

自動車コネクタ

# CONNECTORS FOR AUTOMOBILES



## Which may result in overheating or fire. 発熱・発火の恐れがあります!

- Do not exceed prescribed current to the connectors. ● 規定の電流値を超えて使用しないでください。
- Do not use a broken or cracked housing. ● 割れたりヒビが入ったハウジングは使用しないでください。
- Do not use a deformed or rusty terminal. ● 変形したり、錆びたターミナルは使用しないでください。



## Precautions for Selection and Use of Connectors コネクタ選定・ご使用に際しての注意事項

- To select a suitable connector, please consult with our sales staff about operating environment, mounting conditions, and other information (e.g. unsealed type for indoor compartment use, sealed type for engine compartment use ).
- The current capacity, specifications, and performance of a connector may significantly vary depending on changes in variable elements in the operating environment, such as the number of ways, wire size, ambient temperature, etc. The current capacity (maximum) stated in this catalog applies to a single terminal under the conditions described below, and is not guaranteed when the terminal is inserted into a housing. (Conditions: Maximum wire size specifications, temperature at 40°C, and single pole current flow) For detailed electrical characteristics of each product, see the “Specifications” of the relevant series.
- We have “Specifications” for connector performance and “Instruction Manuals” for connector usage, handling, and precautions, which are available for each connector series. Please be sure to read these in advance to select the appropriate connector and to use it correctly.
- Some connector series require special attention during circuit checks, etc.  
\* For example, **dedicated circuit check jigs** must be used for “SL series” and “SL sealed series.”
- Please consult with our sales staff when requesting applicable tools and jigs (crimping machines, crimping dies, terminal removal jigs etc.).
- Although some connector specifications include drawings showing a securing bracket or mating support, these drawings are provided only for reference. The manufacture of mating parts is not possible without consideration to radius, burrs, warping, dimensional tolerances, etc.
- This catalogue include the parts that was designed and developed jointly with a customer and require prior approval before sales. Please contact our sales staff for details.
- コネクタ選定にあたっては、使用環境、組み付け条件等を弊社営業担当にご相談頂き、用途に適した製品(例:室内は非防水用、エンジンルーム内は防水用、等)をお選びください。
- コネクタの電流容量、仕様、性能は、極数、使用電線サイズ、周囲温度など、使用環境の変動によって数値が大きく変化します。本カタログに掲載の電流容量(=最大電流値)は、下記条件でのターミナル単体の数値であり、実際にハウジングに組み付けて使用したときの性能を保証するものではありません。(条件:最大電線サイズ仕様、40℃温度上昇時、単極通電)各製品の詳しい電気特性は、シリーズ毎の「仕様書」でご確認ください。
- 当社ではコネクタの性能に関する「仕様書」、及びコネクタの使用方法、取扱方法、注意点に関する「取扱説明書」をシリーズ毎に用意しております。コネクタ選定、ご使用に際してはそれらを必ずお読み頂いた上で正しくご使用ください。
- コネクタシリーズによっては、導通検査等に注意を要するコネクタがあります。  
\*例「SLシリーズ」「SL防水シリーズ」コネクタには必ず「専用の導通治具」をご使用願います。
- 適用治工具(圧着機、圧着金型、ターミナル抜き治具等)のご要望は弊社営業担当にご相談ください。
- 各コネクタには固定用ブラケット、相手側サポートを掲載しているものがありますが、あくまで参考図であり、RやP、反り、寸法公差等を考慮せずに、相手側を製造することはできません。
- 記載商品にはお客様との共同開発品が一部含まれております。当該お客様向け以外の販売につきましては、事前承認が必要となりますので、弊社営業担当にお問い合わせ下さるようお願い申し上げます。

\*Product specifications may be subject to change without notice.  
Before using the product, please obtain a “customer drawing” “Specifications” “Instruction Manuals” from our sales staff.  
Please contact our sales staff for details.

※製品の仕様は、予告なく変更することがあります。  
製品ご使用の際は、弊社営業担当に「お客様用図面」「仕様書」「取扱説明書」をご請求ください。  
上記についての詳細は弊社営業担当にお問い合わせください。

# CONTENTS

Precautions concerning the selection / ご使用の注意事項... 1  
 Connector Selection Table / セレクションテーブル... 3~12  
 Introduction / はじめに... 13  
 General Notes / カタログの見方... 13

**TS SERIES ..... A-01**

025(0.64mm) / STANDARD ..... A-02~05  
 025,060(0.64mm,1.5mm) / HYBRID ..... A-06~07  
 025,090(0.64mm,2.3mm) / HYBRID ..... A-08  
 025(0.64mm) / PCB ..... A-09~10  
 040(1.0mm) / STANDARD ..... A-11~12  
 040,090(1.0mm,2.3mm) / HYBRID ..... A-13  
 040,090(1.0mm,2.3mm) / PCB ..... A-14  
 050(1.3mm) / STANDARD ..... A-15~17  
 050,090(1.3mm,2.3mm) / HYBRID ..... A-18~19  
 050,090,187(1.3mm,2.3mm,4.8mm) / PCB ..... A-20~21  
 060(1.5mm) / STANDARD ..... A-22~23  
 090(2.3mm) / STANDARD ..... A-24~28  
 090,187(2.3mm,4.8mm) / HYBRID ..... A-29  
 187(4.8mm) / STANDARD ..... A-30~32  
 312(8.0mm) / STANDARD ..... A-33~34  
 312(8.0mm) / PCB ..... A-35  
 BRACKET ..... A-36

**TS SEALED SERIES ..... B-01**

025(0.64mm) / STANDARD ..... B-02~06  
 025,090,187(0.64mm,2.3mm,4.8mm) / HYBRID ..... B-07~08  
 040(1.0mm) / STANDARD ..... B-09  
 040,187(1.0mm,4.8mm) / HYBRID ..... B-10  
 090(2.3mm) / STANDARD ..... B-11~17  
 090,187(2.3mm,4.8mm) / HYBRID ..... B-18~19  
 187(4.8mm) / STANDARD ..... B-20~22  
 187,312(4.8mm,8.0mm) / HYBRID ..... B-22  
 312(8.0mm) / STANDARD ..... B-23~25  
 BRACKET ..... B-26

**MT SERIES ..... C-01**

090(2.3mm) / STANDARD ..... C-02~07  
 090,250,305(2.3mm,6.6mm,7.7mm) / HYBRID ..... C-08~09

**MT SEALED SERIES ..... D-01**

090(2.3mm) / STANDARD ..... D-02~09  
 090(2.3mm) / ATTACHING TYPE ..... D-10~11  
 BRACKET ..... D-11

**HE SERIES ..... E-01**

025(0.64mm) / STANDARD ..... E-02~04  
 025,090(0.64mm,2.3mm) / HYBRID ..... E-05~06  
 040(1.0mm) / STANDARD ..... E-07~08  
 040,090,187(1.0mm,2.3mm,4.8mm) / HYBRID ..... E-09~10  
 040,090,187(1.0mm,2.3mm,4.8mm) / PCB ..... E-11  
 050(1.3mm) / STANDARD ..... E-12~13  
 050,187(1.3mm,4.8mm) / HYBRID ..... E-14  
 090(2.3mm) / STANDARD ..... E-15~17  
 090,187(2.3mm,4.8mm) / HYBRID ..... E-18  
 090(2.3mm) / PCB ..... E-19  
 187(4.8mm) / STANDARD ..... E-20  
 187,312(4.8mm,8.0mm) / HYBRID ..... E-21  
 375(9.5mm) / STANDARD ..... E-22~23  
 COMMON USE PARTS ..... E-23~24

**HX SEALED SERIES ..... F-01**

040(1.0mm) / STANDARD ..... F-02~04  
 090(2.3mm) / STANDARD ..... F-05~07  
 090,187(2.3mm,4.8mm) / HYBRID ..... F-08~11  
 BRACKET ..... F-11

**HW SEALED SERIES ..... G-01**

090(2.3mm) / STANDARD ..... G-02~05  
 BRACKET ..... G-05

**HD SERIES ..... H-01**

090(2.3mm) / STANDARD ..... H-02~05  
 090,187(2.3mm,4.8mm) / HYBRID ..... H-06~07  
 250(6.6mm) / STANDARD ..... H-08~09  
 305(7.8mm) / STANDARD ..... H-10  
 250,305(6.6mm,7.8mm) / HYBRID ..... H-11  
 COMMON USE PARTS ..... H-11~12

**HM SERIES ..... I-01**

090(2.3mm) / STANDARD ..... I-02~05  
 090,250(2.3mm,6.6mm) / HYBRID ..... I-06~08  
 090(2.3mm) / SPLICE ..... I-09~10  
 090(2.3mm) / BLOCK ..... I-11~12  
 COMMON USE PARTS ..... I-13

**HM SEALED SERIES ..... J-01**

090(2.3mm) / STANDARD ..... J-02~04  
 BRACKET ..... J-04

**NH SERIES ..... K-01**

025(0.64mm) / STANDARD ..... K-02~05

**91 SERIES ..... L-01**

030(0.8mm) / STANDARD A ..... L-02  
 030(0.8mm) / PCB ..... L-03  
 090(2.3mm) / STANDARD NS ..... L-04  
 090(2.3mm) / PCB ..... L-05  
 030,090,250(0.8mm,2.3mm,6.6mm) / HYBRID ..... L-06~07  
 030,090,250(0.8mm,2.3mm,6.6mm) / PCB ..... L-08

**91 SEALED SERIES ..... M-01**

090(2.3mm) / STANDARD RS ..... M-02~06  
 090(2.3mm) / STANDARD RS,RS-BD ..... M-07~10  
 090(2.3mm) / E-RS ..... M-11~14  
 090(2.3mm) / E-BD ..... M-15~17  
 090(2.3mm) / RS FOR DIRECT CONNECTION  
 TO MATING DEVICES ..... M-18

**DL SERIES ..... N-01**

025(0.64mm) / STANDARD ..... N-02~03  
 040(1.0mm) / STANDARD ..... N-04~05  
 040,090,187(1.0mm,2.3mm,4.8mm) / HYBRID ..... N-06  
 040,090(1.0mm,2.3mm) / PCB ..... N-07  
 090(2.3mm) / STANDARD ..... N-08~10  
 090,187(2.3mm,4.8mm) / HYBRID ..... N-11  
 COMMON USE PARTS ..... N-12

**DL SEALED SERIES ..... O-01**

040(1.0mm) / STANDARD ..... O-02~04  
 040,187(1.0mm,4.8mm) / HYBRID ..... O-05~06  
 090(2.3mm) / STANDARD ..... O-07~11  
 090(2.3mm) / DIRECT CONNECTION  
 TO MATING DEVICES ..... O-12~14  
 090(2.3mm) / HEAT-RESISTANT ..... O-15  
 090,187(2.3mm,4.8mm) / HYBRID ..... O-16~17  
 305(7.8mm) / STANDARD ..... O-18~19  
 COMMON USE PARTS ..... O-20

**SL SERIES ..... P-01**

060(1.5mm) / STANDARD ..... P-02~04  
 060,110(1.5mm,2.8mm) / HYBRID ..... P-05  
 060(1.5mm) / PCB ..... P-05  
 090(2.3mm) / STANDARD ..... P-06~08  
 090(2.3mm) / PCB ..... P-08  
 110(2.8mm) / STANDARD ..... P-09~10  
 110,312(2.8mm,8.0mm) / HYBRID ..... P-10  
 187,312(4.8mm,8.0mm) / HYBRID ..... P-11  
 BRACKET ..... P-11

**SL SEALED SERIES ..... Q-01**

040(1.0mm) / STANDARD ..... Q-02  
 060(1.5mm) / STANDARD ..... Q-03~05  
 090(2.3mm) / STANDARD ..... Q-06~08  
 090(2.3mm) / DIRECT CONNECTION  
 TO MATING DEVICES ..... Q-09~15  
 312(8.0mm) / STANDARD ..... Q-16~17  
 COMMON USE PARTS ..... Q-18


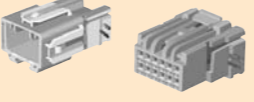









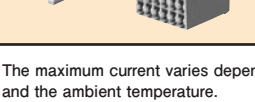
**HFC SERIES ..... R-01**

STANDARD ..... R-02~05  
 PCB ..... R-06~07

INDEX ..... INDEX

# CONNECTOR SELECTION TABLE

( I )

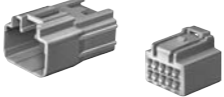
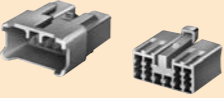

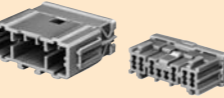
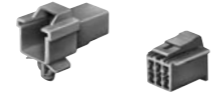

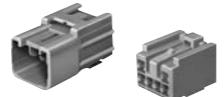
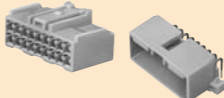
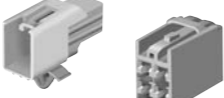
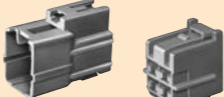

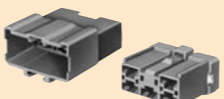
| TERMINAL TAB SIZE [*l max] |              |              |              |               |                  |               |               |               |               |                  |               | CONNECTOR SERIES<br>コネクタシリーズ | MATERIAL<br>材質   | * SPECIFICATIONS / 仕様・性能   |  |   |                                 |   |                       |                               | PAGE  |              |
|----------------------------|--------------|--------------|--------------|---------------|------------------|---------------|---------------|---------------|---------------|------------------|---------------|------------------------------|--|--|--|---|---------------------------------|---|-----------------------|-------------------------------|---|--------------|
| 025 [*7 (A)]               | 030 [*3 (A)] | 040 [*8 (A)] | 050 [*9 (A)] | 060 [*12 (A)] | 090 [*19~22 (A)] | 110 [*24 (A)] | 187 [*28 (A)] | 250 [*30 (A)] | 305 [*50 (A)] | 312 [*43~50 (A)] | 375 [*50 (A)] |                              |  | initial / 初期   | after durability tests / 耐久後   | NO. OF WAY VARIATION<br>(Including Hybrid PCB)<br>極数/ハイブリッドPCBを含む | APPLICABLE WIRE SIZE<br>適用電線サイズ | CONTACT RESISTANCE<br>接触抵抗<br>(圧着部を含む)                    | LEAK CURRENT<br>リーク電流 | INSULATION RESISTANCE<br>絶縁抵抗 |   | SEAL<br>シール性 |
| ●                          |              |              |              |               |                  |               |               |               |               |                  |               | <b>TS SERIES (025)</b>       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)                       | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ)    |   |                                 |   |                       |                               | 5, 10, 14, 16, 17, 18, 20, 22, 24, 28, 32, 36, 40, 68 |              |
| ●                          |              |              |              |               |                  |               |               |               |               |                  |               | <b>HE SERIES (025)</b>       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 2, 4, 6, 7, 10, 12, 13, 16, 18, 20, 23, 24, 28, 34,               | 0.22~0.75mm <sup>2</sup>        | 5mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>H-02</b>  |
| ●                          |              |              |              |               |                  |               |               |               |               |                  |               | <b>NH SERIES (025)</b>       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 4, 8, 10, 12, 16, 24, 32, 40                                      | 0.22~0.75mm <sup>2</sup>        | 10mΩ max. (initial)<br>30mΩ max. (after durability tests) | 1mA max.              | 100MΩ min.                    | —   | <b>K-02</b>  |
| ●                          |              |              |              |               |                  |               |               |               |               |                  |               | <b>DL SERIES (025)</b>       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 2   | 0.22~0.75mm <sup>2</sup>        | 5mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>N-02</b>  |
| ●                          |              |              |              |               |                  |               |               |               |               |                  |               | <b>91 SERIES (030)</b>       |   | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 4, 8  | ※                               | ※   | ※                     | ※                             | —   | <b>L-02</b>  |
|                            | ●            |              |              |               |                  |               |               |               |               |                  |               | <b>TS SERIES (040)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 2, 3, 4, 5, 6, 8, 10, 13, 14, 18, 20, 22, 25                      | 0.22~0.5mm <sup>2</sup>         | 5mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>A-11</b>  |
|                            | ●            |              |              |               |                  |               |               |               |               |                  |               | <b>HE SERIES (040)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 5, 6, 8, 10, 12, 13, 14, 17, 21, 23                               | 0.22~0.85mm <sup>2</sup>        | 5mΩ max. (initial)<br>20mΩ max. (after durability tests)  | 1mA max.              | 100MΩ min.                    | —   | <b>E-07</b>  |
|                            | ●            |              |              |               |                  |               |               |               |               |                  |               | <b>DL SERIES (040)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)                                      | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ)          | 4, 8, 12, 16, 17, 20, 28, 36                                      | 0.3~1.25mm <sup>2</sup>         | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>N-04</b>  |
|                            | ●            |              |              |               |                  |               |               |               |               |                  |               | <b>TS SERIES (050)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 銅合金 (Snメッキ)                  | 3, 4, 6, 12, 14, 16, 17, 18, 20, 22, 24, 34, 40, 52, 60           | 0.3~0.5mm <sup>2</sup>          | 5mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>A-15</b>  |
|                            | ●            |              |              |               |                  |               |               |               |               |                  |               | <b>HE SERIES (050)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 16, 24  | 0.3~0.5mm <sup>2</sup>          | 5mΩ max. (initial)<br>20mΩ max. (after durability tests)  | 1mA max.              | 100MΩ min.                    | —   | <b>E-12</b>  |
|                            |              | ●            |              |               |                  |               |               |               |               |                  |               | <b>TS SERIES (060)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)   | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                | 4, 8, 12  | 0.35~2.0mm <sup>2</sup>         | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>A-22</b>  |
|                            |              | ●            |              |               |                  |               |               |               |               |                  |               | <b>SL SERIES (060)</b>       |  | Housing ..... P.B.T.<br>M Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated) | ハウジング ..... P.B.T.<br>Mターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ) | 4, 12, 14, 16, 34   | 0.3~2.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)  | 3mA max.              | 100MΩ min.                    | —   | <b>P-02</b>  |

\* l max (A) : The maximum current varies depending on the number of connector poles, the wire size, and the ambient temperature. For details of each product, please contact our sales agents.

\*電流量 (A) / 仕様・性能 : コネクタの極数、使用電線サイズ及び周囲温度など使用環境の可変値によって数値は変化します。各製品の詳しい電流量、仕様、性能は弊社営業担当にお問い合わせください。

# CONNECTOR SELECTION TABLE

(Ⅱ)

| TERMINAL TAB SIZE [*l max] |              |              |              |               |                  |               |               |               |               |                  |               | CONNECTOR SERIES<br>コネクタシリーズ                 | MATERIAL<br>材質   | * SPECIFICATIONS / 仕様・性能  |  |   |                                 |  |                       |                               | PAGE |              |
|----------------------------|--------------|--------------|--------------|---------------|------------------|---------------|---------------|---------------|---------------|------------------|---------------|--|--|---|--|---|---------------------------------|--|-----------------------|-------------------------------|------|--------------|
| 025 [*7 (A)]               | 030 [*3 (A)] | 040 [*8 (A)] | 050 [*9 (A)] | 060 [*12 (A)] | 090 [*19~22 (A)] | 110 [*24 (A)] | 187 [*28 (A)] | 250 [*30 (A)] | 305 [*50 (A)] | 312 [*43~50 (A)] | 375 [*50 (A)] |  |  | initial / 初期  | after durability tests / 耐久後   | NO. OF WAY VARIATION<br>(Including Hybrid PCB)<br>極数/ハイブリッドPCBを含む | APPLICABLE WIRE SIZE<br>適用電線サイズ | CONTACT RESISTANCE<br>接触抵抗<br>(圧着部を含む)                   | LEAK CURRENT<br>リーク電流 | INSULATION RESISTANCE<br>絶縁抵抗 |      | SEAL<br>シール性 |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>TS SERIES (090)</b>                       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Brass (Tin-plated or Gold-plated)<br>Heat-resistant copper alloy (Tin-plated or Gold-plated) | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>耐熱銅合金 (Snメッキ・Auメッキ)  | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 20         | 0.22~2.0mm <sup>2</sup>         | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>A-24</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>MT SERIES (090)</b><br>Outdated connector |    | Housing ..... 66NYLON・P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Brass (Tin-plated or Gold-plated)<br>Heat-resistant copper alloy (Tin-plated)        | ハウジング ..... 66ナイロン・P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>耐熱銅合金 (Snメッキ) | 1, 2, 3, 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22       | 0.2~2.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>C-02</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>HE SERIES (090)</b>                       |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)                    | 2, 3, 4, 5, 6, 8, 10, 14, 16, 18, 20                              | 0.3~2.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>E-15</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>HD SERIES (090)</b><br>Outdated connector |    | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)                                     | 2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22                      | 0.3~1.25mm <sup>2</sup>         | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>H-02</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>HM SERIES (090)</b><br>Outdated connector |   | Housing ..... 66NYLON<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)   | ハウジング ..... 66ナイロン<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)                                     | 2, 3, 4, 5, 6, 8, 10, 13, 14, 16, 18, 19, 20, 22, 23, 24          | 0.2~1.25mm <sup>2</sup>         | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>I-02</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>91 SERIES (090)</b>                       |  | Housing ..... P.B.T.<br>M Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 耐熱銅合金 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                               | 6, 10, 36, (40), 48<br><br>(40way is 030, 250)                    | ※                               | ※  | ※                     | ※                             | —    | <b>L-04</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>DL SERIES (090)</b>                       |  | Housing ..... Low water absorption NYLON<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)                          | ハウジング ..... 低吸水性ナイロン<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)                  | 2, 4, 6, 10, 11, 13, 14, 16                                       | 0.3~2.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>N-08</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>SL SERIES (090)</b>                       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)                    | 2, 4, 6, 12, 14, 16, 18   | 0.3~2.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>P-06</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>SL SERIES (110)</b>                       |  | Housing ..... P.B.T.<br>M Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 耐熱銅合金 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                               | 4, 8  | 0.3~3.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>P-09</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>TS SERIES (187)</b>                       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)                    | 1, 2, 3, 4, 6, 8, 10  | 0.3~3.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 3mA max.              | 100MΩ min.                    | —    | <b>A-30</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>HE SERIES (187)</b>                       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)                                  | 2, 4, 5, 6  | 0.3~3.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>6mΩ max. (after durability tests)  | 1mA max.              | 100MΩ min.                    | —    | <b>E-20</b>  |
|                            |              |              |              |               | ●                |               |               |               |               |                  |               | <b>HD SERIES (250)</b><br>Outdated connector |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Anti-Corrosion treatment)<br>F Terminal ..... Brass (Anti-Corrosion treatment)  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (防錆処理)<br>Fターミナル ..... 黄銅 (防錆処理)                                       | 1, 2, 3, 5, 7   | 0.3~3.0mm <sup>2</sup>          | 3mΩ max. (initial)<br>6mΩ max. (after durability tests)  | 1mA max.              | 100MΩ min.                    | —    | <b>H-08</b>  |

\* The 91 and 91sealed series have different specification under the special instituted environment.

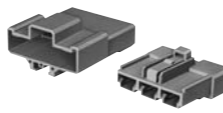


\* l max (A) : The maximum current varies depending on the number of connector poles, the wire size, and the ambient temperature. For details of each product, please contact our sales agents.

\*本コネクタは、特定試験状況下でのデータによっては著しく電流容量が変化することがあります。

\*電流容量(A) / 仕様・性能 : コネクタの極数、使用電線サイズ及び周囲温度など使用環境の可変値によって数値は変化します。各製品の詳しい電流容量、仕様、性能は弊社営業担当にお問い合わせください。

# CONNECTOR SELECTION TABLE

(Ⅲ)

| TERMINAL TAB SIZE [* I max] |               |               |               |               |                |                |                |                |                |                   |                |  | CONNECTOR SERIES<br>コネクタシリーズ             |   | MATERIAL<br>材質   |  | * SPECIFICATIONS / 仕様・性能<br>initial / 初期 after durability tests / 耐久後 |                         |  |            |            |   |  |  | PAGE |
|-----------------------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------|--|--|---|--|--|---|-------------------------|--|------------|------------|---|--|--|------|
| 025 [* 7 (A)]               | 030 [* 3 (A)] | 040 [* 8 (A)] | 050 [* 9 (A)] | 060 [* 9 (A)] | 090 [* 12 (A)] | 110 [* 24 (A)] | 187 [* 28 (A)] | 250 [* 30 (A)] | 305 [* 50 (A)] | 312 [* 43~50 (A)] | 375 [* 50 (A)] |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  | HD SERIES<br>(305)<br>Outdated connector |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Anti-Corrosion treatment)<br>F Terminal ..... Brass (Anti-Corrosion treatment)                 | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (防錆処理)<br>Fターミナル .....黄銅 (防錆処理)                    | 3, 6, 7   | 0.5~5.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>6mΩ max.<br>(after durability tests) | 100µA max. | 100MΩ min. | — |  |  | H-10 |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  | TS SERIES<br>(312)                       |  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated) | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ)<br>Fターミナル .....黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ) | 1, 2, 3, 4  | 0.5~8.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>6mΩ max.<br>(after durability tests) | 100µA max. | 100MΩ min. | — |  |  | A-33 |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  | HE SERIES<br>(375)                       |  | Housing ..... P.B.T.<br>F Terminal ..... Copper alloy (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)                                 | ハウジング .....P.B.T.<br>Fターミナル .....銅合金 (Snメッキ)<br>耐熱銅合金 (Snメッキ)                          | 1, 2  | 2.0~10.0mm <sup>2</sup> | 2mΩ max. (initial)<br>4mΩ max.<br>(after durability tests) | 1mA max.   | 100MΩ min. | — |  |  | E-22 |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |
|                             |               |               |               |               |                |                |                |                |                |                   |                |  |  |   |  |  |   |                         |  |            |            |   |  |  |      |

\* I max (A) : The maximum current varies depending on the number of connector poles, the wire size, and the ambient temperature. For details of each product, please contact our sales agents.

\*電流量(A) / 仕様・性能 : コネクタの極数、使用電線サイズ及び周囲温度など使用環境の可変値によって数値は変化します。各製品の詳しい電流量、仕様、性能は弊社営業担当にお問い合わせください。

- SELECTION TABLE
- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R

# CONNECTOR SELECTION TABLE

(IV)

| TERMINAL TAB SIZE [*l max] |              |              |              |               |                  |               |               |               |               |               | SEALED CONNECTOR SERIES<br>防水コネクタシリーズ   | MATERIAL<br>材質   | * SPECIFICATIONS / 仕様・性能   |  |                         |   |                                 |  | PAGE  |                       |
|----------------------------|--------------|--------------|--------------|---------------|------------------|---------------|---------------|---------------|---------------|---------------|---|--|--|--|-------------------------|---|---------------------------------|--|---|-----------------------|
| 025 [*7 (A)]               | 030 [*3 (A)] | 040 [*8 (A)] | 050 [*9 (A)] | 060 [*12 (A)] | 090 [*19~22 (A)] | 110 [*24 (A)] | 187 [*28 (A)] | 250 [*30 (A)] | 305 [*50 (A)] | 375 [*50 (A)] |   |  | initial / 初期   | after durability tests / 耐久後                     |                         | No. OF WAY VARIATION<br>(Including Hybrid PCB)<br>極数/ハイブリッドPCBを含む | APPLICABLE WIRE SIZE<br>適用電線サイズ | CONTACT RESISTANCE<br>接触抵抗<br>(圧着部を含む) |   | LEAK CURRENT<br>リーク電流 |
| ●                          |              |              |              |               |                  |               |               |               |               |               | <b>TS SEALED SERIES (025)</b><br>                         | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... Silicone                                   | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....シリコン                             | 2, 3, 4, 5, 6, 8, 10, 12, 13, 15, 30, 34, 40, 46 | 0.22~0.5mm <sup>2</sup> |   |                                 |  | 8mΩ max. (initial)<br>16mΩ max. (after durability tests)        |                       |
|                            | ●            |              |              |               |                  |               |               |               |               |               | <b>TS SEALED SERIES (040)</b><br>                          | Housing ..... P.B.T.<br>Wire seal ..... Silicone (Direct connection type)  | ハウジング .....P.B.T.<br>ワイヤシール .....シリコン (直結タイプ)  | 3  | *                       | *   | *                               | *                                      | *   | <b>B-09</b>           |
|                            |              | ●            |              |               |                  |               |               |               |               |               | <b>HX SEALED SERIES (040)</b><br>                          | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... Silicone                     | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ)<br>ワイヤシール .....シリコン                        | 1, 2, 3, 5, 6, 7                                 | 0.3~1.25mm <sup>2</sup> | 5mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>F-02</b>           |
|                            |              |              | ●            |               |                  |               |               |               |               |               | <b>DL SEALED SERIES (040)</b><br>                         | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... Silicone                                   | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....シリコン                             | 3, 4, 20, 28                                     | 0.3~1.25mm <sup>2</sup> | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>O-02</b>           |
|                            |              |              |              | ●             |                  |               |               |               |               |               | <b>SL SEALED SERIES (040)</b><br>                        | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... Silicone                                   | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....シリコン                             | 8, 10  | 0.3~1.25mm <sup>2</sup> | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>Q-02</b>           |
|                            |              |              |              |               | ●                |               |               |               |               |               | <b>SL SEALED SERIES (060)</b><br>                       | Housing ..... P.B.T.<br>M Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... N.B.R.・Silicone      | ハウジング .....P.B.T.<br>Mターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....N.B.R. シリコン                   | 2, 14  | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>Q-03</b>           |
|                            |              |              |              |               |                  | ●             |               |               |               |               | <b>TS SEALED SERIES (090)</b><br>                       | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... N.B.R.・Silicone                            | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....N.B.R. シリコン                      | 2, 3, 4, 5, 6, 7, 11, 24                         | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 50μA max.                       | 100MΩ min.                             | 50kPa min. (initial)<br>30kPa min. (after durability tests)     | <b>B-11</b>           |
|                            |              |              |              |               |                  |               | ●             |               |               |               | <b>MT SEALED SERIES (090)</b><br>Outdated connector<br> | Housing ..... 66NYLON・P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... N.B.R.   | ハウジング .....66ナイロン・P.B.T.<br>Mターミナル .....黄銅 (Snメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ)<br>ワイヤシール .....N.B.R.                                | 1, 2, 3, 4, 6                                    | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>D-02</b>           |
|                            |              |              |              |               |                  |               |               | ●             |               |               | <b>HX SEALED SERIES (090)</b><br>                        | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... Silicone (Direct connection type or Hybrid type)<br>N.B.R. (Hybrid type) | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ)<br>ワイヤシール .....シリコン (直結タイプ/ハイブリッドタイプ)<br>N.B.R. (ハイブリッドタイプ) | 1, 2, 3, 4, 10                                   | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>F-05</b>           |
|                            |              |              |              |               |                  |               |               |               | ●             |               | <b>HW SEALED SERIES (090)</b><br>                       | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Brass (Tin-plated or Gold-plated)<br>Wire seal ..... N.B.R.・Silicone      | ハウジング .....P.B.T.<br>Mターミナル .....黄銅 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ)<br>黄銅 (Snメッキ・Auメッキ)<br>ワイヤシール .....N.B.R. シリコン        | 1, 2, 3, 4, 6, 8, 10, 14                         | 0.3~1.25mm <sup>2</sup> | 3mΩ max. (initial)<br>6mΩ max. (after durability tests)           | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>G-02</b>           |
|                            |              |              |              |               |                  |               |               |               |               | ●             | <b>HM SEALED SERIES (090)</b><br>Outdated connector<br> | Housing ..... 66NYLON<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Wire seal ..... N.B.R.  | ハウジング .....66ナイロン<br>Mターミナル .....黄銅 (Snメッキ)<br>Fターミナル .....黄銅 (Snメッキ)<br>ワイヤシール .....N.B.R.  | 2, 3, 4, 6, 8, 14                                | 0.3~1.25mm <sup>2</sup> | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 100μA max.                      | 100MΩ min.                             | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>J-02</b>           |
|                            |              |              |              |               |                  |               |               |               |               | ●             | <b>91 SEALED SERIES (090)</b><br>                       | Housing ..... P.B.T.<br>M Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... Silicone             | ハウジング .....P.B.T.<br>Mターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>Fターミナル .....耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール .....シリコン                          | 1, 2, 3, 4, 5, 6, 8, 12                          | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests)          | 10μA max.                       | 100MΩ min.                             | 98.0kPa min. (initial)<br>98.0kPa min. (after durability tests) | <b>M-02</b>           |

\* The 91 and 91sealed series have different specification under the special instituted environment.







\* l max (A) : The maximum current varies depending on the number of connector poles, the wire size, and the ambient temperature. For details of each product, please contact our sales agents.

\*本コネクタは、特定試験状況下でのデータによっては著しく電流容量が変化することがあります。

\*電流容量(A) / 仕様・性能 : コネクタの極数、使用電線サイズ及び周囲温度など使用環境の可変値によって数値は変化します。各製品の詳しい電流容量、仕様、性能は弊社営業担当にお問い合わせください。

# CONNECTOR SELECTION TABLE

(V)

| TERMINAL TAB SIZE [*l max] |              |              |               |               |                  |               |               |               |               |               | SEALED CONNECTOR SERIES<br>防水コネクタシリーズ   | MATERIAL<br>材質  | * SPECIFICATIONS / 仕様・性能  |                                 |   |  |  |                       | PAGE  |                               |
|----------------------------|--------------|--------------|---------------|---------------|------------------|---------------|---------------|---------------|---------------|---------------|---|---|---|---------------------------------|---|--|--|-----------------------|---|-------------------------------|
| 025 [*7 (A)]               | 030 [*8 (A)] | 040 [*9 (A)] | 050 [*12 (A)] | 060 [*12 (A)] | 090 [*19~22 (A)] | 110 [*24 (A)] | 187 [*28 (A)] | 250 [*30 (A)] | 305 [*50 (A)] | 375 [*50 (A)] |   |   | initial / 初期  | after durability tests / 耐久後    | NO. OF WAY VARIATION<br>(Including Hybrid PCB)<br>極数/バリエーション<br>(ハイブリッド・PCBを含む) | APPLICABLE WIRE SIZE<br>適用電線サイズ                          | CONTACT RESISTANCE<br>接触抵抗<br>(圧着部を含む) | LEAK CURRENT<br>リーク電流 |   | INSULATION RESISTANCE<br>絶縁抵抗 |
|                            |              |              |               |               | ●                |               |               |               |               |               | <b>DL SEALED SERIES (090)</b><br>   | Housing ..... Low water absorption NYLON or P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... N.B.R.・Silicone | ハウジング ..... 低吸水性ナイロン・P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール ..... N.B.R.<br>シリコン | 1, 2, 3, 4, 6, 8, 9, 10, 12, 16 |   |  |  |                       | 0.3~2.0mm <sup>2</sup>  |                               |
|                            |              |              |               |               | ●                |               |               |               |               |               | <b>SL SEALED SERIES (090)</b><br>   | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated or Gold-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated or Gold-plated)<br>Wire seal ..... N.B.R.・Silicone                               | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ・Auメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ・Auメッキ)<br>ワイヤシール ..... N.B.R.<br>シリコン          | 1, 2, 3, 4, 5, 6                | 0.3~2.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 100μA max.                             | 100MΩ min.            | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>Q-06</b>                   |
|                            |              |              |               |               |                  | ●             |               |               |               |               | <b>TS SEALED SERIES (187)</b><br>   | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... Silicone  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)<br>ワイヤシール ..... シリコン                  | 1, 2, 3                         | 0.3~3.0mm <sup>2</sup>  | 2mΩ max. (initial)<br>10mΩ max. (after durability tests) | 50μA max.                              | 100MΩ min.            | 50kPa min. (initial)<br>30kPa min. (after durability tests)     | <b>B-20</b>                   |
|                            |              |              |               |               |                  |               | ●             |               |               |               | <b>DL SEALED SERIES (305)</b><br>   | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... N.B.R.  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)<br>ワイヤシール ..... N.B.R.                              | 1, 2                            | 2.0~8.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 100μA max.                             | 100MΩ min.            | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>O-18</b>                   |
|                            |              |              |               |               |                  |               | ●             |               |               |               | <b>TS SEALED SERIES (312)</b><br>  | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Brass (Tin-plated)<br>Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... Silicone  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 黄銅 (Snメッキ)<br>耐熱銅合金 (Snメッキ)<br>ワイヤシール ..... 含油シリコン                | 1, 2                            | 3.0~8.0mm <sup>2</sup>  | 2mΩ max. (initial)<br>10mΩ max. (after durability tests) | 50μA max.                              | 100MΩ min.            | 50kPa min. (initial)<br>30kPa min. (after durability tests)     | <b>B-23</b>                   |
|                            |              |              |               |               |                  |               | ●             |               |               |               | <b>SL SEALED SERIES (312)</b><br> | Housing ..... P.B.T.<br>M Terminal ..... Brass (Tin-plated)<br>F Terminal ..... Heat-resistant copper alloy (Tin-plated)<br>Wire seal ..... Silicone  | ハウジング ..... P.B.T.<br>Mターミナル ..... 黄銅 (Snメッキ)<br>Fターミナル ..... 耐熱銅合金 (Snメッキ)<br>ワイヤシール ..... 含油シリコン                              | 2                               | 2.0~8.0mm <sup>2</sup>  | 3mΩ max. (initial)<br>10mΩ max. (after durability tests) | 100μA max.                             | 100MΩ min.            | 49.0kPa min. (initial)<br>29.4kPa min. (after durability tests) | <b>Q-16</b>                   |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |
|                            |              |              |               |               |                  |               |               |               |               |               |   |   |   |                                 |   |  |  |                       |   |                               |

\* l max (A) : The maximum current varies depending on the number of connector poles, the wire size, and the ambient temperature. For details of each product, please contact our sales agents.

\*電流容量(A) / 仕様・性能 : コネクタの極数、使用電線サイズ及び周囲温度など使用環境の可変値によって数値は変化します。各製品の詳しい電流容量、仕様、性能は弊社営業担当にお問い合わせください。

SELECTION TABLE  
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R

INDEX



## Introduction / はじめに

Safety, amenity, and functionality, measure the essential performance of an automobile and these predominately depend on in-vehicle electronic controls.

A variety of car electronic devices are systematically connected with each other using “automotive connectors” (hereinafter referred to as “the connectors”), and the connectors for this purpose are required to be smaller, lighter, and provide direct connection and advanced performance.

At Sumitomo Wiring Systems, we are actively researching and developing components, including terminals and housings, with respect to the “total wiring system,” using our experience as an all-round automotive wiring harness manufacturer. This is how we are able to achieve high reliability for our products.

In addition, we are searching for the optimum wiring system and layout, using as little space for wiring as is effectively possible. These are part of our activities to provide services that will further satisfy our customers, and we sincerely ask to be favored with your request for connectors made by Sumitomo Wiring Systems.

安全性、快適性、そして機能性と、自動車に求められる性能は、その制御の大半をエレクトロニクスが担っています。

この各種カーエレクトロニクス機器を、システムティックにつなぐコンポーネントとしての「自動車用コネクタ」（以下、「コネクタ」と記す）には、軽量・コンパクト化、直結化、高機能化などの性能が求められます。

住友電装は、自動車用ワイヤーハーネス総合メーカーとしての実績と、“トータルワイヤリングシステム”の視点から、ターミナル、ハウジングをはじめとした構成部品の研究・開発を積極的に進め、製品の信頼性に努めています。

さらに限られた配線スペースを最大限に活かしたワイヤリングシステムと最適レイアウトを追究し、一層お客様にご満足いただけるサービスをご提供いたしますので、住友電装の自動車用コネクタをご用命賜りますようお願い申し上げます。

### General Notes

#### 自動車用コネクタカタログの見方について

- All length and area units in this catalog shall marked millimeter (mm) and square millimeter (mm<sup>2</sup>), respectively.
- This catalog focuses on series of terminals, housings, and accessories, and does not include terminals and housings not involved in these series. Similarly, some other series and custom-made parts are not included. Please contact our sales staff for details.
- We have also prepared a separate “Automotive Wire, Convuluted Tube” catalog, made by Sumitomo Wiring Systems, and suitable for the connectors. This catalog can be obtained from our sales staff.
- 本カタログで使用する長さの単位はすべてmm（ミリメートル）で、面積の単位はすべてmm<sup>2</sup>（平方ミリメートル）です。
- 本カタログは、シリーズのターミナル、ハウジング、付属部品を中心に編集しています。シリーズに含まれないターミナル、ハウジングや、一部シリーズ、オリジナル開発部品は掲載しておりませんので、詳細は弊社営業担当にお問い合わせください。
- コネクタにマッチした住友電装の「自動車用電線・コルゲートチューブ」は別途カタログがございますので弊社営業担当にご請求ください。

### Digital catalog

#### 電子カタログ

A digital connector catalog is available on the Sumitomo Wiring Systems home page under “Product information”. Digital catalogue has connectors which are not on this catalogue.

住友電装ホームページの「製品情報」に「コネクタ電子カタログ」を掲載中です。  
電子カタログには本カタログに掲載されていないコネクタも掲載しております。

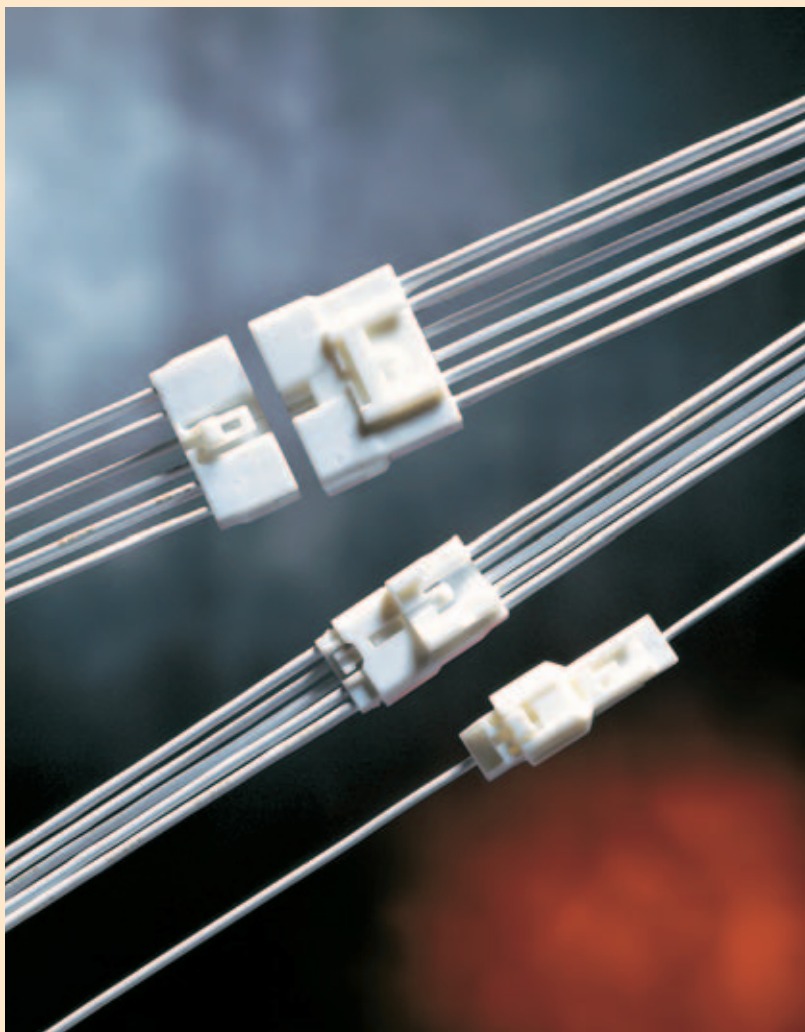
URL: <http://www.sws.co.jp>

\* Product specifications may be subject to change without notice.

Before using the product, please obtain a “customer drawing” “Specifications” “Instruction Manuals” from our sales staff.

※製品の仕様は、予告なく変更することがあります。

製品ご使用の際は、弊社営業担当に「お客様用図面」「仕様書」「取扱説明書」をご請求ください。



# TS SERIES

## Features

The TS connector series has a mechanism of terminal position assurance.

This series consists of 025, 040, 050, 060, 090, 187, and 312 types classified according to terminal size, covering an extensive array of applications from signal to power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- Retainers are pre-mounted on connector housings, and are structured to enable setting by the same simple operation regardless of the number of ways, improving operability.
- These connectors can be directly secured to a support on the car body.
- A PCB model is also available for connection to printed circuit boards.

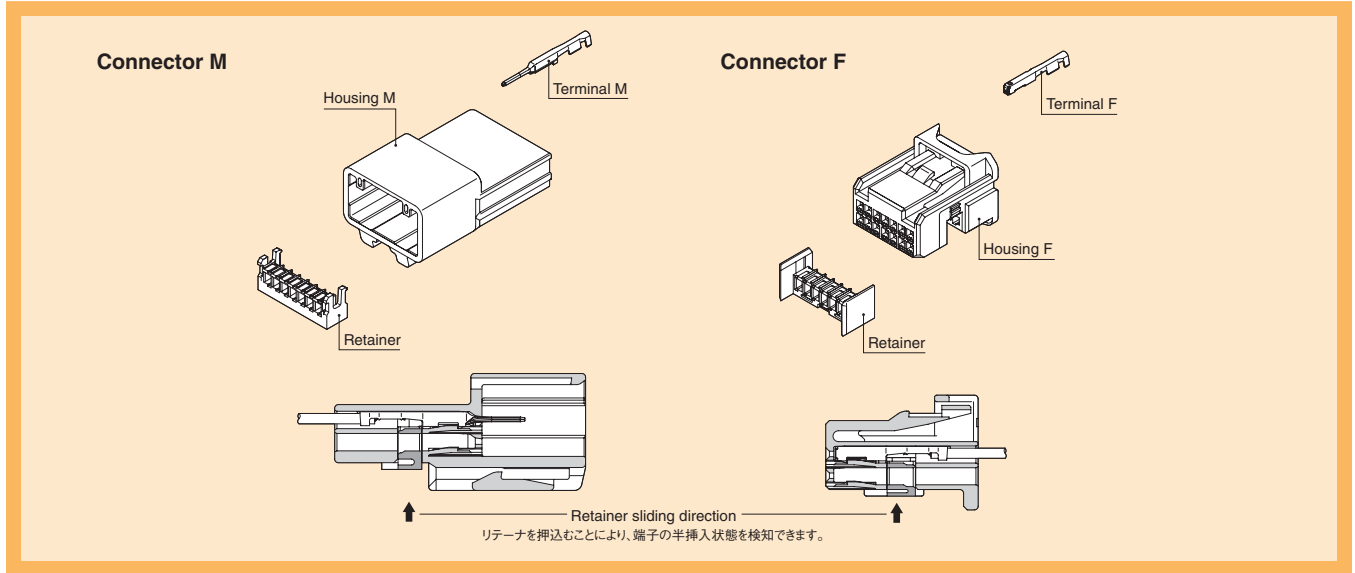
## 特長

TSシリーズは、挿入不足のターミナルを検知する機構を備えたコネクタシリーズです。

ターミナルサイズにより025・040・050・060・090・187・312で構成されており、信号回路からパワー回路まで幅広くご利用いただけます。

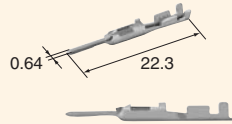
- ターミナルが半挿入の状態では、リテーナが装着できない機構になっています。
- リテーナはコネクタハウジングに予め組み付けられており、また極数に関係なく簡単な同一作業でセットすることができる構造になっているので、作業性が向上します。
- コネクタは、ボデー側のブラケットに直接固定することができます。
- プリント基板との接続に適したPCBタイプも設定いたしました。

## Structure / 構造



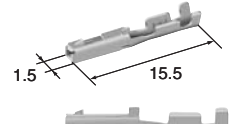
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 6000                |
| Thickness (mm)<br>板厚                     | 0.25                |



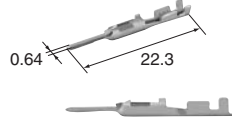
**M(8100-3622)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



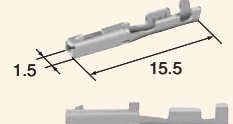
**F(8100-3624)**

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2             |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 6000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



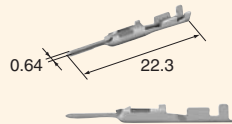
**M(8100-3626)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



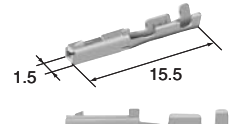
**F(8100-3628)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.4             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 6000                |
| Thickness (mm)<br>板厚                     | 0.25                |



**M(8100-3623)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.4                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |

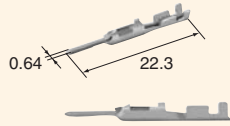


**F(8100-3625)**

Heat-resistant copper alloy=耐熱銅合金

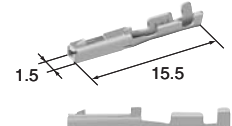
025  
(L)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.4              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 6000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



**M(8100-3627)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.4                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8100-3629)**

Heat-resistant copper alloy=耐熱銅合金

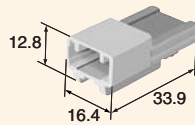
### Housing (mm)

Material / P.B.T.

Color / Natural

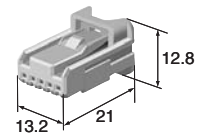
5way

Ref: Terminal part No.  
ターミナル参照頁 A-02



**M(6098-3802)**

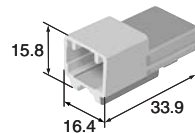
Ref: Terminal part No.  
ターミナル参照頁 A-02



**F(6098-3810)**

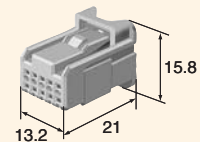
10way

Ref: Terminal part No.  
ターミナル参照頁 A-02



**M(6098-3869)**

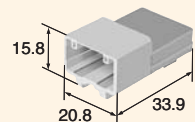
Ref: Terminal part No.  
ターミナル参照頁 A-02



**F(6098-3909)**

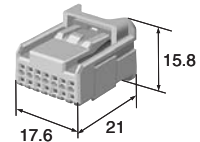
14way

Ref: Terminal part No.  
ターミナル参照頁 A-02



**M(6098-3877)**

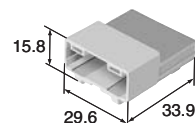
Ref: Terminal part No.  
ターミナル参照頁 A-02



**F(6098-3917)**

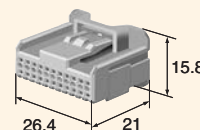
22way

Ref: Terminal part No.  
ターミナル参照頁 A-02



**M(6098-3885)**

Ref: Terminal part No.  
ターミナル参照頁 A-02



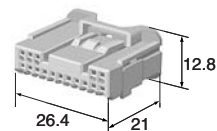
**F(6098-3925)**

## Housing (mm)

Material / P.B.T.  
Color / Natural

16way

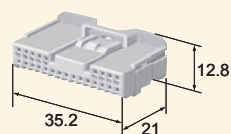
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4008)**

24way

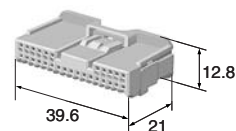
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4010)**

28way

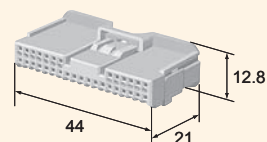
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4756)**

32way

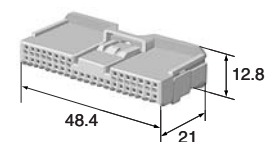
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4013)**

36way

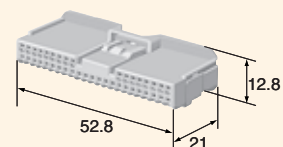
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4740)**

40way

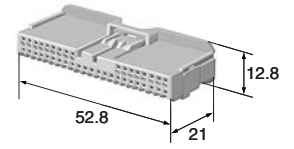
Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4015)**

40way

Ref: Terminal part No. A-02  
ターミナル参照頁



**F(6098-4831)**

## Terminal

● Ref: 025 Terminal List (Page A-02), 060 Terminal List (Page A-22)

● 025ターミナルはA-02、060ターミナルはA-22に掲載。

## Housing (mm)

Material / P.B.T.

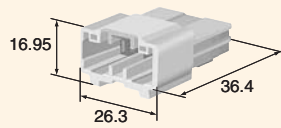
Color / Natural

No. of way / ( ) corresponds to 025, 060, in order from left to right.

極数 / ( ) 内表示 : 左から025極数、060極数

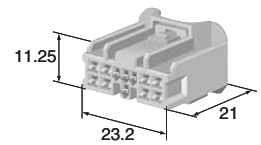
12way  
(4+8)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**M(6098-6055)**

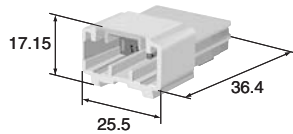
Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**F(6098-6083)**

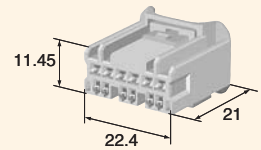
12way  
(6+6)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**M(6098-6104)**

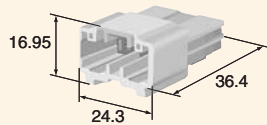
Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**F(6098-6111)**

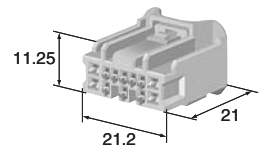
12way  
(8+4)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**M(6098-6090)**

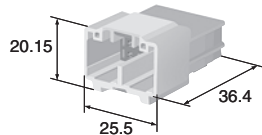
Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**F(6098-6097)**

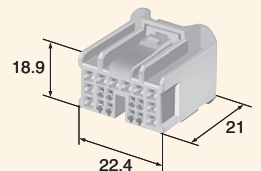
18way  
(8+10)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**M(6098-5650)**

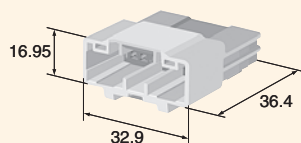
Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**F(6098-5659)**

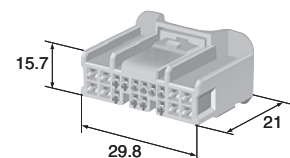
18way  
(10+8)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**M(6098-5594)**

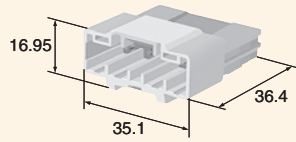
Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[060] A-22



**F(6098-5604)**

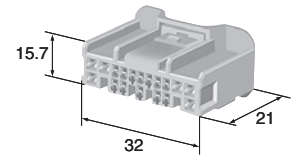
18way  
(12+6)

Ref: Terminal part No. [025] A-02  
ターミナル参照頁 [060] A-22



**M(6098-5631)**

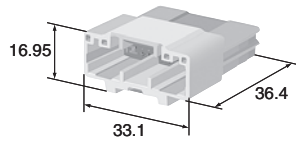
Ref: Terminal part No. [025] A-02  
ターミナル参照頁 [060] A-22



**F(6098-5641)**

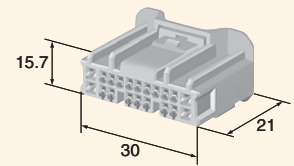
20way  
(16+4)

Ref: Terminal part No. [025] A-02  
ターミナル参照頁 [060] A-22



**M(6098-5613)**

Ref: Terminal part No. [025] A-02  
ターミナル参照頁 [060] A-22



**F(6098-5622)**



A-08

TS SERIES

025, 090,(0.64 mm, 2.3 mm) /HYBRID

Terminal

●Ref: 025 Terminal List (Page A-02), 090 Terminal List (Page A-24)

●025ターミナルはA-02、090ターミナルはA-24に掲載。

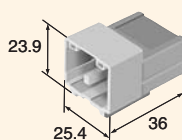
Housing (mm)

Material / P.B.T.

Color / Natural

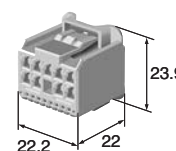
No. of way / ( ) corresponds to 025, 090, in order from left to right.

極数 / ( ) 内表示 : 左から025極数、090極数

17way  
(8+9)Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

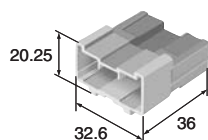
23.9  
25.4 36

M(6098-3893)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

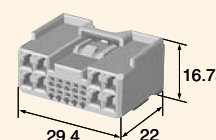
23.9  
22.2 22

F(6098-3933)

18way  
(10+8)Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

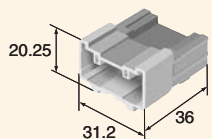
20.25  
32.6 36

M(6098-3901)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

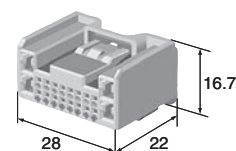
16.75  
29.4 22

F(6098-3941)

20way  
(16+4)Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

20.25  
31.2 36

M(6098-3818)

Ref: Terminal part No.  
ターミナル参照頁 [025] A-02  
[090] A-24

16.75  
28 22

F(6098-3826)

Sumitomo Wiring Systems, Ltd.

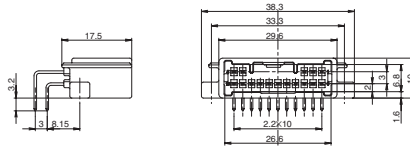
## Housing (mm)

16way

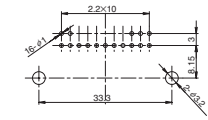
|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4008) |
| Terminal type<br>端子タイプ          | 025         |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Natural     |

M(6098-4023)

● Dimensional drawing



● Mounting drawing

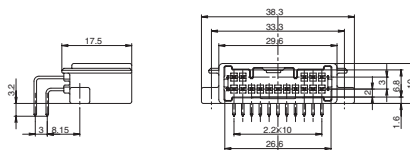


16way

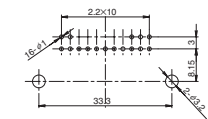
|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4008) |
| Terminal type<br>端子タイプ          | 025         |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Natural     |

M(6098-5368)

● Dimensional drawing



● Mounting drawing

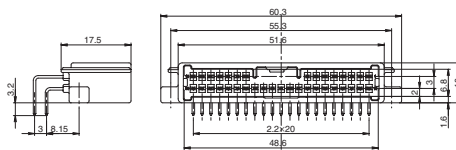


36way

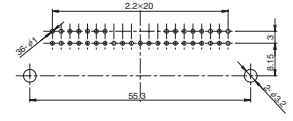
|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4740) |
| Terminal type<br>端子タイプ          | 025         |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Natural     |

M(6098-4747)

● Dimensional drawing



● Mounting drawing

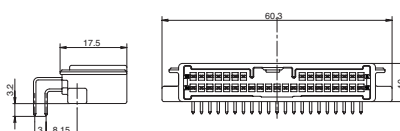


36way

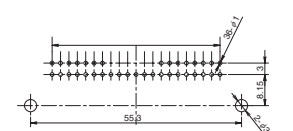
|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4740) |
| Terminal type<br>端子タイプ          | 025         |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Natural     |

M(6098-5592)

● Dimensional drawing



● Mounting drawing



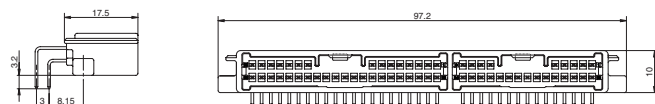
60way

(36+24)

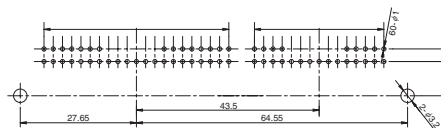
|                                 |                         |
|---------------------------------|-------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4740) (6098-4010) |
| Terminal type<br>端子タイプ          | 36way + 24way (025)     |
| Material<br>材質                  | S.P.S.                  |
| Color<br>色相                     | Natural                 |

M(6098-5798)

● Dimensional drawing

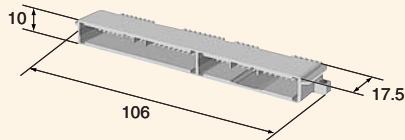


● Mounting drawing



|                                 |                         |
|---------------------------------|-------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4831) (6098-4756) |
| Terminal type<br>端子タイプ          | 40way + 28way (025)     |
| Material<br>材質                  | P.B.T.                  |
| Color<br>色相                     | Natural                 |

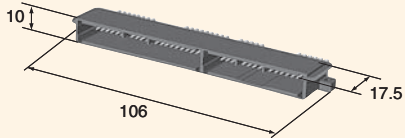
68way



### M(6098-4827)

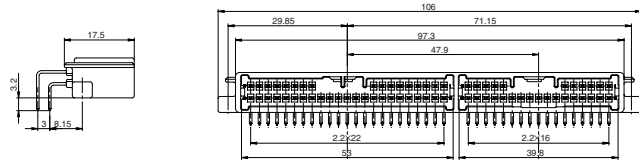
|                                 |                         |
|---------------------------------|-------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4015) (6098-4756) |
| Terminal type<br>端子タイプ          | 40way + 28way (025)     |
| Material<br>材質                  | P.B.T.                  |
| Color<br>色相                     | Blue                    |

68way

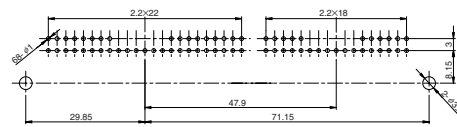


### M(6098-5314)

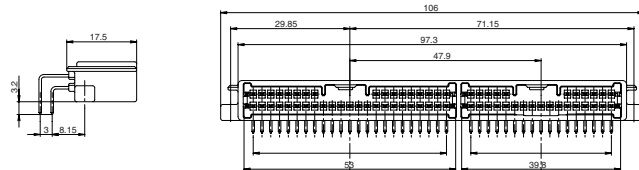
● Dimensional drawing



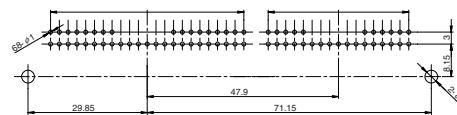
● Mounting drawing



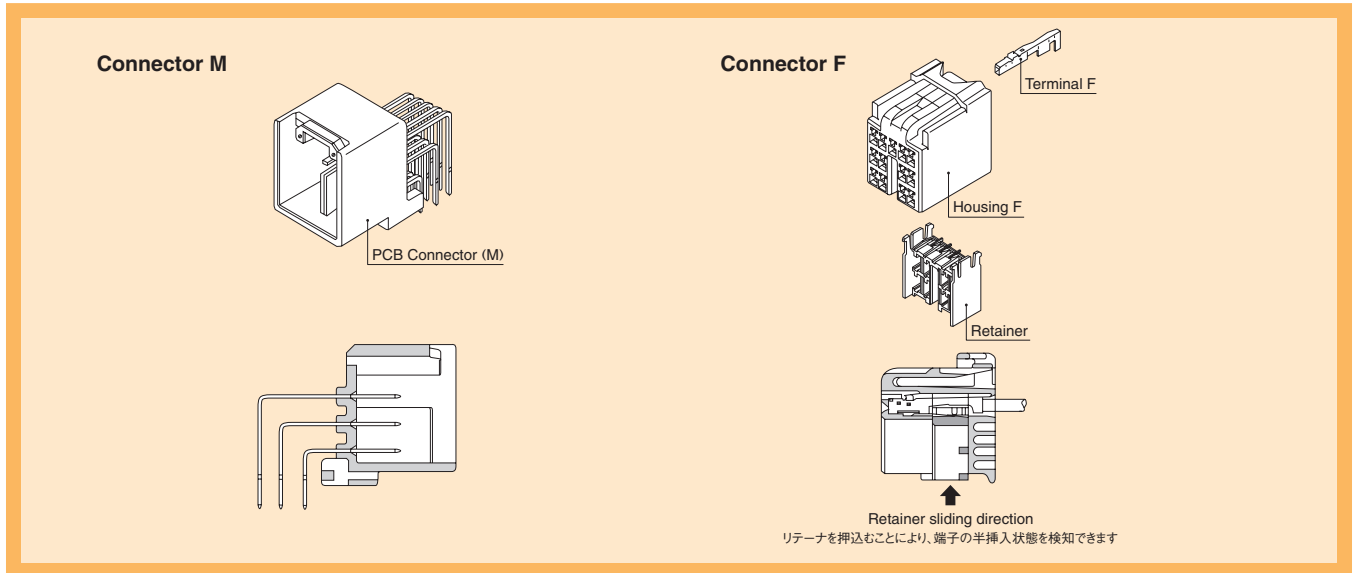
● Dimensional drawing



● Mounting drawing



### Structure / 構造



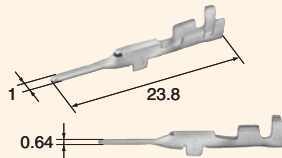
### Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては必ず弊社営業担当にお問い合わせください。

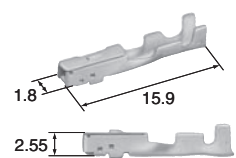
040

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8100-3635)

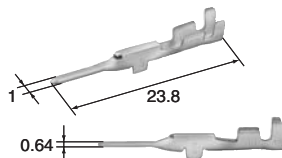
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8100-3636)

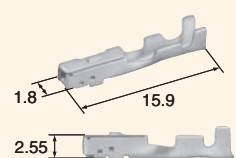
040

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8100-2729)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8100-2730)

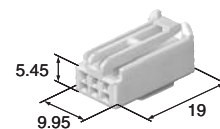
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.  
Color / Natural

3way

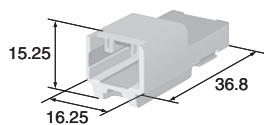
Ref: Terminal part No. A-11  
ターミナル参照頁



**F(6098-2220)**

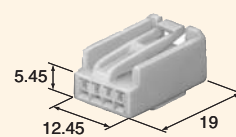
4way

Ref: Terminal part No. A-11  
ターミナル参照頁



**M(6098-2931)**

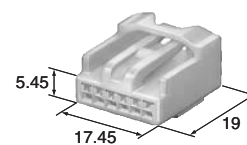
Ref: Terminal part No. A-11  
ターミナル参照頁



**F(6098-2163)**

6way

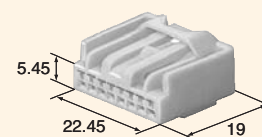
Ref: Terminal part No. A-11  
ターミナル参照頁



**F(6098-2303)**

8way

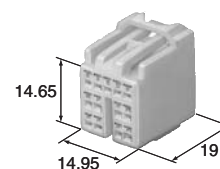
Ref: Terminal part No. A-11  
ターミナル参照頁



**F(6098-2437)**

13way

Ref: Terminal part No. A-11  
ターミナル参照頁



**F(6098-2161)**

## Terminal

●Ref: 040 Terminal List (Page A-11), 090 Terminal List (Page A-24)

●040ターミナルはA-11、090ターミナルはA-24に掲載。

## Housing (mm)

Material / P.B.T.

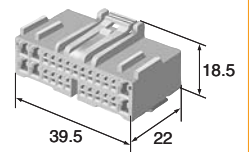
Color / Natural

No. of way / ( ) corresponds to 040, 090, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、090極数

25way  
(19+6)

Ref: Terminal part No. [040] A-11  
ターミナル参照頁 [090] A-24



F(6098-1819)

## Housing (mm)

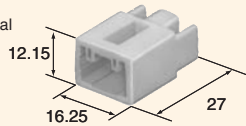
Material / P.B.T.

No. of way / ( ) corresponds to 040, 090, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、090極数

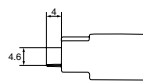
4way  
(Vertical type)  
(垂直)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2163) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

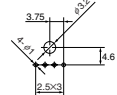


M(6098-2163)

● Dimensional drawing

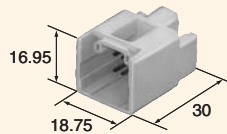


● Mounting drawing



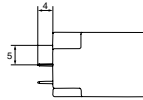
10way  
(Vertical type)  
(垂直)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-3015) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

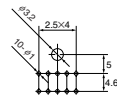


M(6098-2214)

● Dimensional drawing

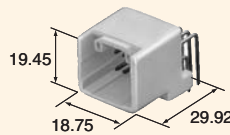


● Mounting drawing



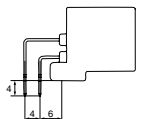
10way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-3015) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

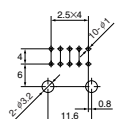


M(6098-2257)

● Dimensional drawing

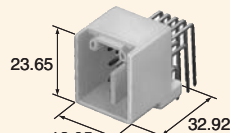


● Mounting drawing



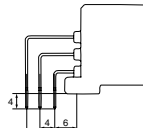
13way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2161) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

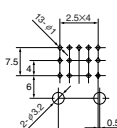


M(6098-2434)

● Dimensional drawing

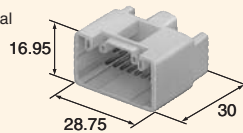


● Mounting drawing



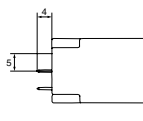
18way  
(Vertical type)  
(垂直)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-3019) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

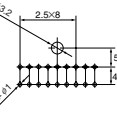


M(6098-2159)

● Dimensional drawing

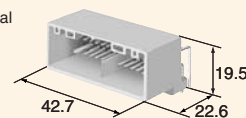


● Mounting drawing



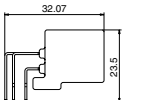
25way  
(19+6)

|                                 |                          |
|---------------------------------|--------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1819)              |
| Terminal type<br>端子タイプ          | 19way (040) + 6way (090) |
| Color<br>色相                     | Natural                  |

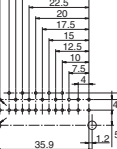


M(6098-2165)

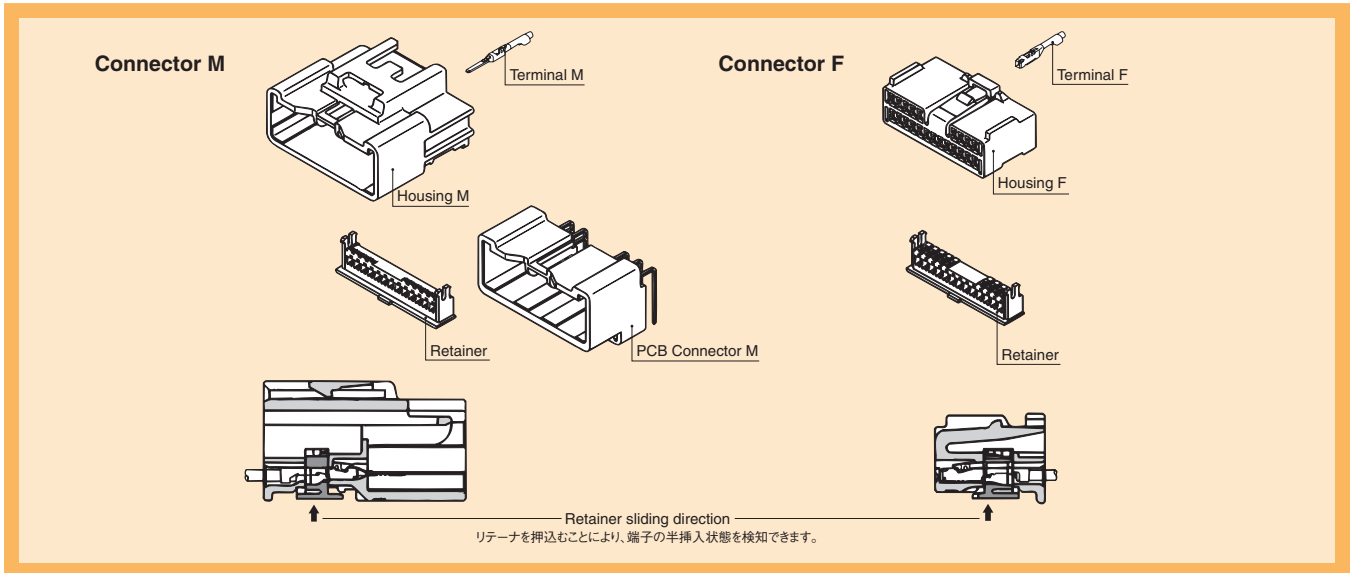
● Dimensional drawing



● Mounting drawing



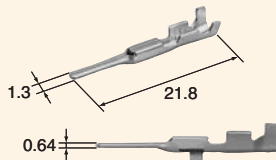
## Structure / 構造



## Terminal (mm)

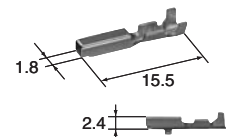
050

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(1500-0181)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Copper alloy<br>銅合金 |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.2                 |



F(8100-0544)

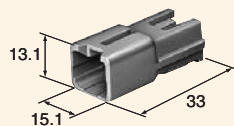
## Housing (mm)

Material / P.B.T.  
Color / Natural

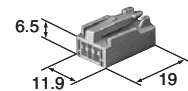
Ref: Terminal part No. A-15  
ターミナル参照頁

Ref: Terminal part No. A-15  
ターミナル参照頁

3way



M(6098-0911)



F(6098-0922)



3way

Ref: Terminal part No.  
ターミナル参照頁 A-15  
Note  
備考 With body fastening clamp.  
回り止めクランプ付

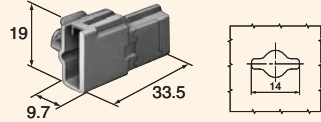
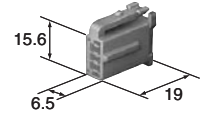


Plate thickness range for clamp :  
t=0.7~2.2

**M(6098-0963)**

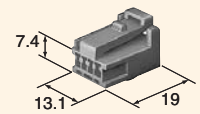
Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0964)**

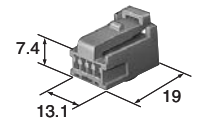
4way

Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0923)**

Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0924)**

6way

Ref: Terminal part No.  
ターミナル参照頁 A-15  
Note  
備考 With body fastening clamp.  
回り止めクランプ付

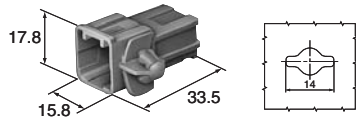
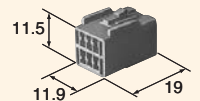


Plate thickness range for clamp :  
t=0.7~2.2

**M(6098-0907)**

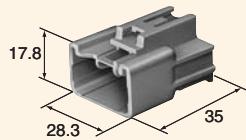
Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0918)**

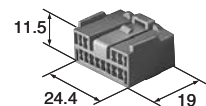
12way

Ref: Terminal part No.  
ターミナル参照頁 A-15



**M(6098-0905)**

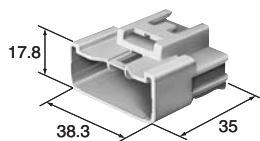
Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0914)**

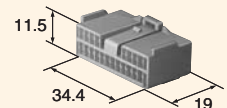
20way

Ref: Terminal part No.  
ターミナル参照頁 A-15



**M(6098-1246)**

Ref: Terminal part No.  
ターミナル参照頁 A-15

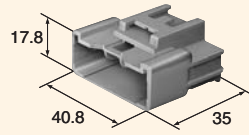


**F(6098-1065)**

Plate thickness range for clamp=クランプ適用板厚

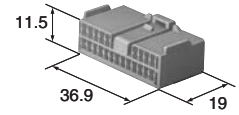
22way

Ref: Terminal part No.  
ターミナル参照頁 A-15



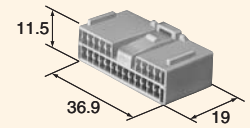
**M(6098-0903)**

Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-0916)**

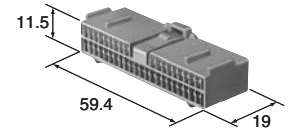
Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-1250)**

40way

Ref: Terminal part No.  
ターミナル参照頁 A-15



**F(6098-1235)**

## Terminal

● Ref: 050 Terminal List (Page A-15), 090 Terminal List (Page A-24)

● 050ターミナルはA-15、090ターミナルはA-24に掲載。

## Housing (mm)

Material / P.B.T.

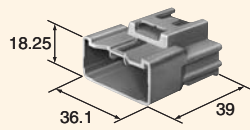
Color / Natural

No. of way / ( ) corresponds to 050, 090, in order from left to right.

極数 / ( ) 内表示 : 左から050極数、090極数

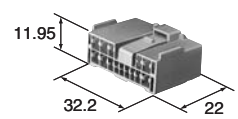
14way  
(8+6)

Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**M(6098-1137)**

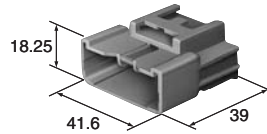
Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**F(6098-1139)**

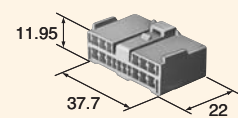
16way  
(6+10)

Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**M(6098-1061)**

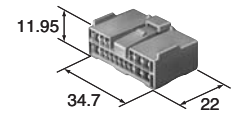
Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**F(6098-1063)**

16way  
(10+6)

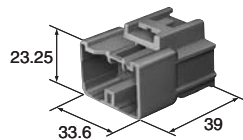
Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**F(6098-1274)**

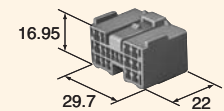
17way  
(8+9)

Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



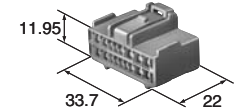
**M(6098-1042)**

Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**F(6098-1045)**

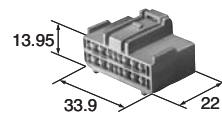
Ref: Terminal part No.  
ターミナル参照頁 [050] A-15  
[090] A-24



**F(6098-1389)**

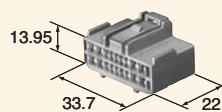
18way  
(10+8)

Ref: Terminal part No. [050] A-15  
ターミナル参照頁 [090] A-24



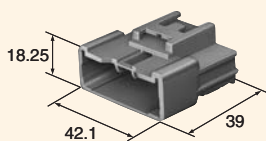
**F(6098-1164)**

Ref: Terminal part No. [050] A-15  
ターミナル参照頁 [090] A-24



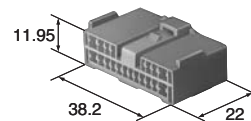
**F(6098-1169)**

Ref: Terminal part No. [050] A-15  
ターミナル参照頁 [090] A-24



**M(6098-0909)**

Ref: Terminal part No. [050] A-15  
ターミナル参照頁 [090] A-24



**F(6098-0913)**

20way  
(16+4)

The PCB type connectors are male connectors which are wired to printed circuit boards directly.

These connectors mate wire leads to printed circuit boards.

The 24 ways, and 34 ways, 52 ways and 60 ways connectors will be the split type which will have the plural female connectors.

プリント基板上に取付けることができるタイプ (M側) です。

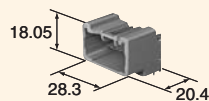
F側は標準タイプを使用します。24極、34極、52極と60極はF側ハウジングを、2個以上使用するスプリット型になっています。

## Housing (mm)

Material / P.B.T.

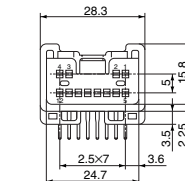
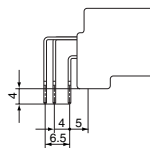
12way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-0914) |
| Terminal type<br>端子タイプ          | 050         |
| Color<br>色相                     | Natural     |

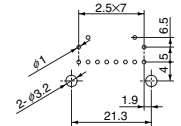


### M(6098-0886)

● Dimensional drawing

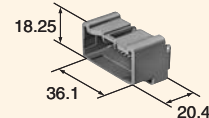


● Mounting drawing



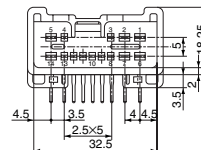
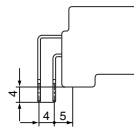
14way  
(8+6)

|                                 |                         |
|---------------------------------|-------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1139)             |
| Terminal type<br>端子タイプ          | 8way (050) + 6way (090) |
| Color<br>色相                     | Light Gray              |

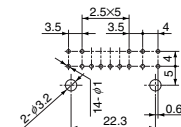


### M(6098-1277)

● Dimensional drawing

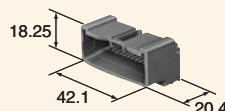


● Mounting drawing



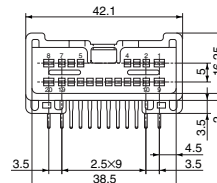
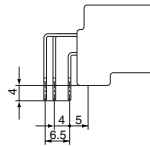
20way  
(16+4)

|                                 |                          |
|---------------------------------|--------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-0913)              |
| Terminal type<br>端子タイプ          | 16way (050) + 4way (090) |
| Color<br>色相                     | Natural                  |

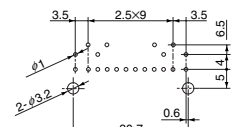


### M(6098-0889)

● Dimensional drawing

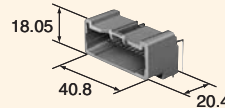


● Mounting drawing



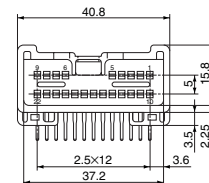
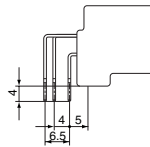
22way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-0916) |
| Terminal type<br>端子タイプ          | 050         |
| Color<br>色相                     | Natural     |

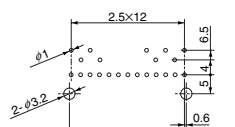


### M(6098-0891)

● Dimensional drawing

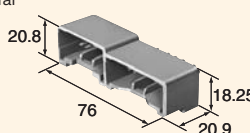


● Mounting drawing



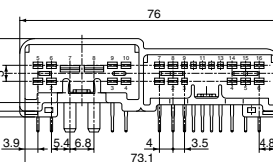
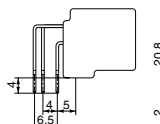
24way  
(5+9  
8+2)

|                                 |  |
|---------------------------------|--|
| Connector F part No.<br>Fコネクタ品番 | (6098-1063) (6520-1142)                            |
| Terminal type<br>端子タイプ          | 5way (050) + 9way (090)<br>8way (090) + 2way (187) |
| Color<br>色相                     | Natural  |

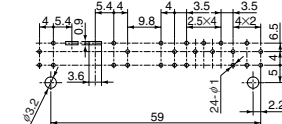


### M(6098-1263)

● Dimensional drawing

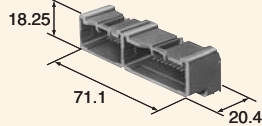


● Mounting drawing



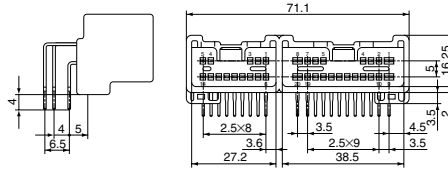
34way  
(16+4)  
(14)

|                                 |   |
|---------------------------------|---|
| Connector F part No.<br>Fコネクタ品番 | (6098-0913) (6520-1235)                 |
| Terminal type<br>端子タイプ          | 16way (050) + 4way (090)<br>14way (050) |
| Color<br>色相                     | Orange                                  |

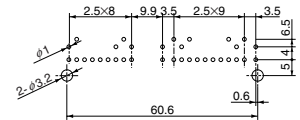


M(6098-0978)

● Dimensional drawing

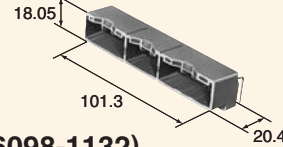


● Mounting drawing



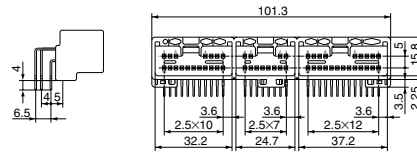
52way  
(22)  
(18)  
(12)

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-0916) (1300-4814) (6098-0914) |
| Terminal type<br>端子タイプ          | 050                                 |
| Color<br>色相                     | Natural                             |

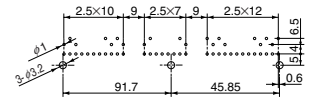


M(6098-1132)

● Dimensional drawing

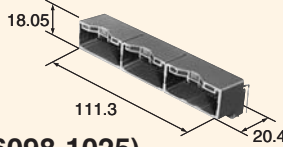


● Mounting drawing



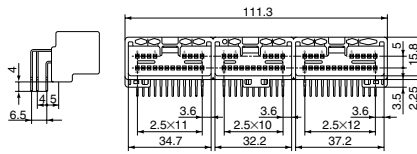
60way  
(20)  
(16)  
(24)

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1065) (1300-4814) (6098-0916) |
| Terminal type<br>端子タイプ          | 050                                 |
| Color<br>色相                     | Natural                             |

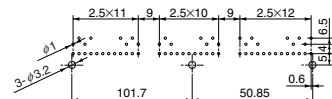


M(6098-1025)

● Dimensional drawing



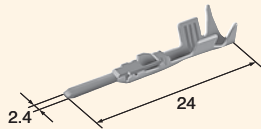
● Mounting drawing



## Terminal (mm)

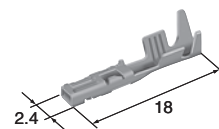
060 (S)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.35~0.5            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.51            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3500                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8230-4925)

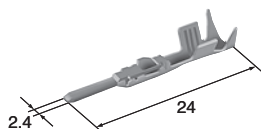
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.35~0.5                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.51                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0215)

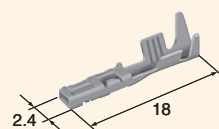
060 (M)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~1.25           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3500                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8230-4924)

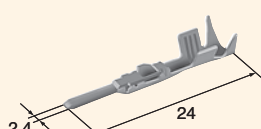
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~1.25                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0213)

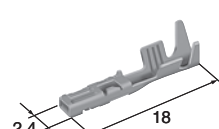
060 (L)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.55                           |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.32                           |



M(8230-4923)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.55                           |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0214)

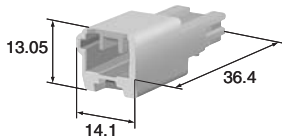
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.  
Color / Natural

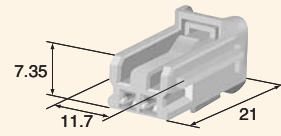
2way

Ref: Terminal part No.  
ターミナル参照頁 A-22



M(6098-6050)

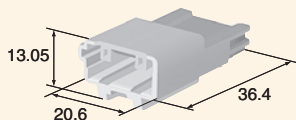
Ref: Terminal part No.  
ターミナル参照頁 A-22



F(6098-6053)

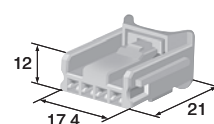
4way

Ref: Terminal part No.  
ターミナル参照頁 A-22



M(6098-5668)

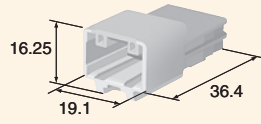
Ref: Terminal part No.  
ターミナル参照頁 A-22



F(6098-5677)

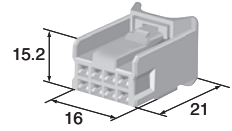
8way

Ref: Terminal part No.  
ターミナル参照頁 A-22



**M(6098-5686)**

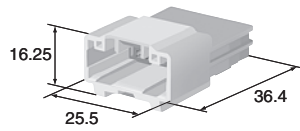
Ref: Terminal part No.  
ターミナル参照頁 A-22



**F(6098-5695)**

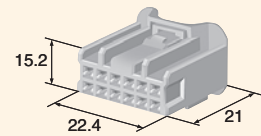
12way

Ref: Terminal part No.  
ターミナル参照頁 A-22



**M(6098-5704)**

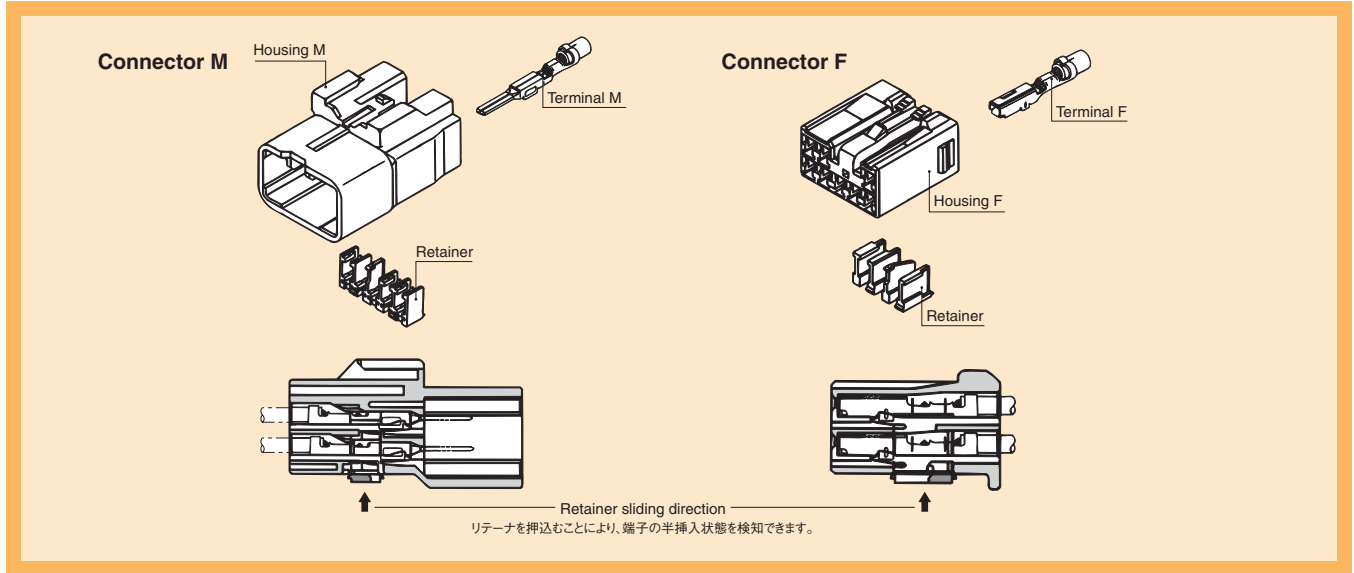
Ref: Terminal part No.  
ターミナル参照頁 A-22



**F(6098-5713)**

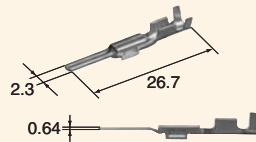


### Structure / 構造



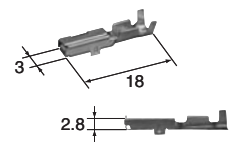
### Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



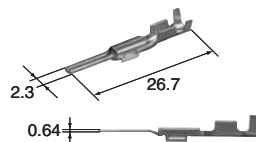
M(8230-4742)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.2            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



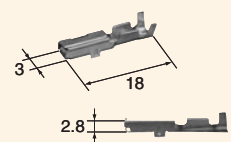
F(8240-0029)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



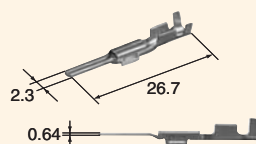
M(8230-4492)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



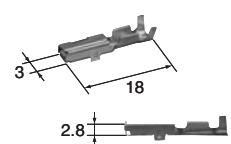
F(8240-4882)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 5000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



M(8100-1341)

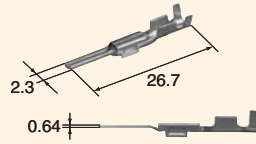
|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 4000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



F(8100-1346)

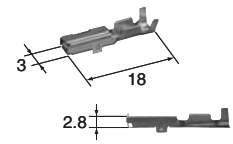
090

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



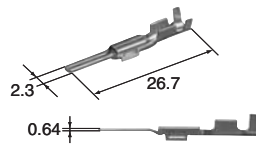
**M(8230-4502)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



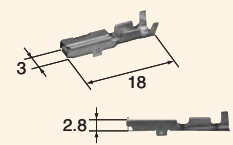
**F(8240-4892)**

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 2000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



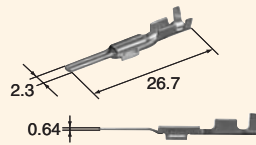
**M(8100-1342)**

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 2000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



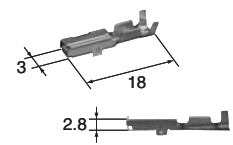
**F(8100-1347)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.7             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



**M(8230-4512)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.7                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4942)**

Heat-resistant copper alloy=耐熱銅合金

090

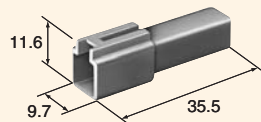
### Housing (mm)

Material / P.B.T.

Color / Natural

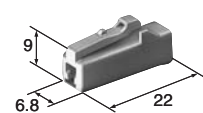
1way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-0561)**

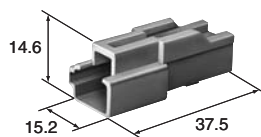
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-0564)**

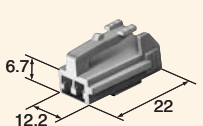
2way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-0549)**

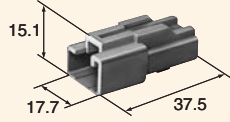
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-0550)**

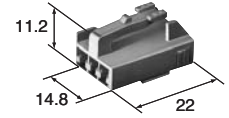
3way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-0492)**

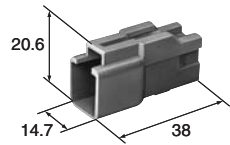
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-0577)**

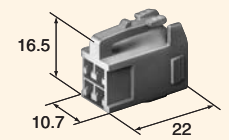
4way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-0348)**

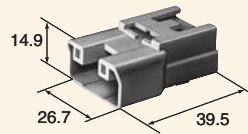
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-0349)**

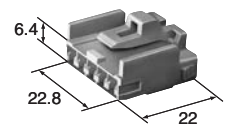
5way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(1300-3783)**

Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(1300-3111)**

Ref: Terminal part No.  
ターミナル参照頁 A-24

Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

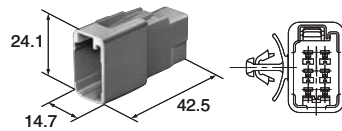
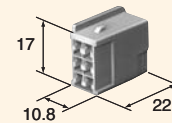


Plate thickness range for clamp :  
t=0.7~2.2

**M(6240-1107)**

Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6240-5118)**

6way

Ref: Terminal part No.  
ターミナル参照頁 A-24

Note  
備考 With body fastening clamp.  
回り止めクランプ付

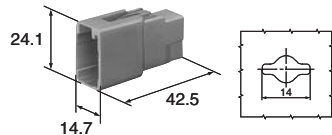
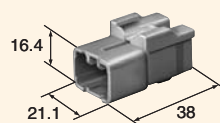


Plate thickness range for clamp :  
t=0.7~2.2

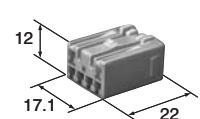
**M(6249-1243)**

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6240-1120)**

Ref: Terminal part No.  
ターミナル参照頁 A-24

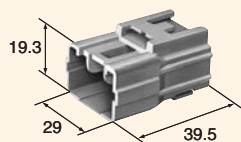


**F(6240-5160)**

Plate thickness range for clamp=クランプ適用板厚

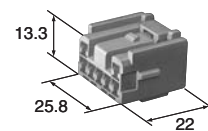
7way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-1230)**

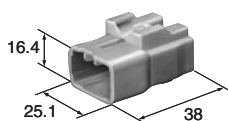
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-0996)**

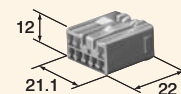
8way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6240-1077)**

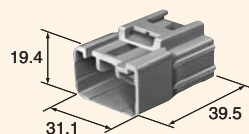
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6240-5031)**

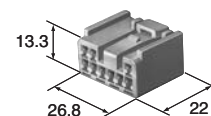
9way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6249-1229)**

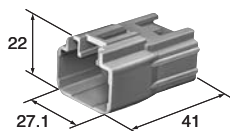
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6248-5270)**

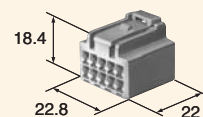
10way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6249-1235)**

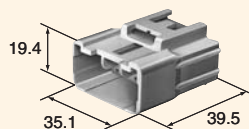
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6248-5276)**

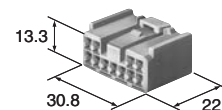
11way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6249-1234)**

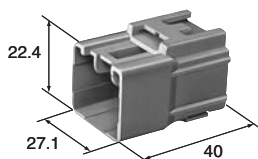
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6248-5275)**

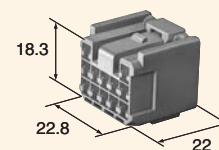
12way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6520-1009)**

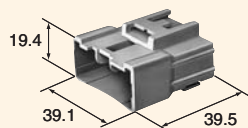
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6520-1004)**

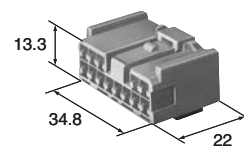
13way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(1300-4927)**

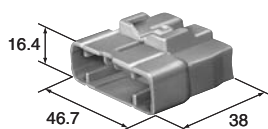
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(1300-4682)**

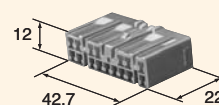
16way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6240-1158)**

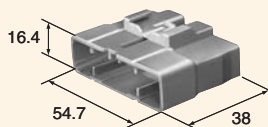
Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6240-5088)**

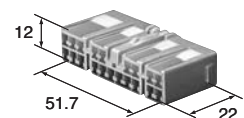
20way

Ref: Terminal part No.  
ターミナル参照頁 A-24



**M(6240-1033)**

Ref: Terminal part No.  
ターミナル参照頁 A-24



**F(6240-5035)**

## Terminal

● Ref: 090 Terminal List (Page A-24), 187 Terminal List (Page A-30)

● 090ターミナルはA-24、187ターミナルはA-30に掲載。

## Housing (mm)

Material / P.B.T.

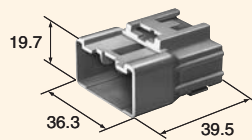
Color / Natural

No. of way / ( ) corresponds to 090, 187, in order from left to right.

極数 / ( ) 内表示 : 左から090極数、187極数

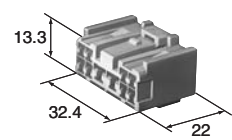
10way  
(8+2)

Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**M(6520-1150)**

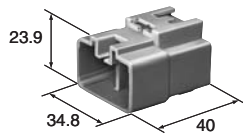
Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**F(6520-1142)**

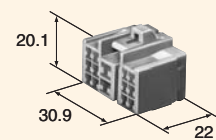
14way  
(12+2)

Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**M(6241-0261)**

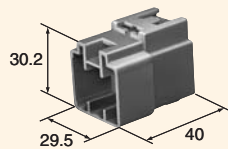
Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**F(6245-0281)**

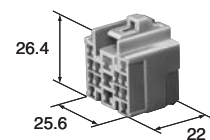
15way  
(12+3)

Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**M(6241-0241)**

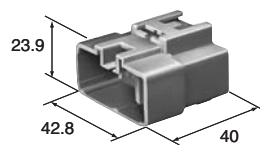
Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



**F(6245-0261)**

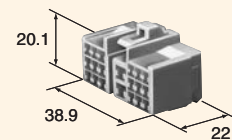
20way  
(18+2)

Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



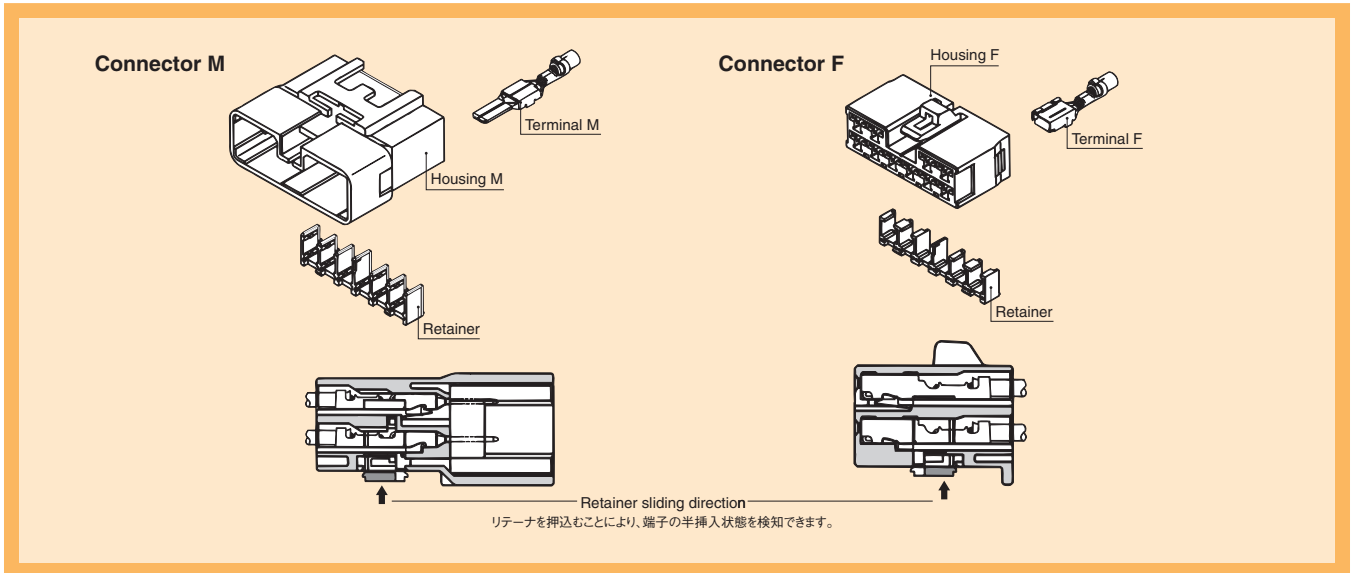
**M(6241-0281)**

Ref: Terminal part No.  
ターミナル参照頁 [090] A-24  
[187] A-30



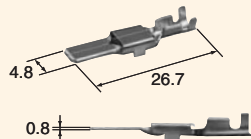
**F(6245-0301)**

## Structure / 構造



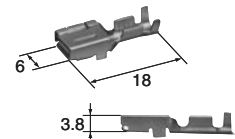
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



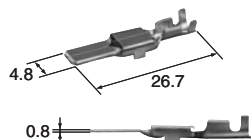
M(8230-4522)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



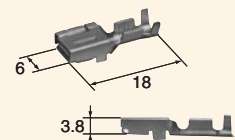
F(8240-4912)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3200                |
| Thickness (mm)<br>板厚                     | 0.4                 |



M(8230-4532)

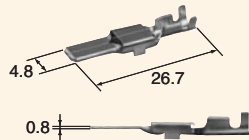
|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



F(8240-4922)

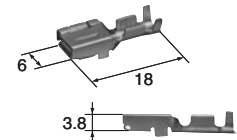
187

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2300                |
| Thickness (mm)<br>板厚                     | 0.4                 |



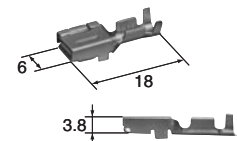
**M(8230-4542)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



**F(8240-4932)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-1555)**

Heat-resistant copper alloy=耐熱銅合金

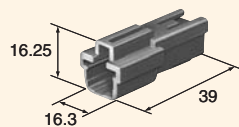
## Housing (mm)

Material / P.B.T.

Color / Natural

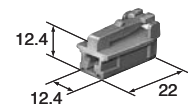
1way

Ref: Terminal part No.  
ターミナル参照頁 A-30



**M(6098-0822)**

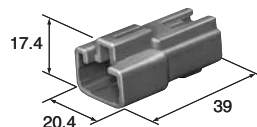
Ref: Terminal part No.  
ターミナル参照頁 A-30



**F(6098-0824)**

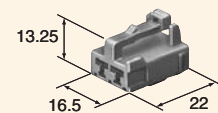
2way

Ref: Terminal part No.  
ターミナル参照頁 A-30



**M(6098-0323)**

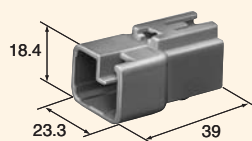
Ref: Terminal part No.  
ターミナル参照頁 A-30



**F(6098-0325)**

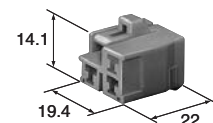
3way

Ref: Terminal part No.  
ターミナル参照頁 A-30



**M(6098-0149)**

Ref: Terminal part No.  
ターミナル参照頁 A-30

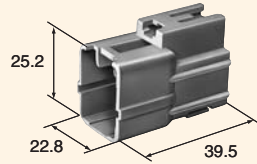


**F(6098-0151)**



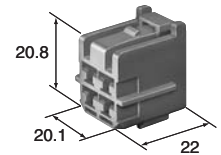
4way

Ref: Terminal part No.  
ターミナル参照頁 A-30



**M(6098-1851)**

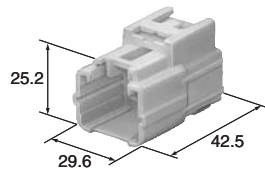
Ref: Terminal part No.  
ターミナル参照頁 A-30



**F(6098-1489)**

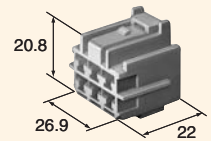
6way

Ref: Terminal part No.  
ターミナル参照頁 A-30



**M(6098-2211)**

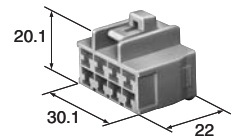
Ref: Terminal part No.  
ターミナル参照頁 A-30



**F(6098-1716)**

8way

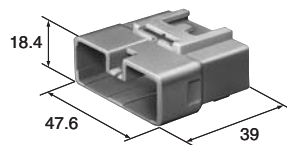
Ref: Terminal part No.  
ターミナル参照頁 A-30



**F(6098-0518)**

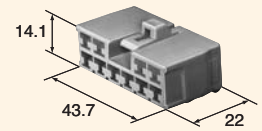
10way

Ref: Terminal part No.  
ターミナル参照頁 A-30



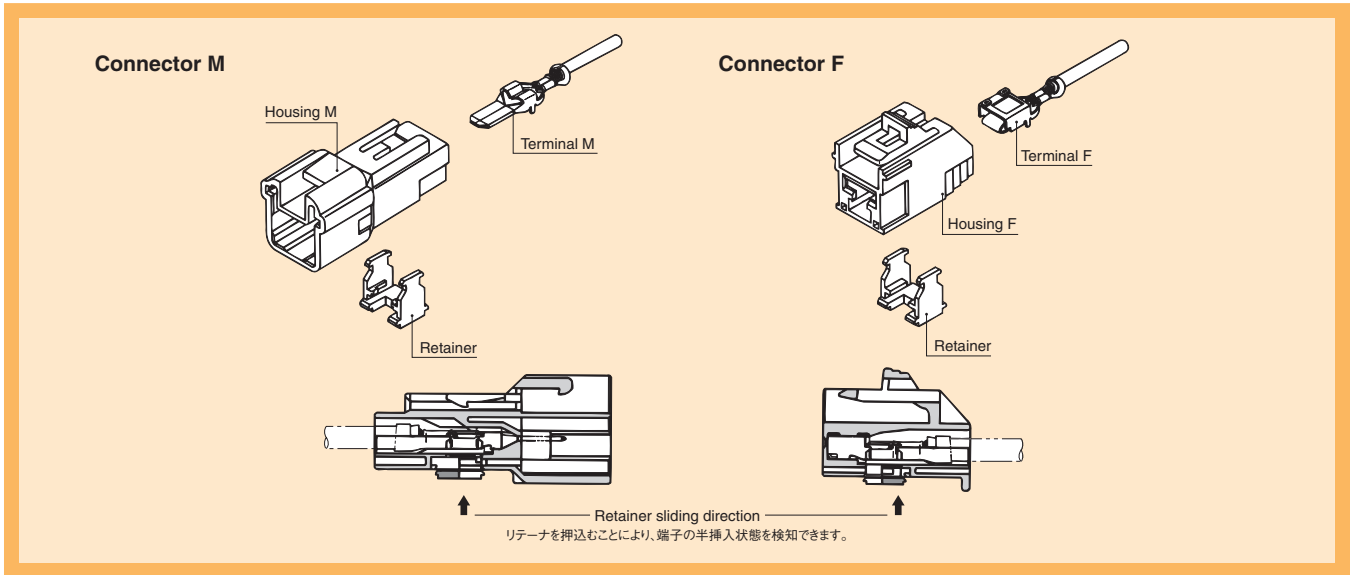
**M(6098-0154)**

Ref: Terminal part No.  
ターミナル参照頁 A-30



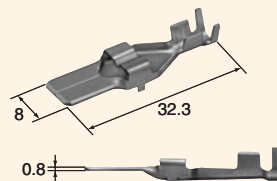
**F(6098-0156)**

## Structure / 構造



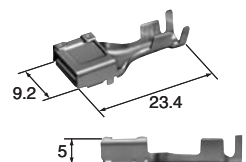
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



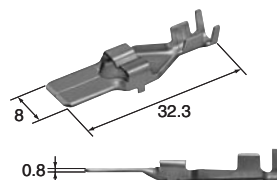
M(8100-0520)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



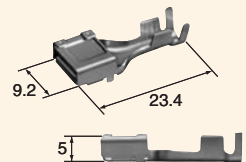
F(8100-0707)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



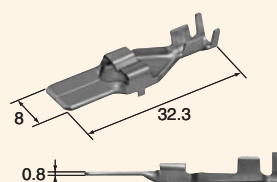
M(8100-0521)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



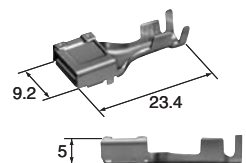
F(8100-2493)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



M(8100-0522)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-1553)

Heat-resistant copper alloy=耐熱銅合金

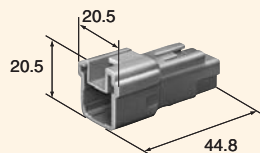
## Housing (mm)

Material / P.B.T.

Color / Natural

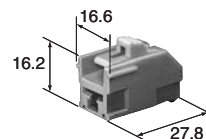
1way

Ref: Terminal part No. A-33  
ターミナル参照頁



**M(6240-1093)**

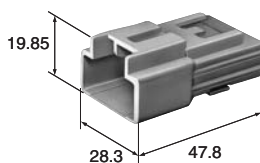
Ref: Terminal part No. A-33  
ターミナル参照頁



**F(6098-0441)**

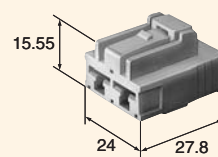
2way

Ref: Terminal part No. A-33  
ターミナル参照頁



**M(6098-1278)**

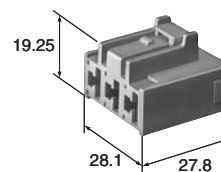
Ref: Terminal part No. A-33  
ターミナル参照頁



**F(6098-1104)**

3way

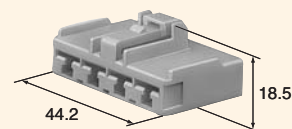
Ref: Terminal part No. A-33  
ターミナル参照頁



**F(6520-1466)**

4way

Ref: Terminal part No. A-33  
ターミナル参照頁



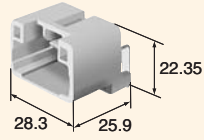
**F(6098-2137)**

## Housing (mm)

Material / P.B.T.

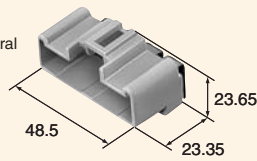
2way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1104) |
| Terminal type<br>端子タイプ          | 312         |
| Color<br>色相                     | Natural     |



### M(6098-2893)

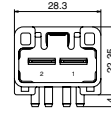
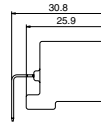
|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2137) |
| Terminal type<br>端子タイプ          | 312         |
| Color<br>色相                     | Natural     |



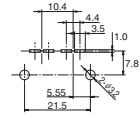
4way

### M(6098-2155)

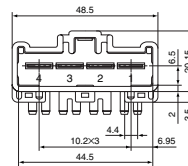
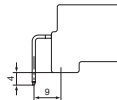
● Dimensional drawing



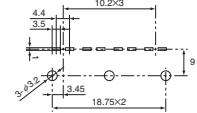
● Mounting drawing



● Dimensional drawing



● Mounting drawing



### ▶▶ Bracket for attaching (mm) ◀◀

|                |                 |                |  |                |                     |
|----------------|-----------------|----------------|--|----------------|---------------------|
| 025 / STANDARD | For 5·10·14 way | 025 / STANDARD | For 22 way   | 025 / STANDARD | —                   |
| 025 / HYBRID   | —               | 025 / HYBRID   | For 12(4+8)·12(6+6)·<br>12(8+4)·18(8+10)·<br>18(10+8)·18(12+6)·<br>20(16+4) way: [025,060] | 025 / HYBRID   | —                   |
| 050 / STANDARD | For 3·12 way    |                | For 17(8+9)·18(10+8)·<br>20(16+4) way: [025,090]   | 050 / STANDARD | For 16(6+10) way    |
| 050 / HYBRID   | —               | 050 / STANDARD | For 20·22 way  | 050 / HYBRID   | —                   |
| 060 / STANDARD | For 2·4·8 way   | 050 / HYBRID   | For 14(8+6)·17(8+9)·<br>20(16+4) way   | 060 / STANDARD | —                   |
| 090 / STANDARD | For 2·4 way     | 060 / STANDARD | For 12 way   | 090 / STANDARD | For 16·18·20·22 way |
| 090 / HYBRID   | —               | 090 / STANDARD | For 6·7·8·9·10·11·12·13·14·<br>16·20 way   | 090 / HYBRID   | —                   |
| 187 / STANDARD | For 2·3·4 way   | 090 / HYBRID   | For 10(8+2)·14(12+2)·<br>15(12+3)·20(18+2) way   | 187 / STANDARD | For 10 way          |
| 312 / STANDARD | For 1 way       | 187 / STANDARD | For 1·6·8 way  | 312 / STANDARD | —                   |
|                |                 | 312 / STANDARD | For 2 way  |                |                     |

**A** t=1.4mm

**B** t=1.4mm

**C** t=1.4mm

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# TS SEALED SERIES

## Features

The TS sealed connector series has a mechanism of terminal position assurance.

This series consists of 025, 040, 090, 187, and 312 types classified according to terminal size, covering an extensive array of applications from signal to power circuits.

- Retainers are pre-mounted on the connector housing, and are structured to enable setting by the same simple operation regardless of the number of ways, improving operability.
- These connectors can be directly secured to a bracket on the car body.

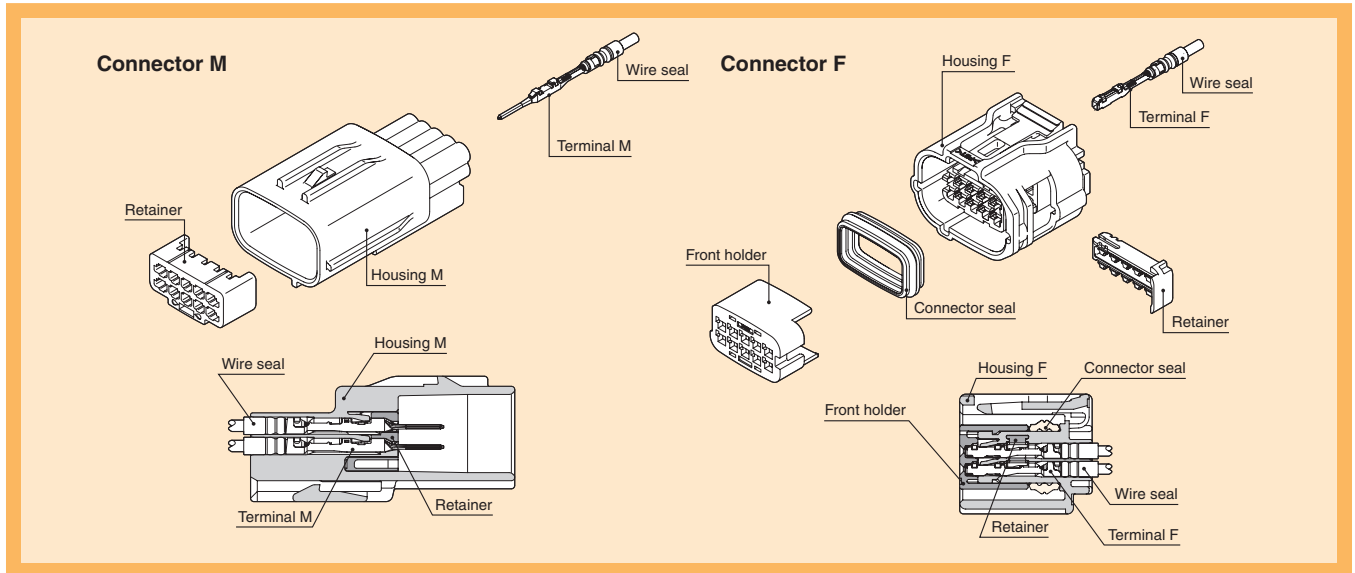
## 特長

TS防水シリーズは、挿入不足のターミナルを検知する機構を備えたコネクタシリーズです。

ターミナルサイズにより025・040・090・187・312で構成されており、信号回路からパワー回路まで幅広くご利用いただけます。

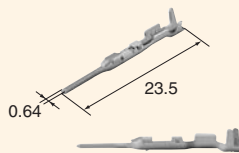
- リテーナは、コネクタハウジングに予め組み付けられており、また極数に関係なく簡単な同一作業でセットすることができる構造になっているので、作業性が向上します。
- コネクタは、ボデー側のブラケットに直接固定することができます。

## Structure / 構造

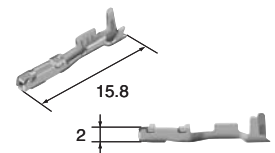


## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 7000                |
| Thickness (mm)<br>板厚                     | 0.25                |

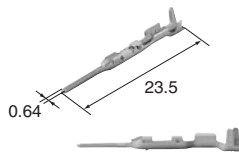


|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 7000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



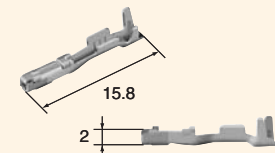
### M(8100-3617)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5             |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 7000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



### F(8100-3455)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 7000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



### M(8100-3708)

### F(8100-3456)

Heat-resistant copper alloy=耐熱銅合金

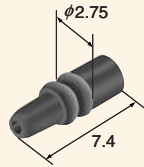
025

### Wire seals (mm)

●The wire seals are common to M and F.  
※A wireseal depends on a chosen cable.

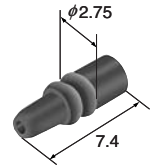
●ワイヤシールはM、F共用です。  
※使用電線により使用ワイヤシールが異なります。

|  |                |
|--|----------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (CHFUS / 0.22) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.05      |
| Material<br>材質                           | Silicon        |
| Color<br>色相                              | Green          |
| Pack (piece)<br>収容数(個)                   | 5000           |



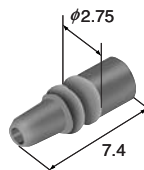
SS Type (7165-1043)

|  |                    |
|--|--------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (CHFUS / 0.35~0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.4            |
| Material<br>材質                           | Silicon            |
| Color<br>色相                              | Dark Green         |
| Pack (piece)<br>収容数(個)                   | 5000               |



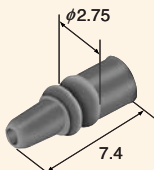
S Type (7165-0851)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3) (AVSSH / 0.3) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.5                    |
| Material<br>材質                           | Silicon                    |
| Color<br>色相                              | Reddish Brown<br>ベンガラ色     |
| Pack (piece)<br>収容数(個)                   | 5000                       |



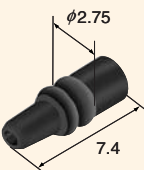
M Type (For AV) (7165-0796)

|  |               |
|--|---------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AESSX / 0.3) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.5       |
| Material<br>材質                           | Silicon       |
| Color<br>色相                              | Dark Brown    |
| Pack (piece)<br>収容数(個)                   | 5000          |



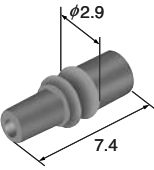
M Type (For AE) (7165-0891)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.5) (AVSSH / 0.5)<br>(AESSX / 0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~1.7                                     |
| Material<br>材質                           | Silicon                                     |
| Color<br>色相                              | Dark Gray                                   |
| Pack (piece)<br>収容数(個)                   | 5000  |



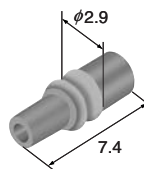
L Type (7165-0815)

|  |                    |
|--|--------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (CHFUS / 0.35~0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.4            |
| Material<br>材質                           | Silicon            |
| Color<br>色相                              | Violet             |
| Pack (piece)<br>収容数(個)                   | 5000               |



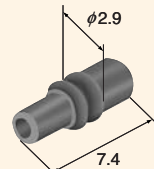
United Wire Seal Size S (7165-1312)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3) (AVSSH / 0.3)<br>(AESSX / 0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.5                                     |
| Material<br>材質                           | Silicon                                     |
| Color<br>色相                              | Dark Yellow                                 |
| Pack (piece)<br>収容数(個)                   | 5000  |



United Wire Seal Size M (7165-1198)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.5) (AVSSH / 0.5)<br>(AVSSX / 0.5) (AESSX / 0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~1.7   |
| Material<br>材質                           | Silicon   |
| Color<br>色相                              | Red Violet  |
| Pack (piece)<br>収容数(個)                   | 5000  |



United Wire Seal Size L (7165-1199)

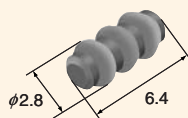
025

### Dummy plugs (mm)

●Dummy plugs are common to M and F.  
●Dummy plugs are used to blind unused terminal holes.

●ダミー栓はM、F共用です。  
● unnecessary terminal holes to be closed for the purpose, dummy plug is used.

|                        |            |
|------------------------|------------|
| Material<br>材質         | N.B.R.     |
| Color<br>色相            | Light Gray |
| Pack (piece)<br>収容数(個) | 2000       |



(7165-0797)

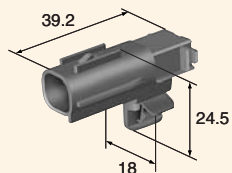
025



## Housing (mm)

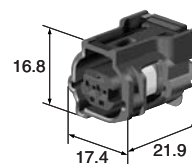
Material / P.B.T.

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



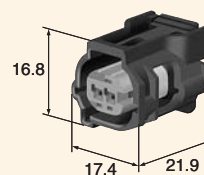
**M(6188-4797)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



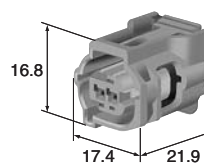
**F(6189-1161)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



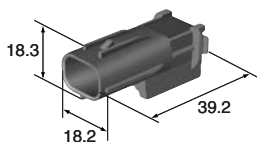
**F(6189-7020)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



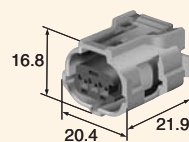
**F(6189-7073)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



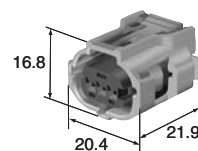
**M(6188-4920)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



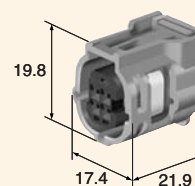
**F(6189-1130)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1132)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1231)**

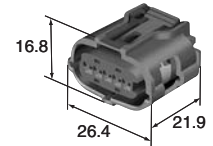
2way

3way

4way

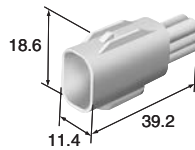
5way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



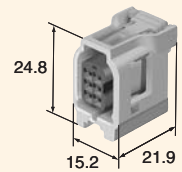
**F(6189-1046)**

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03    |
| Color<br>色相                        | Natural |



**M(6188-0706)**

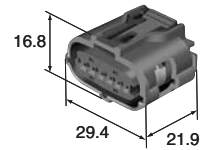
|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03    |
| Color<br>色相                        | Natural |



**F(6189-1142)**

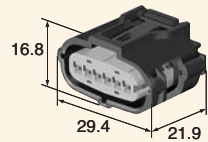
6way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



**F(6189-1083)**

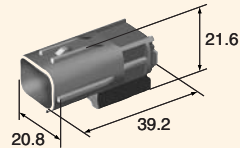
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



**F(6189-7100)**

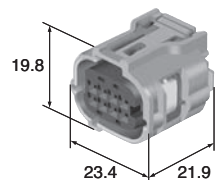
8way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**M(6188-0779)**

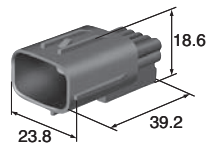
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1240)**

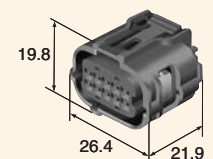
10way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



**M(6188-0696)**

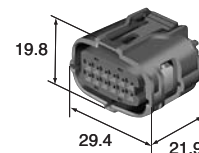
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



**F(6189-1134)**

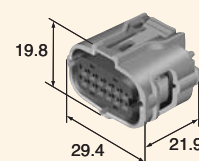
12way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03  |
| Color<br>色相                        | Black |



**F(6189-1128)**

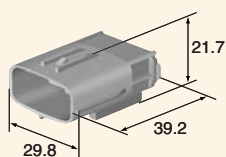
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1133)**

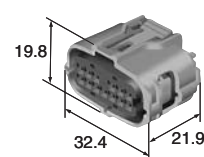
13way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**M(6188-4914)**

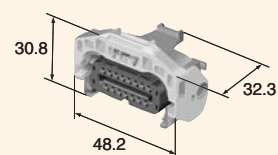
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1092)**

15way

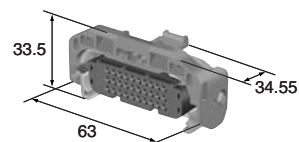
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-1135)**

30way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-03 |
| Color<br>色相                        | Gray |



**F(6189-6987)**

## Terminal

●Ref: 025 Terminal List (Page B-02),  
090 Terminal List (Page B-11),  
187 Terminal List (Page B-20)

●025ターミナルはB-02、090ターミナルはB-11、  
187ターミナルはB-20に掲載。

## Wire seals

●Ref: 025 Wire seal List (Page B-03),  
090 Wire seal List (Page B-12),  
187 Wire seal List (Page B-21)

●025ワイヤシールはB-03、090ワイヤシールはB-12、  
187ワイヤシールはB-21に掲載。

## Dummy plugs

●Ref: 025 Dummy plug List (Page B-03),  
090 Dummy plug List (Page B-13),  
187 Dummy plug List (Page B-21)

●025ダミー栓はB-03、090ダミー栓はB-13、  
187ダミー栓はB-21に掲載。

## Housing (mm)

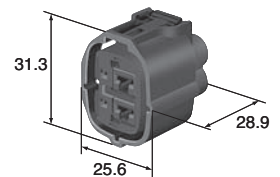
Material / P.B.T.

No. of way / ( ) corresponds to 025, 090, 187, in order from left to right.

極数 / ( ) 内表示 : 左から025極数、090極数、187極数

4way  
(2+2)

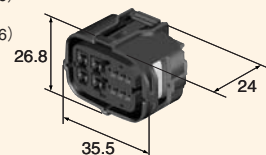
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Black                    |



F(6189-1048)

10way  
(6+4)

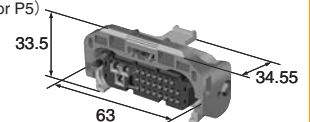
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[090] B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[090] B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[090] B-13 (For P6) |
| Color<br>色相                        | Black                             |



F(6189-1163)

13way  
(10+3)

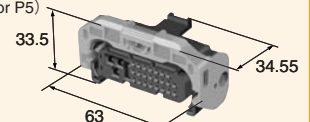
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[090] B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[090] B-13 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[090] B-13 (For P5) |
| Color<br>色相                        | Light Gray                        |



F(6189-7077)

26way  
(23+3)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[090] B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[090] B-12 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[090] B-13 (For P5) |
| Color<br>色相                        | Black                             |

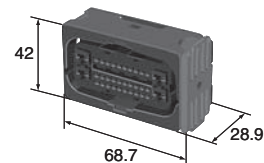


F(6189-6934)

34way

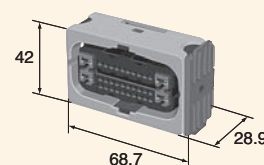
(30+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Black                    |



**F(6189-6978)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Light Gray               |

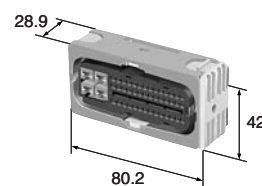


**F(6189-6979)**

40way

(36+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Gray                     |

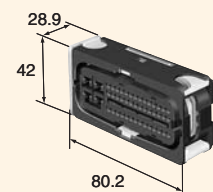


**F(6189-1160)**

46way

(42+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Black                    |

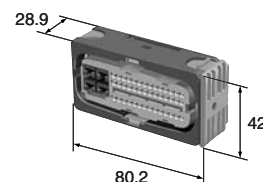


**F(6189-1136)**

46way

(42+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [025] B-02<br>[187] B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [025] B-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [025] B-03<br>[187] B-21 |
| Color<br>色相                        | Black                    |



**F(6189-6894)**

### Terminal

※For terminal selection, please contact our sales staff.

※ターミナルの品番については弊社営業担当にお問い合わせ下さい。

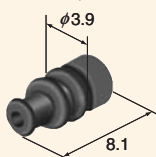
### Wire seals (mm)

●The wire seals are common to M and F.

●ワイヤシールはM、F共用です。

040

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3~0.5) (AVSSX / 0.3~0.5)<br>(AESSX / 0.3~0.5) (CAVUS / 0.3~0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.7   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Brown  |
| Pack (piece)<br>収容数(個)                   | 2000  |



S Type (7165-0728)

### Dummy plugs

※For dummy plugs selection, please contact our sales staff.

※ダミー栓の品番については弊社営業担当にお問い合わせ下さい。

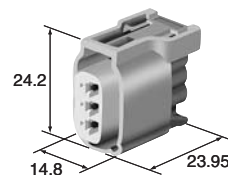
### Housing (mm)

Material / P.B.T.

Color / Natural

3way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | ※    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-07 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | ※    |



F(6189-0892)

## Terminal

※For terminal selection, please contact our sales staff.

※ターミナルの品番については弊社営業担当にお問い合わせ下さい。

## Wire seals

●Ref: 040 Wire seal List (Page B-09), 187 Wire seal List (Page B-21)

●040ワイヤシールはB-09、187ワイヤシールはB-21に掲載。

## Dummy plugs

※For dummy plugs selection, please contact our sales staff.

※ダミー栓の品番については弊社営業担当にお問い合わせ下さい。

## Housing (mm)

Material / P.B.T.

Color / Black

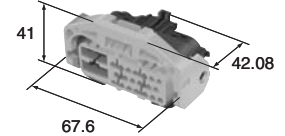
No. of way / ( ) corresponds to 040, 187, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、187極数

24way

(20+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [040] ※<br>[187] B-21    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [040] B-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [040] ※<br>[187] B-21    |

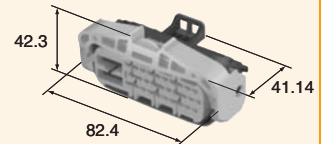


**F(6189-0886)**

34way

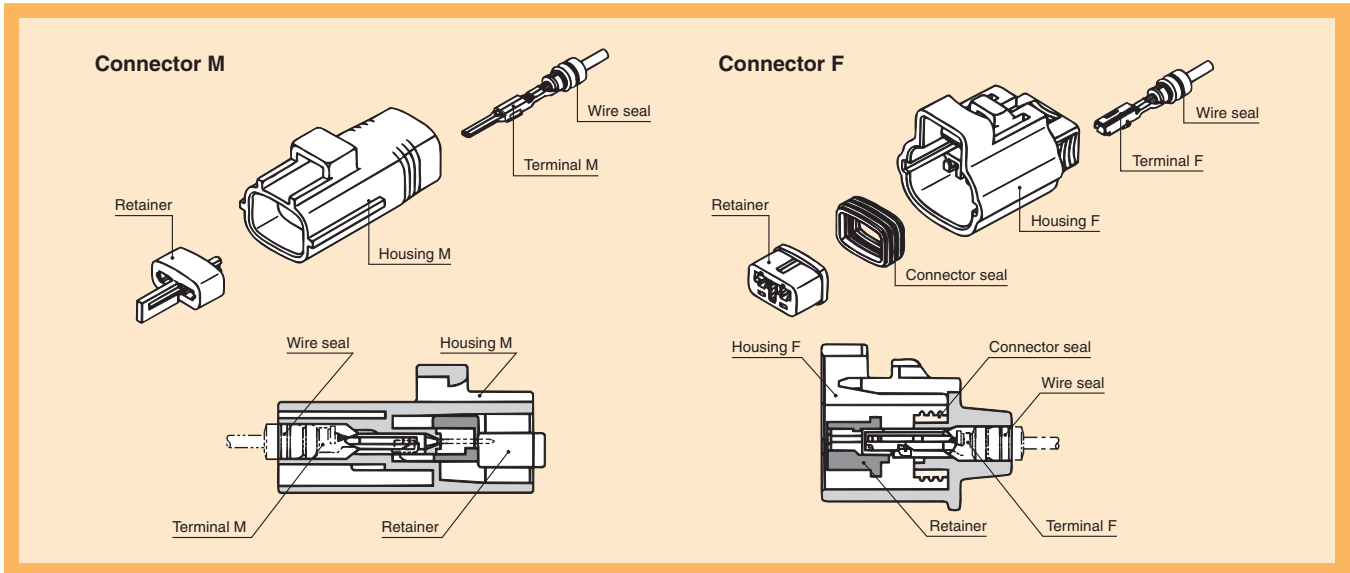
(30+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [040] ※<br>[187] B-21    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [040] B-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [040] ※<br>[187] B-21    |



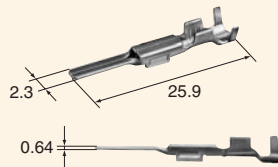
**F(6189-0804)**

### Structure / 構造



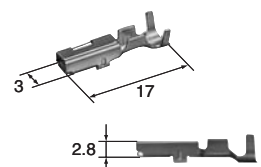
### Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.2             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



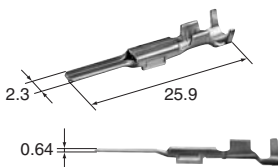
M(8100-0457)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.2                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



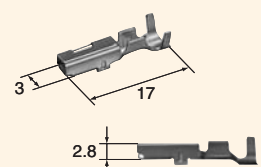
F(8100-0460)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.2              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 4000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



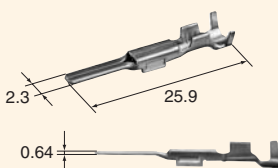
M(8100-1340)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.2                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



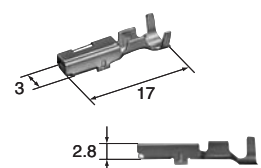
F(8100-1344)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(8100-0458)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



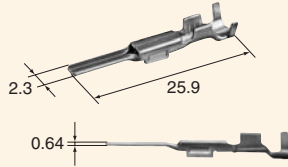
F(8100-0461)

Heat-resistant copper alloy=耐熱銅合金

090

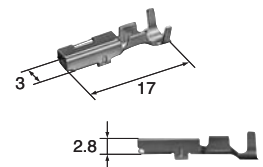


|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 4000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



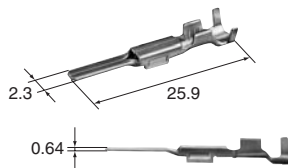
**M(8100-1007)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



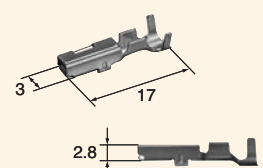
**F(8100-0594)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



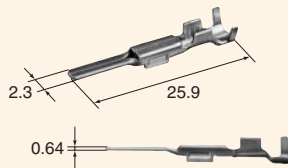
**M(8100-0459)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



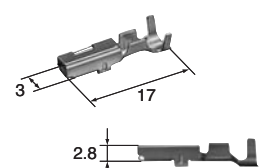
**F(8100-0462)**

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.9              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 4000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



**M(8100-1008)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8100-0817)**

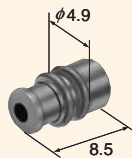
Heat-resistant copper alloy=耐熱銅合金

### Wire seals (mm)

- The wire seals are common to M and F.
- P5: For 5mm pitch housing/Please inquire us for the details.
- P6: For 6mm pitch housing

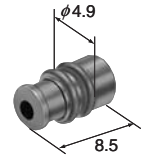
- ワイヤシールはM、F共用です。
- P5：5ミリピッチ用/別途お問い合わせください。
- P6：6ミリピッチ用

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVX・AEX/0.3) (AVS/0.3) (AVSS/0.3~0.85)<br>(AVSSX・AESSX/0.3~0.75) (CAVUS/0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Brown   |
| Pack (piece)<br>収容数(個)                   | 1000  |



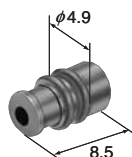
**S Type (7165-0342)**

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5~0.85) (AVX・AEX/0.5~0.75)<br>(AVS/0.5~0.85) (AVSS/1.25)<br>(AVSSX・AESSX/1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.5  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Black  |
| Pack (piece)<br>収容数(個)                   | 2000   |



**M Type (7165-0343)**

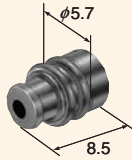
|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/1.25) (AVX・AEX/1.25) (AVS/1.25)<br>(AVSS/2.0) (AVSSX・AESSX/2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.5~2.9   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Blue   |
| Pack (piece)<br>収容数(個)                   | 1000  |



**L Type (7165-0344)**

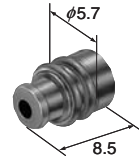
090  
(For P6)

|  |                    |
|--|--------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (CHFUS / 0.35~0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.1~1.4            |
| Material<br>材質                           | Silicone           |
| Color<br>色相                              | Blue               |
| Pack (piece)<br>収容数(個)                   | 2000               |



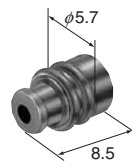
SS Type (7165-0842)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVX·AEX / 0.3) (AVS / 0.3) (AVSS / 0.3~0.85)<br>(AVSSX·AESSX / 0.3~0.75) (CAVUS / 0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Brown  |
| Pack (piece)<br>収容数(個)                   | 2000  |



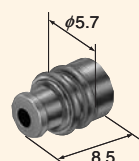
S Type (7165-0349)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5~0.85) (AVX·AEX / 0.5~0.75)<br>(AVS / 0.5~0.85) (AVSS / 1.25)<br>(AVSSX·AESSX / 1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.5  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Dark Green   |
| Pack (piece)<br>収容数(個)                   | 2000   |



M Type (7165-0395)

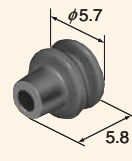
|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 1.25) (AVX·AEX / 1.25) (AVS / 1.25)<br>(AVSS / 2.0) (AVSSX·AESSX / 2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.5~2.9   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Gray   |
| Pack (piece)<br>収容数(個)                   | 2000  |



L Type (7165-0351)

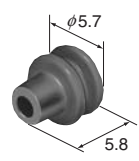
090  
(For P6)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVX·AEX / 0.3) (AVS / 0.3) (AVSS / 0.3~0.5)<br>(AVS / 0.5~1.25) (AVSS / 1.25~2.0)<br>(AVSSX·AESSX / 0.3~0.75) (CAVUS / 0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.3~1.7  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Green  |
| Pack (piece)<br>収容数(個)                   | 2000   |



S Type (7165-0076)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5~0.85) (AVX·AEX / 0.5~0.75)<br>(AVS / 0.5~1.25) (AVSS / 1.25~2.0)<br>(AVSSX·AESSX / 1.25~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.7~2.7  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Black  |
| Pack (piece)<br>収容数(個)                   | 2000   |



M Type (7160-8234)

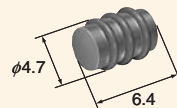
### Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.
- P5 : For 5mm pitch housing/Please inquire us for the details.
- P6 : For 6mm pitch housing

- ダミー栓はM、F共用です。
- 不必要なターミナル穴を塞ぐために、ダミー栓を使用します。
- P5 : 5ミリピッチ用/別途お問い合わせください。
- P6 : 6ミリピッチ用

090

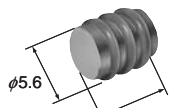
|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Brown  |
| Pack (piece)<br>収容数(個) | 1000   |



For P5 (7161-9787)

090

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



For P6 (7160-9465)

### Housing (mm)

Material / P.B.T.

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**M(6188-0047)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**F(6189-0100)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**M(6188-0108)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**F(6189-0199)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**M(6188-0266)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**F(6189-0249)**

2way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**M(6188-0229)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

**F(6189-0388)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Natural       |

**M(6188-0624)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Natural       |

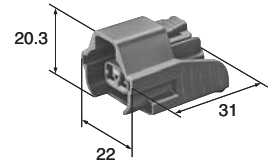
**F(6189-0264)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-12 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P5) |
| Color<br>色相                        | Gray          |

**F(6189-0566)**

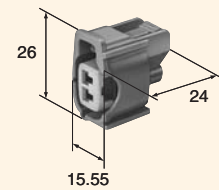
2way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-12 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P5) |
| Color<br>色相                        | Gray          |



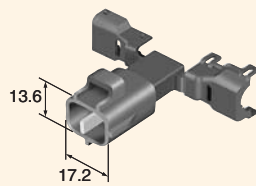
**F(6189-0573)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-12 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P5) |
| Color<br>色相                        | Gray          |



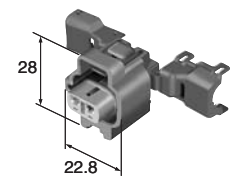
**F(6189-0611)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0470)**

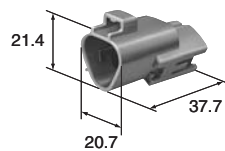
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0682)**

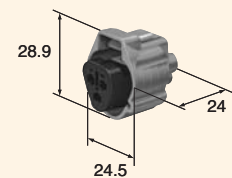
3way  
(T Type)

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0099)**

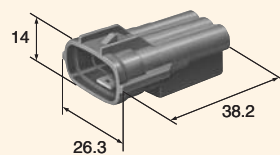
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0179)**

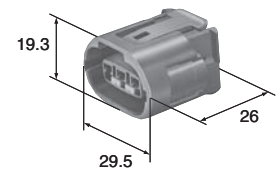
3way  
(E Type)

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0282)**

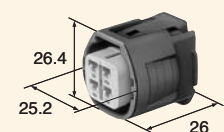
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0443)**

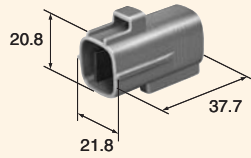
4way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Black         |



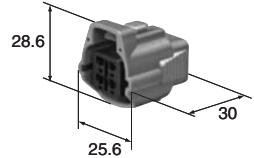
**F(6189-0694)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



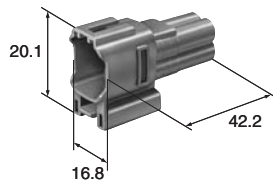
**M(6188-0066)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



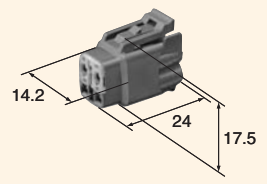
**F(6189-0126)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0141)**

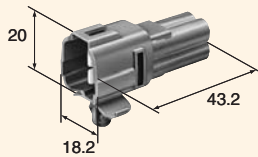
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0381)**

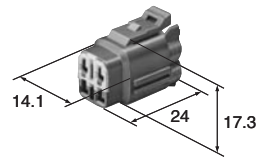
4way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0217)**

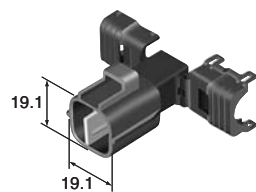
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0372)**

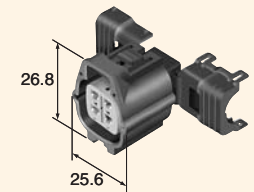
Plate thickness range for clamp :  
t=0.7~2.2

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Dark Gray     |



**M(6188-0442)**

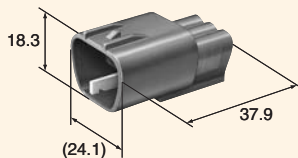
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Dark Gray     |



**F(6189-0656)**

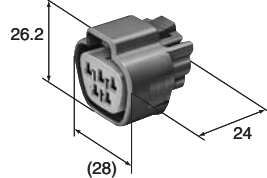
5way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0327)**

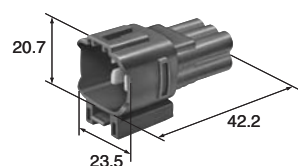
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0504)**

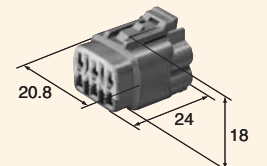
6way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0173)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

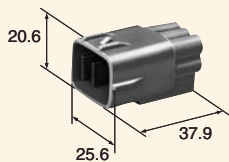


**F(6189-0319)**

Plate thickness range for clamp=クランプ適用板厚

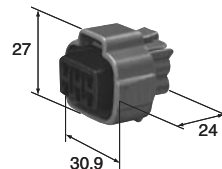
6way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



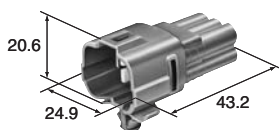
**M(6188-0175)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



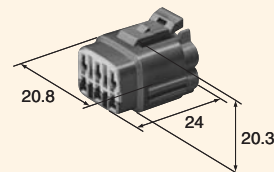
**F(6189-0323)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0209)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |

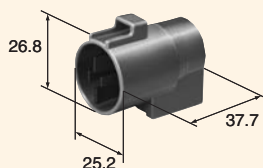


**F(6189-0368)**

Plate thickness range for clamp :  
t=0.7~2.2

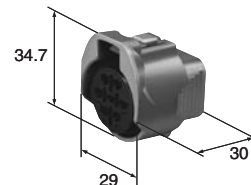
7way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**M(6188-0067)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-13 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-13 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0127)**

Plate thickness range for clamp=クランプ適用板厚

### Terminal

●Ref: 090 Terminal List (Page B-11),  
187 Terminal List (Page B-20)

●090ターミナルはB-11、187ターミナルはB-20に掲載。

### Wire seals

●Ref: 090 Wire seal List (Page B-12),  
187 Wire seal List (Page B-21)

●090ワイヤシールはB-12、187ワイヤシールはB-21に掲載。

### Dummy plugs

●Ref: 090 Dummy plug List (Page B-13),  
187 Dummy plug List (Page B-21)

●090ダミー栓はB-13、187ダミー栓はB-21に掲載。

### Housing (mm)

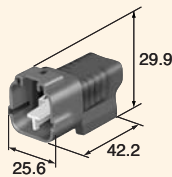
Material / P.B.T.

Color / Gray

No. of way / ( ) corresponds to 090, 187, in order from left to right.

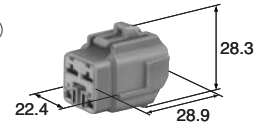
極数 / ( ) 内表示 : 左から090極数、187極数

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



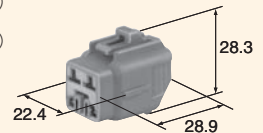
M(6188-0415)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



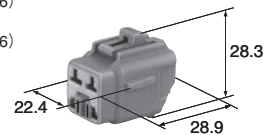
F(6189-0144)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



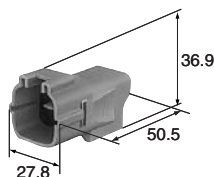
F(6189-0390)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



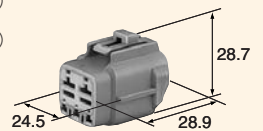
F(6189-0557)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



M(6188-0091)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



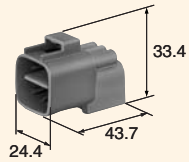
F(6189-0166)

4way  
(2+2)

5way  
(3+2)

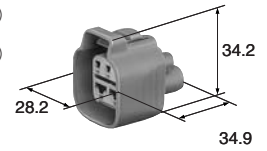
5way  
(3+2)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**M(6188-0101)**

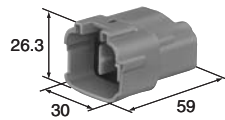
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**F(6189-0181)**

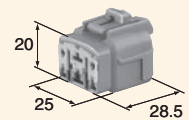
6way  
(4+2)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**M(6188-0187)**

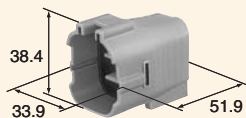
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**F(6189-0143)**

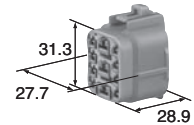
11way  
(8+3)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**M(6188-0221)**

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-13 (For P6)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P6)<br>[187] B-21 |



**F(6189-0376)**

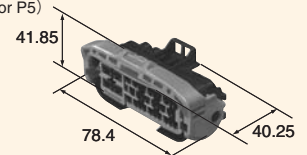
24way  
(20+4)

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-12 (For P5)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P5)<br>[187] B-21 |



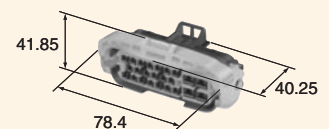
**M(6188-0539)**

|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-12 (For P5)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P5)<br>[187] B-21 |



**F(6189-0630)**

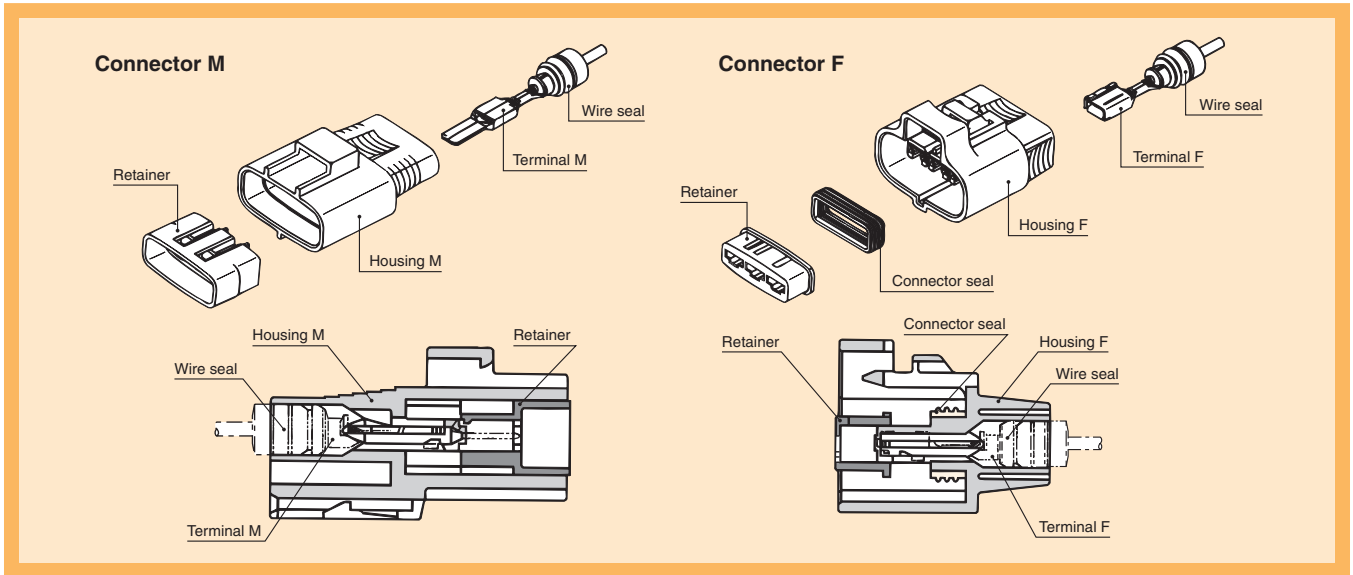
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] B-11<br>[187] B-20          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] B-12 (For P5)<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] B-13 (For P5)<br>[187] B-21 |



**F(6189-0612)**

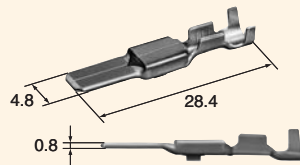


### Structure / 構造



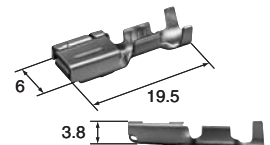
### Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



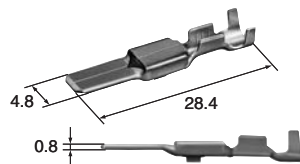
M(8100-0463)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



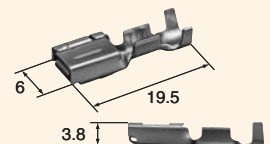
F(8100-0466)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



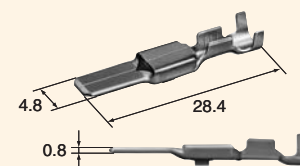
M(8100-0464)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



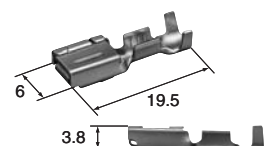
F(8100-0467)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



M(8100-0465)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-0468)

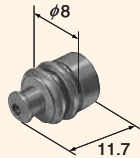
Heat-resistant copper alloy=耐熱銅合金

### Wire seals (mm)

●The wire seals are common to M and F.

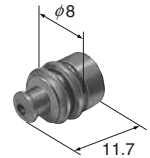
●ワイヤシールはM、F共用です。

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVX・AEX/0.3) (AVS/0.3) (AVSS/0.3~0.85)<br>(AVSSX・AESSX/0.5~0.75) (CAVUS/0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Brown  |
| Pack (piece)<br>収容数(個)                   | 1000  |



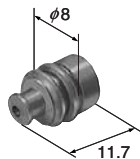
S Type (7165-0346)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5~1.25) (AVX・AEX/0.5~1.25)<br>(AVS/0.5~1.25) (AVSS/1.25~2.0)<br>(AVSSX・AESSX/1.25~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.9  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Dark Green   |
| Pack (piece)<br>収容数(個)                   | 1000   |



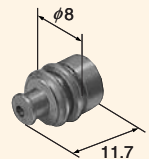
M Type (7165-0347)

|  |                                  |
|--|----------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/2.0) (AVX・AEX/2.0) (AVS/2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~3.5                          |
| Material<br>材質                           | Silicone                         |
| Color<br>色相                              | Dark Gray                        |
| Pack (piece)<br>収容数(個)                   | 1000                             |



L Type (7165-0348)

|  |                                  |
|--|----------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/3.0) (AVX・AEX/3.0) (AVS/3.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 3.5~4.1                          |
| Material<br>材質                           | Silicone                         |
| Color<br>色相                              | Dark Blue                        |
| Pack (piece)<br>収容数(個)                   | 1000                             |



LL Type (7165-0356)

187

### Dummy plugs (mm)

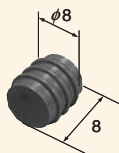
●Dummy plugs are common to M and F.

●ダミー栓はM、F共用です。

●Dummy plugs are used to blind unused terminal holes.

● unnecessary terminal holes to be closed for the purpose, dummy plug is used.

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Gray   |
| Pack (piece)<br>収容数(個) | 1000   |



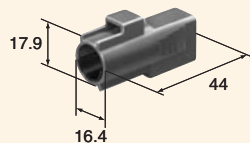
(7165-0145)

187

### Housing (mm)

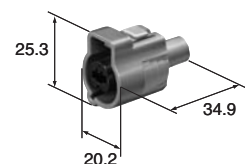
Material / P.B.T.

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



M(6188-0083)

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



F(6189-0145)

1way

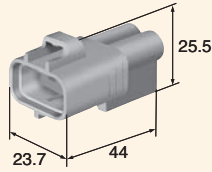
# TS SEALED SERIES

187(4.8 mm) / STANDARD

B-22

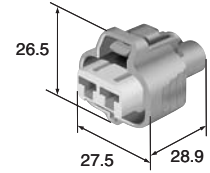
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



M(6188-0259)

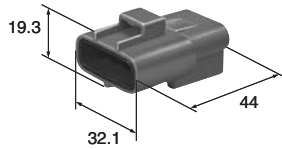
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



F(6189-0425)

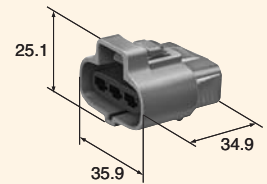
3way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



M(6188-0129)

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-20 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-21 |
| Color<br>色相                        | Gray |



F(6189-0165)

# TS SEALED SERIES

187, 312(4.8 mm, 8.0 mm) / HYBRID

## Terminal

●Ref: 187 Terminal List (Page B-20),  
312 Terminal List (Page B-23)

●187ターミナルはB-20、312ターミナルはB-23に掲載。

## Wire seals

●Ref: 187 Wire seal List (Page B-21),  
312 Wire seal List (Page B-24)

●187ワイヤシールはB-21、312ワイヤシールはB-24に掲載。

## Dummy plugs

●Ref: 187 Dummy plug List (Page B-21),  
312 Dummy plug List (Page B-24)

●187ダミー栓はB-21、312ダミー栓はB-24に掲載。

## Housing (mm)

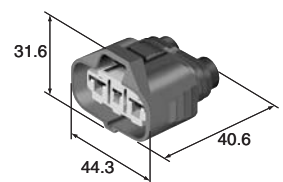
Material / P.B.T.

No. of way / ( ) corresponds to 187, 312, in order from left to right.

極数 / ( ) 内表示 : 左から187極数、312極数

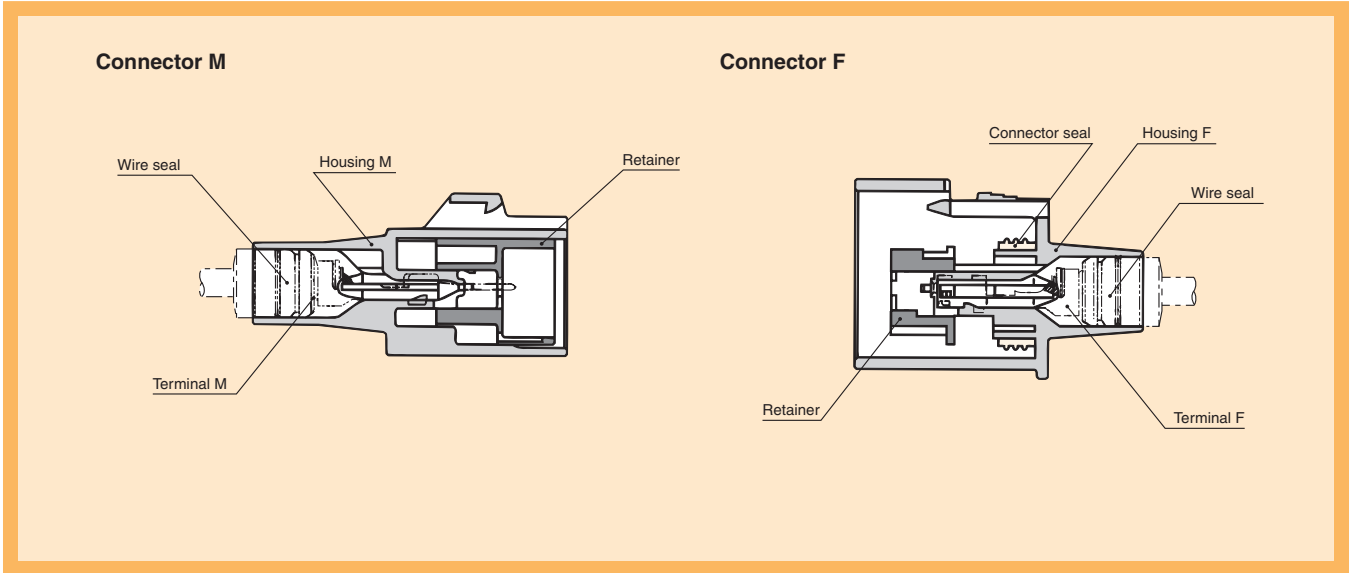
3way  
(1+2)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [187] B-20<br>[312] B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [187] B-21<br>[312] B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [187] B-21<br>[312] B-24 |
| Color<br>色相                        | Gray                     |



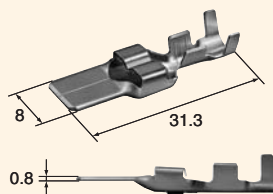
F(6189-0588)

## Structure / 構造



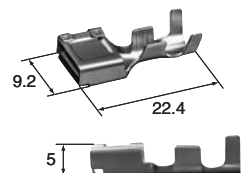
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 3.0                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



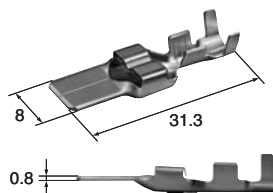
**M(8100-0507)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 3.0                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



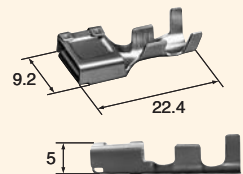
**F(8100-0452)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



**M(8100-0508)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 900                            |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-2980)**

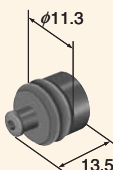
Heat-resistant copper alloy=耐熱銅合金

### Wire seals (mm)

●The wire seals are common to M and F.

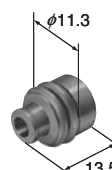
●ワイヤシールはM、F共用です。

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVS/0.5) ~ (AVX/1.25)                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | Over 2.1 mm less than 2.9 mm<br>2.1 mmを越え2.9 mm以下 |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Brown  |
| Pack (piece)<br>収容数(個)                   | 1000  |



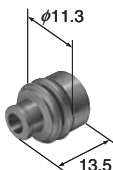
SS Type (7165-0683)

|  |                                  |
|--|----------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/3.0) (AVX·AEX/3.0) (AVS/3.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 3.6~4.1                          |
| Material<br>材質                           | Silicone                         |
| Color<br>色相                              | Dark Gray                        |
| Pack (piece)<br>収容数(個)                   | 1000                             |



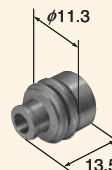
S Type (7165-0400)

|  |                                  |
|--|----------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/5.0) (AVX·AEX/5.0) (AVS/5.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~4.9                          |
| Material<br>材質                           | Silicone                         |
| Color<br>色相                              | Dark Blue                        |
| Pack (piece)<br>収容数(個)                   | 1000                             |



M Type (7165-0392)

|  |                                  |
|--|----------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/8.0) (AVX·AEX/8.0) (AVS/8.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 5.3~5.8                          |
| Material<br>材質                           | Silicone                         |
| Color<br>色相                              | Black                            |
| Pack (piece)<br>収容数(個)                   | 1000                             |



L Type (7165-0393)

312

### Dummy plugs (mm)

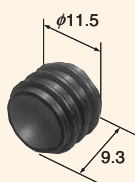
●Dummy plugs are common to M and F.

●ダミー栓はM、F共用です。

●Dummy plugs are used to blind unused terminal holes.

● unnecessary terminal holes to be closed for the purpose, dummy plugs are used.

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



(7165-0180)

312

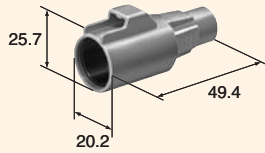
## Housing (mm)

Material / P.B.T.

Color / Gray

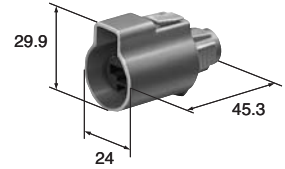
1way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24 |



**M(6188-0049)**

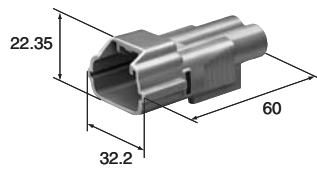
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24 |



**F(6189-0101)**

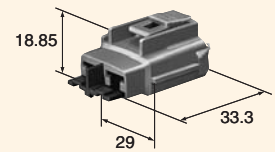
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24 |



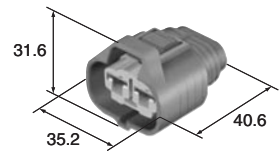
**M(6188-0096)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24 |



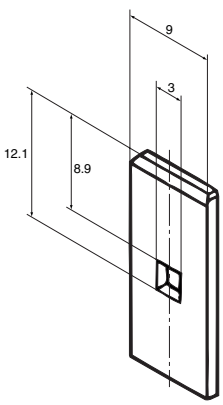
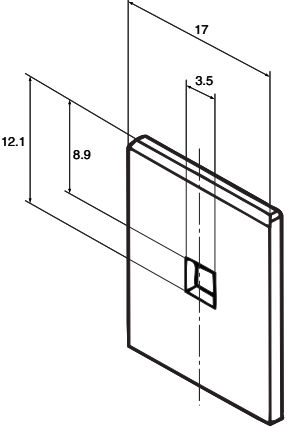
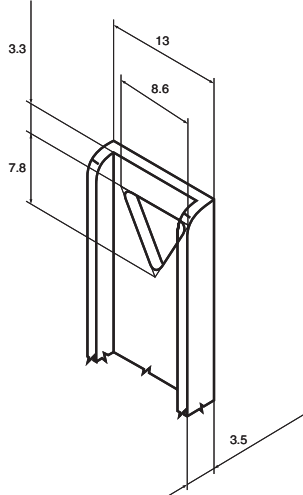
**F(6189-0172)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-23 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24 |



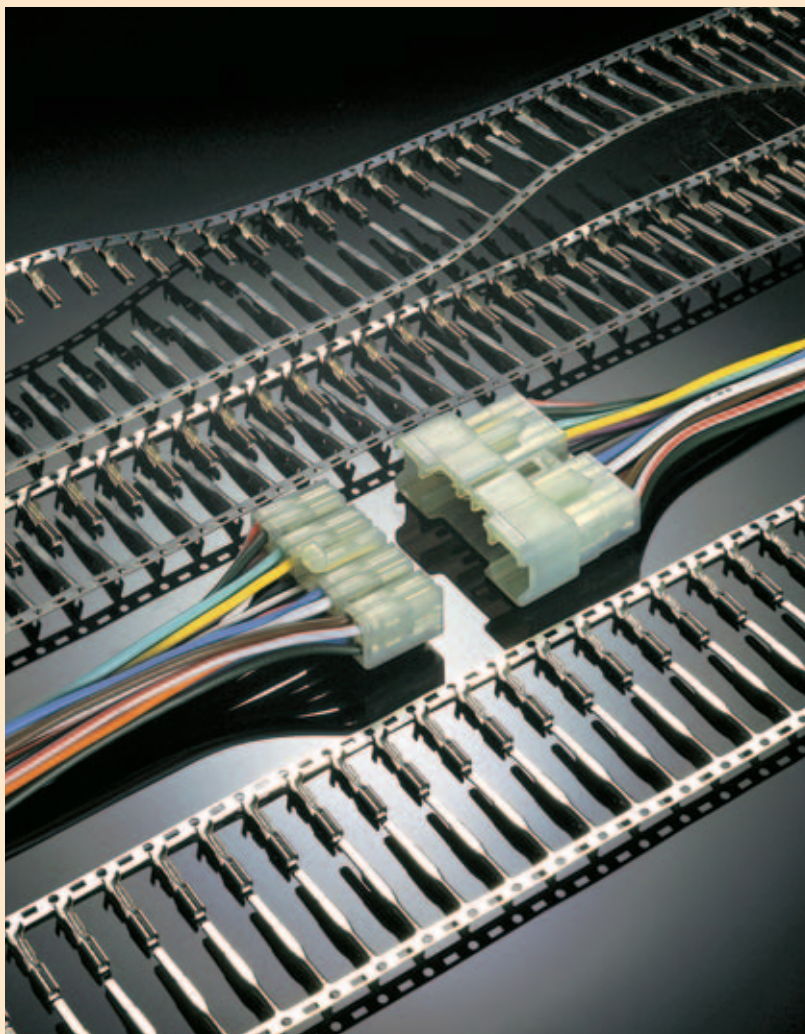
**F(6189-0856)**

### ▶▶ Bracket for attaching (mm) ◀◀

|  |   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
|--|---|---|---|--|----------------|-------------|----------------|---|---|----------------|--------------|----------------|-------------|--------------|---------------------|----------------|----------|----------------|-----------|
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">025 / STANDARD</td> <td>For 6·8·10 way</td> </tr> <tr> <td style="text-align: center;">090 / STANDARD</td> <td>For 2·3 (E type·T type)·4·6 way (Except for fig C)<br/>(C該当部品を除く)</td> </tr> <tr> <td style="text-align: center;">187 / STANDARD</td> <td>For 1·2 way</td> </tr> <tr> <td style="text-align: center;">312 / STANDARD</td> <td>—</td> </tr> </table> | 025 / STANDARD  | For 6·8·10 way  | 090 / STANDARD  | For 2·3 (E type·T type)·4·6 way (Except for fig C)<br>(C該当部品を除く) | 187 / STANDARD | For 1·2 way | 312 / STANDARD | — | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">025 / STANDARD</td> <td>For 3·13 way</td> </tr> <tr> <td style="text-align: center;">090 / STANDARD</td> <td>For 2·7 way</td> </tr> <tr> <td style="text-align: center;">090 / HYBRID</td> <td>For 4·5·6·11·24 way</td> </tr> <tr> <td style="text-align: center;">187 / STANDARD</td> <td>For 3way</td> </tr> <tr> <td style="text-align: center;">312 / STANDARD</td> <td>For 2 way</td> </tr> </table> | 025 / STANDARD | For 3·13 way | 090 / STANDARD | For 2·7 way | 090 / HYBRID | For 4·5·6·11·24 way | 187 / STANDARD | For 3way | 312 / STANDARD | For 2 way |
| 025 / STANDARD   | For 6·8·10 way  |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 090 / STANDARD   | For 2·3 (E type·T type)·4·6 way (Except for fig C)<br>(C該当部品を除く)                                    |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 187 / STANDARD   | For 1·2 way   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 312 / STANDARD   | —   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 025 / STANDARD   | For 3·13 way  |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 090 / STANDARD   | For 2·7 way   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 090 / HYBRID   | For 4·5·6·11·24 way   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 187 / STANDARD   | For 3way  |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 312 / STANDARD   | For 2 way   |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
|  <p><b>A</b></p>   |  <p><b>B</b></p> |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">090 / STANDARD</td> <td>For 2 way M (6188-0229)<br/>For 4 way M (6188-0141)<br/>For 6 way M (6188-0173)</td> </tr> </table>  | 090 / STANDARD  | For 2 way M (6188-0229)<br>For 4 way M (6188-0141)<br>For 6 way M (6188-0173) |  <p><b>C</b></p> |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |
| 090 / STANDARD   | For 2 way M (6188-0229)<br>For 4 way M (6188-0141)<br>For 6 way M (6188-0173)                       |   |   |  |                |             |                |   |   |                |              |                |             |              |                     |                |          |                |           |

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# MT SERIES

## (Outdated connector)

### Features

The MT connector series has a 4 mm terminal pitch between terminal poles. This series consists of a 090 type (090, 250, and 305 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- These connectors can be directly secured to a support on the car body.

### 特長

MTシリーズは、各種の制御回路、並びに低パワー回路に適するターミナル極間ピッチ4mmのコネクタシリーズです。ターミナルサイズが090 (ハイブリッドは090・250・305) で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- コネクタは、ボデー側のサポートに直接固定することができます。

In case of purchasing the subject parts, please contact our sales office. Some part may not be in production.

当コネクタシリーズをご選定の際には、弊社営業担当者に生産対応可否をご確認ください。



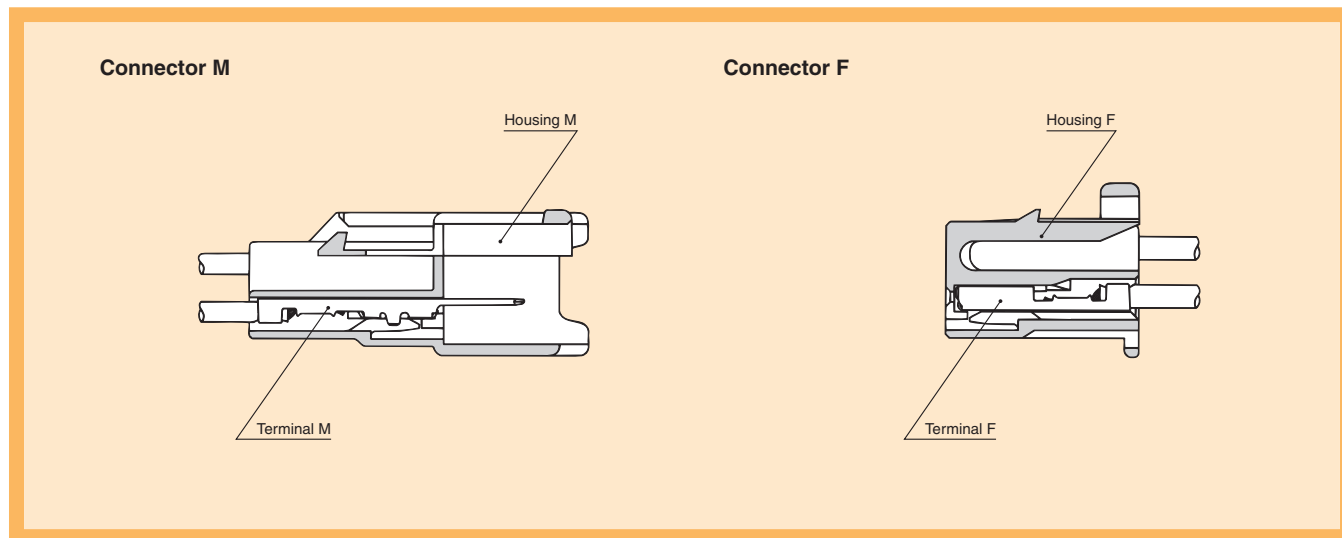
## INTERLOCKING TYPE

Connection is disengaged by releasing the locking arm provided in the housing.

ハウジングに設けられたロッキングアームでロックを解除することによりコネクタの離脱を行うタイプです。

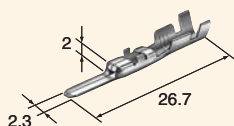
C-02

## Structure / 構造



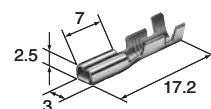
## Terminal (mm)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.5~2.0              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 5000                 |
| Thickness (mm)<br>板厚                     | 0.3                  |



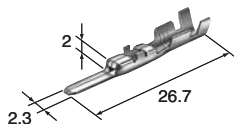
M(8230-4419)

|  |                      |
|--|----------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5              |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.5~2.0              |
| Material<br>材質                           | Brass<br>黄銅          |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ |
| Reel (piece)<br>リール(個)                   | 5000                 |
| Thickness (mm)<br>板厚                     | 0.25                 |



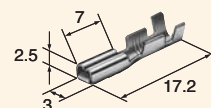
F(8240-4849)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.5~2.0             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(8230-4272)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.5~2.0             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |

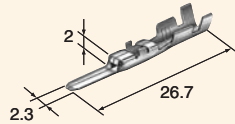


F(8240-4412)

090

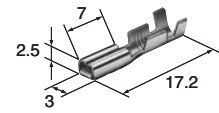
090

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



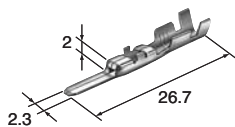
**M(8230-4282)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.5             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



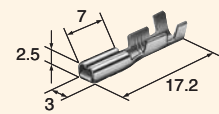
**F(8240-4422)**

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0 (Cables to be used shall be AVSS.)<br>(電線はAVSSを使用) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6  |
| Material<br>材質                           | Brass<br>黄銅  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ                                    |
| Reel (piece)<br>リール(個)                   | 5000   |
| Thickness (mm)<br>板厚                     | 0.3  |



**M(8230-4392)**

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0 (Cables to be used shall be AVSS.)<br>(電線はAVSSを使用) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6  |
| Material<br>材質                           | Heat-resistant<br>copper alloy                         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ                                    |
| Reel (piece)<br>リール(個)                   | 5000   |
| Thickness (mm)<br>板厚                     | 0.25   |



**F(8240-4652)**

Heat-resistant copper alloy=耐熱銅合金

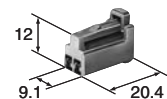
### Housing (mm)

Material / 66 Nylon (\* P.B.T.)

Color / Natural

2way

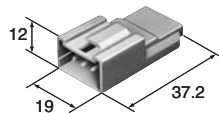
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5021)**

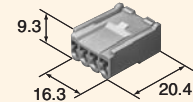
4way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**\* M(6240-1004)**

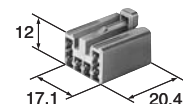
Ref: Terminal part No.  
ターミナル参照頁 C-02



**\* F(6240-5002)**

6way

Ref: Terminal part No.  
ターミナル参照頁 C-02

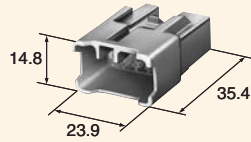


**F(6244-5061)**

C-04

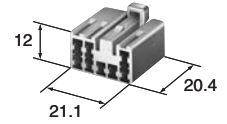
8way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1081)**

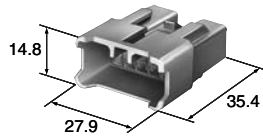
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5081)**

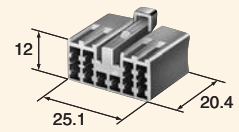
10way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1101)**

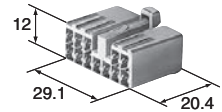
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5101)**

12way

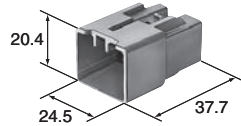
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6244-5121)**

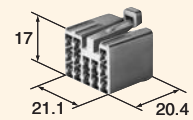
13way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1131)**

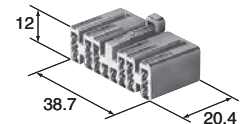
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5131)**

14way

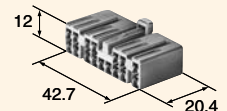
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6244-5141)**

16way

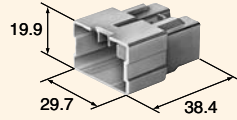
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6244-5161)**

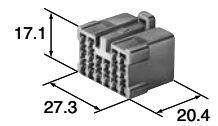
16way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1161)**

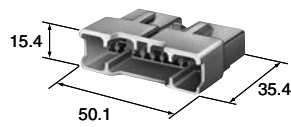
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5161)**

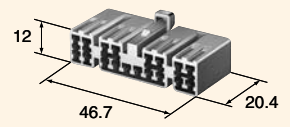
18way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1181)**

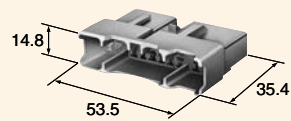
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5181)**

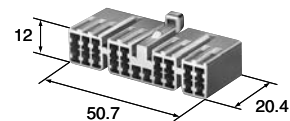
20way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1201)**

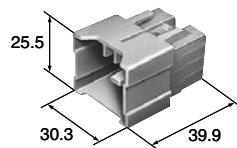
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5201)**

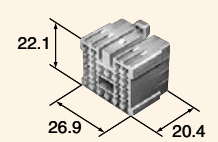
20way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1006)**

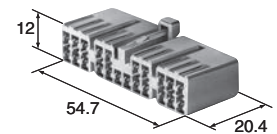
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5003)**

22way

Ref: Terminal part No.  
ターミナル参照頁 C-02



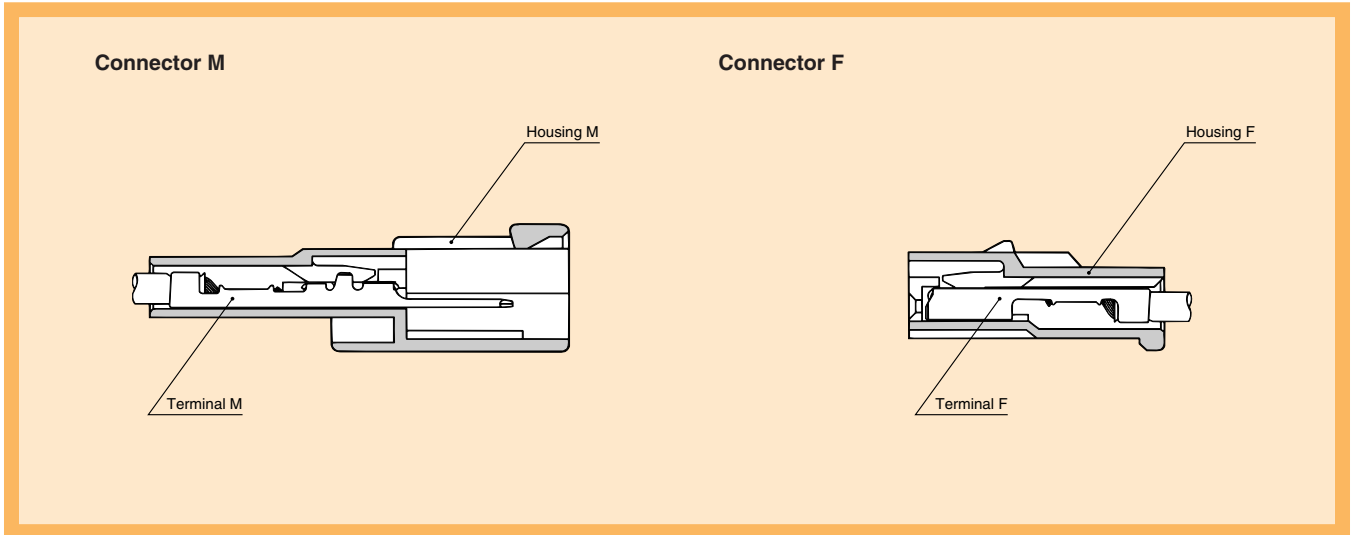
**F(6240-5221)**

## SEMI-LOCKING TYPE

Simplified locking mechanism allows quick disconnection without release operation.  
 簡易係止機構をもち、ハウジングの離脱にロック解除動作の不要なタイプです。

C-06

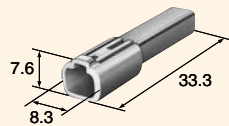
## Structure / 構造



## Housing (mm)

Material / 66 Nylon  
 Color / Natural

Ref: Terminal part No. C-02  
 ターミナル参照頁



### M(6242-1011)

Ref: Terminal part No. C-02  
 ターミナル参照頁

Note  
 備考 With clamp for 7mm dia.  
 φ7用クランプ付

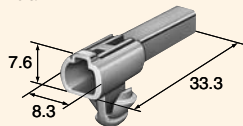


Plate thickness range for clamp :  
 t=0.7~1.6

### M(6243-1011)

Plate thickness range for clamp=クランプ適用板厚

1way

2way

Ref: Terminal part No.  
ターミナル参照頁 C-02  
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

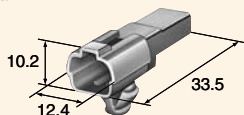


Plate thickness range for clamp :  
t=0.7~1.6 **M(6243-1021)**

Ref: Terminal part No.  
ターミナル参照頁 C-02  
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

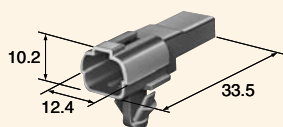


Plate thickness range for clamp :  
t=1.6~3.0 **M(6240-1016)**

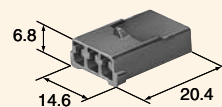
3way

Ref: Terminal part No.  
ターミナル参照頁 C-02



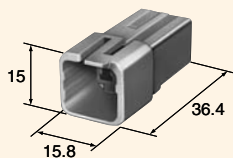
**M(6242-1031)**

Ref: Terminal part No.  
ターミナル参照頁 C-02



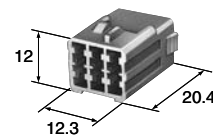
**F(6242-5031)**

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6242-1061)**

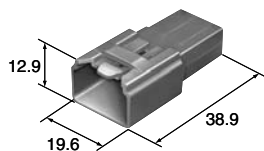
Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6242-5061)**

6way

Ref: Terminal part No.  
ターミナル参照頁 C-02



**M(6240-1003)**

Ref: Terminal part No.  
ターミナル参照頁 C-02  
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

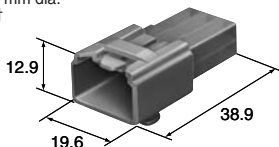
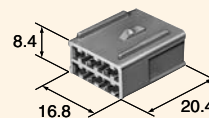


Plate thickness range for clamp :  
t=0.7~1.6 **M(6240-1001)**

Ref: Terminal part No.  
ターミナル参照頁 C-02



**F(6240-5001)**

Plate thickness range for clamp=クランプ適用板厚

## Terminal (mm)

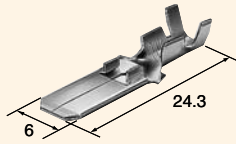
- Ref: 090 Terminal List (Page C-02)
- Terminal part number for 250 and 305 type connector:  
Please inquire details. (Vary depending on wire sizes)

- 090ターミナルはC-02に掲載。
- 250、305ターミナル品番：適用電線サイズにより異なります。  
別途お問い合わせください。

C-08

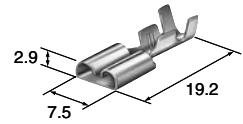
250

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.4                         |



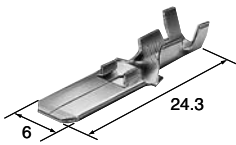
**M(8230-4040)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.32                        |



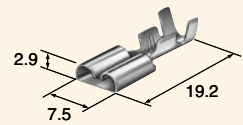
**F(8240-4140)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



**M(8230-4042)**

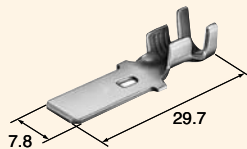
|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



**F(8240-4182)**

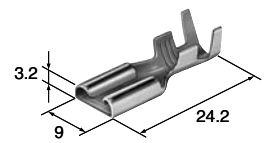
305

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~2.0                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.4~3.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 1500                        |
| Thickness (mm)<br>板厚                     | 0.8                         |



**M(8232-4220)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~2.0                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.4~3.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 2500                        |
| Thickness (mm)<br>板厚                     | 0.4                         |



**F(8242-4050)**

Anti-Corrosion treatment=防錆処理

## Housing (mm)

Material / 66 Nylon

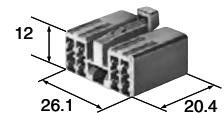
Color / Natural

No. of way / ( ) corresponds to 090, 250, 305, in order from left to right.

極数 / ( ) 内表示：左から090極数、250極数、305極数

9way  
(8+1)

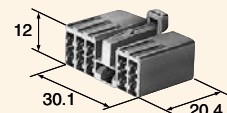
Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**F(6245-0121)**

11way  
(10+1)

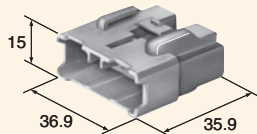
Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**F(6245-0131)**

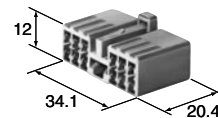
13way  
(12+1)

Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**M(6241-0121)**

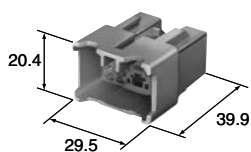
Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**F(6245-0141)**

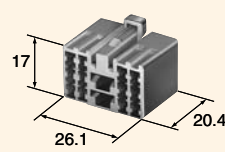
14way  
(12+2)

Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**M(6241-0011)**

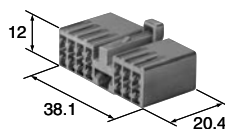
Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**F(6245-0011)**

15way  
(14+1)

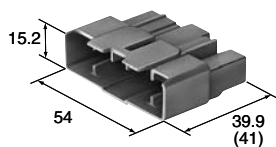
Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08



**F(6245-0021)**

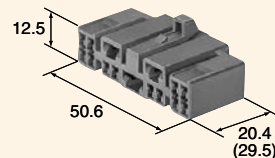
15way  
(12+2+1)

Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08  
[305] C-08



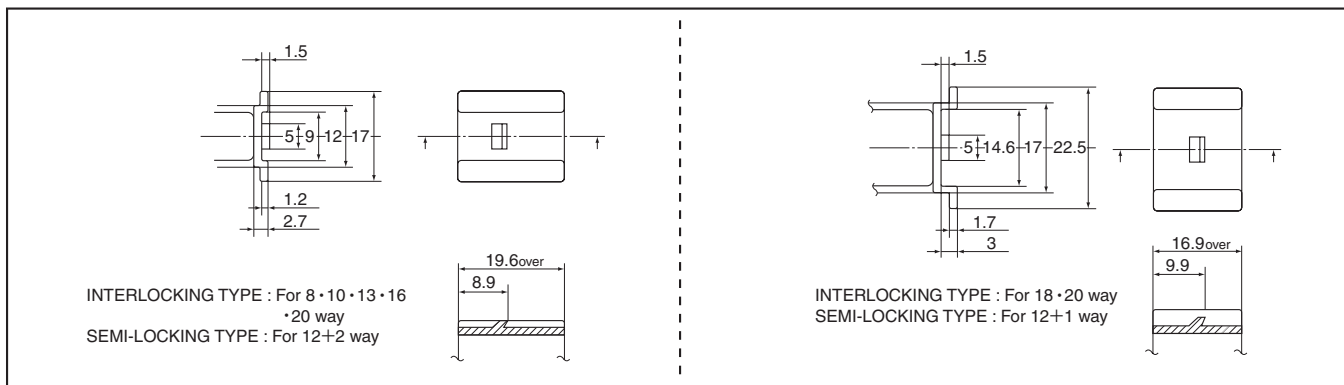
**M(6241-0153)**

Ref: Terminal part No. [090] C-02  
ターミナル参照頁 [250] C-08  
[305] C-08



**F(6245-0173)**

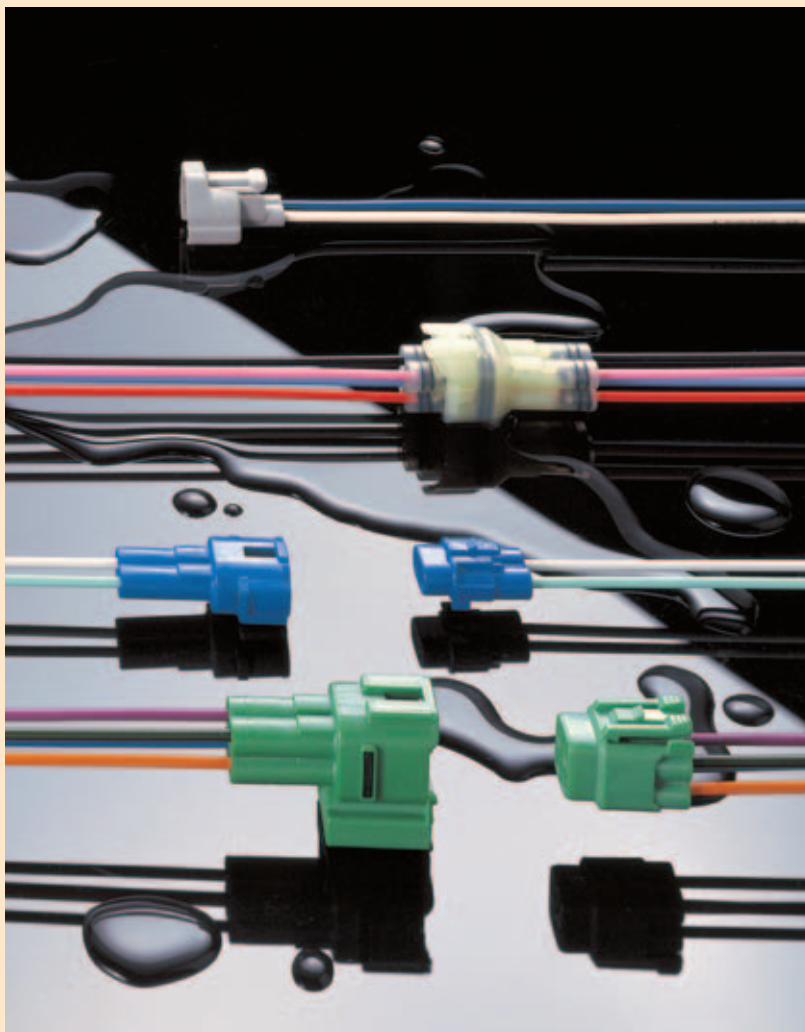
## ▶▶ Shape of Mating Support (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the mating support are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。





# MT SEALED SERIES

## (Outdated connector)

### Features

The MT sealed connector series, developed for connecting waterproof wiring, has 5 mm and 6 mm pitches between terminal poles.

This series consists of a 090 type classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- Perfect performance is ensured even when used in an automobile engine compartment.
- A model that can be directly secured to a bracket on the car body is also available.

### 特長

MT防水シリーズは、防水性をもとめられる配線の接続用として開発された、ターミナル極間ピッチ5mmと6mmのコネクタシリーズです。ターミナルサイズが090で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

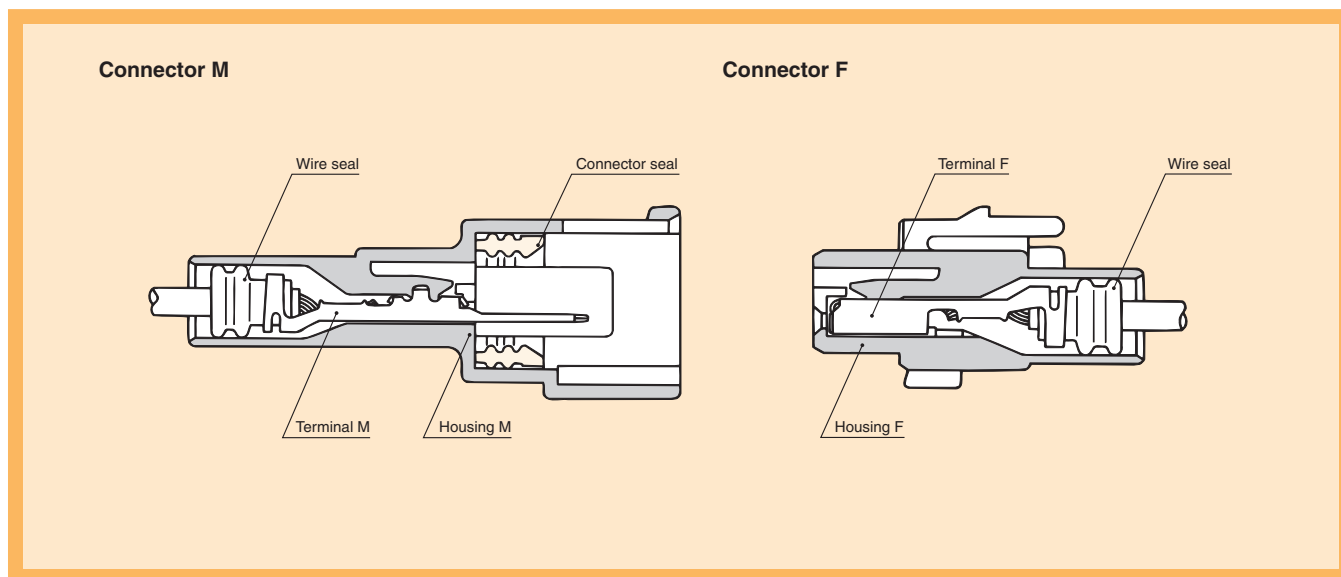
- 自動車のエンジンルーム内での使用にも、その機能を充分発揮します。
- ブラケット固定タイプは、ボデー側のブラケットに直接固定することができます。

In case of purchasing the subject parts, please contact our sales office. Some part may not be in production.

当コネクタシリーズをご選定の際には、弊社営業担当者に生産対応可否をご確認ください。

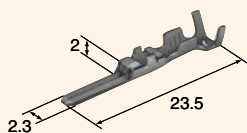
### Structure / 構造

D-02



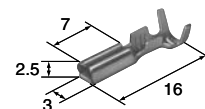
### Terminal (mm)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



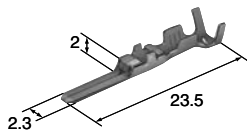
**M(1500-0105)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



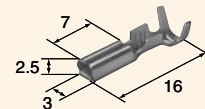
**F(1500-0110)**

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.7                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



**M(8230-4408)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.7                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4828)**

Heat-resistant copper alloy=耐熱銅合金

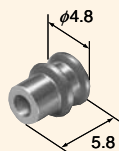
090

### Wire seals (mm)

- The wire seals are common to M and F.
- P5: For 5mm Pitch housing/Please inquire us for the details.
- P6: For 6mm pitch housing

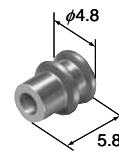
- ワイヤシールはM、F共用です。
- P5：5ミリピッチ用／別途お問い合わせください。
- P6：6ミリピッチ用

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 2.0~2.7 |
| Material<br>材質                         | N.B.R.  |
| Color<br>色相                            | Brown   |
| Pack (piece)<br>収容数(個)                 | 2000    |



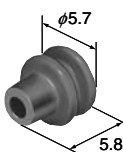
For P5 (7161-9785)

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 2.0~2.7 |
| Material<br>材質                         | N.B.R.  |
| Color<br>色相                            | Black   |
| Pack (piece)<br>収容数(個)                 | 1000    |



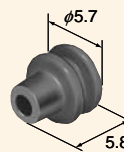
For P5 (7160-9785)

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 1.7~2.7 |
| Material<br>材質                         | N.B.R.  |
| Color<br>色相                            | Black   |
| Pack (piece)<br>収容数(個)                 | 2000    |



For P6 (7160-8234)

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 1.3~1.7 |
| Material<br>材質                         | N.B.R.  |
| Color<br>色相                            | Green   |
| Pack (piece)<br>収容数(個)                 | 2000    |



For fine cables P6細物用 (7165-0076)

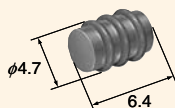
090

### Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.
- P5: For 5mm Pitch housing/Please inquire us for the details.
- P6: For 6mm pitch housing

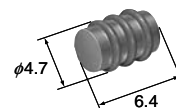
- ダミー栓はM、F共用です。
- 不必要なターミナル穴を塞ぐために、ダミー栓を使用します。
- P5：5ミリピッチ用／別途お問い合わせください。
- P6：6ミリピッチ用

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Brown  |
| Pack (piece)<br>収容数(個) | 1000   |



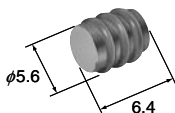
For P5 (7161-9787)

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



For P5 (7160-9787)

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



For P6 (7160-9465)

090

### Housing (mm)

Material / P.B.T.

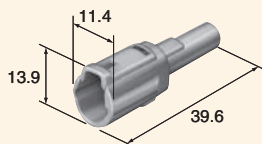
Color / Natural

D-04

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

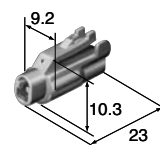
Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁



Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁



1way

#### M(6187-1171)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁

Note  
備考

With clamp for 7mm dia.  
φ7用クランプ付

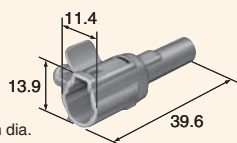


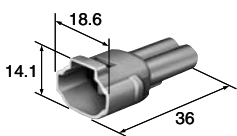
Plate thickness range for clamp :  
t=0.7~2.2

#### M(6187-1561)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁

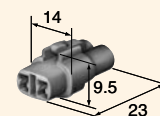


#### F(6180-1181)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ターミナル参照頁



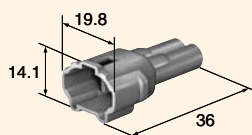
2way  
(AL Type)

#### M(6187-2171)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁

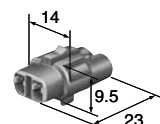


#### F(6180-2181)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁



2way  
(IL Type)

#### M(6187-2311)

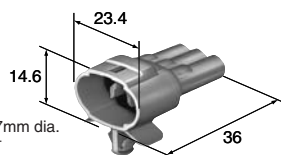
Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁

Note  
備考

With clamp for 7mm dia.  
φ7用クランプ付

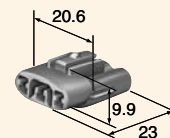


#### F(6180-2321)

Ref: Terminal part No. D-02  
ターミナル参照頁

Ref: Wire seal No. D-03 (For P6)  
ワイヤシール参照頁

Ref: Dummy plug No. D-03 (For P6)  
ダミー栓参照頁



3way  
(E Type)

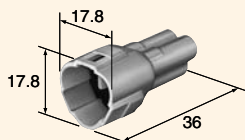
Plate thickness range for clamp :  
t=0.7~2.2

#### M(6187-3281)

#### F(6180-3261)

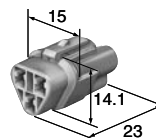
Plate thickness range for clamp=クランプ適用板厚

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**M(6187-3231)**

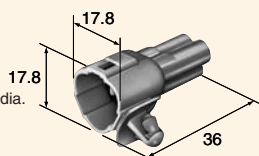
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**F(6180-3241)**

3way  
(T Type)

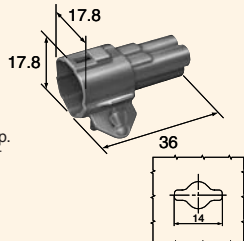
|                                    |                                     |
|------------------------------------|-------------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)                       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)                       |
| Note<br>備考                         | With clamp for 7mm dia.<br>φ7用クランプ付 |



**M(6187-3271)**

Plate thickness range for clamp :  
t=0.7~2.2

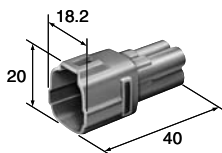
|                                    |                                   |
|------------------------------------|-----------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                              |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)                     |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)                     |
| Note<br>備考                         | With unrotate clamp.<br>回り止めクランプ付 |



**M(6188-0018)**

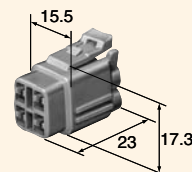
Plate thickness range for clamp :  
t=0.7~2.2

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**M(6188-0004)**

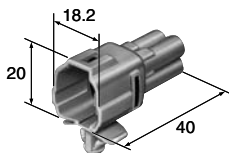
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**F(6180-4771)**

4way

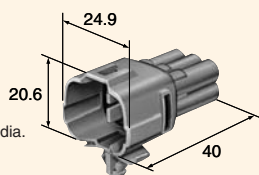
|                                    |                                     |
|------------------------------------|-------------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)                       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)                       |
| Note<br>備考                         | With clamp for 7mm dia.<br>φ7用クランプ付 |



**M(6187-4561)**

Plate thickness range for clamp :  
t=0.7~2.2

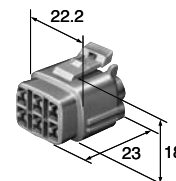
|                                    |                                     |
|------------------------------------|-------------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)                       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)                       |
| Note<br>備考                         | With clamp for 7mm dia.<br>φ7用クランプ付 |



**M(6187-6561)**

Plate thickness range for clamp :  
t=0.7~2.2

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



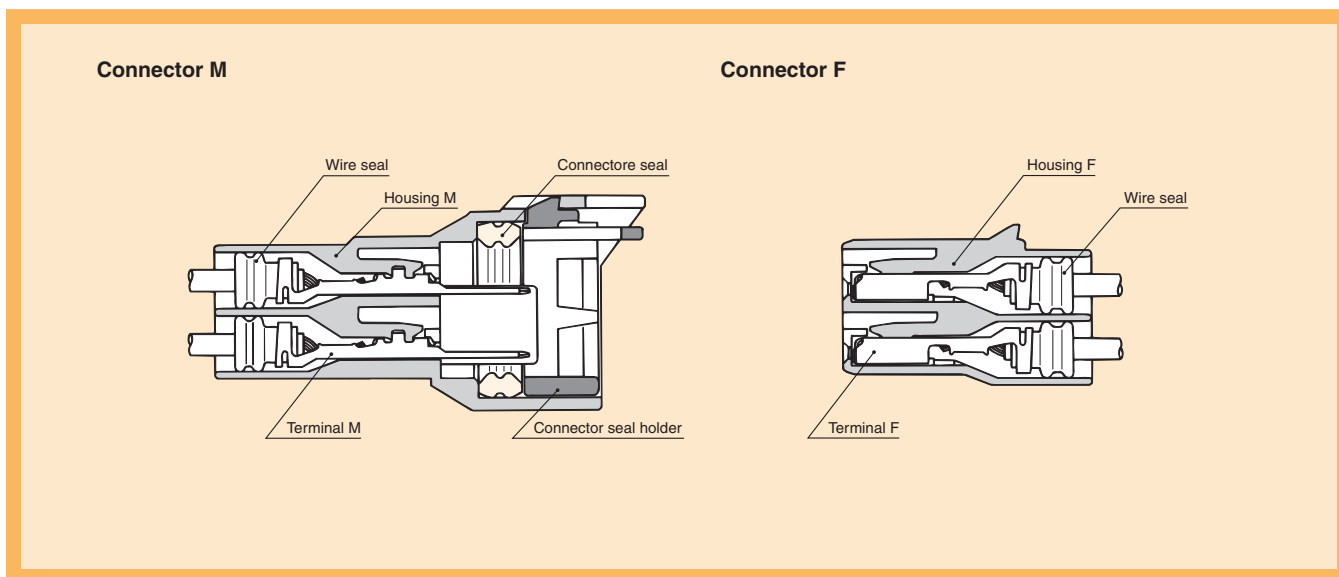
**F(6180-6771)**

6way

Plate thickness range for clamp=クランプ適用板厚

## Structure / 構造

D-06



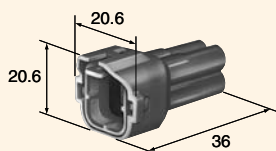
## Housing (mm)

Material / 66 Nylon

Color / Natural

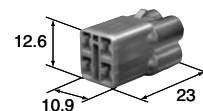
4way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**M(6189-4171)**

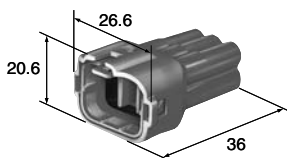
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**F(6180-4181)**

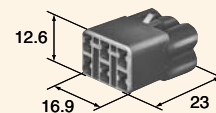
6way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



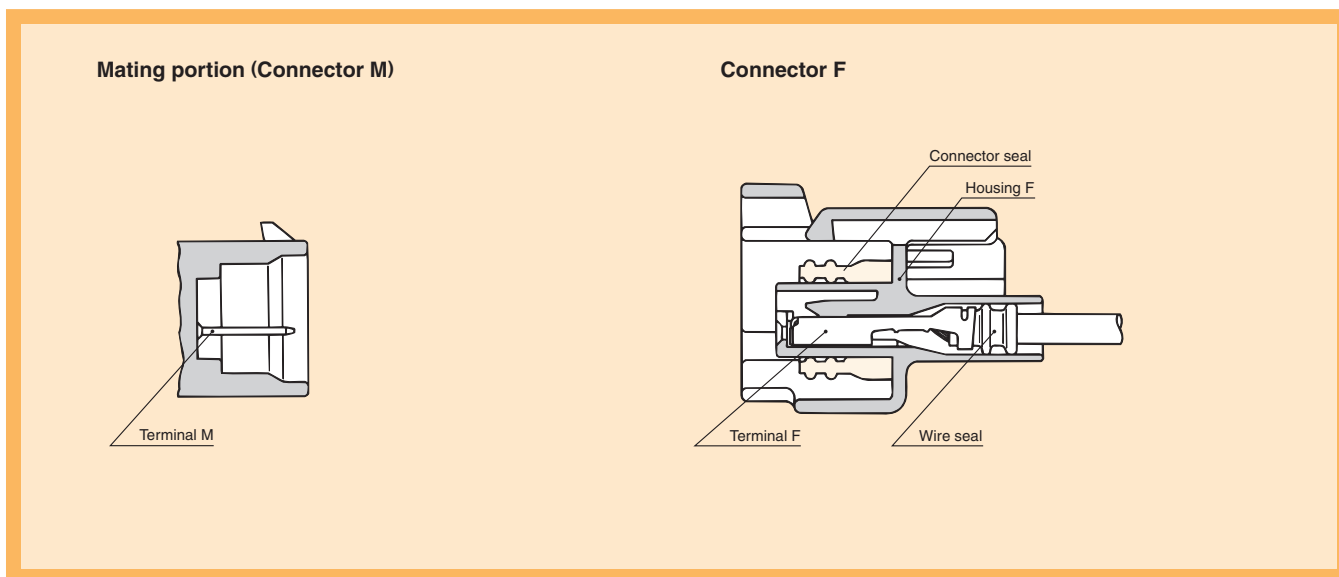
**M(6189-6171)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |



**F(6180-6181)**

## Structure / 構造

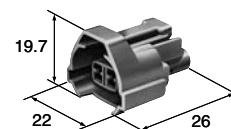


## Housing (mm)

Material / P.B.T.

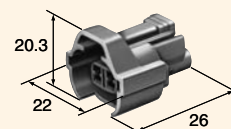
2way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P5) |
| Color<br>色相                        | Gray          |



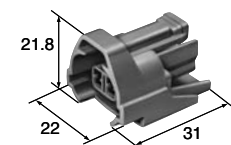
**F(6189-0035)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P5) |
| Color<br>色相                        | Gray          |



**F(6189-0039)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P5) |
| Color<br>色相                        | Gray          |



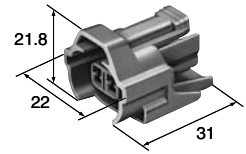
**F(6189-0056)**

# MT SEALED SERIES

090(2.3 mm) / STANDARD

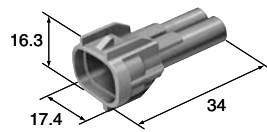
D-08

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P5) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P5) |
| Color<br>色相                        | Gray          |



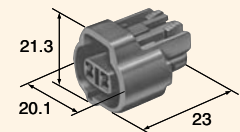
**F(6189-0060)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Blue          |



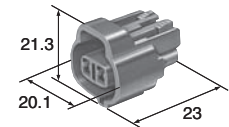
**M(6180-2405)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Blue          |



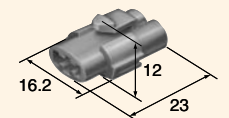
**F(6189-0031)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Brown         |



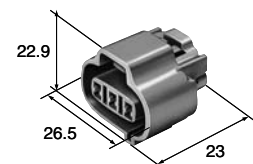
**F(6189-0033)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Natural       |



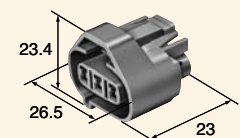
**F(6180-2191)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0027)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Gray          |



**F(6189-0028)**

2way

3way

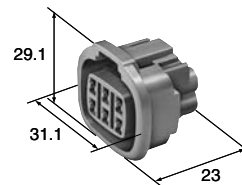


# MT SEALED SERIES

090(2.3 mm) / STANDARD

6way

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Gray          |

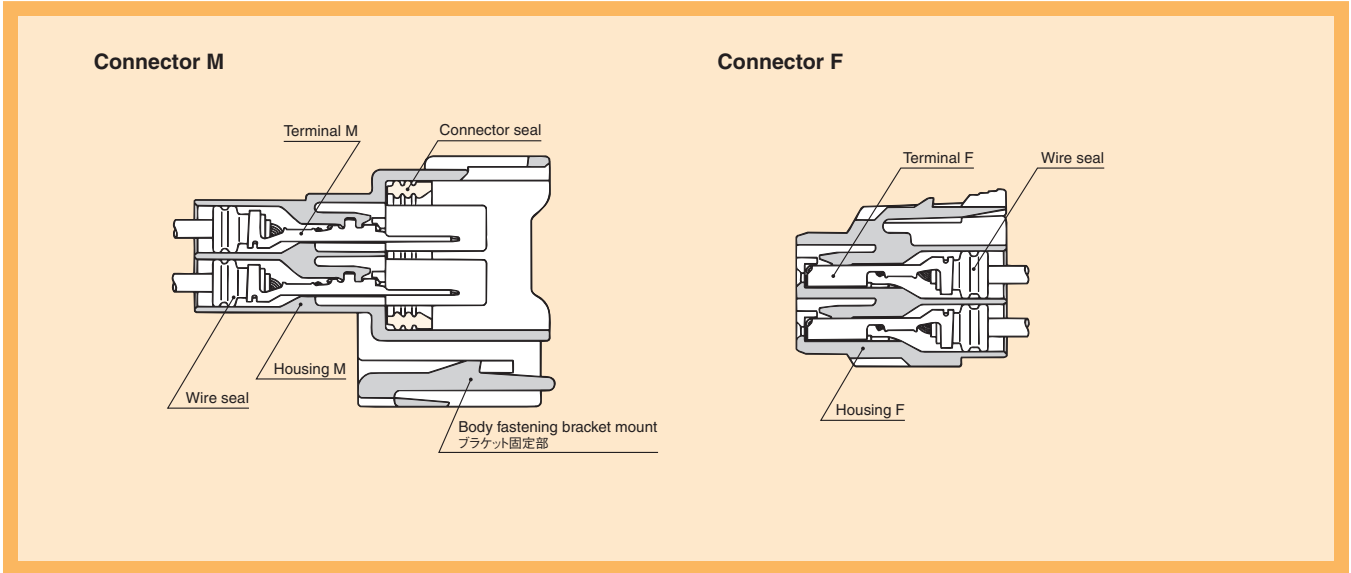


**F(6189-0029)**

D-09

### Structure / 構造

D-10

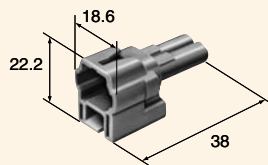


### Housing (mm)

Material / P.B.T.

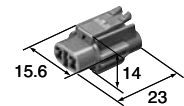
2way

|                                    |                       |
|------------------------------------|-----------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)         |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)         |
| Color<br>色相                        | Natural               |
| Note<br>備考                         | Bracket for attaching |



**M(6187-2581)**

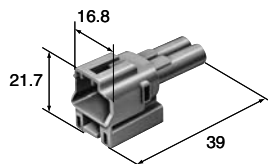
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Natural       |



**F(6180-2591)**

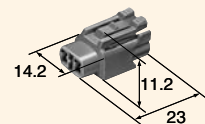
2way  
(Special shape)  
(異形)

|                                    |                       |
|------------------------------------|-----------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)         |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)         |
| Color<br>色相                        | Gray                  |
| Note<br>備考                         | Bracket for attaching |



**M(6187-2607)**

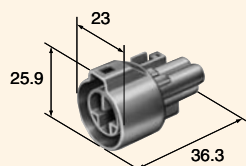
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Gray          |



**F(6180-2617)**

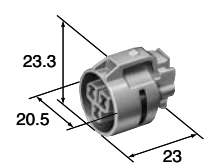
3way

|                                    |                       |
|------------------------------------|-----------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)         |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)         |
| Color<br>色相                        | Natural               |
| Note<br>備考                         | Bracket for attaching |



**M(6180-3891)**

|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Natural       |

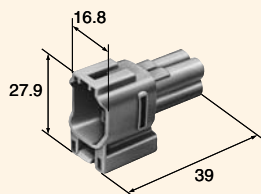


**F(6187-3901)**

Bracket for attaching=ブラケット固定

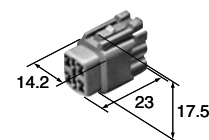
4way

|                                    |                       |
|------------------------------------|-----------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)         |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)         |
| Color<br>色相                        | Green                 |
| Note<br>備考                         | Bracket for attaching |



**M(6187-4583)**

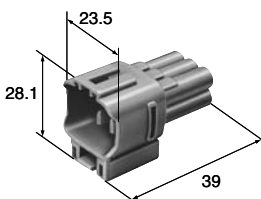
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Green         |



**F(6180-4593)**

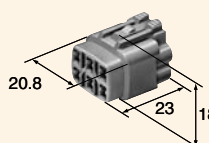
6way

|                                    |                       |
|------------------------------------|-----------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02                  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6)         |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6)         |
| Color<br>色相                        | Natural               |
| Note<br>備考                         | Bracket for attaching |



**M(6187-6581)**

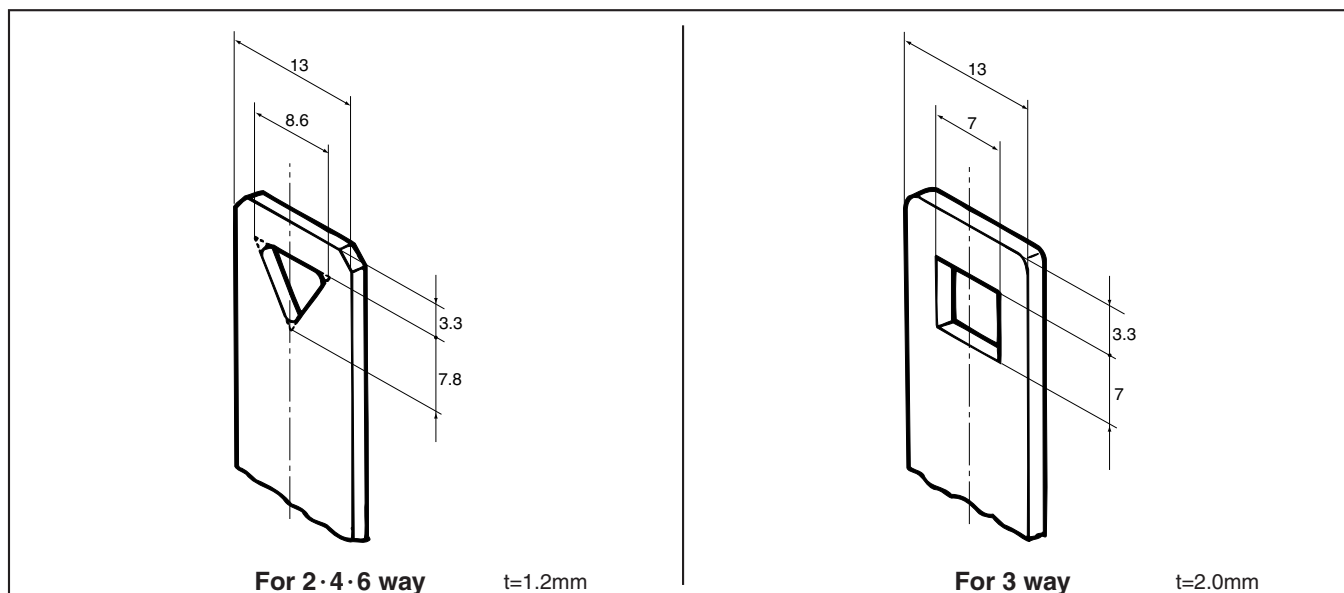
|                                    |               |
|------------------------------------|---------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | D-02          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | D-03 (For P6) |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | D-03 (For P6) |
| Color<br>色相                        | Natural       |



**F(6180-6591)**

Bracket for attaching=ブラケット固定

### ▶▶ Bracket for attaching (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# HE SERIES

## Features

The HE connector series is the highly reliable improved version of the conventional HD series, with a mechanism that minimizes the possibility of terminal back out and semi-engagement of connectors.

This series consists of 025, 040, 050, 090, 187, and 375 types (025, 040, 050, 090, 187, and 312 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- An incompletely inserted terminal is automatically adjusted to the correct position by setting a retainer.
- Retainers are pre-mounted on the connector housing, and are structured to enable setting by the same simple operation regardless of the number of ways, improving operability.
- An extra clip can be attached to the connector housing to secure it to the car body, and multiple connectors can be joined.
- A PCB model is also available for connection to printed circuit boards.

## 特長

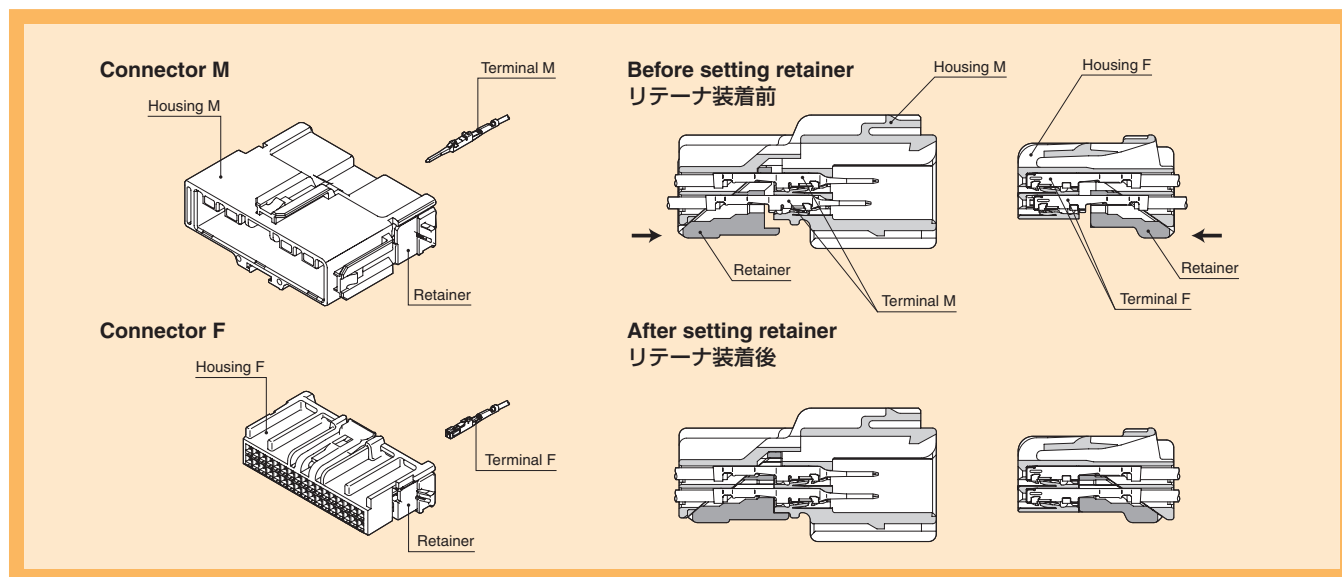
HEシリーズは、従来のHDシリーズを改良し、信頼性を向上させたコネクタです。ターミナル抜けやコネクタの半嵌合が起きにくい機構を備えています。

ターミナルサイズにより025・040・050・090・187・375（ハイブリッドは025・040・050・090・187・312）で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- 挿入不足のターミナルは、リテーナをセットすることにより正規の位置に固定されます。
- リテーナは、コネクタハウジングに予め組み付けられており、また極数に関係なく簡単な同一作業でセットすることができる構造になっているので、作業性が向上します。
- コネクタハウジングにはボデーに固定するためのクランプ（クリップ）を装着することができ、更にコネクタ同士の連結が可能です。
- プリント基板との接続に適したPCBタイプも設定しました。

## Structure / 構造

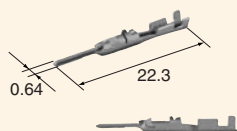
E-02



## Terminal (mm)

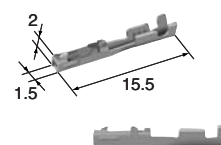
025 (S)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.4            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 8000                |
| Thickness (mm)<br>板厚                     | 0.25                |



M(8100-4028)

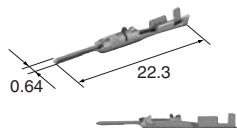
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.4                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-4029)

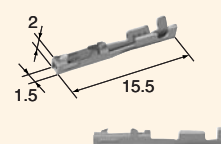
025 (M)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~0.75            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.25~1.6            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 8000                |
| Thickness (mm)<br>板厚                     | 0.25                |



M(8100-4027)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~0.75                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.25~1.6                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-4030)

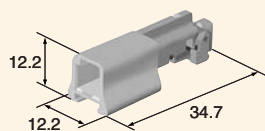
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.  
Color / Natural

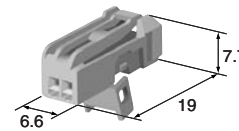
2way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-5070)**

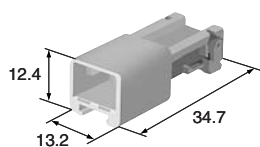
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-5071)**

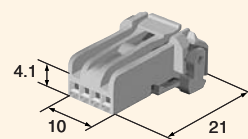
4way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4944)**

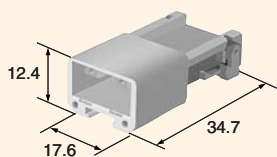
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4978)**

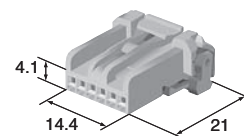
6way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4943)**

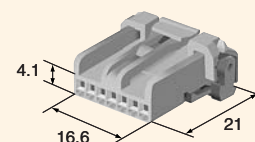
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4979)**

7way

Ref: Terminal part No.  
ターミナル参照頁 E-02

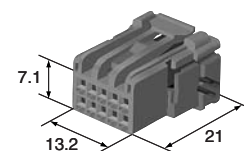


**F(6098-5000)**

10way

Ref: Terminal part No.  
ターミナル参照頁 E-02

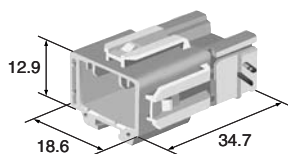
Color  
色相 Green



**F(6098-4982)**

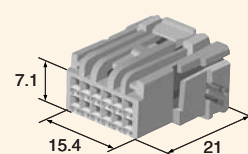
12way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4675)**

Ref: Terminal part No.  
ターミナル参照頁 E-02

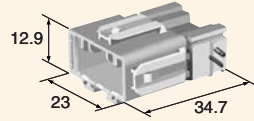


**F(6098-4640)**

E-04

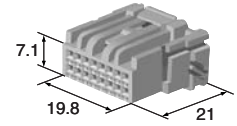
16way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4333)**

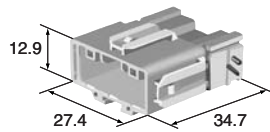
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4339)**

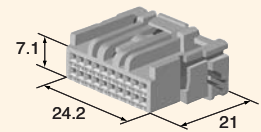
20way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4859)**

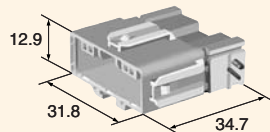
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4595)**

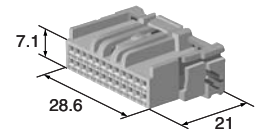
24way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4588)**

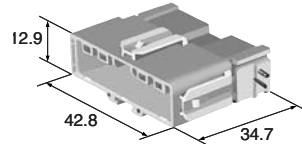
Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4594)**

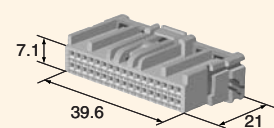
34way

Ref: Terminal part No.  
ターミナル参照頁 E-02



**M(6098-4590)**

Ref: Terminal part No.  
ターミナル参照頁 E-02



**F(6098-4596)**

## Terminal

● Ref : 025 Terminal List (Page E-02), 090 Terminal List (Page E-15)

● 025ターミナルはE-02、090ターミナルはE-15に掲載。

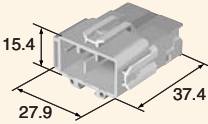
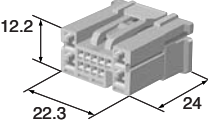
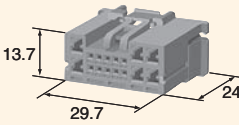
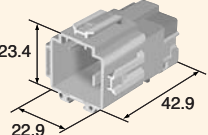
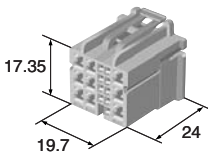
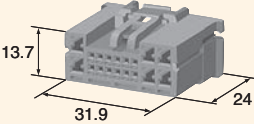
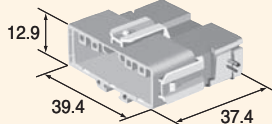
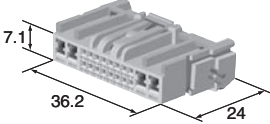
## Housing (mm)

Material / P.B.T.

Color / Natural

No. of way / ( ) corresponds to 025, 090, in order from left to right.

極数 / ( ) 内表示 : 左から025極数、090極数

|                 |  |  |
|-----------------|--|--|
| 13way<br>(9+4)  | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>M(6098-5180)</b></p>   | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>F(6098-5181)</b></p>   |
|                 |  |  |
| 16way<br>(10+6) |  | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>F(6098-5822)</b></p> |
|                 |  |  |
| 18way<br>(9+9)  | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>M(6098-4908)</b></p> | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>F(6098-4910)</b></p> |
|                 |  |  |
| 18way<br>(12+6) |  | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>F(6098-5824)</b></p> |
|                 |  |  |
| 20way<br>(16+4) | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>M(6098-4591)</b></p> | <p>Ref: Terminal part No.<br/>ターミナル参照頁</p> <p>[025] E-02<br/>[090] E-15</p>  <p><b>F(6098-4597)</b></p> |
|                 |  |  |



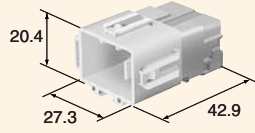
# HE SERIES

025, 090(0.64 mm, 2.3 mm) / HYBRID

E-06

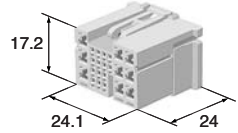
23way  
(14+9)

Ref: Terminal part No. [025] E-02  
ターミナル参照頁 [090] E-15



**M(6098-4707)**

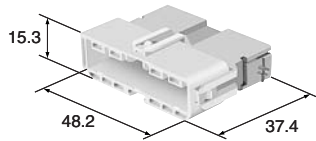
Ref: Terminal part No. [025] E-02  
ターミナル参照頁 [090] E-15



**F(6098-4708)**

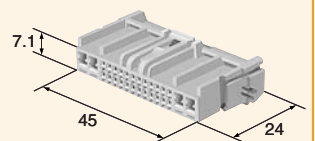
28way  
(24+4)

Ref: Terminal part No. [025] E-02  
ターミナル参照頁 [090] E-15



**M(6098-4725)**

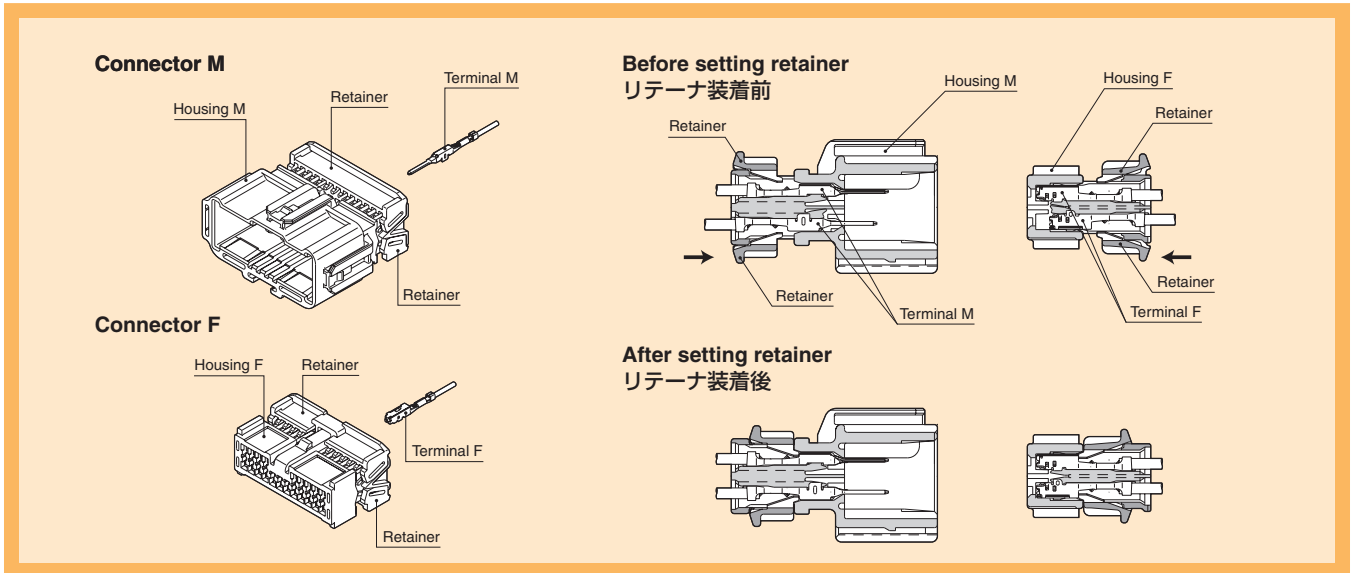
Ref: Terminal part No. [025] E-02  
ターミナル参照頁 [090] E-15



**F(6098-4726)**

### Structure / 構造

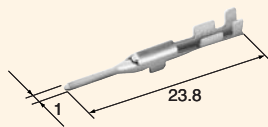
E-07



### Terminal (mm)

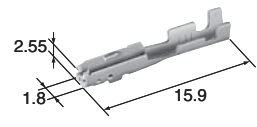
040 (ss)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35           |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.1            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8100-4307)

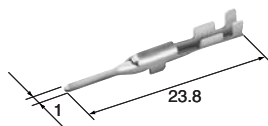
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 0.95~1.1                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8100-4308)

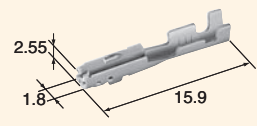
040 (s)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.85            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.8             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



M(8100-2972)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.85                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8100-2971)

Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

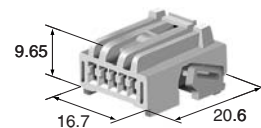
Material / P.B.T.

Color / Natural

E-08

5way

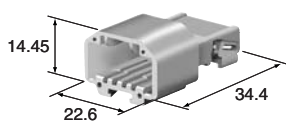
Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2779)**

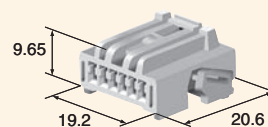
6way

Ref: Terminal part No. E-07  
ターミナル参照頁



**M(6098-2780)**

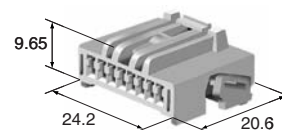
Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2781)**

8way

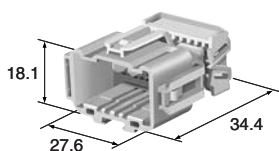
Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2782)**

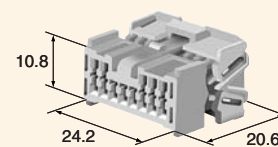
13way

Ref: Terminal part No. E-07  
ターミナル参照頁



**M(6098-2788)**

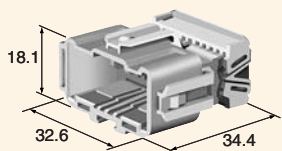
Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2784)**

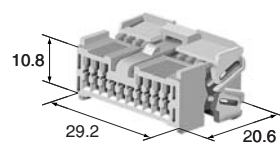
17way

Ref: Terminal part No. E-07  
ターミナル参照頁



**M(6098-3369)**

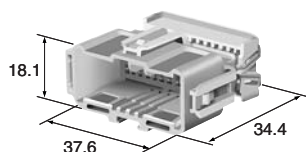
Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2785)**

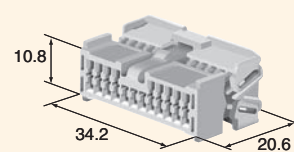
21way

Ref: Terminal part No. E-07  
ターミナル参照頁



**M(6098-2789)**

Ref: Terminal part No. E-07  
ターミナル参照頁



**F(6098-2764)**

## Terminal

● Ref : 040 Terminal List (Page E-07),  
090 Terminal List (Page E-15),  
187 Terminal List (Page E-14)

● 040ターミナルはE-07、090ターミナルはE-15、  
187ターミナルはE-14に掲載。

## Housing (mm)

Material / P.B.T.

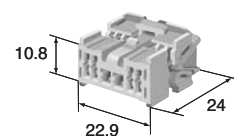
Color / Natural

No. of way / ( ) corresponds to 040, 090, 187, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、090極数、187極数

10way  
(8+2)

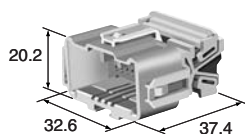
Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [090] E-15



**F(6098-3600)**

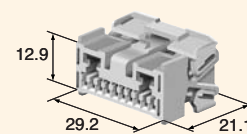
12way  
(10+2)

Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [187] E-14



**M(6098-3370)**

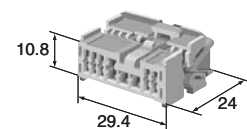
Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [187] E-14



**F(6098-2786)**

14way  
(10+4)

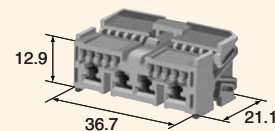
Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [090] E-15



**F(6098-3601)**

14way  
(10+4)

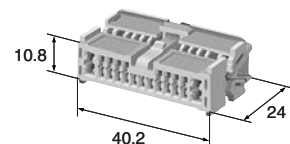
Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [187] E-14



**F(6098-4017)**

23way  
(19+4)

Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [090] E-15



**F(6098-3571)**

# HE SERIES

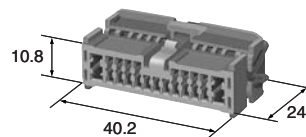
040, 090, 187(1.0 mm, 2.3 mm, 4.8 mm) / HYBRID

E-10

23way  
(19+4)

Ref: Terminal part No. [040] E-07  
ターミナル参照頁 [090] E-15

Color  
色相 Brown



**F(6098-4367)**

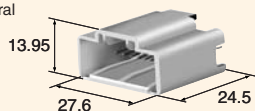
## Housing (mm)

Material / P.B.T. G30

No. of way / ( ) corresponds to 040, 090, 187, in order from left to right. 極数 / ( ) 内表示 : 左から040極数、090極数、187極数

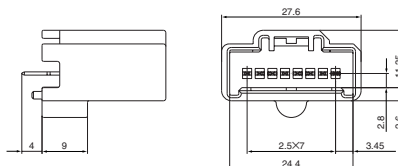
8way  
(Vertical type)  
(垂直)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2782) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

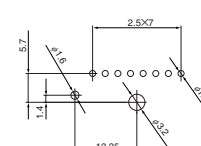


M(6098-3240)

● Dimensional drawing

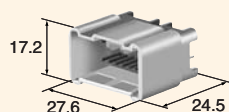


● Mounting drawing



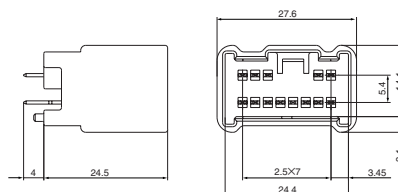
13way  
(Vertical type)  
(垂直)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2784) |
| Terminal type<br>端子タイプ          | 040         |
| Color<br>色相                     | Natural     |

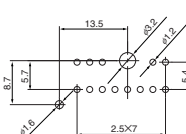


M(6098-2923)

● Dimensional drawing

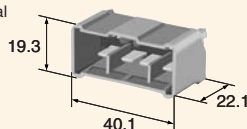


● Mounting drawing



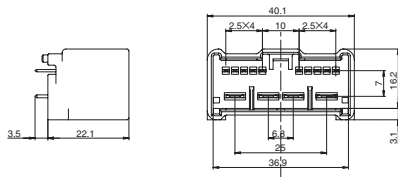
14way  
(10+4)

|                                 |                          |
|---------------------------------|--------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4017)              |
| Terminal type<br>端子タイプ          | 10way (040) + 4way (187) |
| Color<br>色相                     | Natural                  |

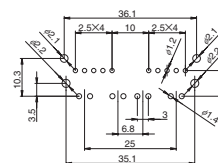


M(6098-4018)

● Dimensional drawing

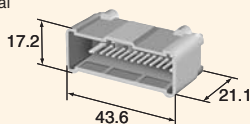


● Mounting drawing



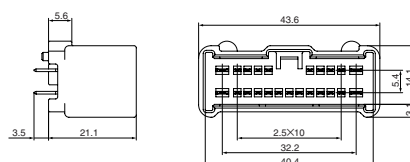
23way  
(19+4)

|                                 |                          |
|---------------------------------|--------------------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-3571)              |
| Terminal type<br>端子タイプ          | 19way (040) + 4way (090) |
| Color<br>色相                     | Natural                  |

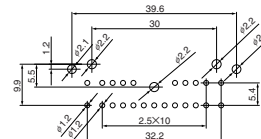


M(6098-3572)

● Dimensional drawing

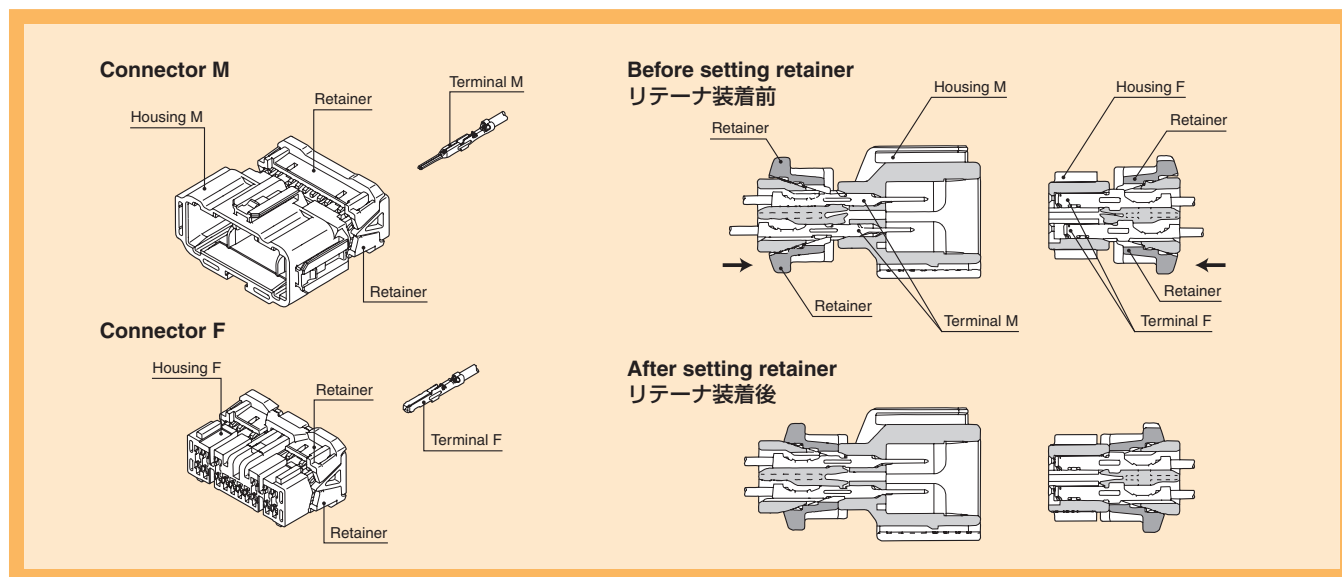


● Mounting drawing



## Structure / 構造

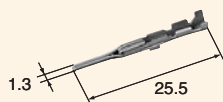
E-12



## Terminal (mm)

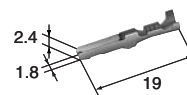
050

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 6000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(8100-1462)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-1469)

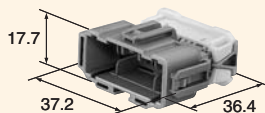
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.

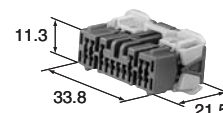
16way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-12  |
| Color<br>色相                        | Brown |



M(6098-1397)

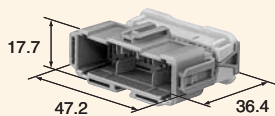
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-12  |
| Color<br>色相                        | Brown |



F(6098-1398)

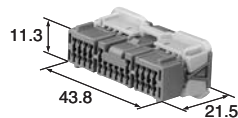
24way

|                                    |          |
|------------------------------------|----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-12     |
| Color<br>色相                        | Sky Blue |



**M(6098-1371)**

|                                    |          |
|------------------------------------|----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-12     |
| Color<br>色相                        | Sky Blue |



**F(6098-1374)**

E-13

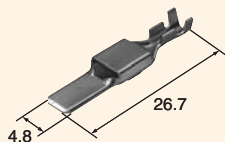


## Terminal (mm)

● Ref : 050 Terminal List (Page E-12)

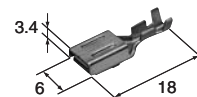
● 050ターミナルはE-12に掲載。

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



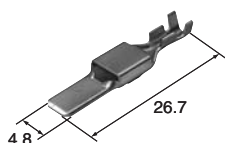
**M(8100-1506)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



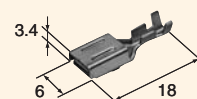
**F(8100-1507)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



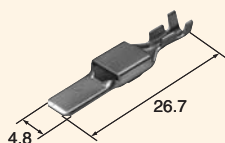
**M(8100-0664)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



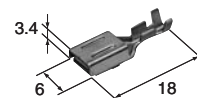
**F(8100-0606)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.8             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



**M(1500-0166)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-0782)**

Heat-resistant copper alloy=耐熱銅合金

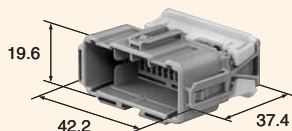
## Housing (mm)

Material / P.B.T.

No. of way / ( ) corresponds to 050, 187, in order from left to right.

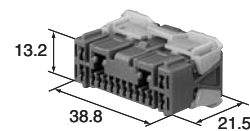
極数 / ( ) 内表示 : 左から050極数、187極数

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [050] E-12<br>[187] E-14 |
| Color<br>色相                        | Sky Blue                 |



**M(6950-1058)**

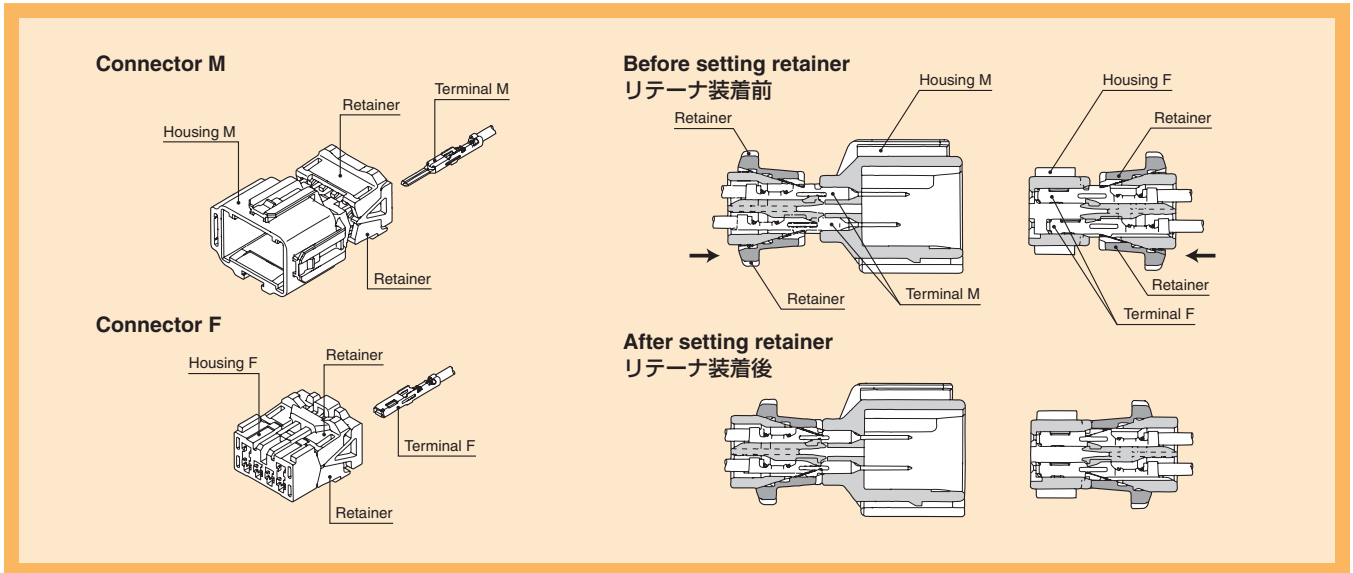
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [050] E-12<br>[187] E-14 |
| Color<br>色相                        | Sky Blue                 |



**F(6950-1053)**

16way  
(14+2)

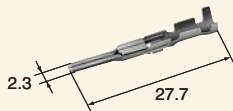
## Structure / 構造



E-15

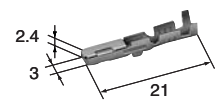
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



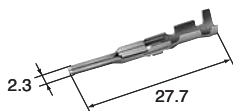
M(8100-1571)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



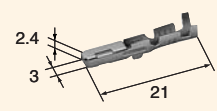
F(8100-1470)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



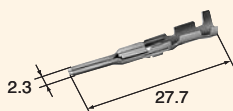
M(8100-1573)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



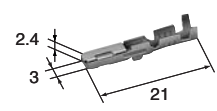
F(8100-1472)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(8100-1572)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8100-1471)

090

Heat-resistant copper alloy=耐熱銅合金

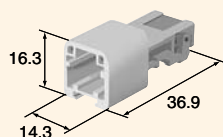
## Housing (mm)

Material / P.B.T.  
Color / Natural

E-16

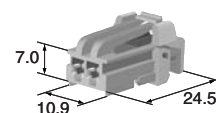
2way

Ref: Terminal part No.  
ターミナル参照頁 E-15



**M(6098-4901)**

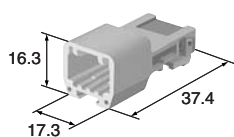
Ref: Terminal part No.  
ターミナル参照頁 E-15



**F(6098-4069)**

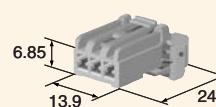
3way

Ref: Terminal part No.  
ターミナル参照頁 E-15



**M(6098-5049)**

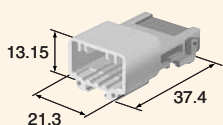
Ref: Terminal part No.  
ターミナル参照頁 E-15



**F(6098-4071)**

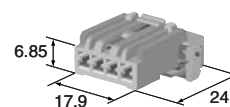
4way

Ref: Terminal part No.  
ターミナル参照頁 E-15



**M(6098-4902)**

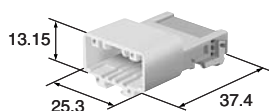
Ref: Terminal part No.  
ターミナル参照頁 E-15



**F(6098-4073)**

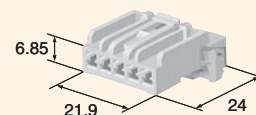
5way

Ref: Terminal part No.  
ターミナル参照頁 E-15



**M(6098-4664)**

Ref: Terminal part No.  
ターミナル参照頁 E-15

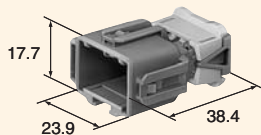


**F(6098-4669)**

6way

Ref: Terminal part No.  
ターミナル参照頁 E-15

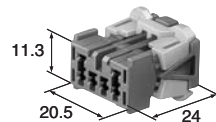
Color  
色相 Sky Blue



**M(6098-1373)**

Ref: Terminal part No.  
ターミナル参照頁 E-15

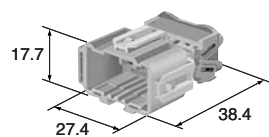
Color  
色相 Sky Blue



**F(6098-1377)**

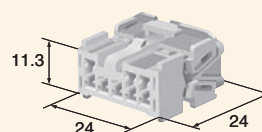
8way

Ref: Terminal part No.  
ターミナル参照頁 E-15



**M(6098-4661)**

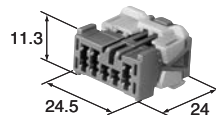
Ref: Terminal part No.  
ターミナル参照頁 E-15



**F(6098-4670)**

8way

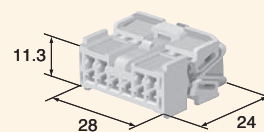
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15  |
| Color<br>色相                        | Green |



**F(6098-1378)**

10way

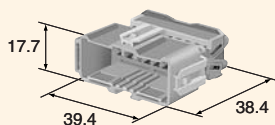
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15 |
|------------------------------------|------|



**F(6240-5378)**

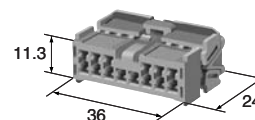
14way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15 |
|------------------------------------|------|



**M(6098-4662)**

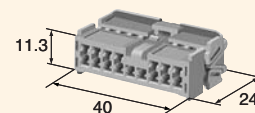
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15 |
|------------------------------------|------|



**F(6098-4050)**

16way

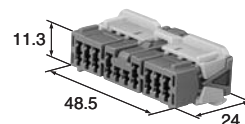
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15 |
|------------------------------------|------|



**F(6098-3563)**

18way

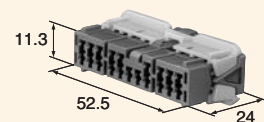
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15  |
| Color<br>色相                        | Green |



**F(6098-1379)**

20way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-15  |
| Color<br>色相                        | Green |



**F(6098-1380)**

## Terminal

● Ref : 090 Terminal List (Page E-15), 187 Terminal List (Page E-14)

● 090ターミナルはE-15、187ターミナルはE-14に掲載。

E-18

## Housing (mm)

Material / P.B.T.

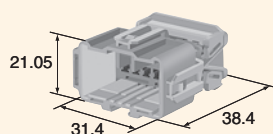
Color / Natural

No. of way / ( ) corresponds to 090, 187, in order from left to right.

極数 / ( ) 内表示 : 左から090極数、187極数

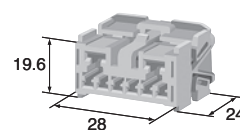
8way  
(6+2)

Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14



**M(6098-5218)**

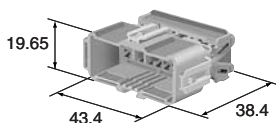
Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14



**F(6098-5217)**

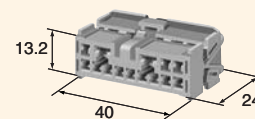
14way  
(12+2)

Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14



**M(6098-4660)**

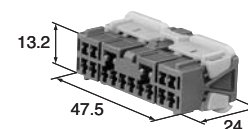
Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14



**F(6098-3565)**

16way  
(14+2)

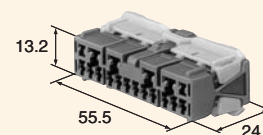
Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14  
Color 色相 Green



**F(6950-1054)**

18way  
(14+4)

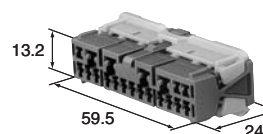
Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14  
Color 色相 Sky Blue



**F(6950-1055)**

20way  
(16+4)

Ref: Terminal part No. [090] E-15  
ターミナル参照頁 [187] E-14  
Color 色相 Green

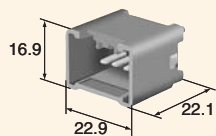


**F(6950-1056)**

## Housing (mm)

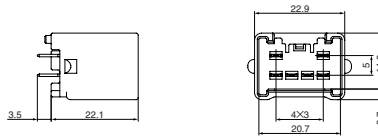
Material / P.B.T. G30

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1377) |
| Terminal type<br>端子タイプ          | 090         |
| Color<br>色相                     | Sky Blue    |

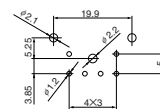


M(6098-3616)

### ● Dimensional drawing



### ● Mounting drawing



**6way**  
(Vertical type)  
(垂直)

## Terminal

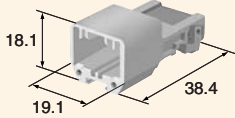
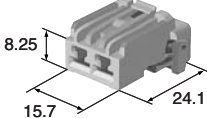
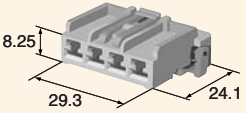
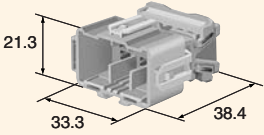
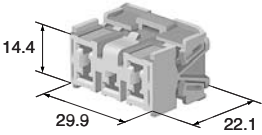
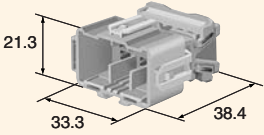
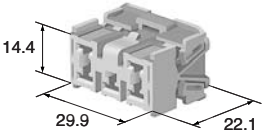
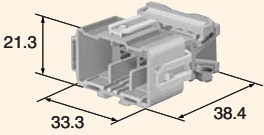
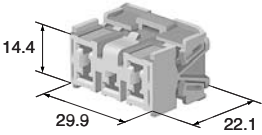
●Ref : 187 Terminal List (Page E-14)

●187ターミナルはE-14に掲載。

E-20

## Housing (mm)

Material / P.B.T.

|      |  |  |
|------|--|--|
| 2way | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>M(6098-5120)</b></p>     | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>F(6098-5119)</b></p>   |
|      | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>F(6098-4971)</b></p> |  |
| 4way | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>M(6098-4663)</b></p>   | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>F(6098-4667)</b></p> |
|      | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>M(6098-4663)</b></p>   | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>F(6098-4667)</b></p> |
| 5way | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>M(6098-4663)</b></p>   | <p>Ref: Terminal part No.<br/>ターミナル参照頁 E-14</p>  <p><b>F(6098-4667)</b></p> |

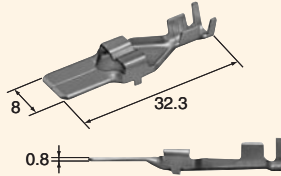
## Terminal (mm)

●Ref : 187 Terminal List (Page E-14)

●187ターミナルはE-14に掲載。

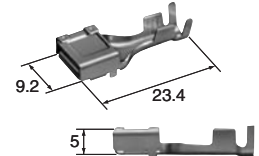
E-21

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



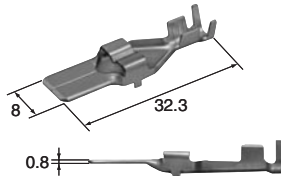
M(8100-0520)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



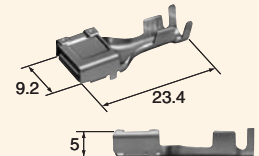
F(8100-0707)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



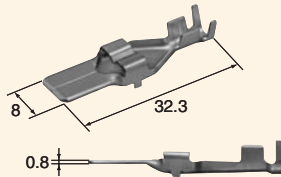
M(8100-0521)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



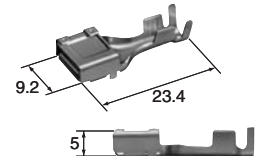
F(8100-0706)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 1000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



M(8100-0522)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 4.4~5.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-1553)

Heat-resistant copper alloy=耐熱銅合金

312

## Housing (mm)

Material / P.B.T.

Color / Natural

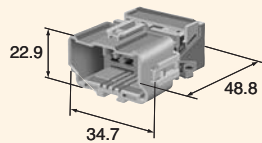
No. of way / ( ) corresponds to 187, 312, in order from left to right.

極数 / ( ) 内表示 : 左から187極数、312極数

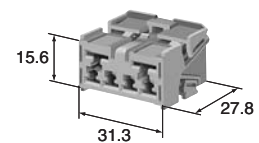
Ref: Terminal part No. [187] E-14  
ターミナル参照頁 [312] E-21

Ref: Terminal part No. [187] E-14  
ターミナル参照頁 [312] E-21

6way  
(4+2)



M(6098-3567)



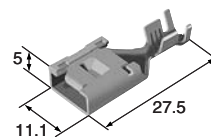
F(6098-3569)



## Terminal (mm)

E-22

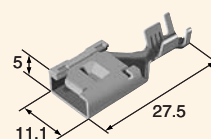
|  |                     |
|--|---------------------|
| Cable size (mm)<br>適用電線サイズ             | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径 | 2.6~4.1             |
| Material<br>材質                         | Copper alloy<br>銅合金 |
| Surface treatment<br>表面処理              | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                 | 600                 |
| Thickness (mm)<br>板厚                   | 0.6                 |



**F(8240-0152)**

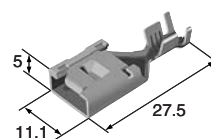
375

|  |                                |
|--|--------------------------------|
| Cable size (mm)<br>適用電線サイズ             | 5.0~8.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径 | 4.4~5.8                        |
| Material<br>材質                         | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理              | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                 | 600                            |
| Thickness (mm)<br>板厚                   | 0.6                            |



**F(8240-0153)**

|  |                                |
|--|--------------------------------|
| Cable size (mm)<br>適用電線サイズ             | 10.0                           |
| Cable overall diameter (mm)<br>電線仕上り外径 | 6.5~6.9                        |
| Material<br>材質                         | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理              | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                 | 600                            |
| Thickness (mm)<br>板厚                   | 0.6                            |



**F(8240-0154)**

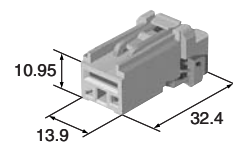
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.

1way  
(rib A)

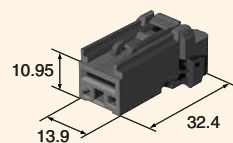
|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-22    |
| Color<br>色相                        | Natural |



**F(6098-4973)**

1way  
(rib B)

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-22  |
| Color<br>色相                        | Black |



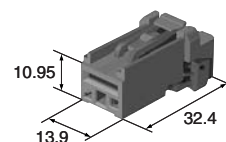
**F(6098-4974)**

# HE SERIES

375(9.5 mm) / STANDARD

1way  
(rib C)

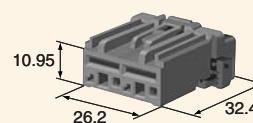
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-22       |
| Color<br>色相                        | Dark Green |



**F(6098-4975)**

2way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | E-22  |
| Color<br>色相                        | Green |



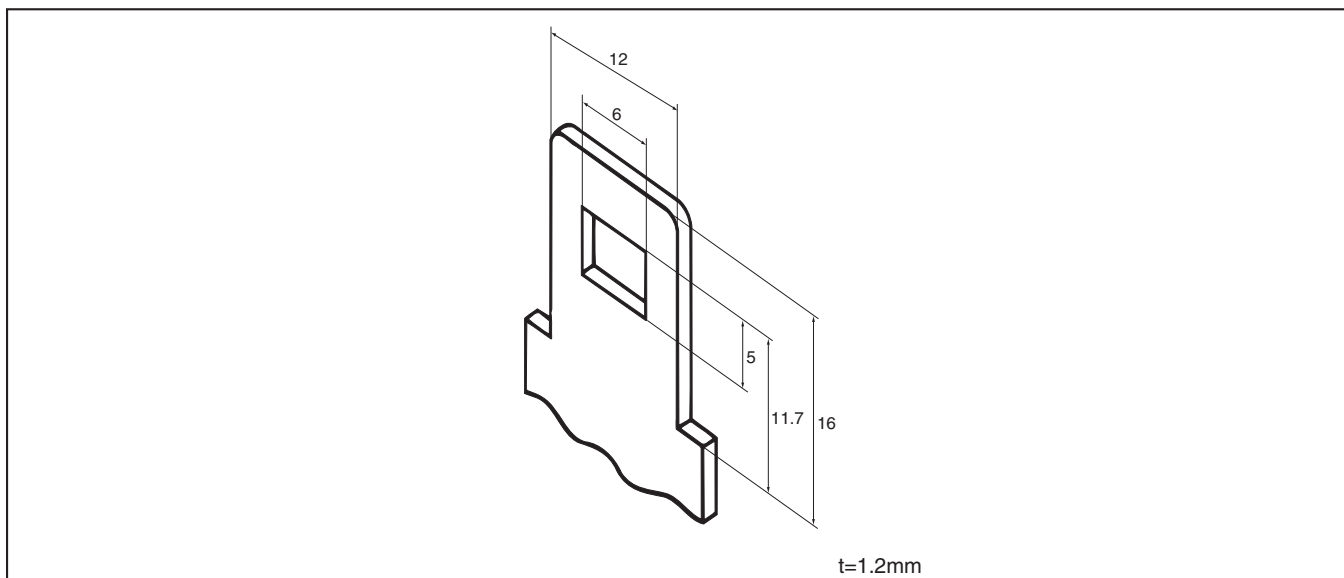
**F(6098-4977)**

E-23

# HE SERIES

COMMON USE PARTS

## ▶▶ Bracket for attaching (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

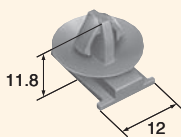
※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。

### ▶▶ Body fastening clamp (mm) ◀◀

The clamp can be installed to connector M, if necessary, to fasten into the body side hole.

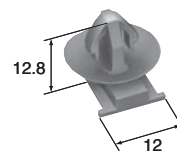
Mコネクタには、ボデー側の穴に固定するためのクランプを必要に応じて取付けることができます。

|  |            |
|--|------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ7         |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6 |
| Material<br>材質                           | 6 Nylon    |
| Color<br>色相                              | Red        |



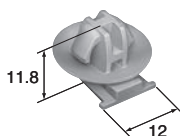
(6810-1203)

|  |           |
|--|-----------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ7        |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=1.6~2.6 |
| Material<br>材質                           | 6 Nylon   |
| Color<br>色相                              | Brown     |



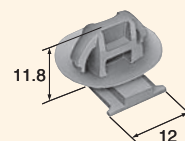
(6810-1217)

|  |            |
|--|------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ10        |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6 |
| Material<br>材質                           | 6 Nylon    |
| Color<br>色相                              | Natural    |



(6810-1204)

|  |                    |
|--|--------------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | 6×12 (Square hole) |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6         |
| Material<br>材質                           | 6 Nylon            |
| Color<br>色相                              | Orange             |



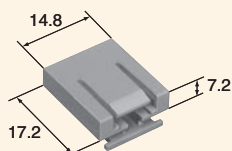
(6810-1462)

### ▶▶ Body fastening clamp (Bracket type) (mm) ◀◀

Connector M can be accoupled with clamp, if necessary, to fasten to the body side bracket.

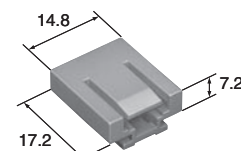
Mコネクタには、ボデー側のブラケットに固定するためのクランプを必要に応じて取付けることができます。

|                                 |  |
|---------------------------------|--|
| Bracket direction<br>ブラケット差込み方向 | Connector mating direction<br>コネクタ嵌合方向 |
| Material<br>材質                  | 6 Nylon                                |
| Color<br>色相                     | Red                                    |

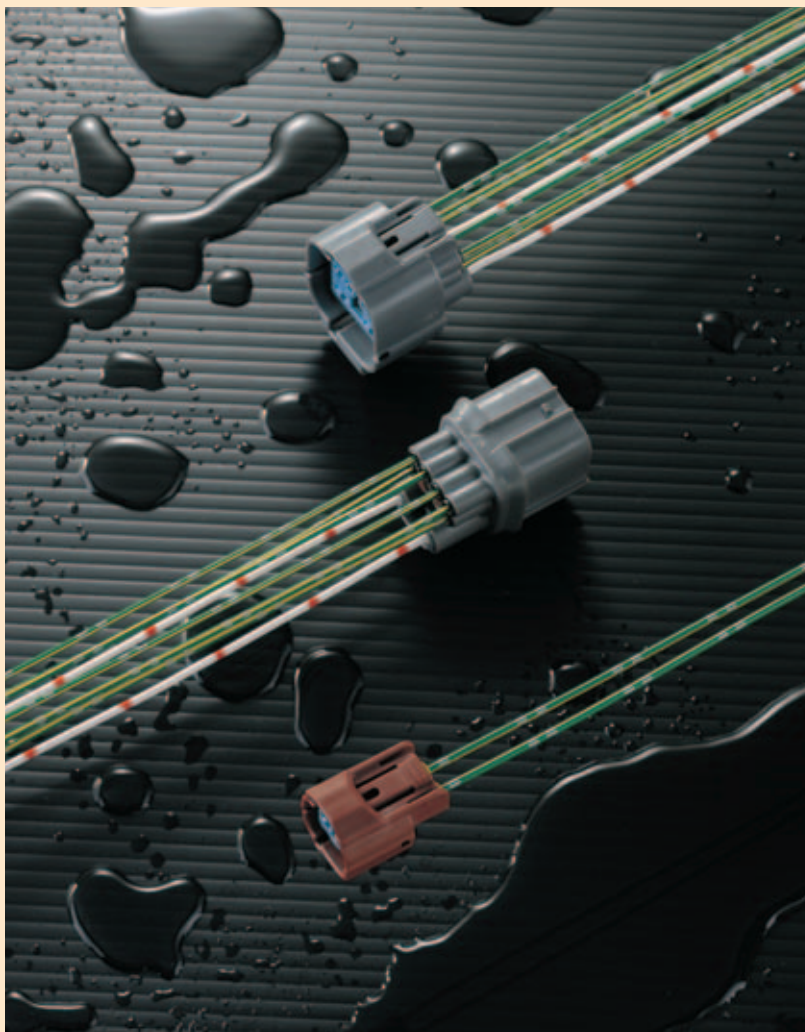


(6910-0119)

|                                 |                               |
|---------------------------------|-------------------------------|
| Bracket direction<br>ブラケット差込み方向 | Anti clock wise<br>コネクタ嵌合の逆方向 |
| Material<br>材質                  | 6 Nylon                       |
| Color<br>色相                     | Natural                       |



(6910-0120)



# HX SEALED SERIES

## Features

The HX sealed connector series is the highly reliable improved version of the conventional HW sealed series, with a mechanism that detects when terminals are not inserted completely. This series consists of 040 and 090 types (090 and 187 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- The hybrid model can be directly secured to a bracket on the car body, but this is only possible when the locking mechanism ensures the connectors are completely engaged, preventing semi-engagement.

## 特長

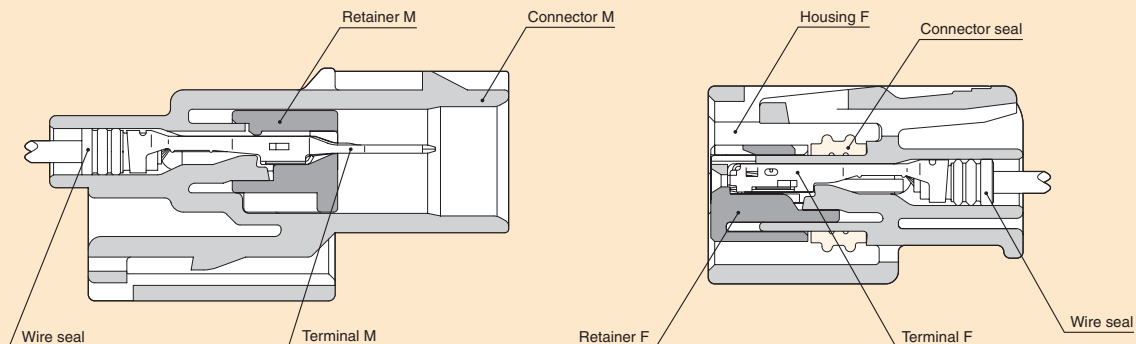
HX防水シリーズは、従来のHW防水シリーズを改良し、信頼性を向上させたコネクタシリーズです。挿入不足のターミナルを検知する機構を備えています。ターミナルサイズにより040・090（ハイブリッドは090・187）で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- ターミナルが半挿入の状態では、リテーナが装着できない機構になっています。
- ハイブリッドタイプのコネクタは、完全に嵌合した状態でないと、ボデー側のブラケットに固定することができないロック構造になっています。
- ハイブリッドタイプのコネクタは、ボデー側のブラケットに直接固定することができます。

## Structure / 構造

Connector M

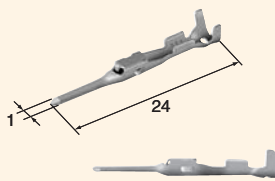
Connector F



## Terminal (mm)

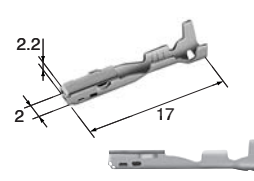
040 (S)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



M(8100-3177)

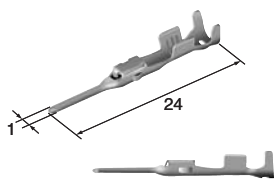
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-3067)

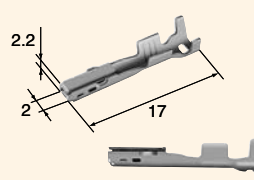
040 (M)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~1.25                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.2                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



M(8100-3178)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~1.25                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.2                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-3068)

Heat-resistant copper alloy=耐熱銅合金

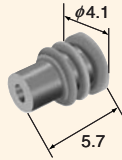
### Wire seals (mm)

●The wire seals are common to M and F.

●ワイヤーシールはM、Fに共用です。

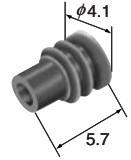
040

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVS / 0.3) (AVSS / 0.5) (AVSSX / 0.5)<br>(AVSSH / 0.5) (CHFS / 0.75) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~1.9   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Light Green   |
| Pack (piece)<br>収容数(個)                   | 1000  |



S Type (7165-0621)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVS / 0.5) (AVSS / 0.75~1.25)<br>(AVSSX / 0.75~1.25) (AVSSH / 0.75~1.25)<br>(AVX / 0.5) (CHFS / 1.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.2   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Violet  |
| Pack (piece)<br>収容数(個)                   | 1000  |



M Type (7165-0622)

F-03

### Dummy plugs (mm)

●Dummy plugs are common to M and F.

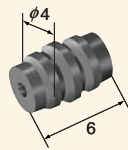
●ダミー栓はM、Fに共用です。

●Dummy plugs are used to blind unused terminal holes.

●不必要なターミナル穴を塞ぐために、ダミー栓を使用します。

040

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



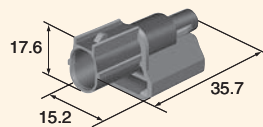
(7165-0432)

### Housing (mm)

Material / P.B.T.

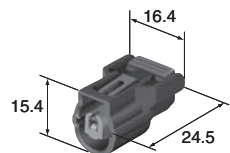
1way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤーシール参照頁   | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



M(6188-0657)

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤーシール参照頁   | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-1979)

F(6189-0940)

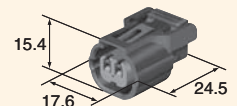
2way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤーシール参照頁   | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



M(6188-0589)

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤーシール参照頁   | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-1835)

F(6189-0890)

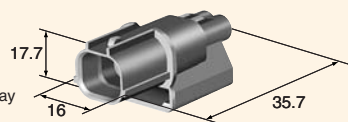
# HX SEALED SERIES

040(1.0 mm) / STANDARD

F-04

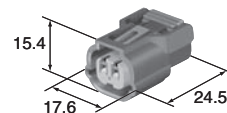
2way  
(Rib difference)  
(リブ違)

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03      |
| Color<br>色相                        | Dark Gray |



**M(6188-0590)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03      |
| Color<br>色相                        | Dark Gray |



Retainer No. (6918-1835) **F(6189-0891)**

3way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-1833) **F(6189-0887)**

5way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-2128) **F(6189-1081)**

6way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



**M(6188-0658)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-2056) **F(6189-1012)**

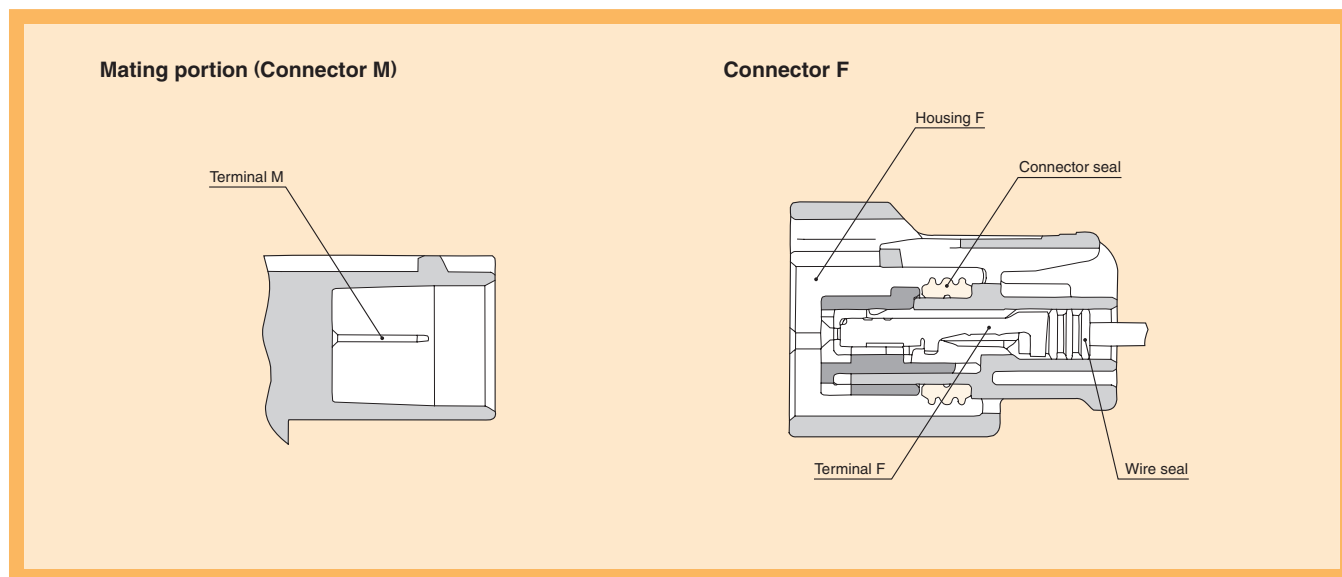
7way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-03  |
| Color<br>色相                        | Black |



Retainer No. (6918-1762) **F(6189-0855)**

### Structure / 構造



F-05

### Terminal (mm)

|                     |   |  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|---------------------|---|--|-------------|--|---------|----------------|-----------------------------|---------------------------|------------------|------------------------|------|----------------------|------|--|
| 090<br>(S)          | <table border="1"> <tr> <td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td> <td>0.3~0.5</td> </tr> <tr> <td>Cable overall diameter (mm)<br/>電線仕上り外径</td> <td>1.4~2.4</td> </tr> <tr> <td>Material<br/>材質</td> <td>Heat-resistant copper alloy</td> </tr> <tr> <td>Surface treatment<br/>表面処理</td> <td>Tin-plated Snメッキ</td> </tr> <tr> <td>Reel (piece)<br/>リール(個)</td> <td>4000</td> </tr> <tr> <td>Thickness (mm)<br/>板厚</td> <td>0.25</td> </tr> </table>     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5     | Cable overall diameter (mm)<br>電線仕上り外径 | 1.4~2.4 | Material<br>材質 | Heat-resistant copper alloy | Surface treatment<br>表面処理 | Tin-plated Snメッキ | Reel (piece)<br>リール(個) | 4000 | Thickness (mm)<br>板厚 | 0.25 |  |
|                     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ  | 0.3~0.5                                  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Cable overall diameter (mm)<br>電線仕上り外径  | 1.4~2.4                                  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Material<br>材質  | Heat-resistant copper alloy              |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Surface treatment<br>表面処理   | Tin-plated Snメッキ                         |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Reel (piece)<br>リール(個)  | 4000                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Thickness (mm)<br>板厚  | 0.25                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
| <b>F(8240-4862)</b> |   |  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
| 090<br>(M)          | <table border="1"> <tr> <td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td> <td>0.85 (0.75)</td> </tr> <tr> <td>Cable overall diameter (mm)<br/>電線仕上り外径</td> <td>1.8~2.6</td> </tr> <tr> <td>Material<br/>材質</td> <td>Heat-resistant copper alloy</td> </tr> <tr> <td>Surface treatment<br/>表面処理</td> <td>Tin-plated Snメッキ</td> </tr> <tr> <td>Reel (piece)<br/>リール(個)</td> <td>3500</td> </tr> <tr> <td>Thickness (mm)<br/>板厚</td> <td>0.25</td> </tr> </table> | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85 (0.75) | Cable overall diameter (mm)<br>電線仕上り外径 | 1.8~2.6 | Material<br>材質 | Heat-resistant copper alloy | Surface treatment<br>表面処理 | Tin-plated Snメッキ | Reel (piece)<br>リール(個) | 3500 | Thickness (mm)<br>板厚 | 0.25 |  |
|                     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ  | 0.85 (0.75)                              |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Cable overall diameter (mm)<br>電線仕上り外径  | 1.8~2.6                                  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Material<br>材質  | Heat-resistant copper alloy              |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Surface treatment<br>表面処理   | Tin-plated Snメッキ                         |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Reel (piece)<br>リール(個)  | 3500                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Thickness (mm)<br>板厚  | 0.25                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
| <b>F(8240-4992)</b> |   |  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
| 090<br>(L)          | <table border="1"> <tr> <td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td> <td>1.25~2.0</td> </tr> <tr> <td>Cable overall diameter (mm)<br/>電線仕上り外径</td> <td>2.1~2.9</td> </tr> <tr> <td>Material<br/>材質</td> <td>Heat-resistant copper alloy</td> </tr> <tr> <td>Surface treatment<br/>表面処理</td> <td>Tin-plated Snメッキ</td> </tr> <tr> <td>Reel (piece)<br/>リール(個)</td> <td>3500</td> </tr> <tr> <td>Thickness (mm)<br/>板厚</td> <td>0.25</td> </tr> </table>    | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0    | Cable overall diameter (mm)<br>電線仕上り外径 | 2.1~2.9 | Material<br>材質 | Heat-resistant copper alloy | Surface treatment<br>表面処理 | Tin-plated Snメッキ | Reel (piece)<br>リール(個) | 3500 | Thickness (mm)<br>板厚 | 0.25 |  |
|                     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ  | 1.25~2.0                                 |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Cable overall diameter (mm)<br>電線仕上り外径  | 2.1~2.9                                  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Material<br>材質  | Heat-resistant copper alloy              |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Surface treatment<br>表面処理   | Tin-plated Snメッキ                         |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Reel (piece)<br>リール(個)  | 3500                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
|                     | Thickness (mm)<br>板厚  | 0.25                                     |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |
| <b>F(8240-4952)</b> |   |  |             |  |         |                |                             |                           |                  |                        |      |                      |      |  |

Heat-resistant copper alloy=耐熱銅合金



# HX SEALED SERIES

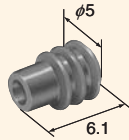
090(2.3 mm) / STANDARD

## Wire seals (mm)

●The wire seals are common to M and F.

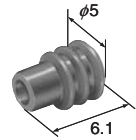
●ワイヤシールはM、Fに共用です。

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3~0.5) (AVSSX / 0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.7                        |
| Material<br>材質                           | Silicone                       |
| Color<br>色相                              | Gray                           |
| Pack (piece)<br>収容数(個)                   | 2000                           |



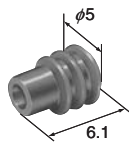
SS Type (7165-0385)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5) (AVX·AEX / 0.5~0.75) (AVS / 0.3~0.85)<br>(AVSS / 0.85~1.25) (AVSSX / 0.75~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.7~2.4  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Green  |
| Pack (piece)<br>収容数(個)                   | 1000   |



S Type (7165-0194)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5~1.25) (AVX·AEX / 0.75~1.25)<br>(AVS / 0.85~1.25) (AVSS / 1.25~2.0)<br>(AVSSX / 1.25~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~2.9  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Yellow   |
| Pack (piece)<br>収容数(個)                   | 1000   |



M Type (7165-0198)

※ Depending on your production layout, operation efficiency, and other factors, you may select one of the wire seals, when the finished outer diameter falls within two of the ranges specified herein.

## Dummy plugs (mm)

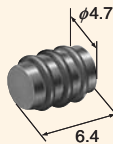
●Dummy plugs are common to M and F.

●ダミー栓はM、F共用です。

●Dummy plugs are used to blind unused terminal holes.

● unnecessary terminal holes to be plugged for, dummy plug is used.

|                        |          |
|------------------------|----------|
| Material<br>材質         | Silicone |
| Color<br>色相            | Green    |
| Pack (piece)<br>収容数(個) | 1000     |

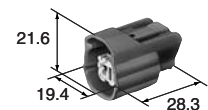


(7165-0193)

## Housing (mm)

Material / P.B.T.

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-05  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-06  |
| Color<br>色相                        | Black |

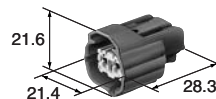


Retainer No. (6918-1370)

F(6189-0591)

2way

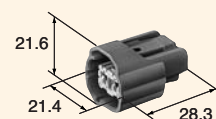
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-05  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-06  |
| Color<br>色相                        | Black |



Retainer No. (6918-1260) **F(6189-0552)**

2way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-05  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-06  |
| Color<br>色相                        | Brown |



Retainer No. (6918-1260) **F(6189-0593)**

3way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-05  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-06  |
| Color<br>色相                        | Black |



Retainer No. (6918-1371) **F(6189-0596)**

4way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | F-05  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | F-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | F-06  |
| Color<br>色相                        | Black |

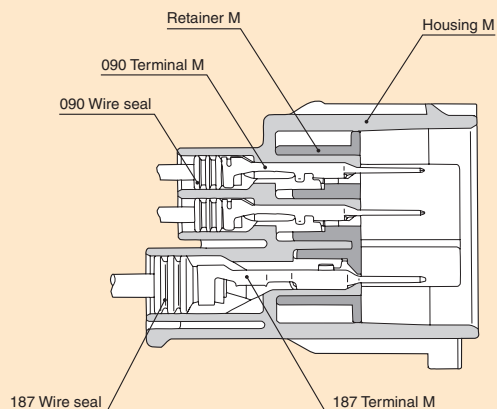


Retainer No. (6918-1469) **F(6189-0617)**

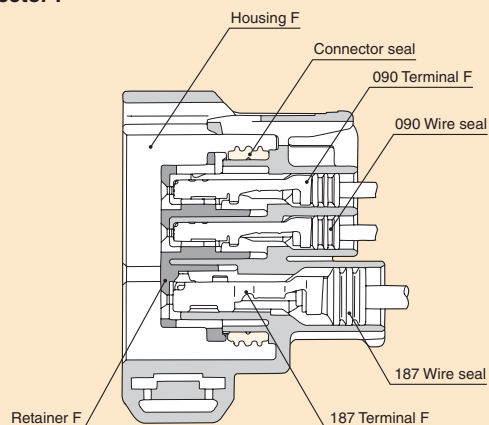
F-07

## Structure / 構造

### Connector M



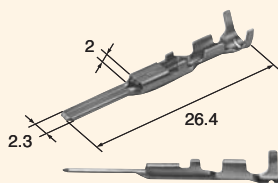
### Connector F



## Terminal (mm)

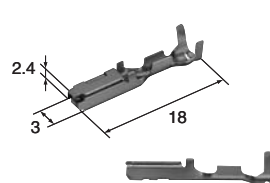
090 (S)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.4                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ         |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness:0.64) |



**M(8230-4472)**

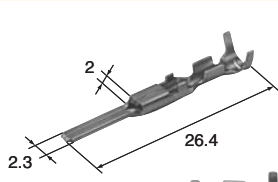
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.4                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4862)**

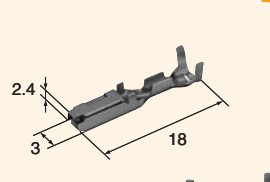
090 (M)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85 (0.75)                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.6                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ         |
| Reel (piece)<br>リール(個)                   | 3500                        |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness:0.64) |



**M(8230-4562)**

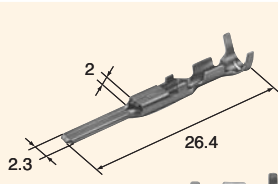
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85 (0.75)                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.6                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4992)**

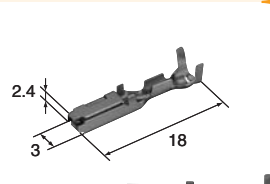
090 (L)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~2.9                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ         |
| Reel (piece)<br>リール(個)                   | 3500                        |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness:0.64) |



**M(8230-4552)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |

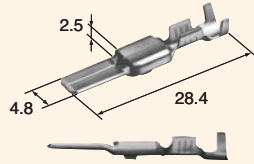


**F(8240-4952)**

Heat-resistant copper alloy=耐熱銅合金

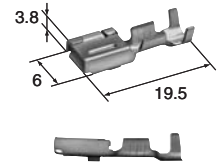
187  
(S)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.4                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 3000                       |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness:0.8) |



**M(8100-0463)**

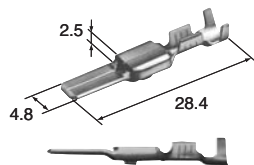
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.4                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-0661)**

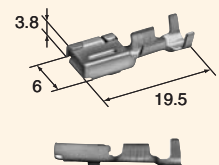
187  
(M)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 3000                       |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness:0.8) |



**M(8100-0464)**

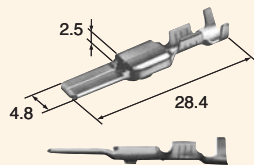
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.6                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-0660)**

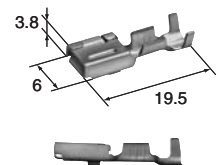
187  
(L)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                    |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 2500                       |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness:0.8) |



**M(8100-0465)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~4.1                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-0468)**

Heat-resistant copper alloy=耐熱銅合金

F-09

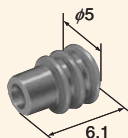
## Wire seals (mm)

●The wire seals are common to M and F.

●ワイヤシールはM、F共用です。

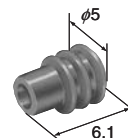
090

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS/0.3~0.5) (AVSSX/0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.7                    |
| Material<br>材質                           | Silicone                   |
| Color<br>色相                              | Gray                       |
| Pack (piece)<br>収容数(個)                   | 2000                       |



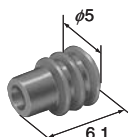
SS Type **(7165-0385)**

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5) (AVX/0.5~0.75) (AVS/0.3~0.85)<br>(AVSS/0.85~1.25) (AVSSX/0.75~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.7~2.4  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Blue   |
| Pack (piece)<br>収容数(個)                   | 2000   |



S Type **(7165-0118)**

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5~1.25) (AVX/AEX/0.75~1.25)<br>(AVS/0.85~1.25) (AVSS/1.25~2.0)<br>(AVSSX/1.25~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~2.9  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Brown  |
| Pack (piece)<br>収容数(個)                   | 2000   |

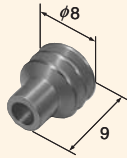


M Type **(7165-0119)**

# HX SEALED SERIES

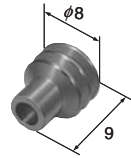
090, 187(2.3 mm, 4.8 mm)/HYBRID

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVS/0.3) (AVSS/0.3~0.85) (AVSSX/0.5~0.75) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.3~1.9                                    |
| Material<br>材質                           | N.B.R.                                     |
| Color<br>色相                              | Brown                                      |
| Pack (piece)<br>収容数(個)                   | 1000                                       |



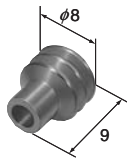
S Type (7165-0172)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5~1.25) (AVX/0.5~1.25) (AVS/0.3~1.25)<br>(AVSS/0.85~2.0) (AVSSX/0.75~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.8~2.9   |
| Material<br>材質                           | N.B.R.  |
| Color<br>色相                              | Gray  |
| Pack (piece)<br>収容数(個)                   | 1000  |



M Type (7165-0130)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/2.0~3.0) (AVX/2.0~3.0) (AVS/2.0~3.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 3.0~4.1                                  |
| Material<br>材質                           | N.B.R.                                   |
| Color<br>色相                              | Black                                    |
| Pack (piece)<br>収容数(個)                   | 1000                                     |



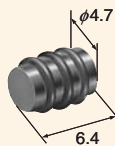
L Type (7165-0131)

## Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.

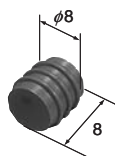
- ダミー栓はM、F共用です。
- unnecessary terminal holes to be closed for the purpose, dummy plug is used.

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Brown  |
| Pack (piece)<br>収容数(個) | 1000   |



(7161-9787)

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Gray   |
| Pack (piece)<br>収容数(個) | 1000   |



(7165-0145)

# HX SEALED SERIES

090, 187(2.3 mm, 4.8 mm)/HYBRID

## Housing (mm)

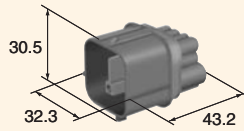
Material/P.B.T.

No. of way/( ) corresponds to 090, 187, in order from left to right.

極数/( )内表示：左から090極数、187極数

10way  
(8+2)

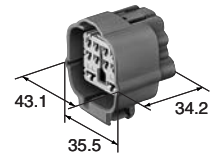
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] F-08<br>[187] F-09 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] F-09<br>[187] F-10 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] F-10<br>[187] F-10 |
| Color<br>色相                        | Dark Gray                |



Retainer No. (6918-1263)

**M(6181-0381)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] F-08<br>[187] F-09 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] F-09<br>[187] F-10 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] F-10<br>[187] F-10 |
| Color<br>色相                        | Dark Gray                |



Retainer No. (6918-1267)

**F(6189-0555)**

F-11

# HX SEALED SERIES

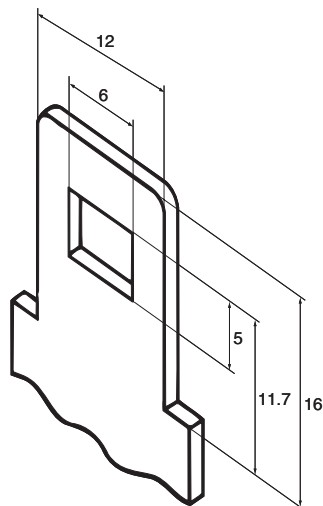
BRACKETS

## ▶▶ Bracket for attaching (mm) ◀◀

The hybrid type has a double locking mechanism, and can be secured to a bracket with M and F engaged.

ハイブリッドタイプは、二重ロック構造になっており、MとFを嵌合した状態でブラケットに固定することができます。

|                |             |
|----------------|-------------|
| 040 / STANDARD | For 1・2 way |
| 090 / HYBRID   | For 10 way  |



t=1.2mm

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# HW SEALED SERIES

## Features

The HW sealed connector series is a new, improved version of the conventional HM sealed series, with a mechanism that detects when terminals are not inserted completely. This series consists of a 090 type classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- These connectors can be directly secured to a bracket on the car body.
- 1-6 way connectors adopt an inertia locking system to prevent semi-engagement.
- 8-14 way connectors is only possible when the locking mechanism ensures the connectors are completely engaged, preventing semi-engagement.

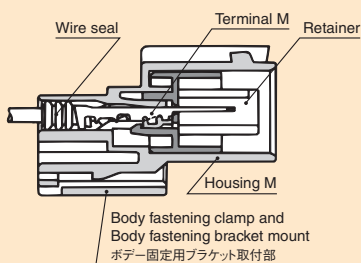
## 特長

HW防水シリーズは、従来のHM防水シリーズを改良し、挿入不足のターミナルを検知する機構を備えています。ターミナルサイズが090で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

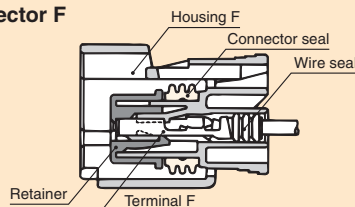
- ターミナルが半挿入の状態ではリテーナが装着できない機構になっています。
- コネクタは、ボデー側のブラケットに直接固定することができます。
- 1極～6極のコネクタは半嵌合の起こりにくい慣性ロック方式です。
- 8極～14極のコネクタは完全に嵌合した状態でないとボデー側のブラケットに固定することができないロック構造になっています。

### Structure / 構造

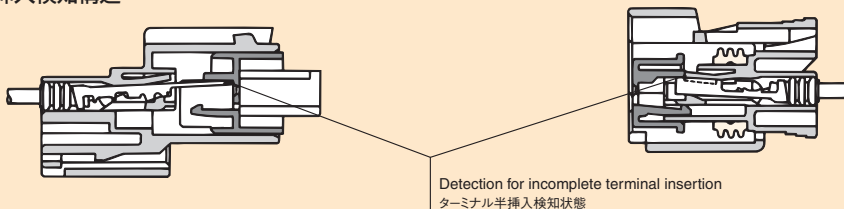
Connector M



Connector F

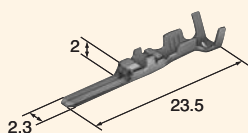


Detecting structure for incomplete terminal insertion  
ターミナル半挿入検知構造



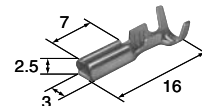
### Terminal (mm)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~2.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



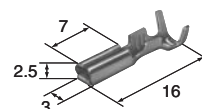
M(1500-0105)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



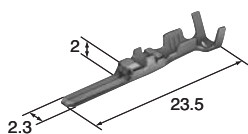
F(1500-0106)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



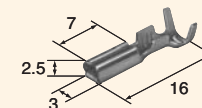
F(1500-0110)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~2.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ       |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



M(1500-0134)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(1500-0133)

Heat-resistant copper alloy=耐熱銅合金

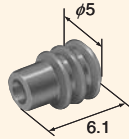


### Wire seals (mm)

●The wire seals are common to M and F.

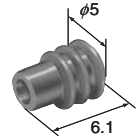
●ワイヤシールはM、F共用です。

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3~0.5) (AVSSX / 0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.2~1.7                        |
| Material<br>材質                           | Silicone                       |
| Color<br>色相                              | Gray                           |
| Pack (piece)<br>収容数(個)                   | 2000                           |



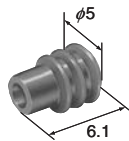
SS Type (7165-0385)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5) (AVX / 0.5~0.75) (AVS / 0.3~0.85)<br>(AVSS / 0.85~1.25) (AVSSX / 0.75~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.7~2.4  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Blue   |
| Pack (piece)<br>収容数(個)                   | 2000   |



S Type (7165-0118)

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5~1.25) (AVX / 0.75~1.25)<br>(AVS / 0.85~1.25) (AVSS / 1.25~2.0)<br>(AVSSX / 1.25~2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~2.9  |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Brown  |
| Pack (piece)<br>収容数(個)                   | 2000   |



M Type (7165-0119)

G-03

090

### Dummy plugs (mm)

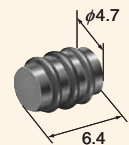
●Dummy Plugs are common to M and F.

●Dummy Plugs are used to blind unused terminal holes.

●ダミー栓はM、F共用です。

● unnecessary terminal holes to be plugged for the purpose, dummy plug is used.

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Brown  |
| Pack (piece)<br>収容数(個) | 1000   |



SS Type (7161-9787)

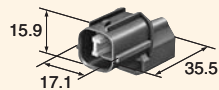
090

### Housing (mm)

Material / P.B.T.

Color / Dark Gray

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0699)

**M(6181-0227)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0698)

**F(6189-0386)**

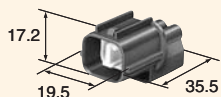
1way

# HW SEALED SERIES

090(2.3 mm) / STANDARD

2way

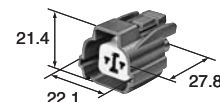
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0323)

**M(6181-0070)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

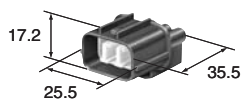


Retainer No. (6918-0322)

**F(6189-0129)**

3way

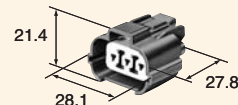
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0325)

**M(6181-0071)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

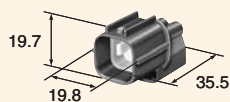


Retainer No. (6918-0324)

**F(6189-0130)**

3way  
(T type)

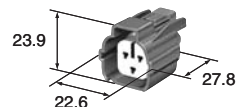
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0327)

**M(6181-0072)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

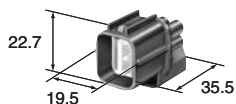


Retainer No. (6918-0326)

**F(6189-0131)**

4way

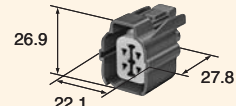
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0329)

**M(6181-0073)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

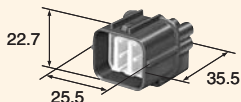


Retainer No. (6918-0328)

**F(6189-0132)**

6way

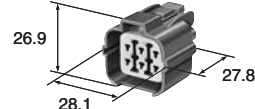
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0331)

**M(6181-0074)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

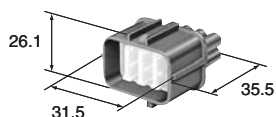


Retainer No. (6918-0330)

**F(6189-0133)**

8way

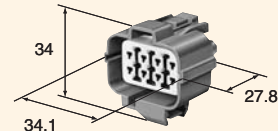
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0333)

**M(6181-0075)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0332)

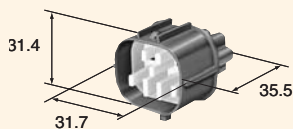
**F(6189-0134)**

# HW SEALED SERIES

090(2.3 mm) / STANDARD

10way

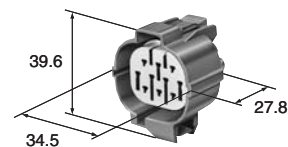
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0335)

**M(6181-0076)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |

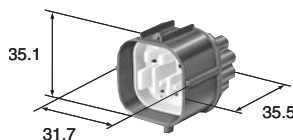


Retainer No. (6918-0334)

**F(6189-0135)**

14way

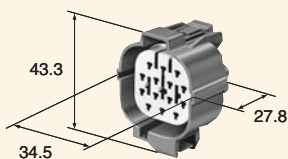
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0337)

**M(6181-0077)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | G-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | G-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | G-03 |



Retainer No. (6918-0336)

**F(6189-0136)**

G-05

# HW SEALED SERIES

BRACKETS

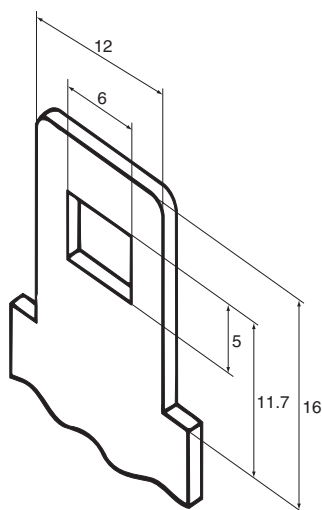
## ▶▶ Bracket for attaching (mm) ◀◀

Connector M can be fixed with bracket (In case 2, 3, 3 T-type, 4 and 6 way), 8, 10 and 14 ways connectors have a double locking mechanism, and can be secured to a bracket with M and F engaged.

Mコネクタは、ブラケットに固定することができます。(2、3、3T、4、6極) 8、10、14極は二重ロック構造になっており、MとFを嵌合した状態でブラケットに固定することができます。

090 / STANDARD

For 1·2·3·3(T type)·4·6·8·10·14 way



t=1.2mm

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# HD SERIES

## (Outdated connector)

### Features

The HD connector series is a new, improved version of the conventional HM series, with a mechanism that minimizes the possibility of terminal back out and semi-engagement of connectors.

This series consists of 090, 250, and 305 types (090, 187, 250, and 305 types for the hybrid model) classified according to terminal size, covering an extensive array of applications from signal to power circuits.

- An incompletely inserted terminal is automatically adjusted to the correct position by setting a retainer.
- Retainers are integrated with the housing when molded (090 type) or pre-mounted on the housing (250 and 305 types), improving operability.
- An extra clip can be attached to the connector housing to secure it to the car body.

In case of purchasing the subject parts, please contact our sales office. Some part may not be in production.

### 特長

HDシリーズは、従来のHMシリーズを改良し、ターミナル抜けの起きにくい機構及びコネクタの半嵌合の起きにくい機構を備えたコネクタシリーズです。

ターミナルサイズにより090・250・305（ハイブリッドは090・187・250・305）で構成されており、信号回路からパワー回路まで幅広くご利用いただけます。

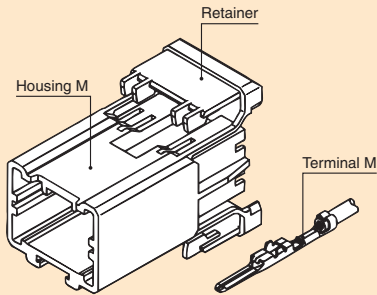
- 挿入不足のターミナルは、リテーナをセットすることにより正規の位置に固定されます。
- リテーナは、コネクタハウジングと一体成形（090）あるいは予め組み付けられており（250・305）、高い作業性を備えています。
- コネクタハウジングにはボデーに固定するためのクランプ（クリップ）を装着することができます。

当コネクタシリーズをご選定の際には、弊社営業担当者に生産対応可否をご確認ください。

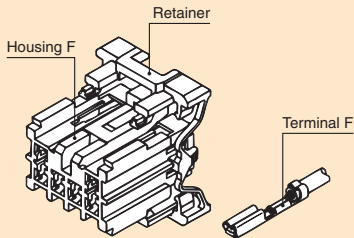
## Structure / 構造

H-02

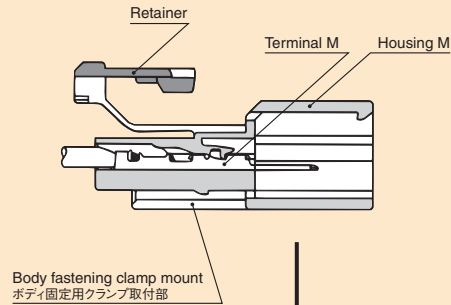
### Connector M



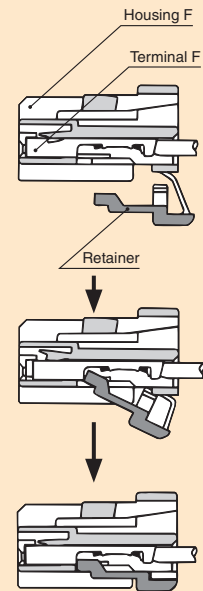
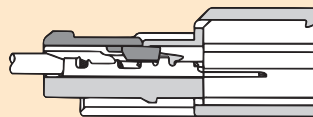
### Connector F



### Before setting retainer リテーナ装着前



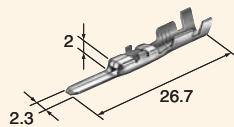
### After setting retainer リテーナ装着後



※ Retainer eliminates the terminal backing-out by enforcing the look mechanism.  
※ 挿入不足のターミナルは、リテーナを装着することで前へ押し出され固定されます。

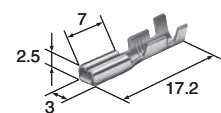
## Terminal (mm)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



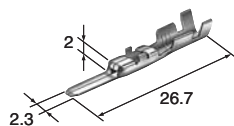
### M(8230-4272)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



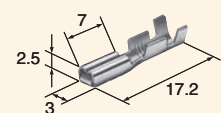
### F(8240-4412)

|  |                            |
|--|----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                    |
| Material<br>材質                           | Brass<br>黄銅                |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ        |
| Reel (piece)<br>リール(個)                   | 5000                       |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.64) |



### M(8230-4282)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



### F(8240-4422)

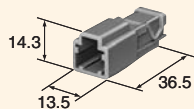
090

## Housing (mm)

Material / P.B.T.

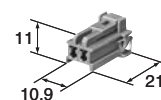
2way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**M(6098-0240)**

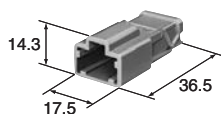
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0239)**

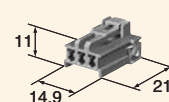
3way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**M(6098-0242)**

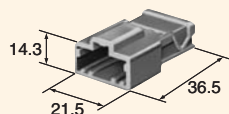
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0241)**

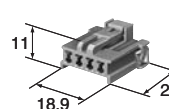
4way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**M(6098-0244)**

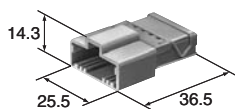
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0243)**

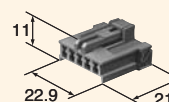
5way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**M(6098-0343)**

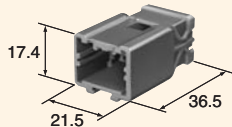
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0344)**

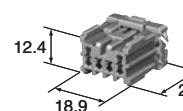
6way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**M(6098-0246)**

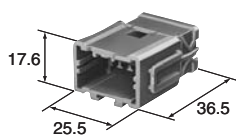
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0245)**

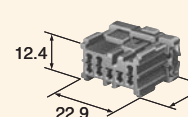
8way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0248)**

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |

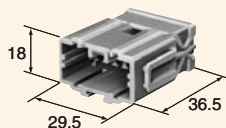


**F(6098-0247)**

H-03

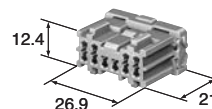
10way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0250)**

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |

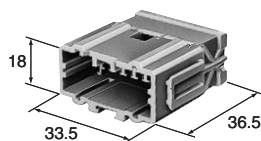


**F(6098-0249)**

H-04

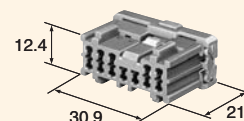
12way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0252)**

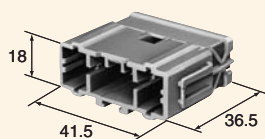
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0251)**

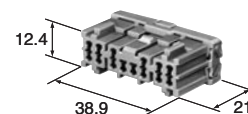
14way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0254)**

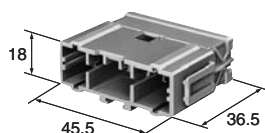
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0253)**

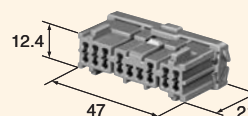
16way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0256)**

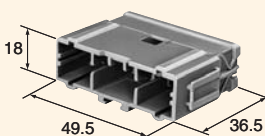
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0255)**

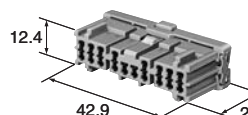
18way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0258)**

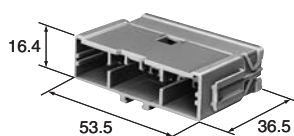
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0257)**

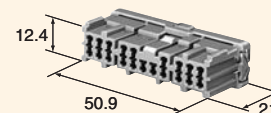
20way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0260)**

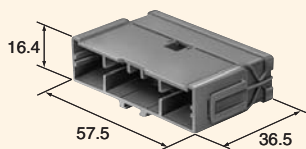
|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0259)**

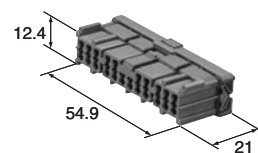
22way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |
| Note<br>備考                         | Block type |



**M(6098-0814)**

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-02       |
| Color<br>色相                        | Light Gray |



**F(6098-0464)**

H-05

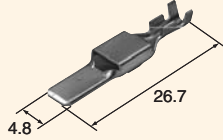


## Terminal (mm)

● Ref : 090 Terminal List (Page H-02)

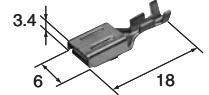
● 090ターミナルはH-02に掲載。

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ       |
| Reel (piece)<br>リール(個)                   | 3000                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



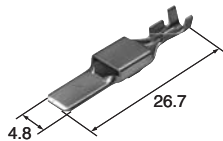
**M(8100-1506)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



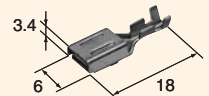
**F(8100-1507)**

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ       |
| Reel (piece)<br>リール(個)                   | 2500                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



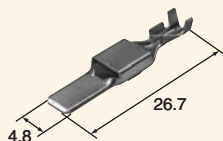
**M(8100-0664)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



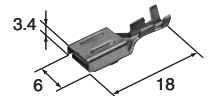
**F(8100-0606)**

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.8                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ       |
| Reel (piece)<br>リール(個)                   | 2000                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



**M(1500-0166)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.6~3.8                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



**F(8100-0782)**

Heat-resistant copper alloy=耐熱銅合金

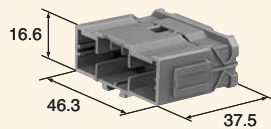
## Housing (mm)

Material / P.B.T.

No. of way / ( ) corresponds to 090, 187, in order from left to right.

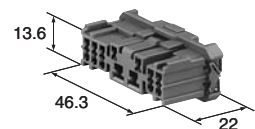
極数 / ( ) 内表示 : 左から090極数、187極数

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



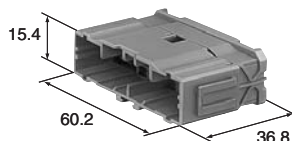
**M(6950-0992)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



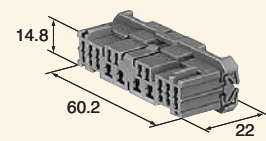
**F(6950-0991)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



**M(6950-0982)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



**F(6950-0981)**

14way  
(12+2)

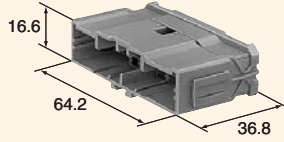
20way  
(16+4)

# HD SERIES

090, 187(2.3 mm, 4.8 mm) / HYBRID

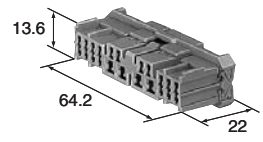
22way  
(18+4)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



**M(6950-0990)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] H-02<br>[187] H-06 |
| Color<br>色相                        | Light Gray               |



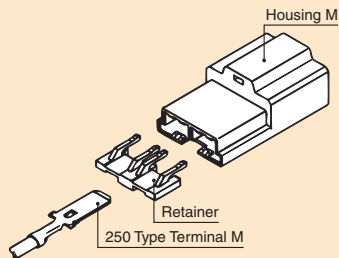
**F(6950-0989)**

H-07

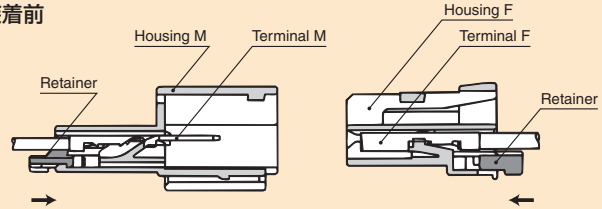
## Structure / 構造

H-08

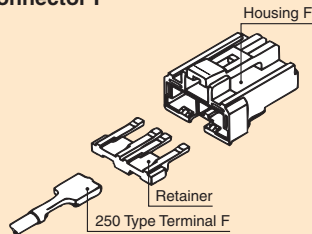
### Connector M



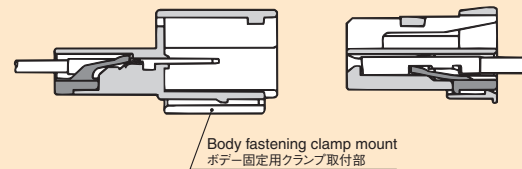
### Before setting retainer リテーナ装着前



### Connector F



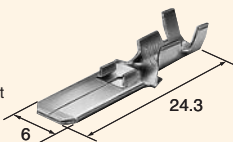
### After setting retainer リテーナ装着後



※ Retainer eliminates the terminal backing-out by enforcing the lock mechanism.  
※ 挿入不足のターミナルは、リテーナを装着することで前へ押し出され固定されます。

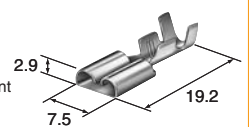
## Terminal (mm)

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                       |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment  |
| Reel (piece)<br>リール(個)                   | 4000                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



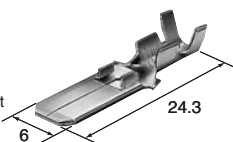
M(8230-4050)

|  |                          |
|--|--------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                  |
| Material<br>材質                           | Brass<br>黄銅              |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment |
| Reel (piece)<br>リール(個)                   | 5000                     |
| Thickness (mm)<br>板厚                     | 0.32                     |



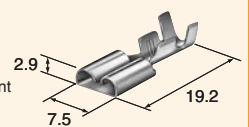
F(8240-4220)

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment  |
| Reel (piece)<br>リール(個)                   | 4000                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



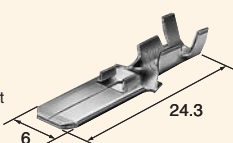
M(8230-4040)

|  |                          |
|--|--------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4                  |
| Material<br>材質                           | Brass<br>黄銅              |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment |
| Reel (piece)<br>リール(個)                   | 5000                     |
| Thickness (mm)<br>板厚                     | 0.32                     |



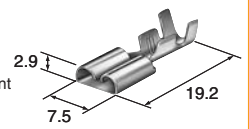
F(8240-4140)

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment  |
| Reel (piece)<br>リール(個)                   | 3500                      |
| Thickness (mm)<br>板厚                     | 0.4 (Tab thickness : 0.8) |



M(8230-4060)

|  |                          |
|--|--------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1                  |
| Material<br>材質                           | Brass<br>黄銅              |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment |
| Reel (piece)<br>リール(個)                   | 5000                     |
| Thickness (mm)<br>板厚                     | 0.32                     |



F(1500-0081)

Anti-Corrosion treatment=防錆処理

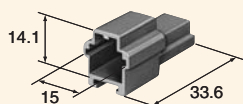
250

## Housing (mm)

Material / P.B.T.

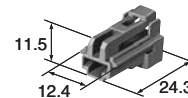
1way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**M(6098-0232)**

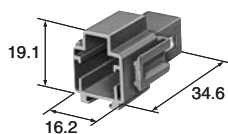
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**F(6098-0234)**

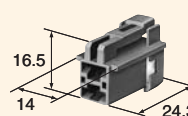
2way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08       |
| Color<br>色相                        | Brown      |
| Note<br>備考                         | Block type |



**M(6098-0228)**

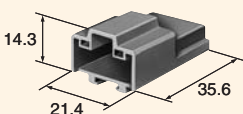
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**F(6098-0230)**

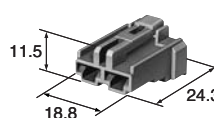
3way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**M(6098-0224)**

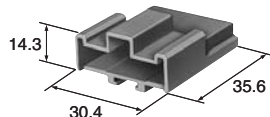
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**F(6098-0226)**

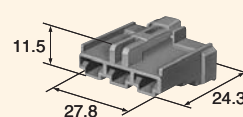
5way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**M(6098-0220)**

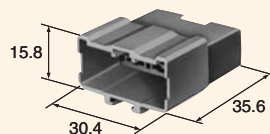
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**F(6098-0222)**

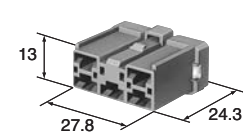
7way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



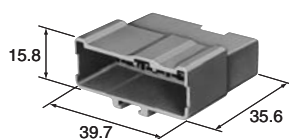
**M(6098-0216)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



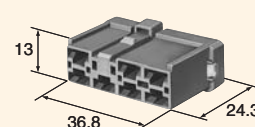
**F(6098-0218)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |



**M(6098-0212)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-08  |
| Color<br>色相                        | Brown |

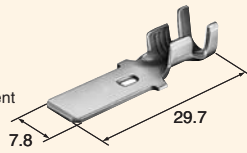


**F(6098-0214)**

H-09

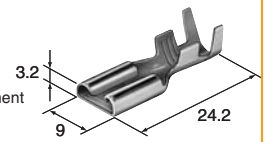
### Terminal (mm)

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~2.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.1~3.4                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment  |
| Reel (piece)<br>リール(個)                   | 1500                      |
| Thickness (mm)<br>板厚                     | 0.8 (Tab thickness : 0.8) |



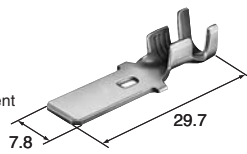
**M(8232-4220)**

|  |                          |
|--|--------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~3.4                  |
| Material<br>材質                           | Brass<br>黄銅              |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment |
| Reel (piece)<br>リール(個)                   | 2500                     |
| Thickness (mm)<br>板厚                     | 0.4                      |



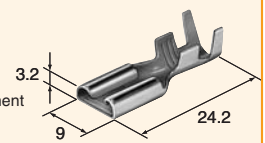
**F(8242-4050)**

|  |                           |
|--|---------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 3.0~5.0                   |
| Cable overall diameter (mm)<br>電線仕上り外径   | 3.6~4.9                   |
| Material<br>材質                           | Brass<br>黄銅               |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment  |
| Reel (piece)<br>リール(個)                   | 1500                      |
| Thickness (mm)<br>板厚                     | 0.8 (Tab thickness : 0.8) |



**M(8232-4238)**

|  |                          |
|--|--------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 3.0~5.0                  |
| Cable overall diameter (mm)<br>電線仕上り外径   | 3.6~4.9                  |
| Material<br>材質                           | Brass<br>黄銅              |
| Surface treatment<br>表面処理                | Anti-Corrosion treatment |
| Reel (piece)<br>リール(個)                   | 2500                     |
| Thickness (mm)<br>板厚                     | 0.4                      |



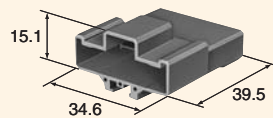
**F(8242-4068)**

Anti-Corrosion treatment=防錆処理

### Housing (mm)

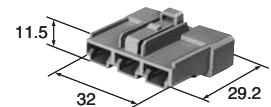
Material / P.B.T.

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-10  |
| Color<br>色相                        | Brown |



**M(6098-0208)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | H-10  |
| Color<br>色相                        | Brown |



**F(6098-0210)**

3way

# HD SERIES

250, 305(6.6 mm, 7.8 mm) / HYBRID

## Terminal

● Ref : 250 Terminal List (Page H-08), 305 Terminal List (Page H-10)

● 250ターミナルはH-08、305ターミナルはH-10に掲載。

## Housing (mm)

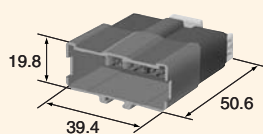
Material / P.B.T.

No. of way / ( ) corresponds to 250, 305, in order from left to right.

極数 / ( ) 内表示 : 左から250極数、305極数

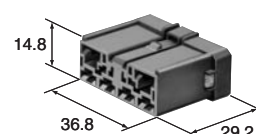
6way  
(4+2)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [250] H-08<br>[305] H-10 |
| Color<br>色相                        | Brown                    |



**M(6098-3966)**

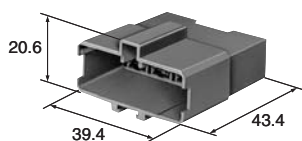
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [250] H-08<br>[305] H-10 |
| Color<br>色相                        | Brown                    |



**F(6950-0978)**

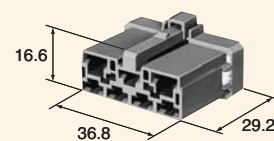
7way  
(5+2)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [250] H-08<br>[305] H-10 |
| Color<br>色相                        | Brown                    |



**M(6950-1030)**

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [250] H-08<br>[305] H-10 |
| Color<br>色相                        | Brown                    |



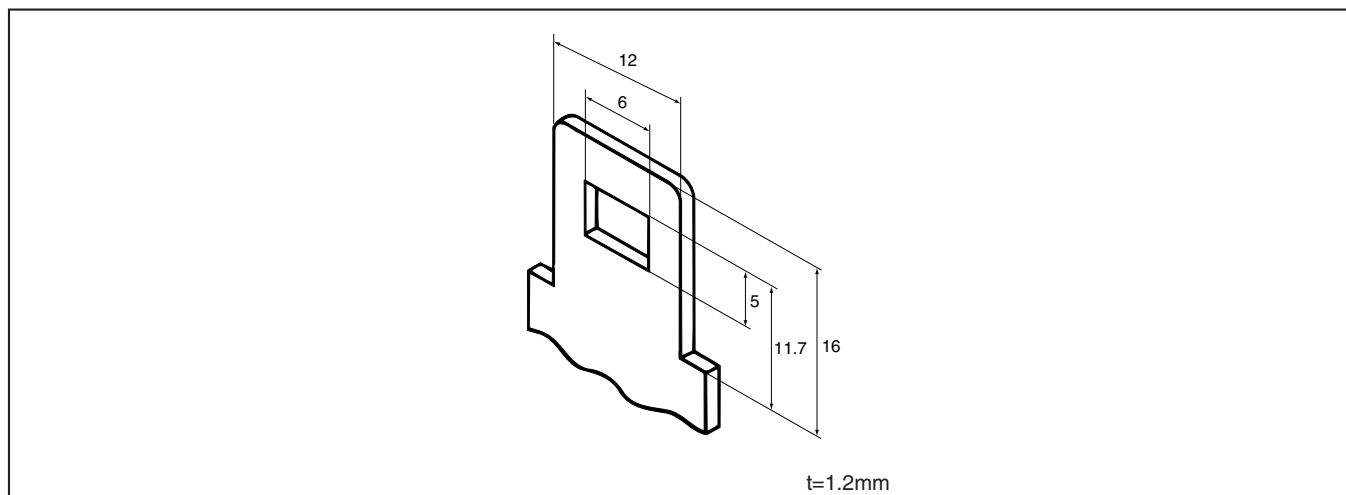
**F(6950-0366)**

H-11

# HD SERIES

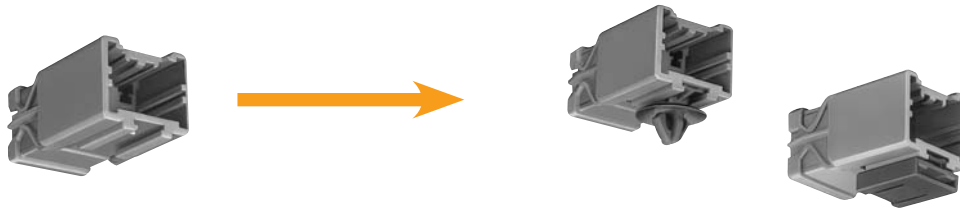
COMMON USE PARTS

## ▶▶ Bracket for attaching (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。

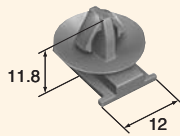


### ▶▶ Body fastening clamp (mm) ◀◀

The clamp can be installed to connector M, if necessary, to fasten into the body side hole.

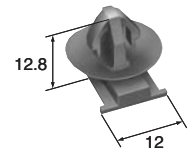
Mコネクタには、ボデー側の穴に固定するためのクランプを必要に応じて取付けることができます。

|  |            |
|--|------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ7         |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6 |
| Material<br>材質                           | 6 Nylon    |
| Color<br>色相                              | Red        |



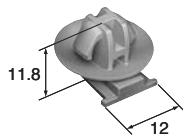
(6810-1203)

|  |           |
|--|-----------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ7        |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=1.6~2.6 |
| Material<br>材質                           | 6 Nylon   |
| Color<br>色相                              | Brown     |



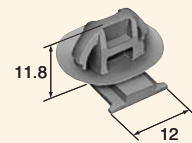
(6810-1217)

|  |            |
|--|------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | φ10        |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6 |
| Material<br>材質                           | 6 Nylon    |
| Color<br>色相                              | Natural    |



(6810-1204)

|  |                    |
|--|--------------------|
| Clamp fitting hole size (mm)<br>適合穴サイズ   | 6×12 (Square hole) |
| Clamp fitting thickness (mm)<br>クランプ適合板厚 | t=0.65~1.6         |
| Material<br>材質                           | 6 Nylon            |
| Color<br>色相                              | Orange             |



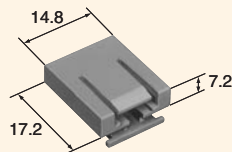
(6810-1462)

### ▶▶ Body fastening clamp (Bracket type) (mm) ◀◀

Connector M can be accoupled with clamp, if necessary, to fasten to the body side bracket.

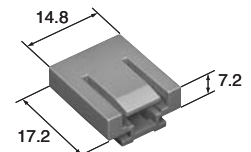
Mコネクタには、ボデー側のブラケットに固定するためのクランプを必要に応じて取付けることができます。

|                                 |  |
|---------------------------------|--|
| Bracket direction<br>ブラケット差込み方向 | Connector mating direction<br>コネクタ嵌合方向 |
| Material<br>材質                  | 6 Nylon                                |
| Color<br>色相                     | Red                                    |

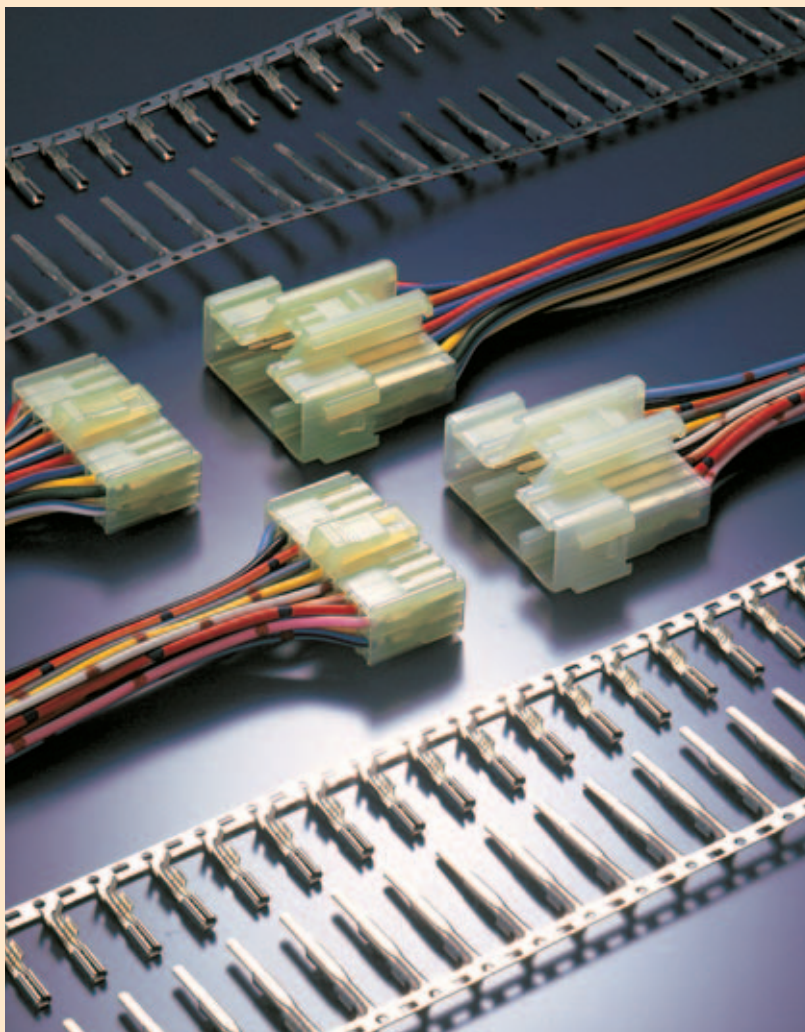


(6910-0119)

|                                 |                               |
|---------------------------------|-------------------------------|
| Bracket direction<br>ブラケット差込み方向 | Anti clock wise<br>コネクタ嵌合の逆方向 |
| Material<br>材質                  | 6 Nylon                       |
| Color<br>色相                     | Natural                       |



(6910-0120)



# HM SERIES

## (Outdated connector)

### Features

The HM connector series has a 4 mm pitch between terminal poles.

This series consists of a 090 type (090 and 250 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- A joint model allows you to integrate multiple connectors, regardless of the number of ways.
- A splice connector is also available.

### 特長

HMシリーズは各種の制御回路、並びに低パワー回路に適するターミナル極間ピッチ4mmのコネクタシリーズです。

ターミナルサイズが090 (ハイブリッドは090・250) で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- 連結型は同極数のコネクタ、異なるコネクタ同士の連結が可能です。
- スプライスコネクタも設定いたしました。

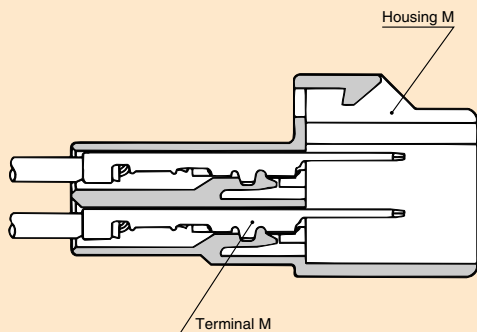
In case of purchasing the subject parts, please contact our sales office.  
Some part may not be in production.

当コネクタシリーズをご選定の際には、弊社営業担当者に生産対応可否をご確認ください。

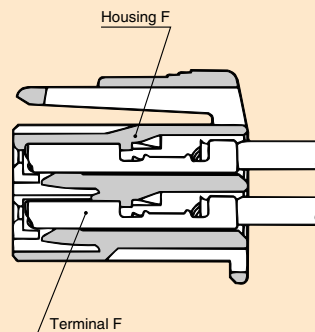


## Structure / 構造

Connector M



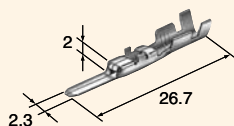
Connector F



I-02

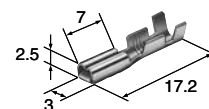
## Terminal (mm)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.2~0.3             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



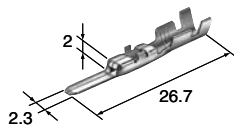
M(8230-4272)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.2~0.3             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



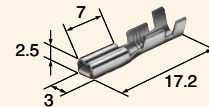
F(8240-4412)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.3                 |



M(8230-4282)

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



F(8240-4422)

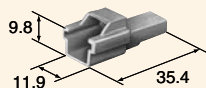
090

## Housing (mm)

Material / 66Nylon  
Color / Natural

2way

Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1031)**

Ref: Terminal part No. I-02  
ターミナル参照頁

Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

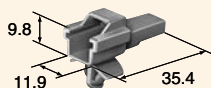
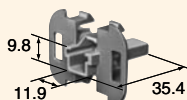


Plate thickness range for clamp :  
t=0.7~2.2

**M(6090-1126)**

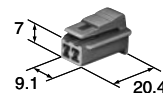
Ref: Terminal part No. I-02  
ターミナル参照頁

Note  
備考 Flanged  
パネル取付タイプ



**F(6181-1001)**

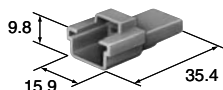
Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1001)**

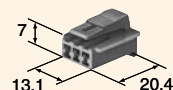
3way

Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1131)**

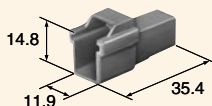
Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1136)**

4way

Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1041)**

Ref: Terminal part No. I-02  
ターミナル参照頁

Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付

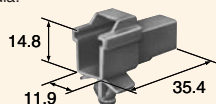
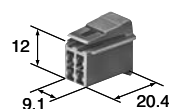


Plate thickness range for clamp :  
t=0.7~2.2

**M(6090-1123)**

Ref: Terminal part No. I-02  
ターミナル参照頁



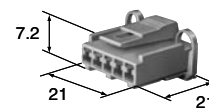
**F(6090-1011)**

Plate thickness range for clamp=クランプ適用板厚

I-03

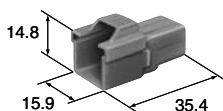
5way  
(Secondary Locking Type)  
(二重係止タイプ)

Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1256)**

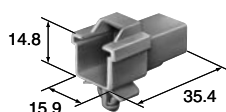
Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1149)**

Ref: Terminal part No. I-02  
ターミナル参照頁

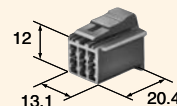
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付



**M(6090-1124)**

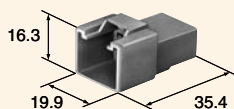
Plate thickness range for clamp :  
t=0.7~2.2

Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1218)**

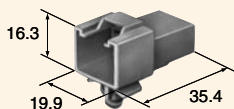
Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1051)**

Ref: Terminal part No. I-02  
ターミナル参照頁

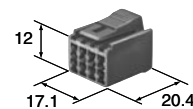
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付



**M(6090-1125)**

Plate thickness range for clamp :  
t=0.7~2.2

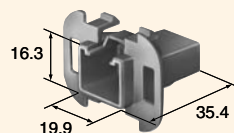
Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1021)**

Ref: Terminal part No. I-02  
ターミナル参照頁

Note  
備考 Flanged  
パネル取付タイプ

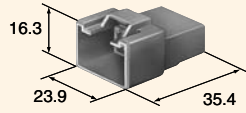


**M(6090-1122)**

Plate thickness range for clamp=クランプ適用板厚

10way

Ref: Terminal part No. I-02  
ターミナル参照頁



**M(6090-1056)**

Ref: Terminal part No. I-02  
ターミナル参照頁

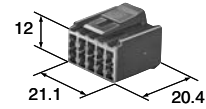
Note  
備考 With clamp for 7mm dia.  
φ7用クランプ付



Plate thickness range for clamp :  
t=0.7~2.2

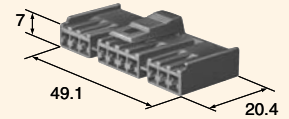
**M(6090-1127)**

Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1220)**

Ref: Terminal part No. I-02  
ターミナル参照頁



**F(6090-1254)**

10way

Plate thickness range for clamp=クランプ適用板厚

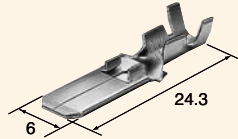
I-05

## Terminal (mm)

● Ref : 090 Terminal List (Page I-02)

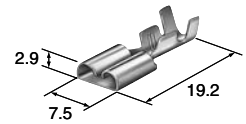
●090ターミナルはI-02に掲載。

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                         |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.4                         |



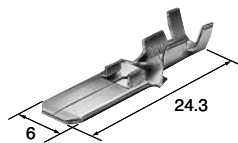
**M(8230-4050)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                         |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.32                        |



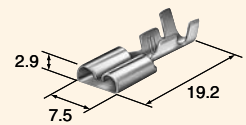
**F(8240-4220)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.4                         |



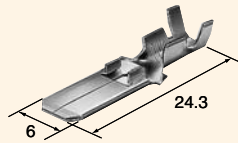
**M(8230-4040)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.32                        |



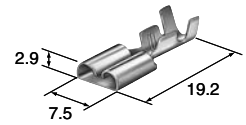
**F(8240-4140)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 3500                        |
| Thickness (mm)<br>板厚                     | 0.4                         |



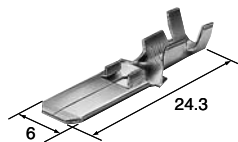
**M(8230-4060)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                     |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1                     |
| Material<br>材質                           | Brass<br>黄銅                 |
| Surface treatment<br>表面処理                | Anti-Corrosion<br>treatment |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.32                        |



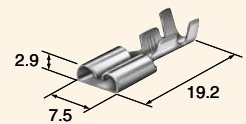
**F(1500-0081)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



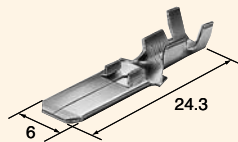
**M(8230-4052)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3                 |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~1.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



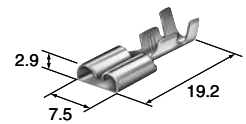
**F(8240-4202)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.4                 |



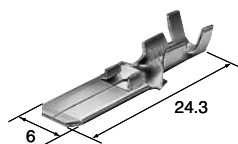
**M(8230-4042)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~2.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.6~3.4             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



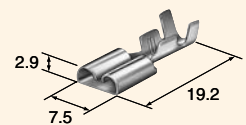
**F(8240-4182)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 3500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



**M(8230-4062)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0             |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.9~4.1             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.32                |



**F(8240-4538)**

Anti-Corrosion treatment=防錆処理

## Housing (mm)

Material / 66Nylon

Color / Natural

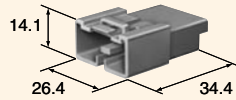
No. of way / ( ) corresponds to 090, 250, in order from left to right.

極数 / ( ) 内表示 : 左から090極数、250極数

6way  
(4+2)

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



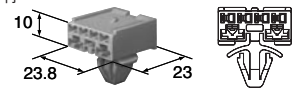
**M(6090-1250)**

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |

Note  
備考

With clamp for 7mm dia.  
φ7用クランプ付



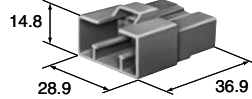
**F(6090-1251)**

Plate thickness range for clamp :  
t=0.7~2.2  
The corners are rounded.  
10×8mm

8way  
(6+2)

Ref: Terminal part No.  
ターミナル参照頁

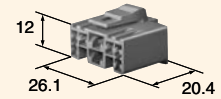
|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



**M(6090-1231)**

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |

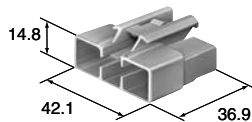


**F(6090-1224)**

10way  
(6+4)

Ref: Terminal part No.  
ターミナル参照頁

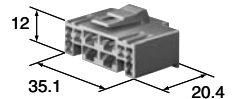
|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



**M(6090-1119)**

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |

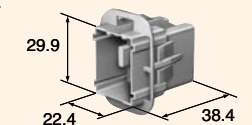


**F(6090-1230)**

14way  
(12+2)

Ref: Terminal part No.  
ターミナル参照頁

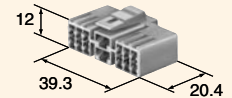
|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



**M(6090-1182)**

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



**F(6090-1219)**

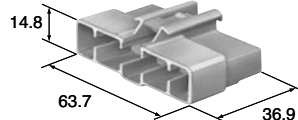
19way  
(18+1)

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |

Note  
備考

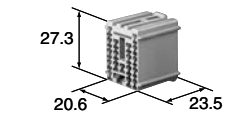
Flanged  
パネル取付タイプ



**M(6090-1120)**

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |



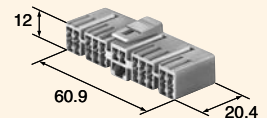
**F(6090-1183)**

23way  
(22+1)

Ref: Terminal part No.  
ターミナル参照頁

|       |      |
|-------|------|
| [090] | I-02 |
| [250] | I-06 |

Note  
備考



**F(6090-1117)**

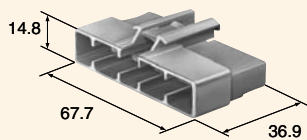
Plate thickness range for clamp=クランプ適用板厚

# HM SERIES

090, 250(2.3 mm, 6.6 mm) / HYBRID

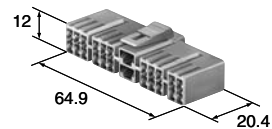
24way  
(22+2)

Ref: Terminal part No. [090] I-02  
ターミナル参照頁 [250] I-06



M(6090-1121)

Ref: Terminal part No. [090] I-02  
ターミナル参照頁 [250] I-06

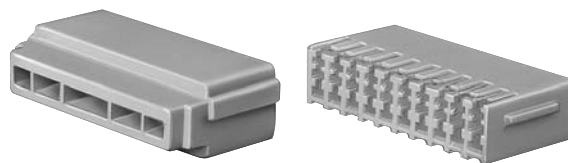


F(6090-1118)

I-08

The rationalization and reliability are appreciably improved, by concentrating the splices in the wiring harness at one position.

ワイヤハーネス内のスプライスを一カ所に集中させる事により、ワイヤハーネス製造の合理化ができ、信頼性が向上します。



## Splice connector

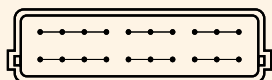
Material / 66Nylon

|        |             |         |  |      |             |         |
|--------|-------------|---------|--|------|-------------|---------|
| Type 1 | Color<br>色相 | Black   | Ref: Terminal part No.<br>ターミナル参照頁         | I-02 | Color<br>色相 | Black   |
|        |             |         | Connector F (Mate) No. <b>F(6400-0012)</b> |      |             |         |
| Type 2 | Color<br>色相 | Green   | Ref: Terminal part No.<br>ターミナル参照頁         | I-02 | Color<br>色相 | Green   |
|        |             |         | Connector F (Mate) No. <b>F(6400-0013)</b> |      |             |         |
| Type 3 | Color<br>色相 | Gray    | Ref: Terminal part No.<br>ターミナル参照頁         | I-02 | Color<br>色相 | Gray    |
|        |             |         | Connector F (Mate) No. <b>F(6400-0081)</b> |      |             |         |
| Type 4 | Color<br>色相 | Blue    | Ref: Terminal part No.<br>ターミナル参照頁         | I-02 | Color<br>色相 | Blue    |
|        |             |         | Connector F (Mate) No. <b>F(6400-0014)</b> |      |             |         |
| Type 5 | Color<br>色相 | Natural | Ref: Terminal part No.<br>ターミナル参照頁         | I-02 | Color<br>色相 | Natural |
|        |             |         | Connector F (Mate) No. <b>F(6400-0010)</b> |      |             |         |



Type 6

Color  
色相 Orange



**M(6409-0075)**

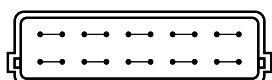
Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Orange

Connector F (Mate) No.

**F(6400-0016)**

Color  
色相 Red



**M(6409-0070)**

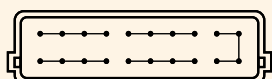
Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Red

Connector F (Mate) No.

**F(6400-0011)**

Color  
色相 Yellow



**M(6409-0074)**

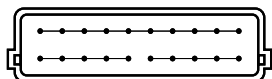
Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Yellow

Connector F (Mate) No.

**F(6400-0015)**

Color  
色相 Pink



**M(6440-0128)**

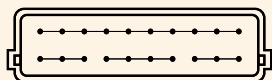
Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Pink

Connector F (Mate) No.

**F(6440-0129)**

Color  
色相 Brown



**M(6409-0603)**

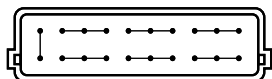
Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Brown

Connector F (Mate) No.

**F(6400-0186)**

Color  
色相 Wisteria Violet



**M(6440-0135)**

Ref: Terminal part No.  
ターミナル参照頁 I-02

Color  
色相 Wisteria Violet

Connector F (Mate) No.

**F(6440-0136)**

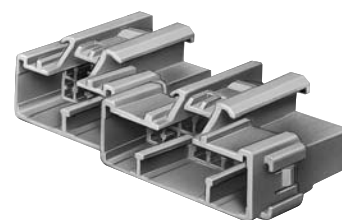
The connectors which have different number of ways as well as the same number of ways can be connected each other. It is also possible to connect with the block type ET connectors.

Clamping a single connector on a device, etc. where only a narrow clamping location is available makes it possible to clamp a multiple number of connector.

同極数のコネクタ、異なる極数のコネクタ同志の連結が可能です。

また、ETコネクタのブロックタイプとの連結も可能な多目的コネクタです。

機器等への固定場所が少ないところにも1つのコネクタを固定することにより多数のコネクタを同時に固定することが可能です。



### Housing (mm)

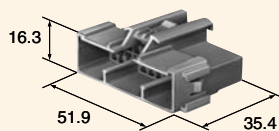
Material / 66Nylon

Color / Natural

|       |  |  |
|-------|--|--|
| 13way | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1090)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1061)</b></p> |
|       | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1221)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1064)</b></p> |
| 16way | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1099)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1071)</b></p> |
|       | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1101)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1073)</b></p> |
| 18way | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1107)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1081)</b></p> |
|       | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>M(6090-1107)</b></p> | <p>Ref: Terminal part No. / ターミナル参照頁 I-02</p> <p><b>F(6090-1081)</b></p> |

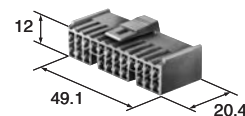
22way

Ref: Terminal part No.  
ターミナル参照頁 I-02



**M(6090-1112)**

Ref: Terminal part No.  
ターミナル参照頁 I-02

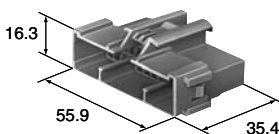


**F(6090-1086)**

I-12

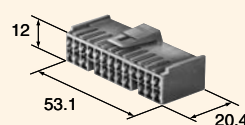
24way

Ref: Terminal part No.  
ターミナル参照頁 I-02



**M(6090-1113)**

Ref: Terminal part No.  
ターミナル参照頁 I-02

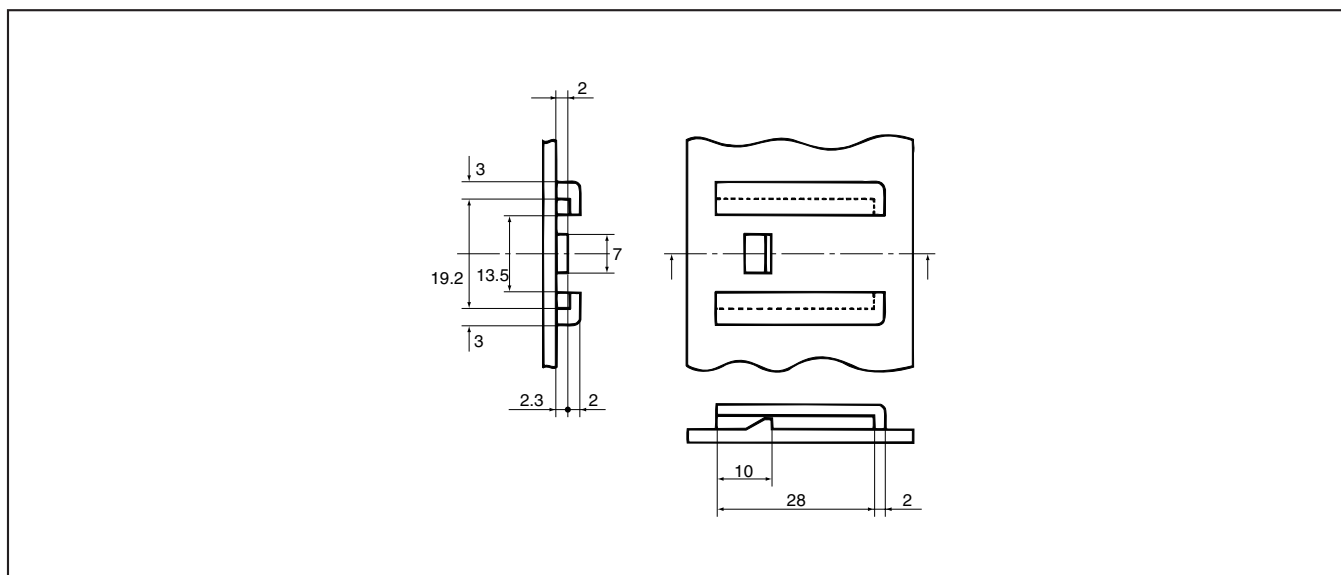


**F(6090-1087)**

## ▶▶ Shape of Mating Support (mm) ◀◀

090 Blocking type M housing can be mounted by providing the support as indicated above to the mating parts.

090連結型Mハウジングは、下図の様なサポート部を設ける事により固定することが出来ます。



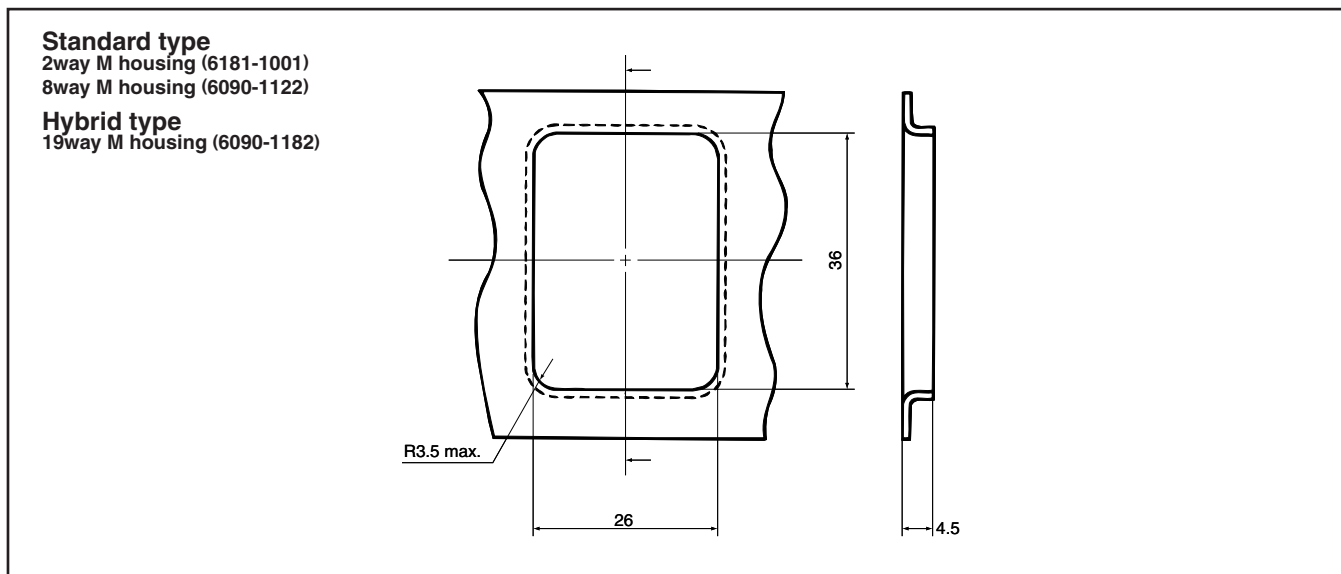
Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the mating support are specified in the official drawing. Please contact our sales staff.

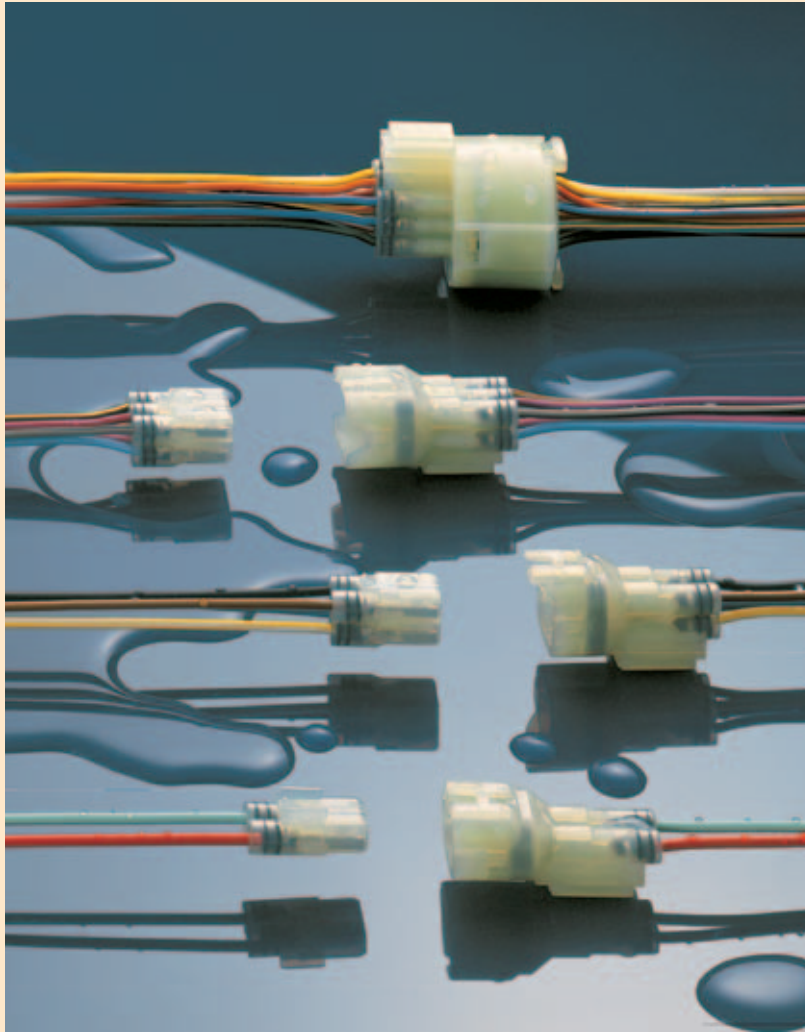
※上記寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。

### ▶▶ Dimensions of Installation Panel (mm) ◀◀

Housings mentioned above can be mounted by machining the panel as indicated in the figure.

下記ハウジングにはパネルに下図の様な加工をする事により、固定することができます。





J-01

# HM SEALED SERIES

## (Outdated connector)

### Features

The HM sealed connector series, developed for connecting waterproof wiring, has a 6 mm pitch between terminal poles. This series consists of a 090 type classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- Perfect performance is ensured even when used in an automobile engine compartment.
- These connectors can be directly secured to a bracket on the car body.

### 特長

HM防水シリーズは防水性をもとめられる配線の接続用として開発された、ターミナル極間ピッチ6mmのコネクタです。ターミナルサイズが090で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

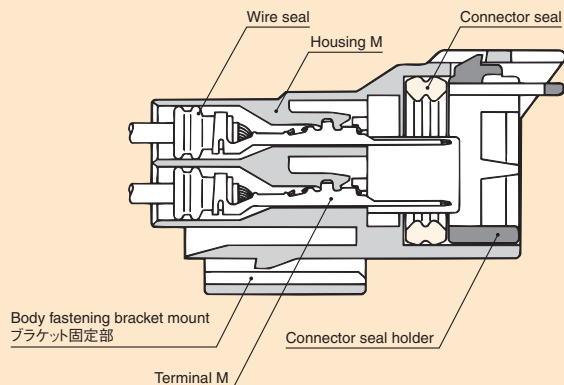
- 自動車のエンジンルーム内での使用にも、その機能を充分発揮します。
- コネクタは、ボデー側のブラケットに直接固定することができます。

In case of purchasing the subject parts, please contact our sales office. Some part may not be in production.

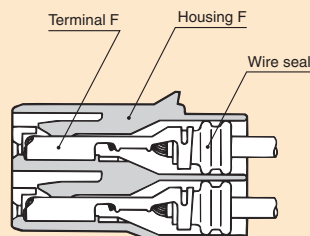
当コネクタシリーズをご選定の際には、弊社営業担当者に生産対応可否をご確認ください。

### Structure / 構造

#### Connector M



#### Connector F

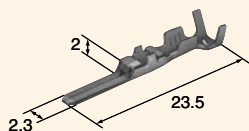


J-02

### Terminal (mm)

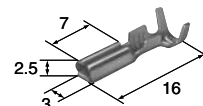
090

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25                      |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.9                       |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



**M(1500-0105)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~1.25            |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.9             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |



**F(1500-0106)**

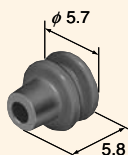
### Wire seals (mm)

●The wire seals are common to M and F.

●ワイヤシールはM、F共用です。

090

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV / 0.5~1.25) (AVX / 0.5~1.25)<br>(AVS / 0.3~1.25) (AVSS / 0.85~1.25)<br>(AVSSX / 0.85~1.25) |
| Material<br>材質                           | N.B.R.   |
| Color<br>色相                              | Black  |
| Pack (piece)<br>収容数(個)                   | 2000   |



**(7160-8234)**

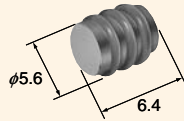
### Dummy plugs (mm)

- Dummy Plugs are common to M and F.
- Dummy Plugs are used to blind unused terminal holes.

- ダミー栓はM、F共用です。
- 不要なターミナル穴を塞ぐために、ダミー栓を使用します。

090

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



(7160-9465)

### A Type

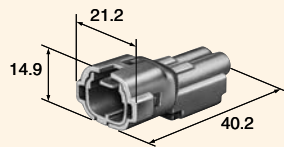
### Housing (mm)

Material / 66Nylon  
Color / Natural

J-03

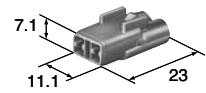
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



M(6187-2801)

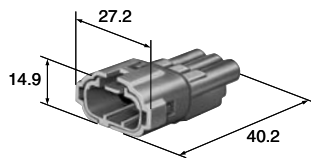
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



F(6180-2451)

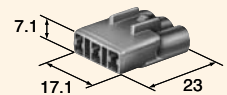
3way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



M(6187-3801)

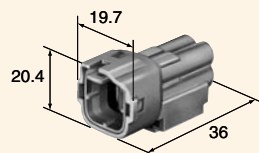
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



F(6180-3451)

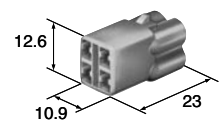
4way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



M(6187-4441)

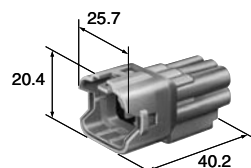
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



F(6180-4181)

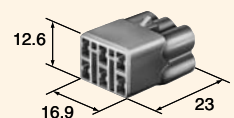
6way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



M(6187-6801)

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



F(6180-6181)

## B Type

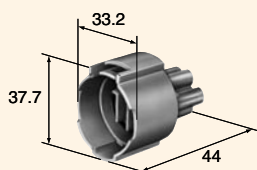
### Housing (mm)

Material / 66Nylon  
Color / Natural

J-04

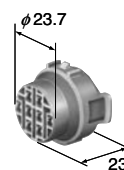
8way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



**M(6187-8691)**

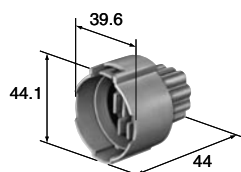
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



**F(6180-8451)**

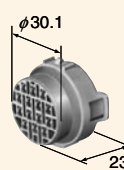
14way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |



**M(6188-4691)**

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | J-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | J-02 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | J-03 |

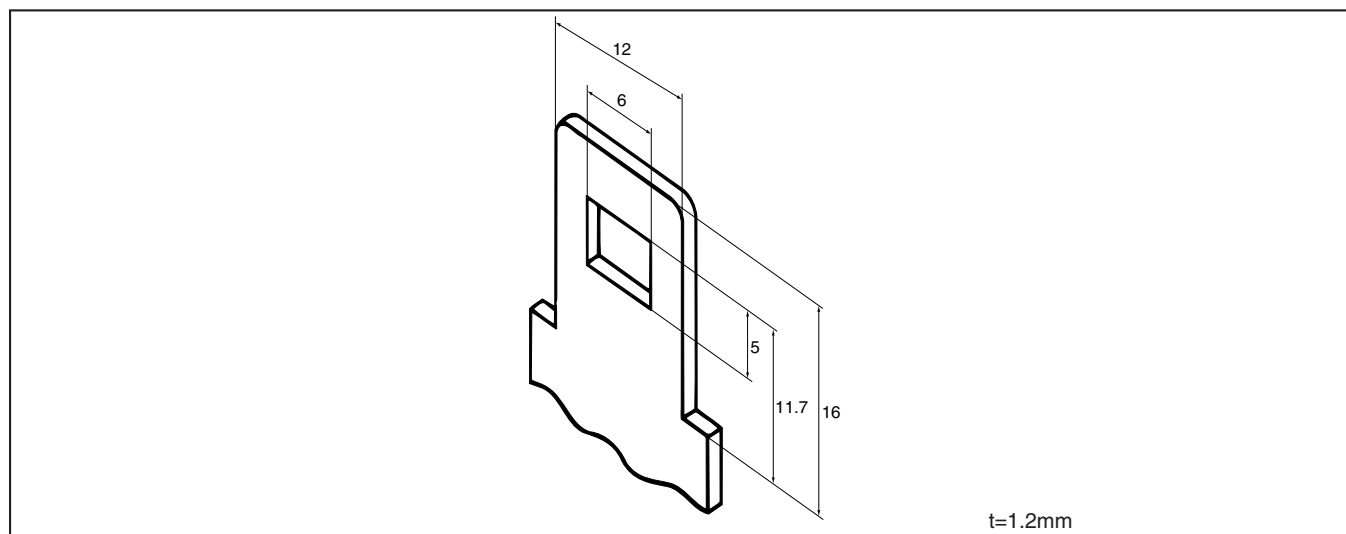


**F(6181-4451)**

### ▶▶ Bracket for attaching (mm) ◀◀

Connector M can be attached to this bracket.

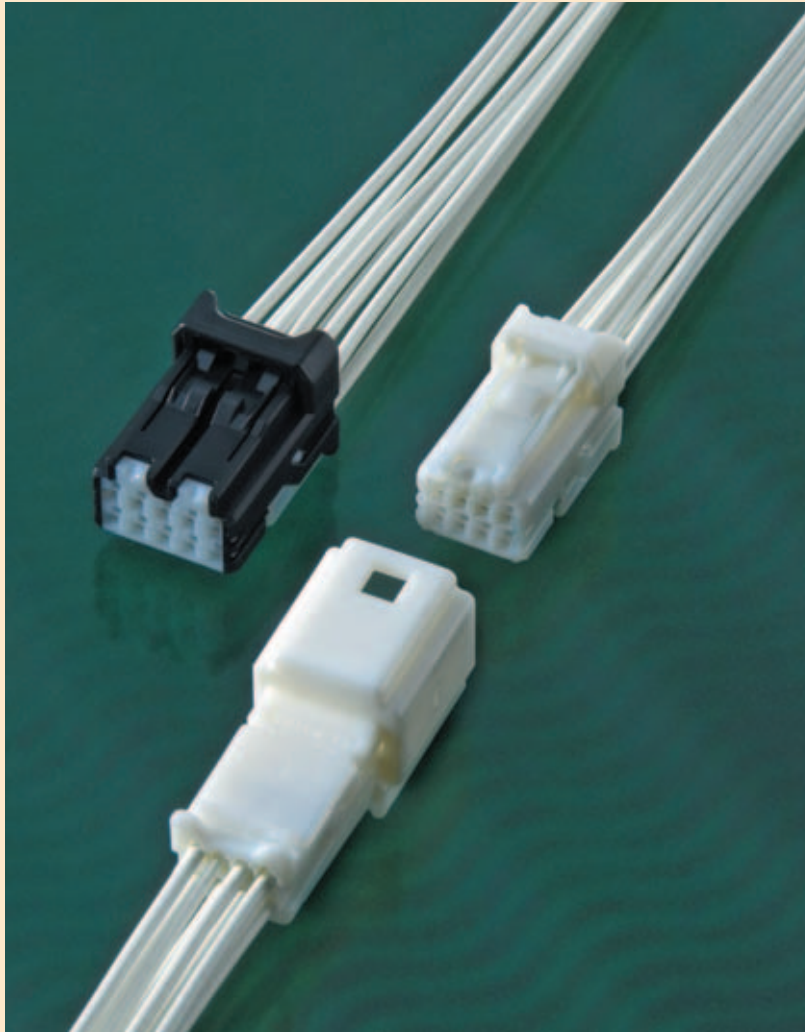
Mコネクタは、ブラケットに固定することができます。



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。





K-01

# NH SERIES

## Features

The NH series connector is a highly reliable for connector mating and terminal insertion.  
This series consist of 025 terminal usable for controll circuits.

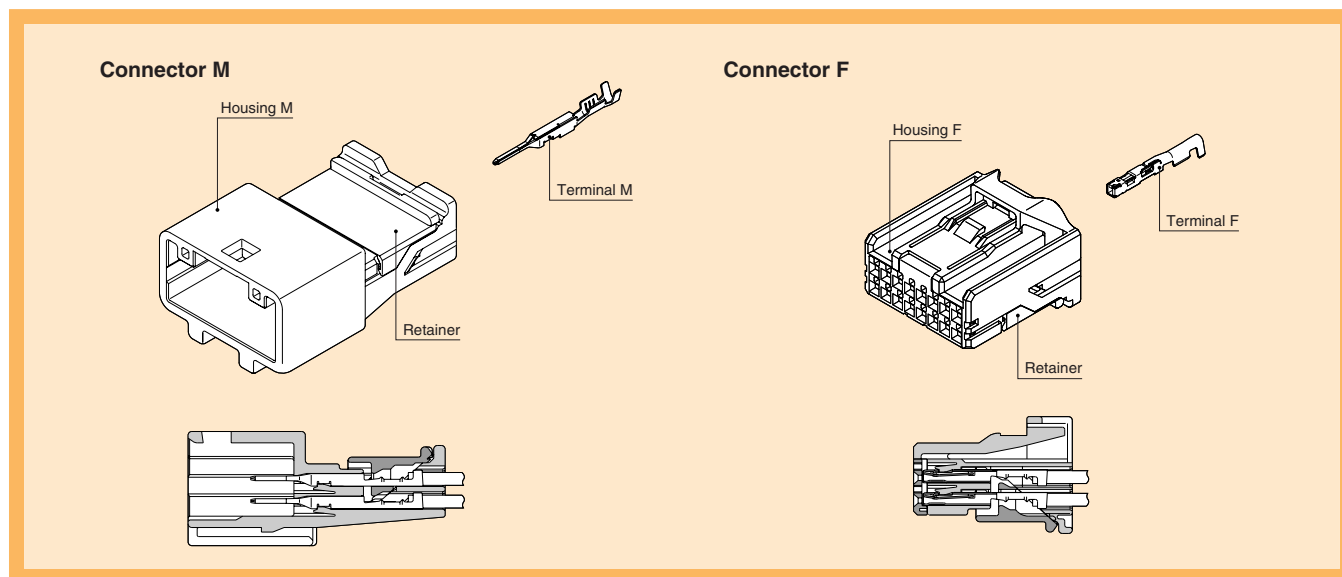
- The front mask of Female connector assists allure male terminal.
- By setting TPA (Terminal Position Assurance) adjust the incomplete inserted terminal to the correct position.
- An extra clip can be attached to the connector housing to secure it to the body.

## 特長

NHシリーズは、コネクタ嵌合、ターミナル抜け等において信頼性を向上させたコネクタです。  
ターミナルサイズが025で構成されており、信号回路にご利用いただけます。

- メスコネクタは、フロントマスクの採用により、コネクタ嵌合時のオス端子誘い込み性が向上しております。
- 挿入不足のターミナルは、リテーナをセットすることにより正規の位置に固定されます。
- コネクタハウジングにはボデーに固定するためのクランプ（クリップ）を装着することができます。

## Structure / 構造



K-02

## Terminal (mm)

| NH (S)                                   | M(8230-4877)  |  | F(8240-0180) |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
|--|---|--|--------------|----------------|-------------|---------------------------|---------------------|------------------------|------|----------------------|-------------------------------|--|--|---|--|----------|----------------|--------------------------------|---------------------------|---------------------|------------------------|------|----------------------|
|  | <table border="1"> <tr><td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td><td>0.22~0.5</td></tr> <tr><td>Material<br/>材質</td><td>Brass<br/>黄銅</td></tr> <tr><td>Surface treatment<br/>表面処理</td><td>Tin-plated<br/>Snメッキ</td></tr> <tr><td>Reel (piece)<br/>リール(個)</td><td>8000</td></tr> <tr><td>Thickness (mm)<br/>板厚</td><td>0.2<br/>(Tab thickness : 0.64)</td></tr> </table> | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5     | Material<br>材質 | Brass<br>黄銅 | Surface treatment<br>表面処理 | Tin-plated<br>Snメッキ | Reel (piece)<br>リール(個) | 8000 | Thickness (mm)<br>板厚 | 0.2<br>(Tab thickness : 0.64) |  |  | <table border="1"> <tr><td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td><td>0.22~0.5</td></tr> <tr><td>Material<br/>材質</td><td>Heat-resistant<br/>copper alloy</td></tr> <tr><td>Surface treatment<br/>表面処理</td><td>Tin-plated<br/>Snメッキ</td></tr> <tr><td>Reel (piece)<br/>リール(個)</td><td>8000</td></tr> <tr><td>Thickness (mm)<br/>板厚</td><td>0.2</td></tr> </table> | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5 | Material<br>材質 | Heat-resistant<br>copper alloy | Surface treatment<br>表面処理 | Tin-plated<br>Snメッキ | Reel (piece)<br>リール(個) | 8000 | Thickness (mm)<br>板厚 |
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Material<br>材質                           | Brass<br>黄銅   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Reel (piece)<br>リール(個)                   | 8000  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Thickness (mm)<br>板厚                     | 0.2<br>(Tab thickness : 0.64)   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.5  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Reel (piece)<br>リール(個)                   | 8000  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Thickness (mm)<br>板厚                     | 0.2   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| NH (M)                                   | M(8230-4876)  |  | F(8240-0179) |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
|  | <table border="1"> <tr><td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td><td>0.75</td></tr> <tr><td>Material<br/>材質</td><td>Brass<br/>黄銅</td></tr> <tr><td>Surface treatment<br/>表面処理</td><td>Tin-plated<br/>Snメッキ</td></tr> <tr><td>Reel (piece)<br/>リール(個)</td><td>8000</td></tr> <tr><td>Thickness (mm)<br/>板厚</td><td>0.2<br/>(Tab thickness : 0.64)</td></tr> </table>     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75         | Material<br>材質 | Brass<br>黄銅 | Surface treatment<br>表面処理 | Tin-plated<br>Snメッキ | Reel (piece)<br>リール(個) | 8000 | Thickness (mm)<br>板厚 | 0.2<br>(Tab thickness : 0.64) |  |  | <table border="1"> <tr><td>Cable size (mm<sup>2</sup>)<br/>適用電線サイズ</td><td>0.75</td></tr> <tr><td>Material<br/>材質</td><td>Heat-resistant<br/>copper alloy</td></tr> <tr><td>Surface treatment<br/>表面処理</td><td>Tin-plated<br/>Snメッキ</td></tr> <tr><td>Reel (piece)<br/>リール(個)</td><td>8000</td></tr> <tr><td>Thickness (mm)<br/>板厚</td><td>0.2</td></tr> </table>     | Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75     | Material<br>材質 | Heat-resistant<br>copper alloy | Surface treatment<br>表面処理 | Tin-plated<br>Snメッキ | Reel (piece)<br>リール(個) | 8000 | Thickness (mm)<br>板厚 |
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Material<br>材質                           | Brass<br>黄銅   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Reel (piece)<br>リール(個)                   | 8000  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Thickness (mm)<br>板厚                     | 0.2<br>(Tab thickness : 0.64)   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Reel (piece)<br>リール(個)                   | 8000  |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |
| Thickness (mm)<br>板厚                     | 0.2   |  |              |                |             |                           |                     |                        |      |                      |                               |  |  |   |  |          |                |                                |                           |                     |                        |      |                      |

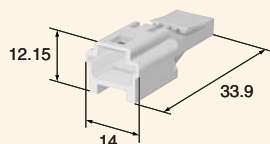
Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.

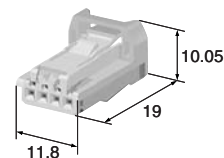
4way

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



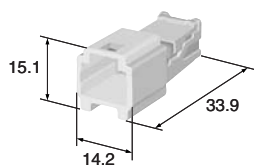
**M(6098-5310)** TH 04 MW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



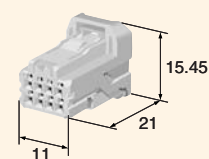
**F(6098-5267)** TH 04 FW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**M(6098-5271)** TH 08 MW-NH

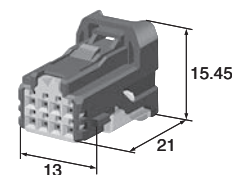
Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**F(6098-5269)** TH 08 FW-NH

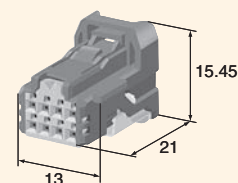
8way

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Black



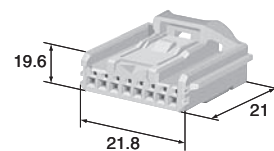
**F(6098-6451)** TH 08 FB-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Gray



**F(6098-6452)** TH 08 FGY-NH

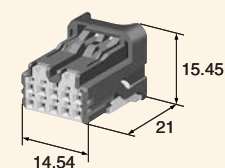
Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**F(6098-5312)** TH 08 FW-1V-NH AY

10way

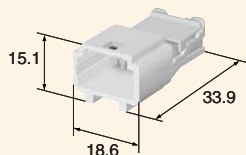
Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Black



**F(6098-5273)** TH 10 FB-NH

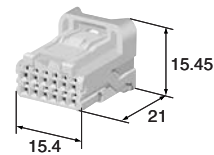
K-03

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



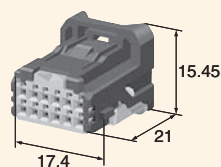
**M(6098-5277)** TH 12 MW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



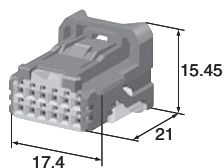
**F(6098-5275)** TH 12 FW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Black



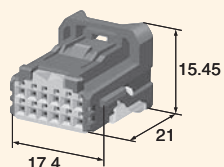
**F(6098-6455)** TH 12 FB-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Gray



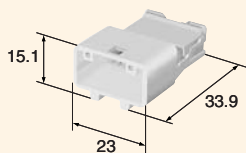
**F(6098-6456)** TH 12 FGY-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Blue



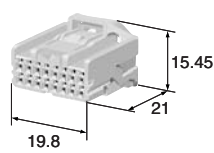
**F(6098-6457)** TH 12 FL-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



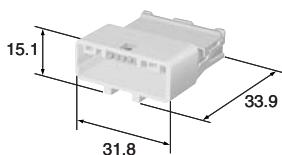
**M(6098-5281)** TH 16 MW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



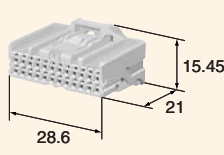
**F(6098-5279)** TH 16 FW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**M(6098-5285)** TH 24 MW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**F(6098-5283)** TH 24 FW-NH

K-04

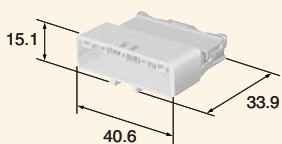
12way

16way

24way

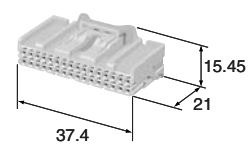
32way

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



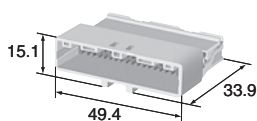
**M(6098-5289)** TH 32 MW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



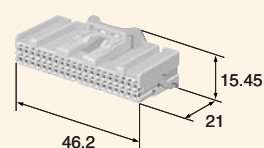
**F(6098-5287)** TH 32 FW-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**M(6098-5585)** TH 40 MW-NH

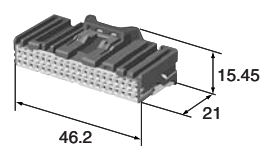
Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Natural



**F(6098-5291)** TH 40 FW-NH

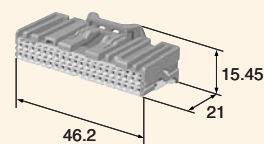
40way

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Black



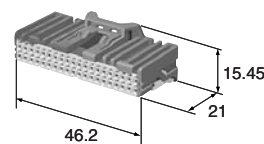
**F(6098-5293)** TH 40 FB-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Gray



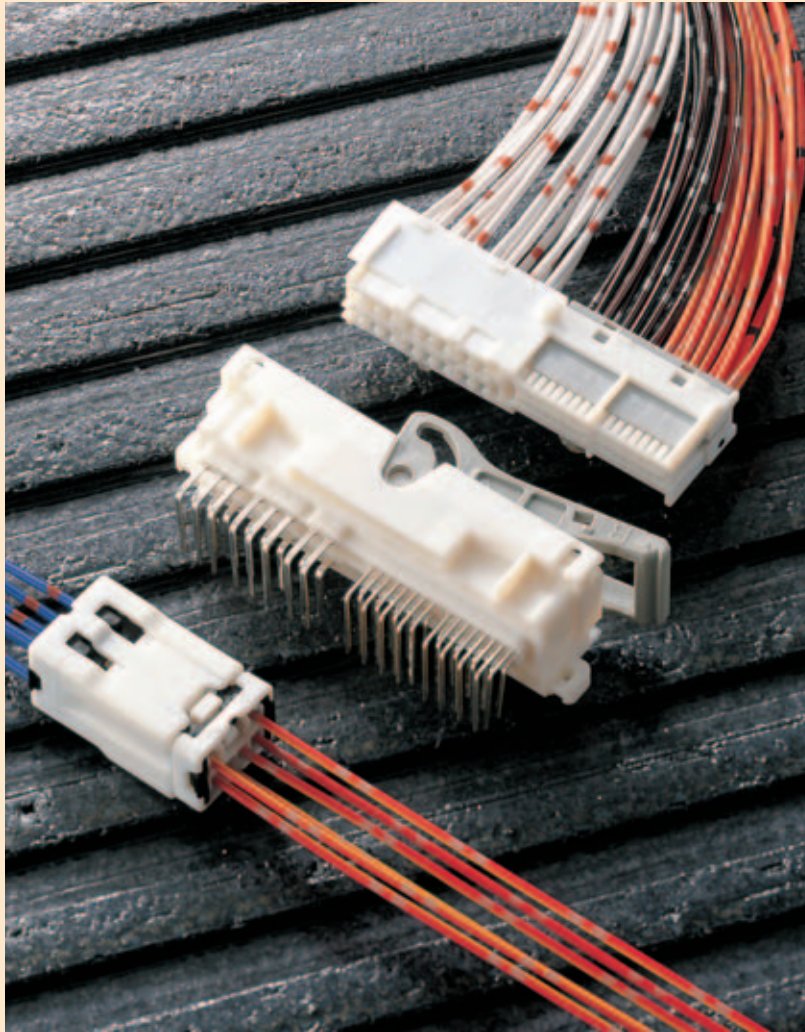
**F(6098-5295)** TH 40 FGY-NH

Ref: Terminal part No.  
ターミナル参照頁 K-02  
Color  
色相 Green



**F(6098-5297)** TH 40 FG-NH

K-05



# 91 SERIES

## Features

The 91 connector series is an improved, miniaturized version of the conventional 62 series (C type) and 58 series (S type). Multi-way, light-insertion, and lever-system connectors are available.

This series consists of 030 and 090 types (030, 090, and 250 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- Retainers are pre-mounted on the connector housing, and are structured to enable setting by the same simple operation regardless of the number of ways, improving operability.
- An inertia locking system is used to prevent semi-engagement (this system is not incorporated in some connectors).
- Standard connectors can be directly secured to a bracket on the car body.
- A PCB model is also available for connection to printed circuit boards.

## 特長

91シリーズは、従来の62シリーズ(Cタイプ)と58シリーズ(Sタイプ)を小型化、改良したコネクタシリーズです。レバーを使用した多極低挿入力コネクタをとりそろえています。ターミナルサイズにより030・090(ハイブリッドは030・090・250)で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

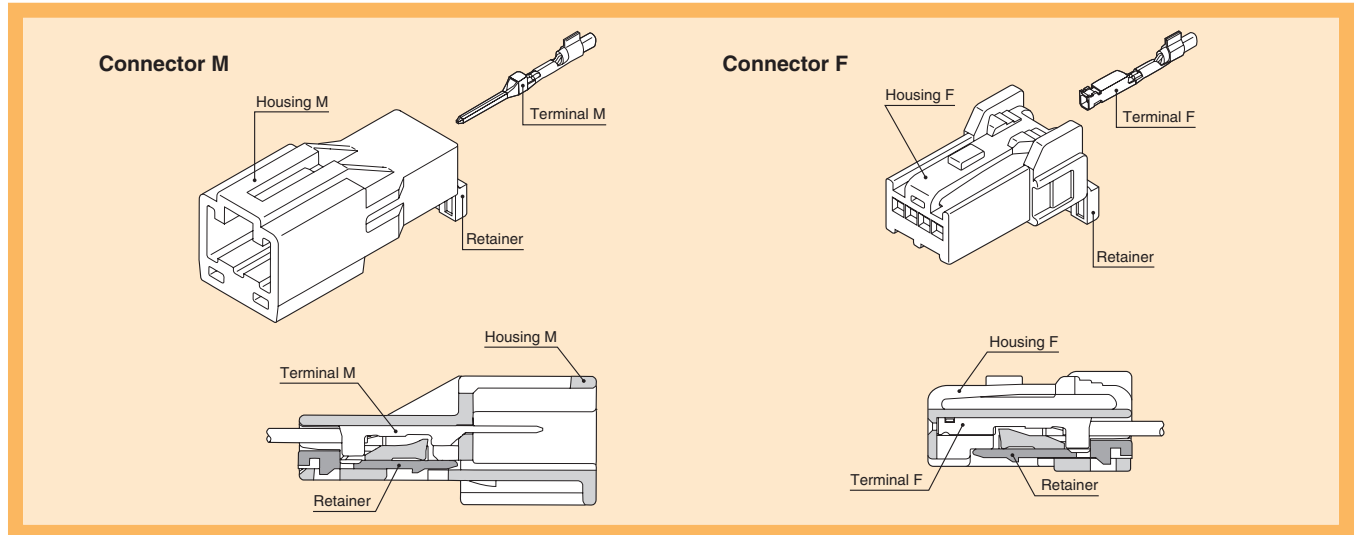
- ターミナル半挿入の状態ではリテーナが装着できない機構になっています。
- リテーナはコネクタハウジングに予め組み付けられており、また極数に関係なく簡単な同一作業でセットすることができる構造になっているので、作業性が向上します。
- コネクタの半嵌合の起きにくい慣性ロック方式です。(慣性ロック方式でないコネクタが一部あります。)
- 標準タイプのコネクタはボデー側のブラケットに直接固定することができます。
- プリント基板との接続に適したPCBタイプも設定しました。

# 91 SERIES

030(0.8 mm) / STANDARD A

The 030 connector is a miniaturized C type 62 Series.  
 The retainer is temporarily attached to the connector in advance.  
 62シリーズのCタイプをさらに小型化(030)したコネクタです。  
 リテーナは予めコネクタに仮セットされています。

## Structure / 構造



## Terminal

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

## Housing (mm)

Material / P.B.T.

- Explanation of products name sign.
- 品名記号の説明

**A 04 MW**

- Color (W: White, B: Black, BR: Brown, GY: Gray)
- Male (F: Female) H=PCB-type
- Number of way
- A-type

|      |                                      |                             |                                      |                             |
|------|--------------------------------------|-----------------------------|--------------------------------------|-----------------------------|
| 4way | Ref: Terminal part No.<br>ターミナル参照頁 ※ |                             | Ref: Terminal part No.<br>ターミナル参照頁 ※ |                             |
|      |                                      | <b>M(6098-1116)</b> A 04 MW |                                      | <b>F(6098-1120)</b> A 04 FW |
| 8way | Ref: Terminal part No.<br>ターミナル参照頁 ※ |                             | Ref: Terminal part No.<br>ターミナル参照頁 ※ |                             |
|      |                                      | <b>M(6098-1117)</b> A 08 MW |                                      | <b>F(6098-1121)</b> A 08 FW |

※Detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.  
 ※固定用ブラケットに関しては、弊社営業担当にお問い合わせください。

## Housing (mm)

Material / P.B.T.

● Explanation of products name sign.

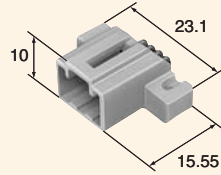
● 品名記号の説明

**A 04 MW**

Color (W: White, B: Black, BR: Brown, GY: Gray)  
 Male (F: Female) H=PCB-type  
 Number of way  
 A-type

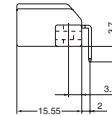
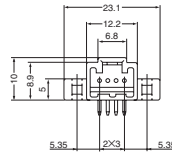
4way

Connector F part No.  
Fコネクタ品番 (6098-1120)  
Terminal type  
端子タイプ 030

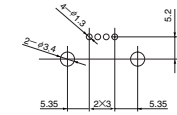


**M(6098-1282)** A 04 HW

● Dimensional drawing

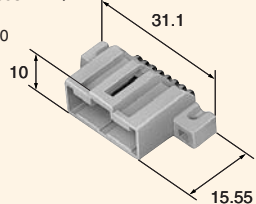


● Mounting drawing



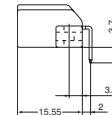
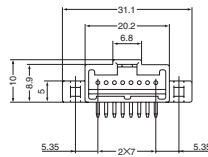
8way

Connector F part No.  
Fコネクタ品番 (6098-1121)  
Terminal type  
端子タイプ 030

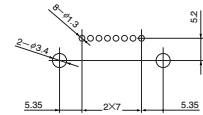


**M(6098-1141)** A 08 HW

● Dimensional drawing



● Mounting drawing



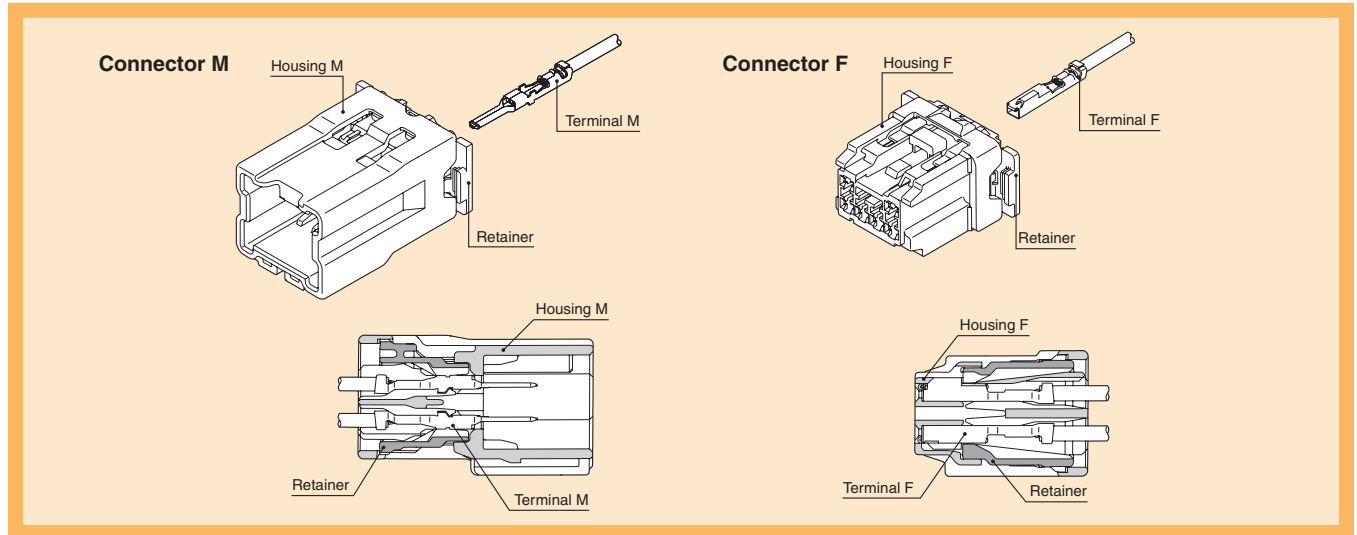


# 91 SERIES

090(2.3 mm) / STANDARD NS

The 090 connector is a miniaturized S type 58 Series.  
 The retainer is temporarily attached to the connector in advance.  
 58シリーズのSタイプをさらに小型化(090)したコネクタです。  
 リテーナは予めコネクタに仮セットされています。

## Structure / 構造



## Terminal

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

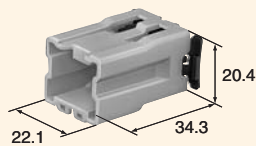
## Housing (mm)

Material / P.B.T.

- Explanation of products name sign.
  - 品名記号の説明
- NS 06 MW**
- Color (W: White, BR: Brown)
  - Male (F: Female)
  - Number of way
  - NS-type

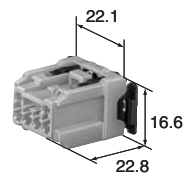
6way

Ref: Terminal part No.  
ターミナル参照頁 ※



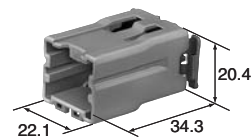
**M(6098-0999)** NS 06 MW

Ref: Terminal part No.  
ターミナル参照頁 ※



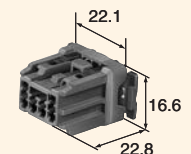
**F(6098-1214)** NS 06 FW

Ref: Terminal part No.  
ターミナル参照頁 ※



**M(6098-1007)** NS 06 MBR

Ref: Terminal part No.  
ターミナル参照頁 ※



**F(6098-1009)** NS 06 FBR

※Detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.  
 ※固定用ブラケットに関しては、弊社営業担当にお問い合わせください。

## Housing (mm)

Material / P.B.T.

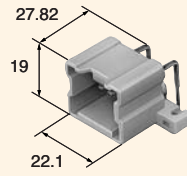
- Explanation of products name sign.
- 品名記号の説明

**NS 06 MW**

- Color (W: White, BR: Brown)
- Male (F: Female) H=PCB-type
- Number of way
- NS-type

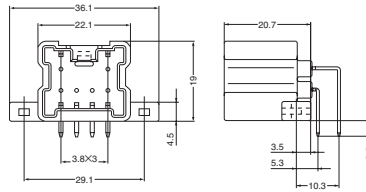
6way

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-1214) |
| Terminal type<br>端子タイプ          | 090         |

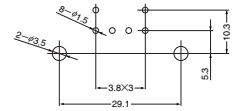


**M(6098-1198)** NS 06 HW

### ● Dimensional drawing



### ● Mounting drawing

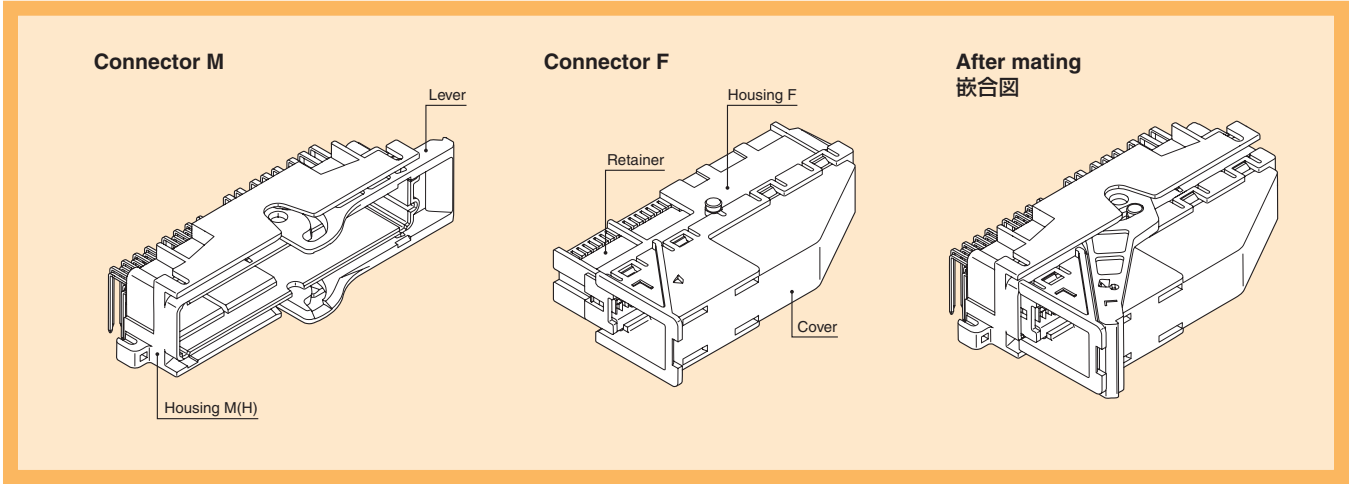


# 91 SERIES

030, 090, 250(0.8 mm, 2.3 mm, 6.6 mm) / HYBRID

Signal circuits and power circuits are accepted simultaneously.  
The multi-way connector uses a lever to lower the inserting force.  
信号回路とパワー回路を混合して使用できます。  
多極のコネクタはレバーを用い低挿入力化を可能としました。

## Structure / 構造



L-06

## Terminal

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

## Housing (mm)

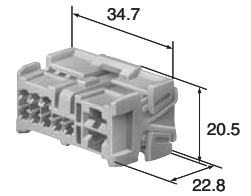
Material / P.B.T.

No. of way / ( ) corresponds to 030, 090, 250, in order from left to right.

- Explanation of products name sign.
  - A 04 MW
    - Color (W: White, B: Black, BR: Brown, GY: Gray)
    - Male (F: Female)
    - Number of way
    - A-type (NS: NS-type, M: M-type)
- 品名記号の説明
  - 極数 / ( ) 内表示 : 左から030極数、090極数、250極数

10way  
(8+2)

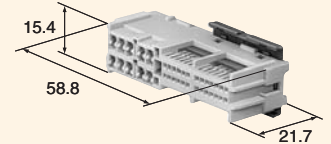
Ref: Terminal part No. [090] ※  
ターミナル参照頁 [250] ※



**F(6098-1715)** NS 08-M 02 FW

36way  
(26+10)

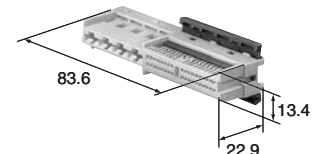
Ref: Terminal part No. [030] ※  
ターミナル参照頁 [090] ※



Cover No. (6911-0462) **F(6098-1027)** A 26 FW-NS 10

40way  
(36+4)

Ref: Terminal part No. [030] ※  
ターミナル参照頁 [250] ※



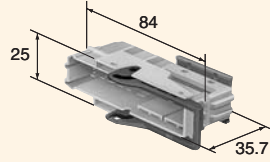
Cover No. (6911-0483)  
Retainer No. (6918-1013) **F(6098-1108)** A 36 FW-M 04

# 91 SERIES

030, 090, 250(0.8 mm, 2.3 mm, 6.6 mm) / HYBRID

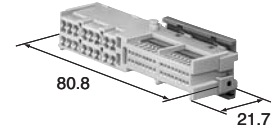
48way  
(32+16)

Ref: Terminal part No. [030] ※  
ターミナル参照頁 [090] ※



**M(6098-1109)** A 32 MW-NS 16

Ref: Terminal part No. [030] ※  
ターミナル参照頁 [090] ※



Cover No. (6911-0442)

**F(6098-1122)** A 32 FW-NS 16

# 91 SERIES

030, 090, 250(0.8 mm, 2.3 mm, 6.6 mm) / PCB

## Housing (mm)

Material / P.B.T.

Color / Natural

No. of way / ( ) corresponds to 030, 090, 250, in order from left to right.

● Explanation of products name sign.

● 品名記号の説明

A 04 MW

Color (W: White, B: Black, BR: Brown, GY: Gray)

Male (F: Female) H=PCB-type

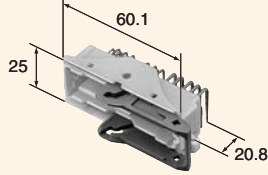
Number of way

A-type (NS: NS-type, M: M-type)

極数 / ( ) 内表示 : 左から030極数、090極数、250極数

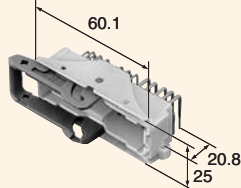
36way  
(26+10)

Connector F part No.  
Fコネクタ品番 (6098-1027)  
Terminal type  
端子タイプ  
26way (030) + 10way (090)



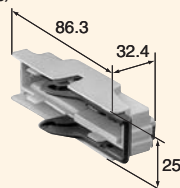
M(6098-1022) A 26 HW-NS 10 L

Connector F part No.  
Fコネクタ品番 (6098-1027)  
Terminal type  
端子タイプ  
26way (030) + 10way (090)



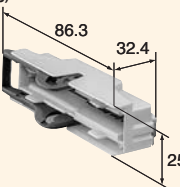
M(6098-1023) A 26 HW-NS 10 R

Connector F part No.  
Fコネクタ品番 (6098-1108)  
Terminal type  
端子タイプ  
36way (030) + 4way (250)



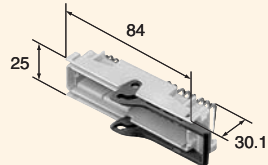
M(6098-1106) A 36 HW-M 04 L

Connector F part No.  
Fコネクタ品番 (6098-1108)  
Terminal type  
端子タイプ  
36way (030) + 4way (250)



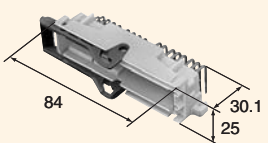
M(6098-1107) A 36 HW-M 04 R

Connector F part No.  
Fコネクタ品番 (6098-1122)  
Terminal type  
端子タイプ  
32way (030) + 16way (090)



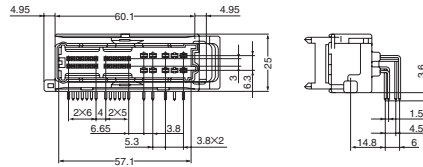
M(6098-1442) A 32 HW-NS 16 L

Connector F part No.  
Fコネクタ品番 (6098-1122)  
Terminal type  
端子タイプ  
32way (030) + 16way (090)

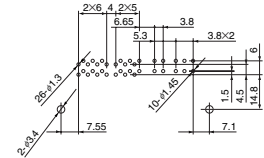


M(6098-1443) A 32 HW-NS 16 R

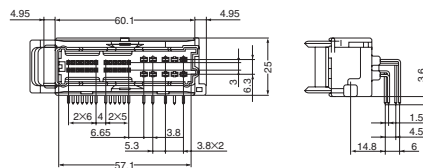
### ● Dimensional drawing



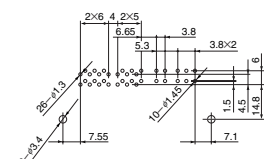
### ● Mounting drawing



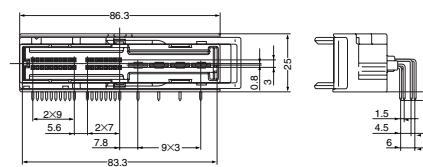
### ● Dimensional drawing



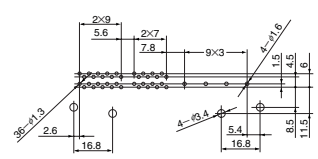
### ● Mounting drawing



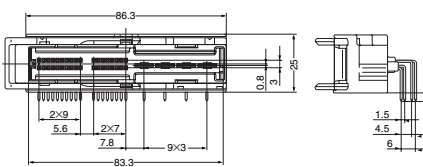
### ● Dimensional drawing



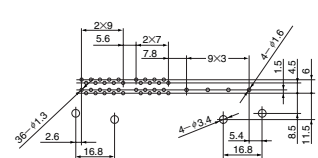
### ● Mounting drawing



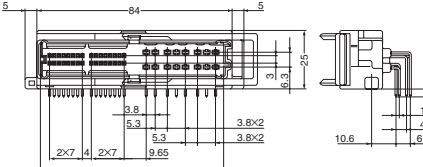
### ● Dimensional drawing



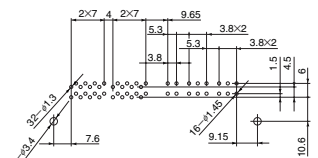
### ● Mounting drawing



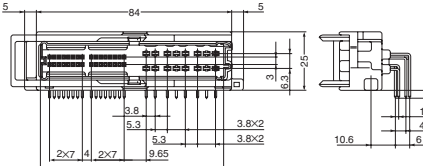
### ● Dimensional drawing



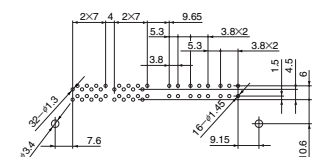
### ● Mounting drawing



### ● Dimensional drawing



### ● Mounting drawing





# 91 SEALED SERIES

## Features

The 91 sealed connector series (RS type) is a new, improved connector that integrates the conventional 58 sealed series (W type) and the 62 sealed series (Z type). This series consists of a 090 type classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- Semi-engagement detectable connectors and multi-way & light insertion connectors are available.
- The RS-standard type connectors adopt an inertia locking system to prevent semi-engagement (this system is not incorporated in some connectors).  
\*Please contact our sales representative for product numbers.
- The RS-BD and E-BD type connectors feature a semi-engagement detection & locking system that uses a spring to return a semi-engaged connector back to the disengaged position.

## 特長

91防水シリーズ (RSタイプ) は、従来の58防水シリーズ (Wタイプ) と62防水シリーズ (Zタイプ) を統合、改良したコネクタシリーズです。ターミナルサイズが090で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- 半嵌合検知機能付きコネクタとレバーを使用した多極低挿入力コネクタを取りそろえています。
- RS-標準タイプコネクタは、コネクタの半嵌合が起きにくい慣性ロック方式です。(慣性ロック方式でないコネクタが一部あります。)
- RS-BD、E-BDタイプコネクタは、コネクタの半嵌合時パネでコネクタを押し戻す半嵌合検知ロック方式です。

# 91 SEALED SERIES

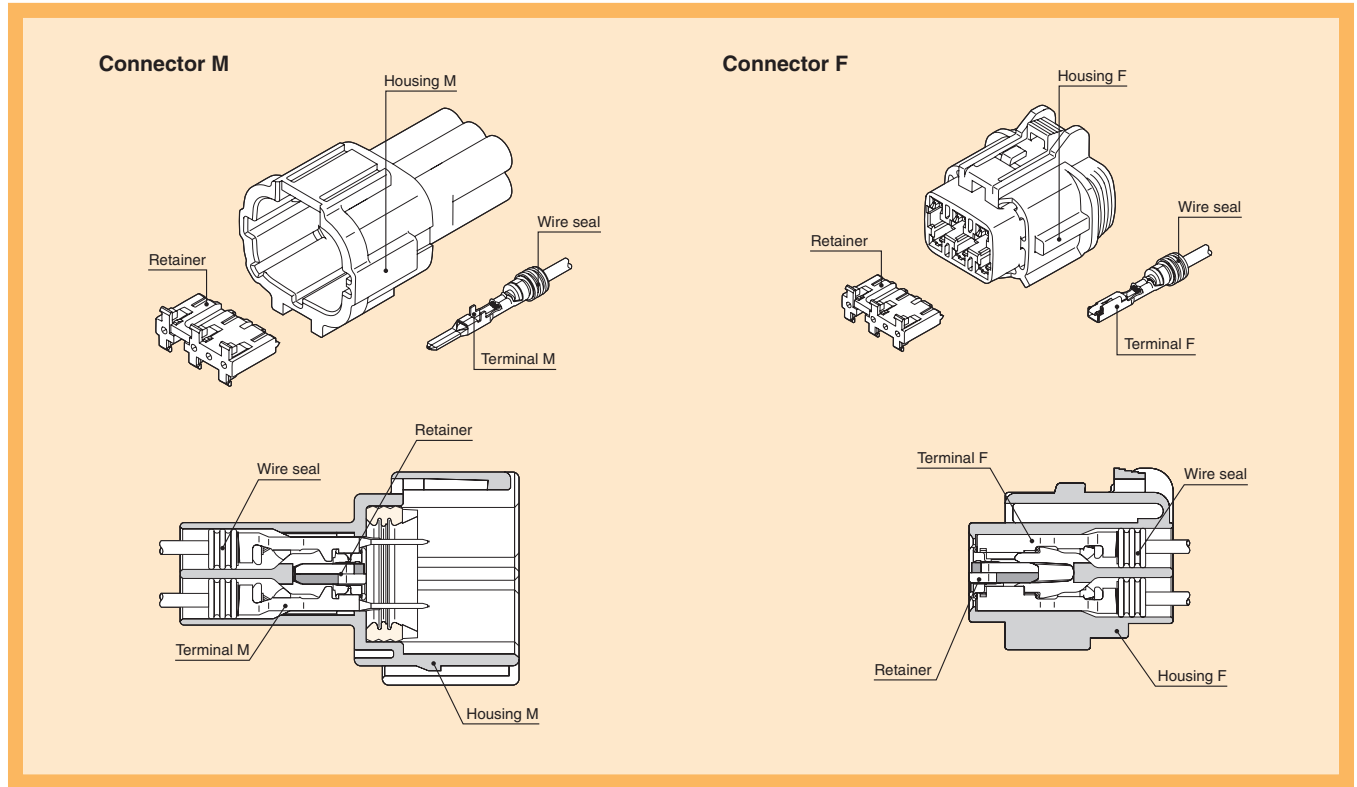
090(2.3 mm) / STANDARD RS

090 terminal size sealed connector for connector seal M integrates both the former W type of 58 Sealed Series and the former Z type of 62 Sealed Series.

従来の58防水シリーズのWタイプと

62防水シリーズのZタイプを統合した、090ターミナルサイズのM側シール構造防水コネクタです。

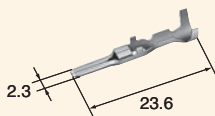
## Structure / 構造



M-02

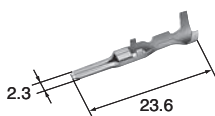
## Terminal (mm)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



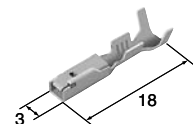
M(8100-3803)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



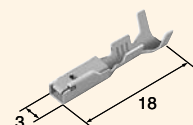
M(8100-3805)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0263)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0266)

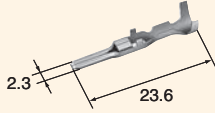
Heat-resistant copper alloy=耐熱銅合金

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS

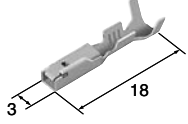
090  
RS(M)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                      |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



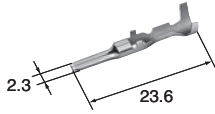
M(8100-3804)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



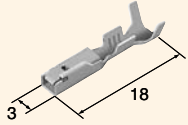
F(8240-0264)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                      |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



M(8100-3806)

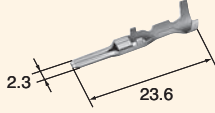
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0267)

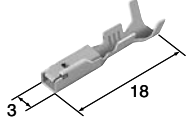
090  
RS(L)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



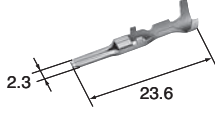
M(8100-4172)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



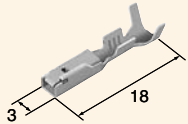
F(8240-0265)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



M(8100-4173)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



F(8240-0268)

Heat-resistant copper alloy=耐熱銅合金

M-03

## Wire seals (mm)

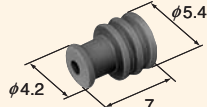
Material / Silicone

●The wire seals are common to M and F.

●ワイヤシールはM、F共用です。


090  
RS

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.3) (CAVUS / 0.3~0.5) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.0~1.4                        |
| Color<br>色相                              | Orange                         |
| Pack (piece)<br>収容数(個)                   | 2000                           |



US Type (7165-0474)

|  |                                       |
|--|---------------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 0.5~0.85) (CAVUS / 0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.5~1.9                               |
| Color<br>色相                              | Light Blue                            |
| Pack (piece)<br>収容数(個)                   | 2000                                  |



S Type (7165-0473)

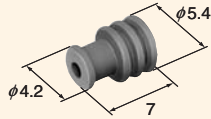


# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS

090  
RS

|  |               |
|--|---------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.4       |
| Color<br>色相                              | Violet        |
| Pack (piece)<br>収容数(個)                   | 2000          |



M Type (7165-0472)

|  |              |
|--|--------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AVSS / 2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.5~2.9      |
| Color<br>色相                              | Light Green  |
| Pack (piece)<br>収容数(個)                   | 2000         |



L Type (7165-0471)

## Dummy plugs (mm)

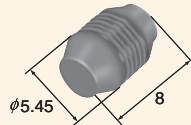
- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.

- ダミー栓はM、F共用です。
- 不必要なターミナル穴を塞ぐために、ダミー栓を使用します。

M-04

090  
RS

|                        |          |
|------------------------|----------|
| Material<br>材質         | Silicone |
| Color<br>色相            | Blue     |
| Pack (piece)<br>収容数(個) | 2000     |



(7165-1131)

## Housing (mm)

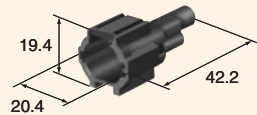
Material / P.B.T.

※ Detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※ 固定用ブラケットに関しては、弊社営業担当にお問い合わせください。

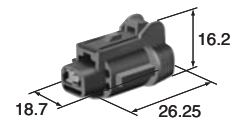
1way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1773) **M(6188-0551)** RS 01 MB

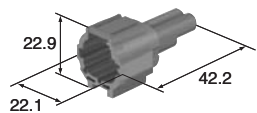
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1773) **F(6185-0862)** RS 01 FB

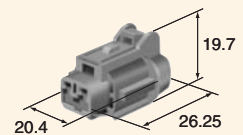
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1774) **M(6188-0554)** RS 02 MG Y

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



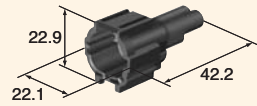
Retainer No. (6918-1774) **F(6185-0867)** RS 02 FG Y

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS

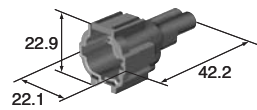
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



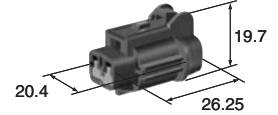
Retainer No. (6918-1774) **M(6188-0552)** RS 02 MB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



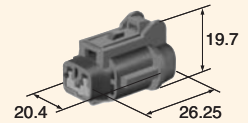
Retainer No. (6918-1774) **M(6188-0553)** RS 02 MBR  
**M(6188-0663)** RS 02 MBR-DGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



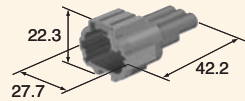
Retainer No. (6918-1774) **F(6185-0865)** RS 02 FB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1774) **F(6185-0866)** RS 02 FBR  
**F(6185-1101)** RS 02 FBR-DGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



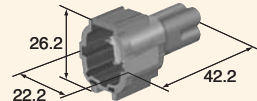
Retainer No. (6918-1775) **M(6188-0556)** RS 03 MGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1775) **M(6188-0555)** RS 03 MB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



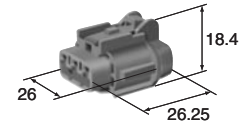
Retainer No. (6918-1776) **M(6188-0558)** RS 04 MGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



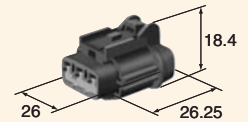
Retainer No. (6918-1776) **M(6188-0557)** RS 04 MB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



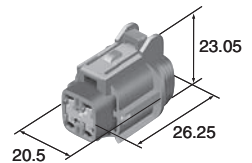
Retainer No. (6918-1775) **F(6185-0869)** RS 03 FGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



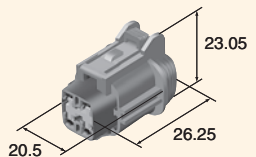
Retainer No. (6918-1775) **F(6185-0868)** RS 03 FB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1776) **F(6185-1171)** RS 04 FGY-PR

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1776) **F(6185-1169)** RS 04 FB-PR

M-05

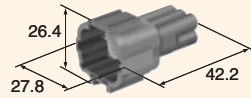
4way

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS

6way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



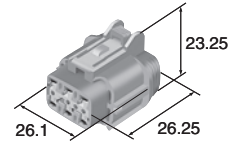
Retainer No. (6918-1779) **M(6188-0560)** RS 06 MGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



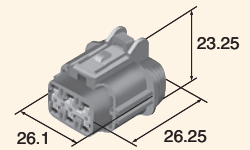
Retainer No. (6918-1779) **M(6188-0559)** RS 06 MB

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1779) **F(6185-1175)** RS 06 FGY-PR

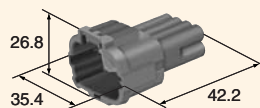
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1779) **F(6185-1173)** RS 06 FB-PR

M-06

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



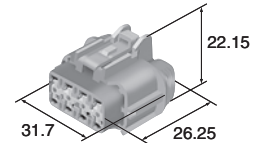
Retainer No. (6918-1780) **M(6188-0738)** RS 08 MGY-PR

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



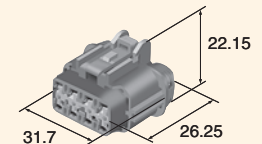
Retainer No. (6918-1780) **M(6188-0736)** RS 08 MB-PR

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1780) **F(6185-1179)** RS 08 FGY-PR

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1780) **F(6185-1177)** RS 08 FB-PR

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS, RS-BD

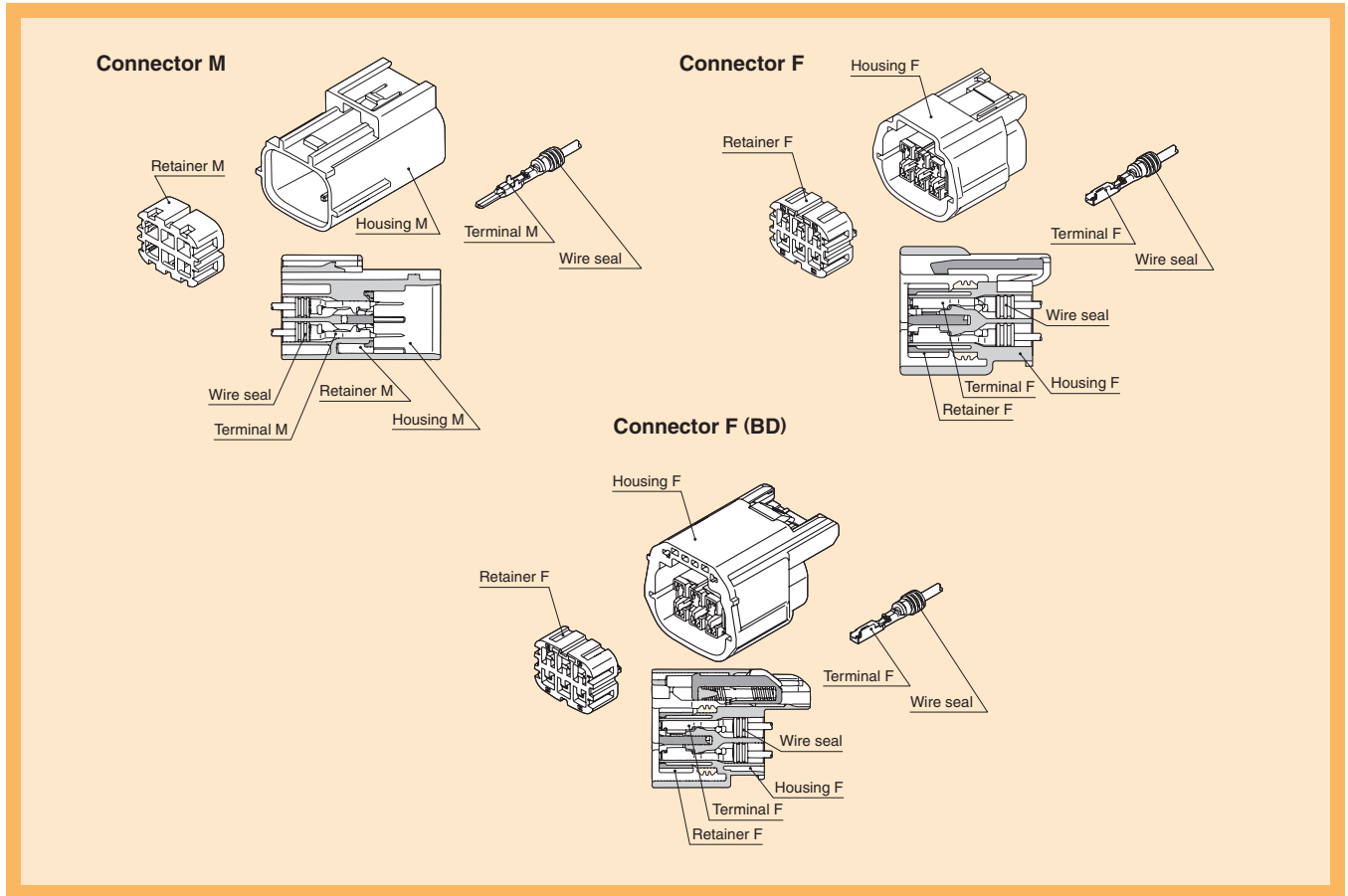
090 terminal size sealed connector for connector seal F.

Inertia lock and spring go no-go systems (BD) are set up for connector F.

090ターミナルサイズのF側シール構造防水コネクタです。

F側は、慣性ロック方式と半嵌合検知ロック方式(BD)を設定しています。

## Structure / 構造



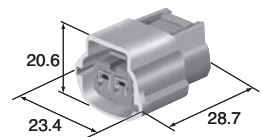
M-07

## Housing (mm)

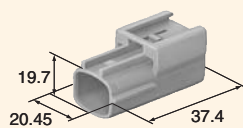
Material / P.B.T.

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



2way



**F(6189-0951)** RS 02 FSB  
**F(6189-1107)** RS 02 FSB-B

Retainer No. (6918-1651)

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1653) **M(6181-0515)** RS 02 MSB  
**M(6181-0670)** RS 02 MSB-B

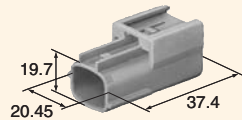
Retainer No. (6918-1651) **F(6189-0760)** RS 02 FSB-B

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS, RS-BD

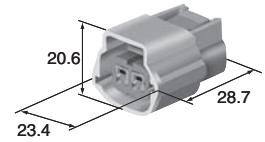
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



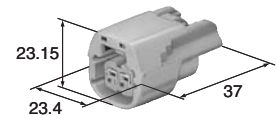
Retainer No. (6918-1653) **M(6181-0532)** RS 02 MLGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1651) **F(6189-0950)** RS 02 FLGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |

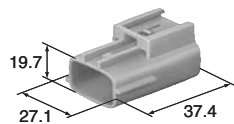


Retainer No. (6918-1651) **F(6189-0816)** RS 02 FLGY-BD

M-08

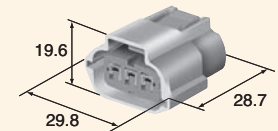
3way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



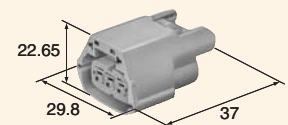
Retainer No. (6918-1654) **M(6181-0516)** RS 03 MSB  
**M(6181-0671)** RS 03 MSB-GY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1652) **F(6189-0928)** RS 03 FSB  
**F(6189-1104)** RS 03 FSB-GY

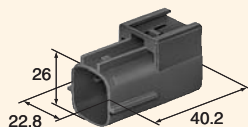
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1652) **F(6189-0761)** RS 03 FSB-BD

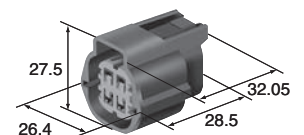
4way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



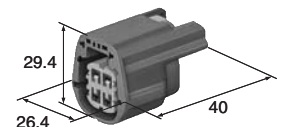
Retainer No. (6918-1598) **M(6181-0513)** RS 04 MG  
**M(6181-0668)** RS 04 MG-GY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1599) **F(6189-0929)** RS 04 FG  
**F(6189-1105)** RS 04 FG-GY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



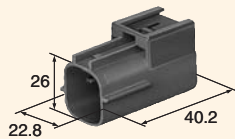
Retainer No. (6918-1599) **F(6189-0802)** RS 04 FG-BD

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS, RS-BD

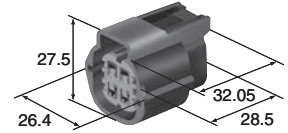
4way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



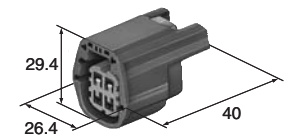
Retainer No. (6918-1598) **M(6181-0514)** RS 04 ML  
**M(6181-0669)** RS 04 ML-B

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1599) **F(6189-0930)** RS 04 FL  
**F(6189-1106)** RS 04 FL-B

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



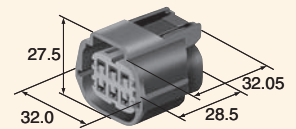
Retainer No. (6918-1599) **F(6189-0796)** RS 04 FL-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



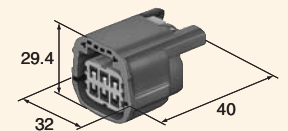
Retainer No. (6918-1600) **M(6181-0511)** RS 06 MG  
**M(6181-0665)** RS 06 MG-DGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1601) **F(6189-0766)** RS 06 FG  
**F(6189-1102)** RS 06 FG-DGY

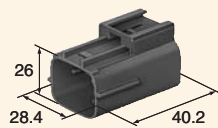
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1601) **F(6189-0797)** RS 06 FG-BD

6way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1600) **M(6181-0536)** RS 06 ML  
**M(6181-0664)** RS 06 ML-B

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1601) **F(6189-0847)** RS 06 FL  
**F(6189-1103)** RS 06 FL-B

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1601) **F(6189-0818)** RS 06 FL-BD

M-09

# 91 SEALED SERIES

090(2.3 mm) / STANDARD RS, RS-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



**M(6181-0512)** RS 08 MG  
**M(6181-0667)** RS 08 MG-GY

Retainer No. (6918-1602)

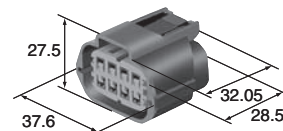
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



**M(6181-0522)** RS 08 ML  
**M(6181-0666)** RS 08 ML-B

Retainer No. (6918-1602)

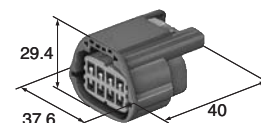
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



**F(6189-0954)** RS 08 FG  
**F(6189-1108)** RS 08 FG-GY

Retainer No. (6918-1603)

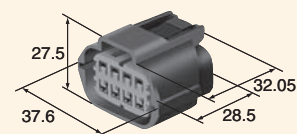
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



**F(6189-0798)** RS 08 FG-BD

Retainer No. (6918-1603)

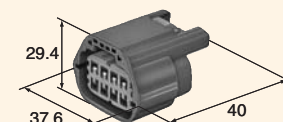
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



**F(6189-0955)** RS 08 FL  
**F(6189-1109)** RS 08 FL-B

Retainer No. (6918-1603)

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



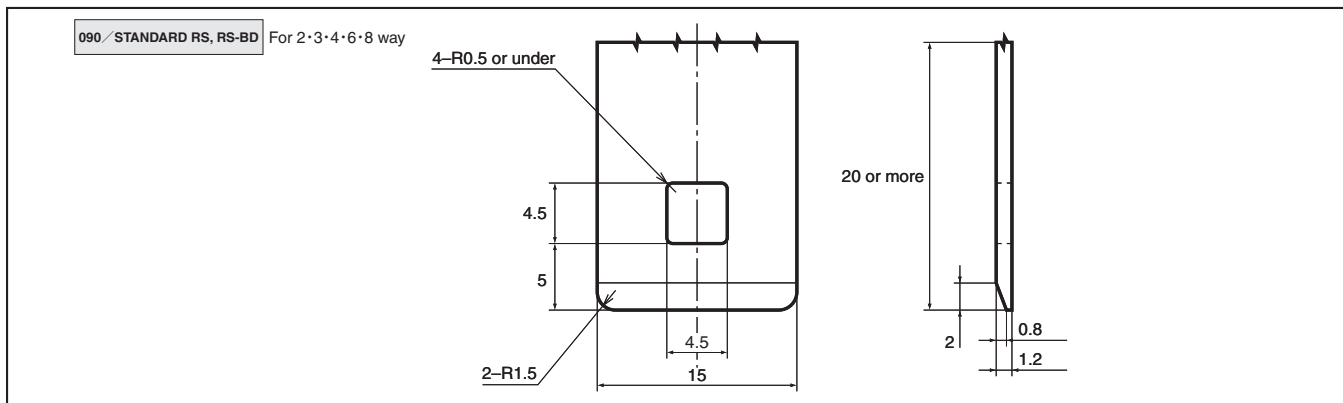
**F(6189-0770)** RS 08 FL-BD

Retainer No. (6918-1603)

8way

M-10

## ▶▶ Bracket for attaching (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

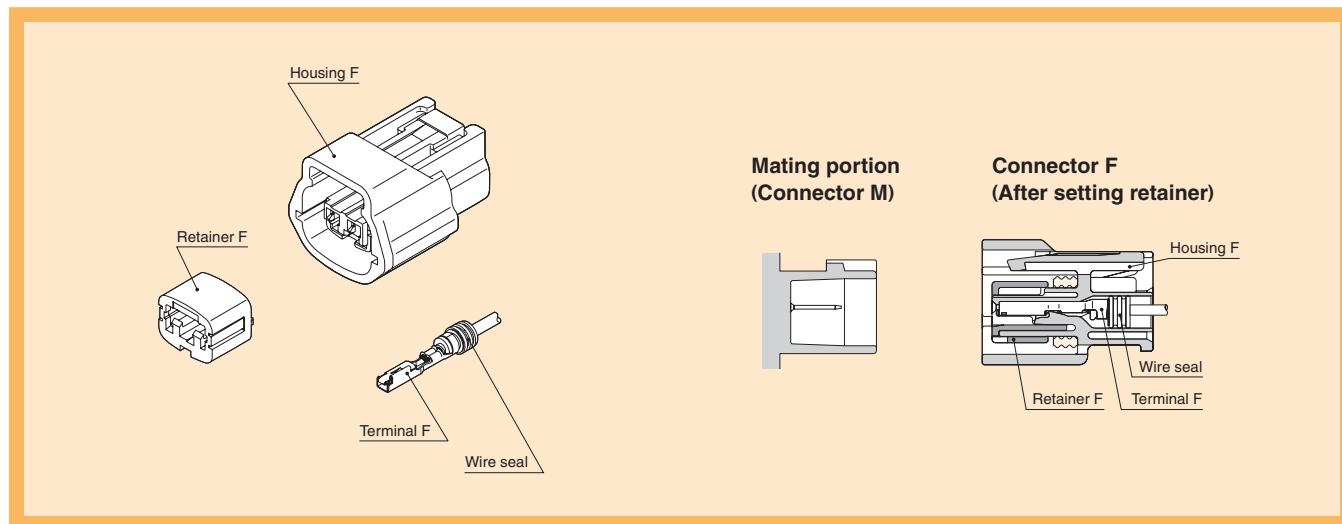
※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。

# 91 SEALED SERIES

090(2.3 mm) / E-RS

090 terminal size sealed connector for direct connection to mating devices.  
090ターミナルサイズの機器直結防水コネクタです。

## Structure / 構造



M-11

## Terminal

●Ref: 090 Terminal List (Page M-02)

●090ターミナルはM-02に掲載。

## Wire seals

●Ref: 090 Wire seal List (Page M-03)

●090ワイヤシールはM-03に掲載。

## Dummy plugs

●Ref: 090 Dummy plug List (Page M-04)

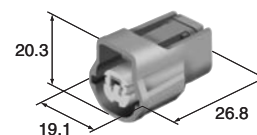
●090ダミー栓はM-04に掲載。

## Housing (mm)

Material / P.B.T.

1way

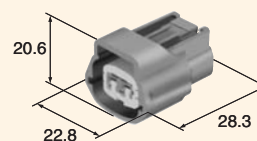
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1636) **F(6098-2329)** E 01 FGY-RS

2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



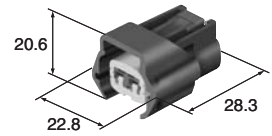
Retainer No. (6918-1594) **F(6189-0772)** E 02 FGY-RS



# 91 SEALED SERIES

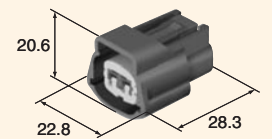
090(2.3 mm) / E-RS

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



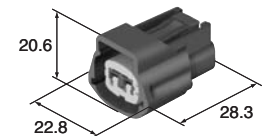
Retainer No. (6918-1594) **F(6189-0773)** E 02 FB-RS

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



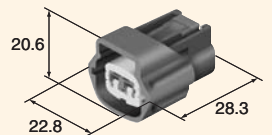
Retainer No. (6918-1594) **F(6189-0774)** E 02 FBR-RS  
**F(6189-1093)** E 02 FBR-RS-GY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



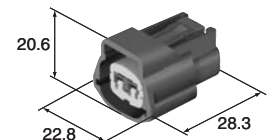
Retainer No. (6918-1594) **F(6189-0775)** E 02 FG-RS  
**F(6189-1094)** E 02 FG-RS-LGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



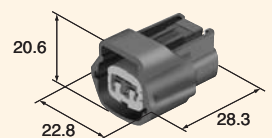
Retainer No. (6918-1594) **F(6189-0776)** E 02 FR-RS  
**F(6189-1095)** E 02 FR-RS-GY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1594) **F(6189-0777)** E 02 FL-RS  
**F(6189-1096)** E 02 FL-RS-LGY

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



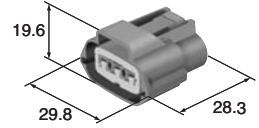
Retainer No. (6918-1594) **F(6189-0778)** E 02 FPU-RS  
**F(6189-1097)** E 02 FPU-RS-B

M-12

2way

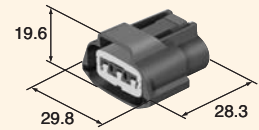
3way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1595) **F(6189-0779)** E 03 FGY-RS

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1595) **F(6189-0780)** E 03 FBR-RS  
**F(6189-1098)** E 03 FBR-RS-B

4way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1596) **F(6189-0781)** E 04 FGY-RS

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1596) **F(6189-0782)** E 04 FBR-RS  
**F(6189-1099)** E 04 FBR-RS-LGY

5way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1604) **F(6189-0848)** E 05 FGY-RS

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1604) **F(6189-0783)** E 05 FBR-RS  
**F(6189-1100)** E 05 FBR-RS-B

M-13

# 91 SEALED SERIES

090(2.3 mm) / E-RS

6way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1597)

**F(6189-0784)**

E 06 FGY-RS

M-14

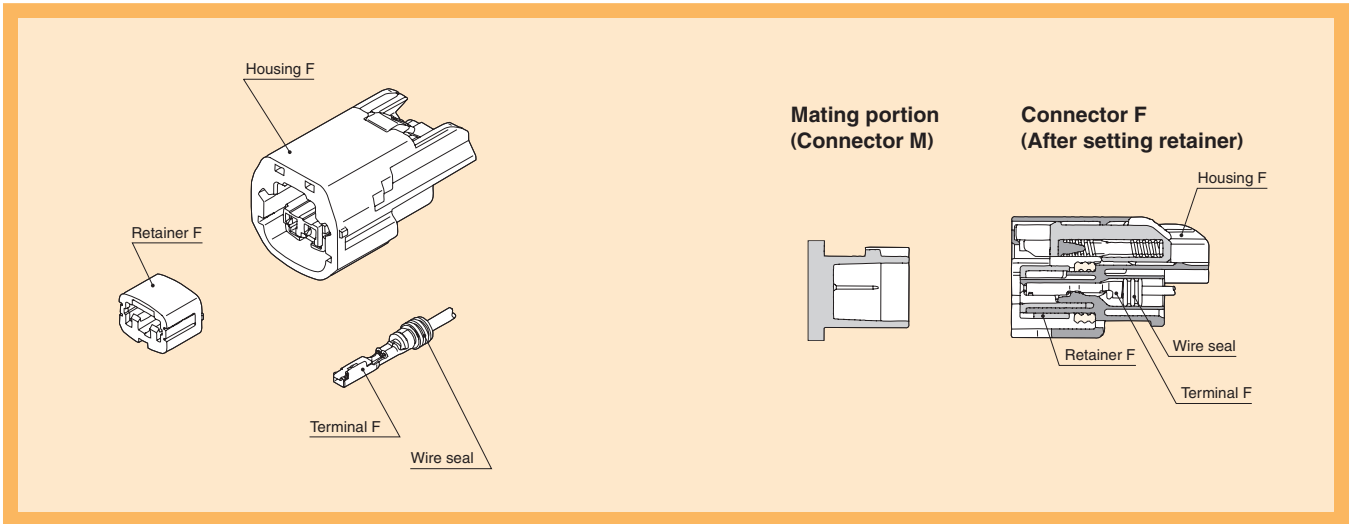
# 91 SEALED SERIES

090(2.3 mm) / E-BD

090 terminal size sealed connector with CPA (Connector position assurance) mechanism for direct connection to mating devices.

半嵌合検知機構付き090ターミナルサイズの機器直結防水コネクタです。

## Structure / 構造



## Terminal

●Ref: 090 Terminal List (Page M-02)

●090ターミナルはM-02に掲載。

## Wire seals

●Ref: 090 Wire seal List (Page M-03)

●090ワイヤシールはM-03に掲載。

## Dummy plugs

●Ref: 090 Dummy plug List (Page M-04)

●090ダミー栓はM-04に掲載。

## Housing (mm)

Material / P.B.T.

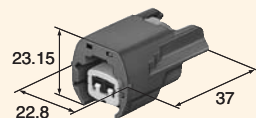
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1594) **F(6189-0786)** E 02 FGY-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1594) **F(6189-0787)** E 02 FB-BD

M-15

# 91 SEALED SERIES

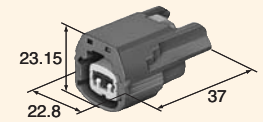
090(2.3 mm) / E-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



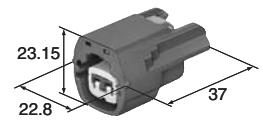
Retainer No. (6918-1594) **F(6189-0788)** E 02 FBR-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



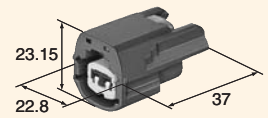
Retainer No. (6918-1594) **F(6189-0789)** E 02 FG-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1594) **F(6189-0790)** E 02 FR-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



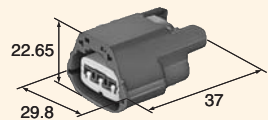
Retainer No. (6918-1594) **F(6189-0799)** E 02 FL-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1594) **F(6189-0800)** E 02 FPU-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1595) **F(6189-0791)** E 03 FGY-BD

M-16

2way

3way

# 91 SEALED SERIES

090(2.3 mm) / E-BD

3way

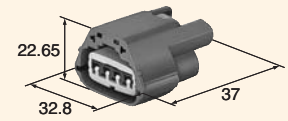
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1595) **F(6189-0792)** E 03 FBR-BD

4way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1596) **F(6189-0793)** E 04 FGY-BD

5way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1596) **F(6189-0794)** E 04 FBR-BD

6way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1604) **F(6189-0815)** E 05 FGY-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1604) **F(6189-0801)** E 05 FBR-BD

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1597) **F(6189-0795)** E 06 FGY-BD

M-17

# 91 SEALED SERIES

090(2.3 mm)/RS FOR DIRECT CONNECTION TO MATING DEVICES

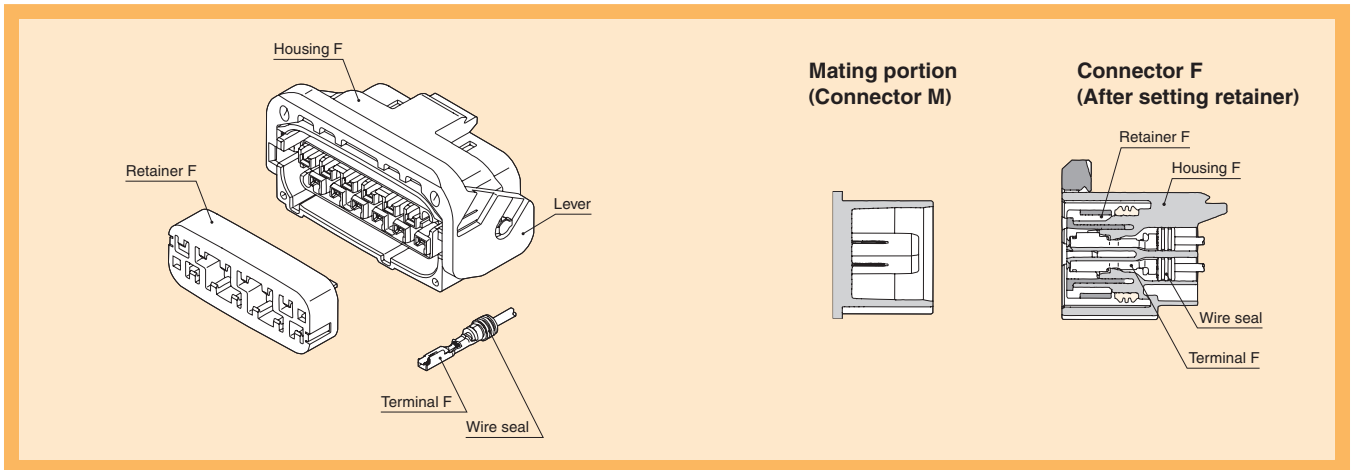
The sealed connectors for direct connection to mating devices have staggered terminal arrangement for improved assembly of printed circuit board.

The 12 way connector features a lever engagement mechanism to reduce the engagement force.

プリント基盤に対応しやすい様、端子を千鳥配列とした機器直結防水コネクタです。

12極コネクタはレバーを用い低挿入力化を可能としました。

## Structure / 構造



M-18

### Terminal

●Ref: 090 Terminal List (Page M-02)

●090ターミナルはM-02に掲載。

### Wire seals

●Ref: 090 Wire seal List (Page M-03)

●090ワイヤシールはM-03に掲載。

### Dummy plugs

●Ref: 090 Dummy plug List (Page M-04)

●090ダミー栓はM-04に掲載。

### Housing (mm)

Material / P.B.T.

8way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



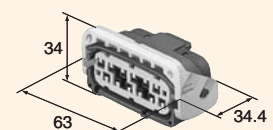
Retainer No. (6918-1607)

**F(6189-0727)**

RS 08 FGY-1V

12way

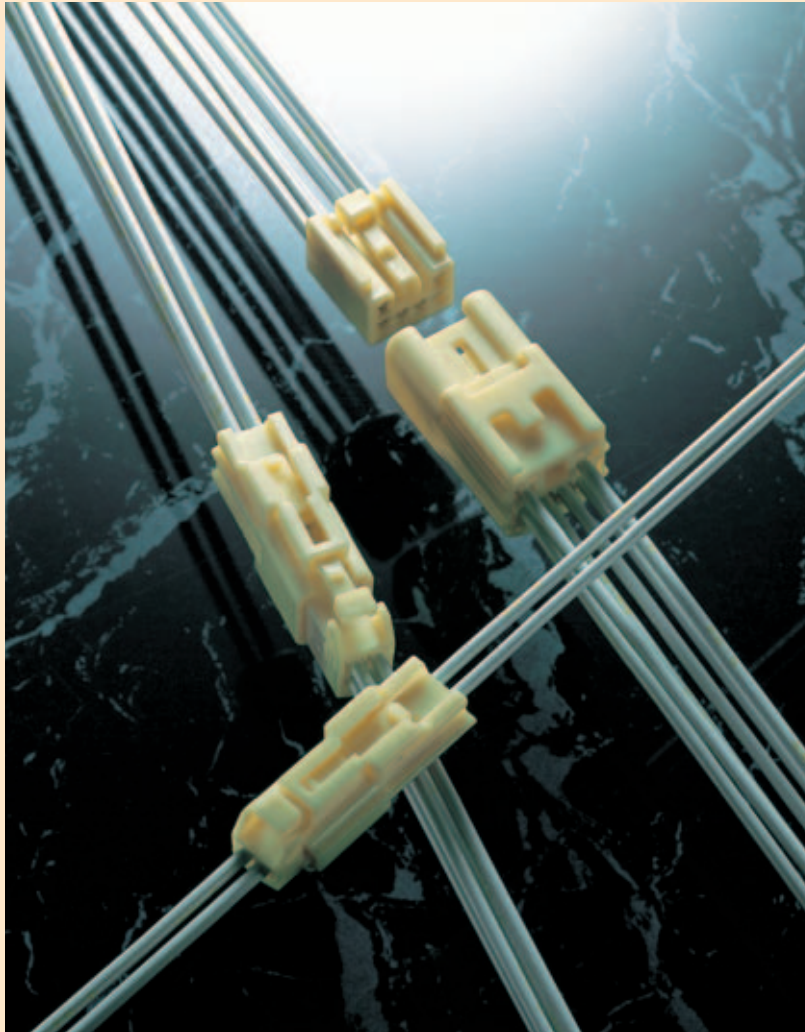
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | M-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | M-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | M-04 |



Retainer No. (6918-1605)

**F(6189-0725)**

RS 12 FGY



N-01

# DL SERIES

## Features

The DL connector series has a mechanism that detects when terminals are not inserted completely. This series consists of 025, 040, and 090 types (040, 090, and 187 types for the hybrid model) classified according to terminal size, supporting use in a variety of control circuits and low power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- These connectors can be directly secured to a bracket on the car body.
- A PCB model is also available for connection to printed circuit boards.

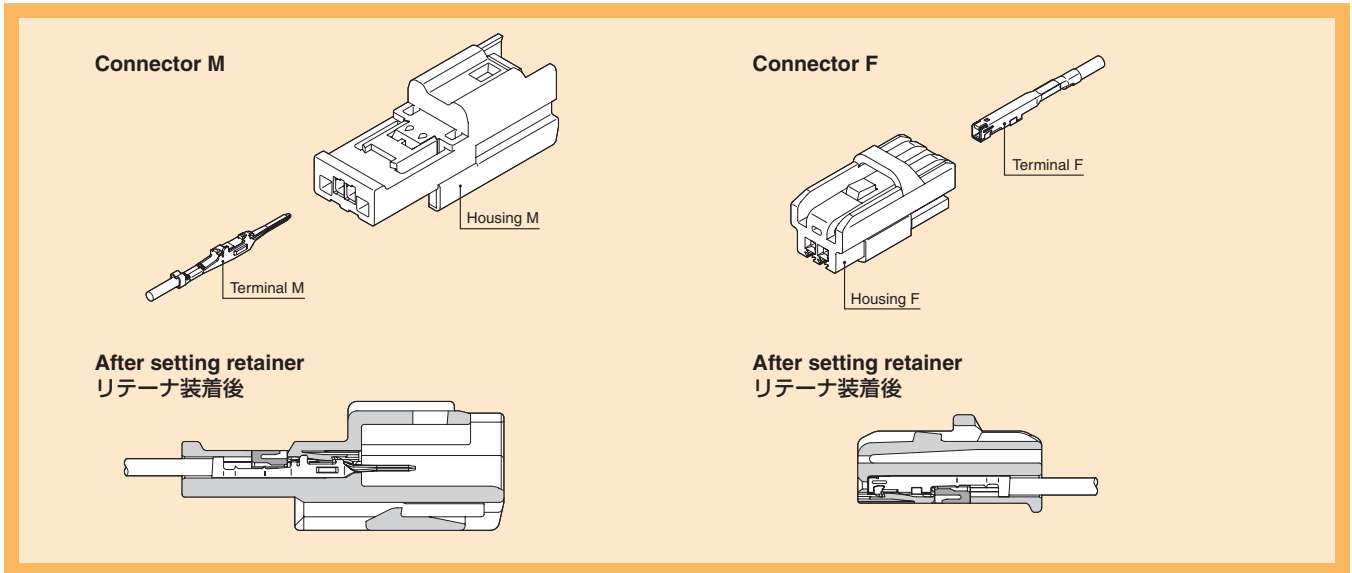
## 特長

DLシリーズは、挿入不足のターミナルを検知する機構を備えたコネクタシリーズです。ターミナルサイズにより025・040・090（ハイブリッドは040・090・187）で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- ターミナルが半挿入の状態では、リテーナが装着できない機構になっています。
- コネクタはボデー側のブラケットに直接固定することができます。
- プリント基板との接続に適したPCBタイプも設定しました。



## Structure / 構造



N-02

## Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

025 (S)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 8000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |

M(8100-4028)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.22~0.35                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |

F(8100-4029)

025 (M)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~0.75                       |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 8000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |

M(8100-4027)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~0.75                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 6000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |

F(8100-4030)

Heat-resistant copper alloy=耐熱銅合金

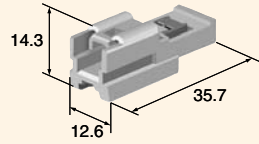
## Housing (mm)

Material / P.B.T.

Color / Natural

2way

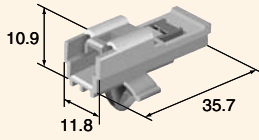
Ref: Terminal part No. N-02  
ターミナル参照頁



**M(6098-4569)**

Ref: Terminal part No. N-02  
ターミナル参照頁

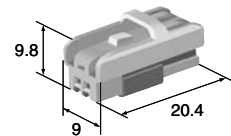
Note With body fastening clamp  
備考 回り止めクランプ付



**M(6098-4567)**

Plate thickness range for clamp :  
t=0.6~2.0mm  
Hole=7.2mm×10.2mm

Ref: Terminal part No. N-02  
ターミナル参照頁



**M(6098-4565)**

Plate thickness range for clamp=クランプ適用板厚

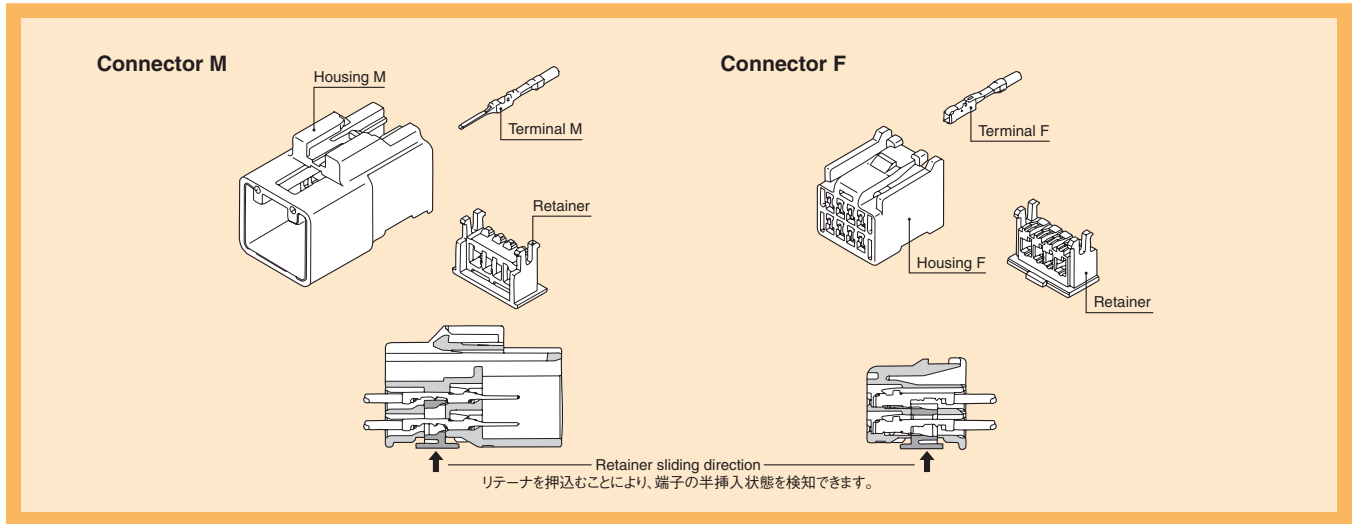
N-03

# DL SERIES

040(1.0 mm) / STANDARD

This connector has a terminal pitch of 2.5 mm.  
端子間ピッチ2.5mmのコネクタです。

## Structure / 構造



## Terminal (mm)

※ For terminal selection, please contact our sales staff.  
**Note) M size terminal can be used connector with insertion cavity specified. For details please contact our sales staff.**

※ Surface treatment of gold-plated is available to meet your needs.  
Thick size is for the time being now.

※ ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。  
注) Mサイズターミナルの使用出来るコネクタは限定されます。  
必ず弊社営業担当にお問い合わせください。

※ Auメッキ仕様については、必要に応じ設定は可能です。  
尚、太物サイズについては、現在の所、暫定とさせていただきます。

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 7000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |

**M(8100-2512)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |

**F(8100-1710)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |

**F(8100-1978)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 7000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |

**M(8100-2513)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |

**F(8100-2514)**

Note)

Note)

Heat-resistant copper alloy=耐熱銅合金

## Housing (mm)

Material / P.B.T.

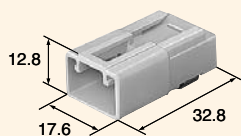
Color / Natural

Note) M size terminal can be used connector with insertion cavity specified. For details please contact our sales staff.

注) Mサイズターミナルの使用出来るコネクタは限定されます。必ず弊社営業担当にお問い合わせください。

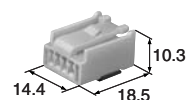
4way

Ref: Terminal part No. N-04  
ターミナル参照頁



M(6098-2158)

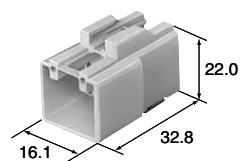
Ref: Terminal part No. N-04  
ターミナル参照頁



F(6098-2013)

8way

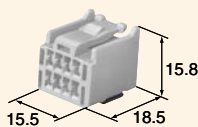
Ref: Terminal part No. N-04  
ターミナル参照頁



M(6098-2206)

Note)

Ref: Terminal part No. N-04  
ターミナル参照頁

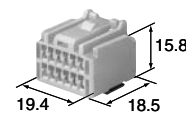


F(6098-2208)

Note)

12way

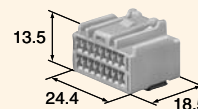
Ref: Terminal part No. N-04  
ターミナル参照頁



F(6098-2289)

16way

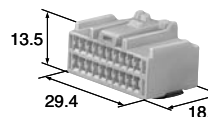
Ref: Terminal part No. N-04  
ターミナル参照頁



F(6098-1624)

20way

Ref: Terminal part No. N-04  
ターミナル参照頁



F(6098-1626)

N-05

## Terminal

● Ref: 040 Terminal List (page N-04),  
090 Terminal List (page N-08),  
187 Terminal List (page A-30)

● 040ターミナルはN-04、090ターミナルはN-08、  
187ターミナルはA-30に掲載。

## Housing (mm)

Material / P.B.T.

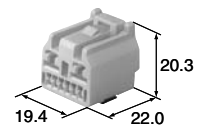
Color / Natural

No. of way / ( ) corresponds to 040, 090, 187, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、090極数、187極数

8way  
(6+2)

Ref: Terminal part No. [040] N-04  
ターミナル参照頁 [187] A-30

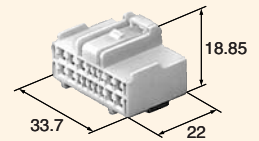


**F(6098-2103)**

N-06

17way  
(9+8)

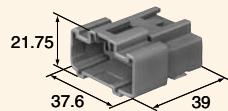
Ref: Terminal part No. [040] N-04  
ターミナル参照頁 [090] N-08



**F(6098-1998)**

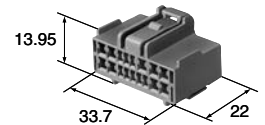
17way  
(9+8)  
(Special shape)  
(異形)

Ref: Terminal part No. [040] N-04  
ターミナル参照頁 [090] N-08



**M(6098-2245)**

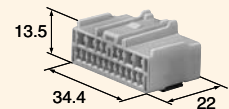
Ref: Terminal part No. [040] N-04  
ターミナル参照頁 [090] N-08



**F(6098-2016)**

20way  
(16+4)

Ref: Terminal part No. [040] N-04  
ターミナル参照頁 [090] N-08



**F(6098-2056)**

## Housing (mm)

Material / P.B.T.

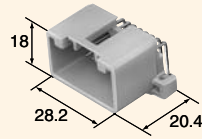
Color / Natural

Terminal material / Brass

Terminal surface treatment / Tin-plated (Also it's possible to Gold-plated.) ターミナル材質 / 黄銅  
ターミナル表面処理 / Snメッキ (Auメッキも可能)

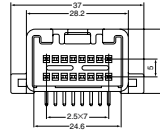
**16way**  
(Horizontal type)  
(水平)

Connector F part No.  
Fコネクタ品番 (6098-1624)  
Terminal type  
端子タイプ 040

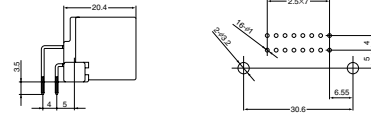


**M(6098-1815)**

● Dimensional drawing

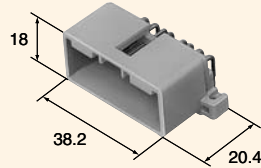


● Mounting drawing



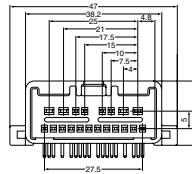
**HYB 20way**  
(16+4)  
(Horizontal type)  
(水平)

Connector F part No.  
Fコネクタ品番 (6098-2056)  
Terminal type  
端子タイプ 16way (040) + 4way (090)

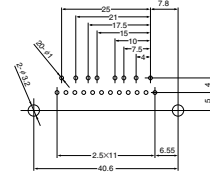


**M(6098-1813)**

● Dimensional drawing

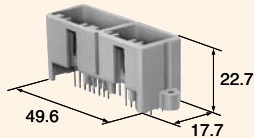


● Mounting drawing



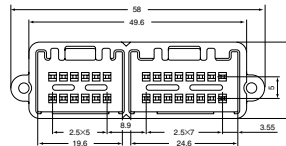
**28way**  
(12+16)  
(Vertical type)  
(垂直)

Connector F part No.  
Fコネクタ品番 (6098-2289) (6098-1624)  
Terminal type  
端子タイプ 12way (040) + 16way (040)

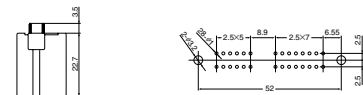


**M(6098-2287)**

● Dimensional drawing

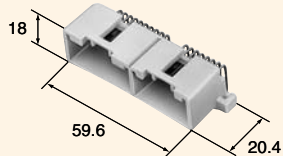


● Mounting drawing



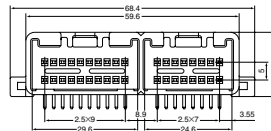
**36way**  
(20+16)  
(Horizontal type)  
(水平)

Connector F part No.  
Fコネクタ品番 (6098-1626) (6098-1624)  
Terminal type  
端子タイプ 20way (040) + 16way (040)

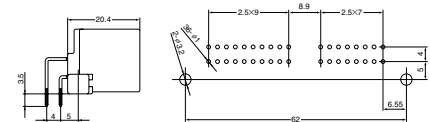


**M(6098-1620)**

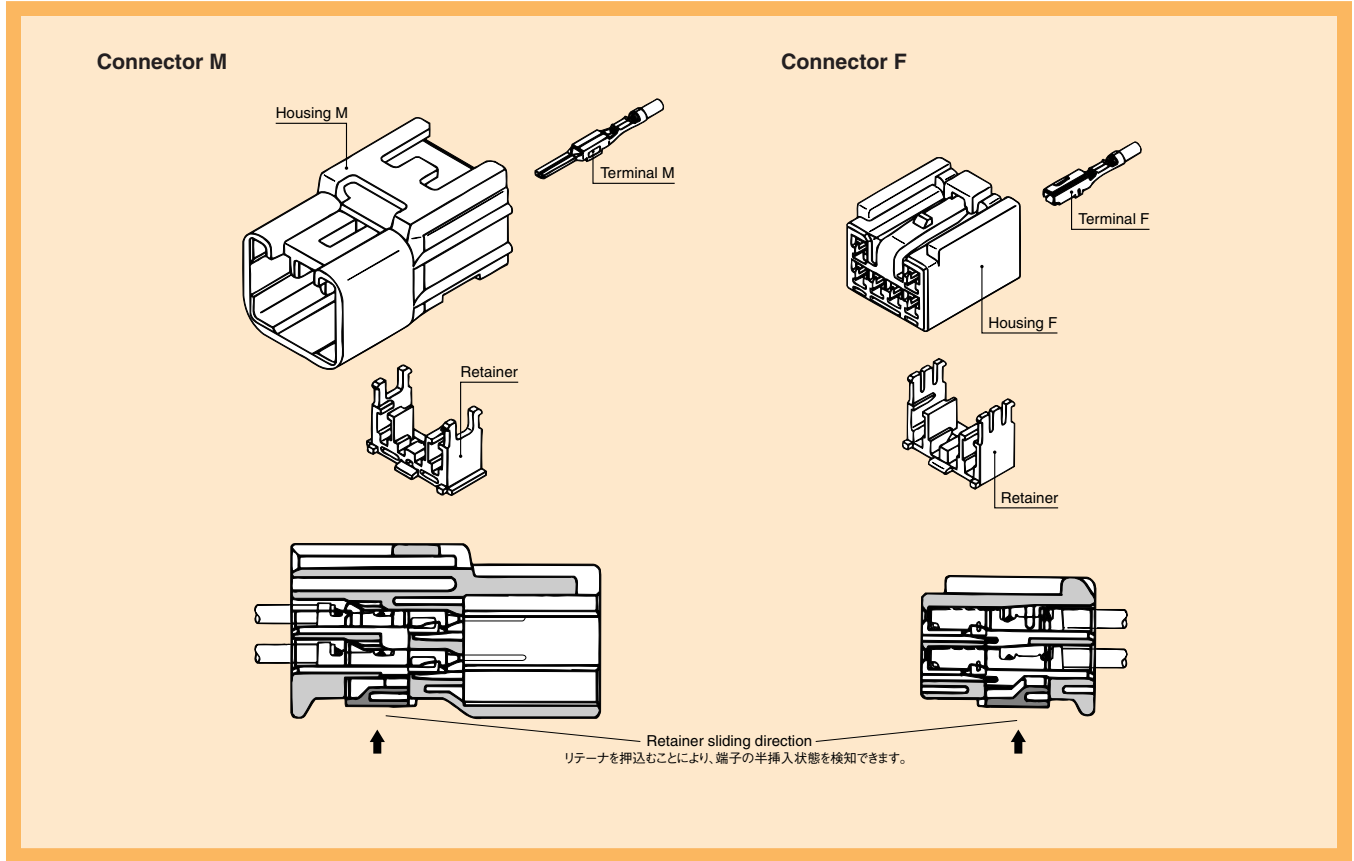
● Dimensional drawing



● Mounting drawing



## Structure / 構造



## Terminal (mm)

※ For terminal selection, please contact our sales staff.  
Regarding "Gold-plated Terminal", please see "A-24".

※ ターミナル選定にあたっては必ず弊社営業担当にお問い合わせください。  
AuメッキターミナルはA-24に掲載。

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                       |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |

**M(8230-4492)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |

**F(8240-4882)**

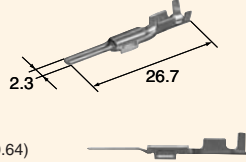
|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 5000                |
| Thickness (mm)<br>板厚                     | 0.25                |

**F(8240-0001)**

090  
(s)

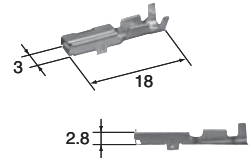
090  
(M)

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                      |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



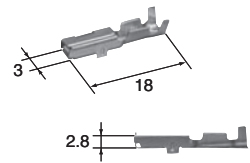
**M(8230-4502)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



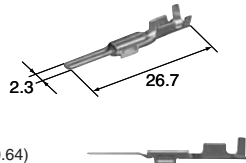
**F(8240-4892)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



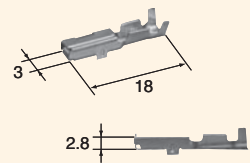
**F(8240-0003)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                           |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



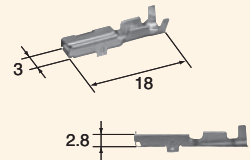
**M(8230-4512)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4942)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-0002)**

Heat-resistant copper alloy=耐熱銅合金

N-09

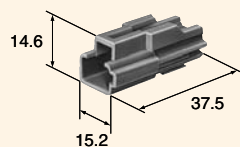
090  
(L)

### Housing (mm)

Material / Low water absorption Nylon

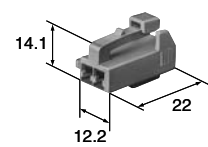
Color / Natural

Ref: Terminal part No.  
ターミナル参照頁 N-08



**M(6249-1248)**

Ref: Terminal part No.  
ターミナル参照頁 N-08



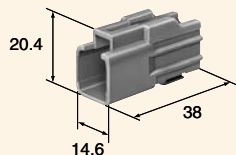
**F(6249-1251)**

2way



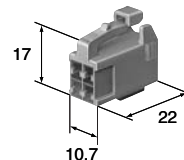
4way

Ref: Terminal part No.  
ターミナル参照頁 N-08



**M(6249-1249)**

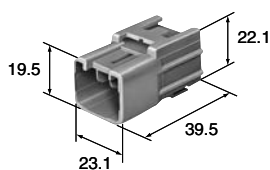
Ref: Terminal part No.  
ターミナル参照頁 N-08



**F(6249-1252)**

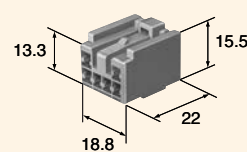
6way

Ref: Terminal part No.  
ターミナル参照頁 N-08



**M(6249-1250)**

Ref: Terminal part No.  
ターミナル参照頁 N-08

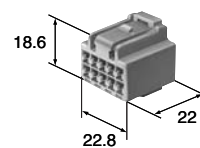


**F(6249-1253)**

N-10

10way

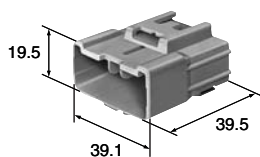
Ref: Terminal part No.  
ターミナル参照頁 N-08



**F(6248-5311)**

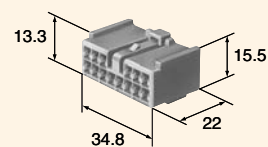
14way

Ref: Terminal part No.  
ターミナル参照頁 N-08



**M(6249-1265)**

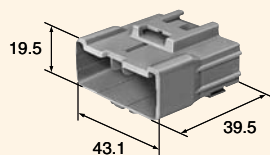
Ref: Terminal part No.  
ターミナル参照頁 N-08



**F(6248-5309)**

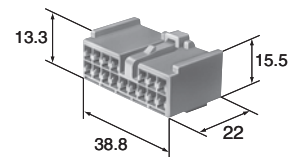
16way

Ref: Terminal part No.  
ターミナル参照頁 N-08



**M(6249-1266)**

Ref: Terminal part No.  
ターミナル参照頁 N-08



**F(6248-5310)**

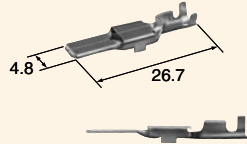
## Terminal (mm)

● Ref: 090 Terminal List (page N-08)

● 090ターミナルはN-08に掲載。

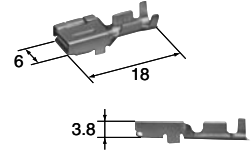
187  
(S)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 4000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8230-4522)

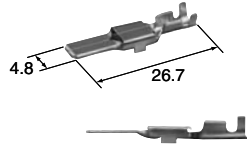
|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



F(8240-4912)

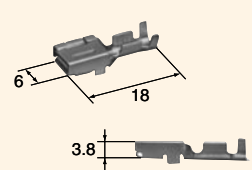
187  
(M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                     |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 3200                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8230-4532)

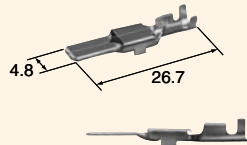
|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 2500                |
| Thickness (mm)<br>板厚                     | 0.4                 |



F(8240-4922)

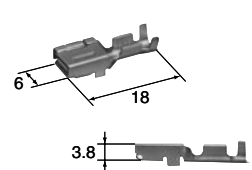
187  
(L)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 2300                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8230-4542)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-1555)

Heat-resistant copper alloy=耐熱銅合金

N-11

## Housing (mm)

Material / Low water absorption Nylon

Color / Natural

No. of way / ( ) corresponds to 090, 187, in order from left to right.

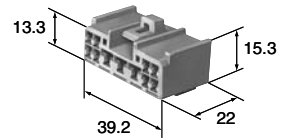
※ For terminal selection, please contact our sales staff.

極数 / ( ) 内表示 : 左から090極数、187極数

※ ターミナル選定にあたっては必ず弊社営業担当にお問い合わせください。

11way  
(8+3)

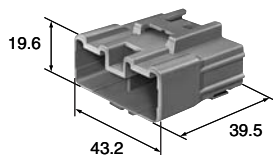
Ref: Terminal part No. [090] N-08  
ターミナル参照頁 [187] N-11



F(6098-1333)

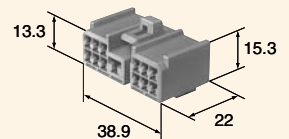
13way  
(12+1)

Ref: Terminal part No. [090] N-08  
ターミナル参照頁 [187] N-11



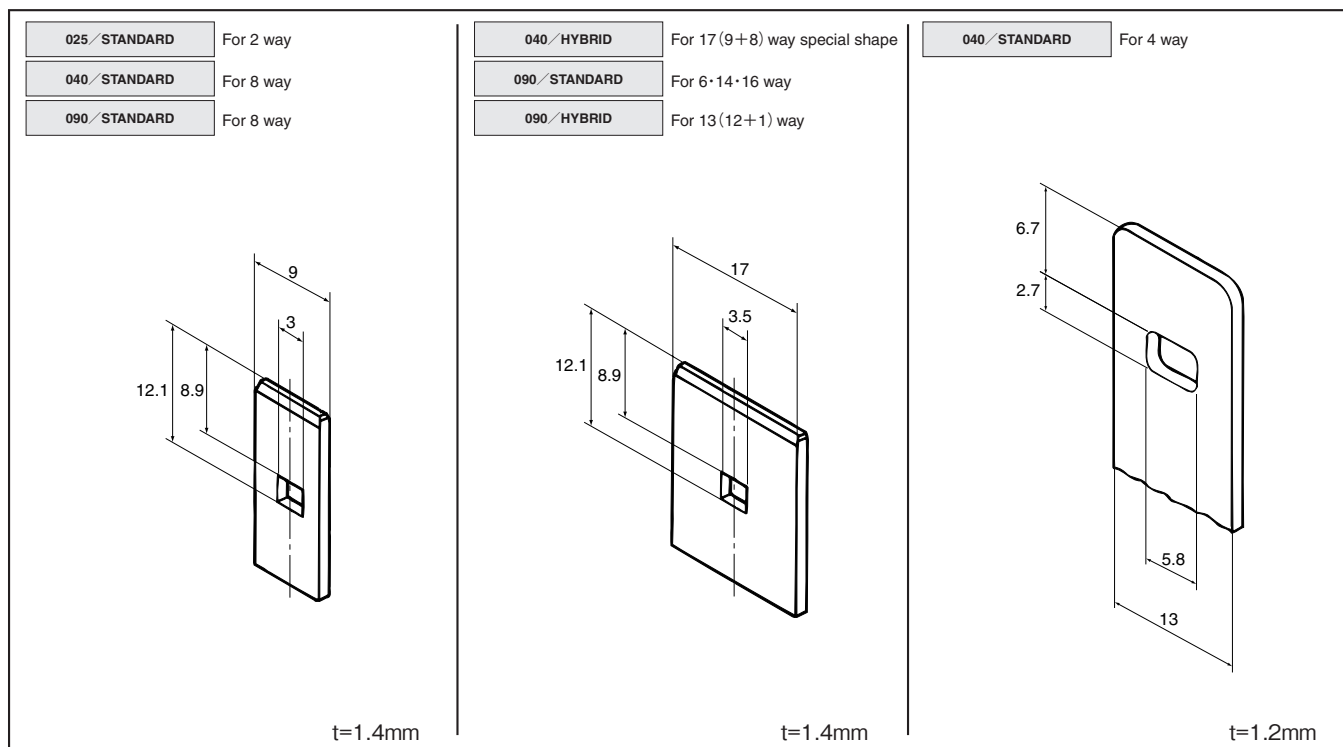
M(6098-1331)

Ref: Terminal part No. [090] N-08  
ターミナル参照頁 [187] N-11



F(6098-1335)

### ▶▶ Bracket for attaching (mm) ◀◀



Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# DL SEALED SERIES

## Features

The DL sealed connector series has a mechanism that detects when terminals are not inserted completely.

This series consists of 040, 090, and 305 types (040, 090, and 187 types for the hybrid model) classified according to terminal size, covering an extensive array of applications from signal to power circuits.

- The connector mechanism only allows the retainer to be set when the terminal is completely inserted.
- These connectors can be directly secured to a bracket on the car body.
- In addition, an extra clip can be attached to the connector to secure it to the car body.

## 特長

DL防水シリーズは、挿入不足のターミナルを検知する機構を備えたコネクタシリーズです。

ターミナルサイズにより040・090・305（ハイブリッドは040・090・187）で構成されており、信号回路からパワー回路まで幅広くご利用いただけます。

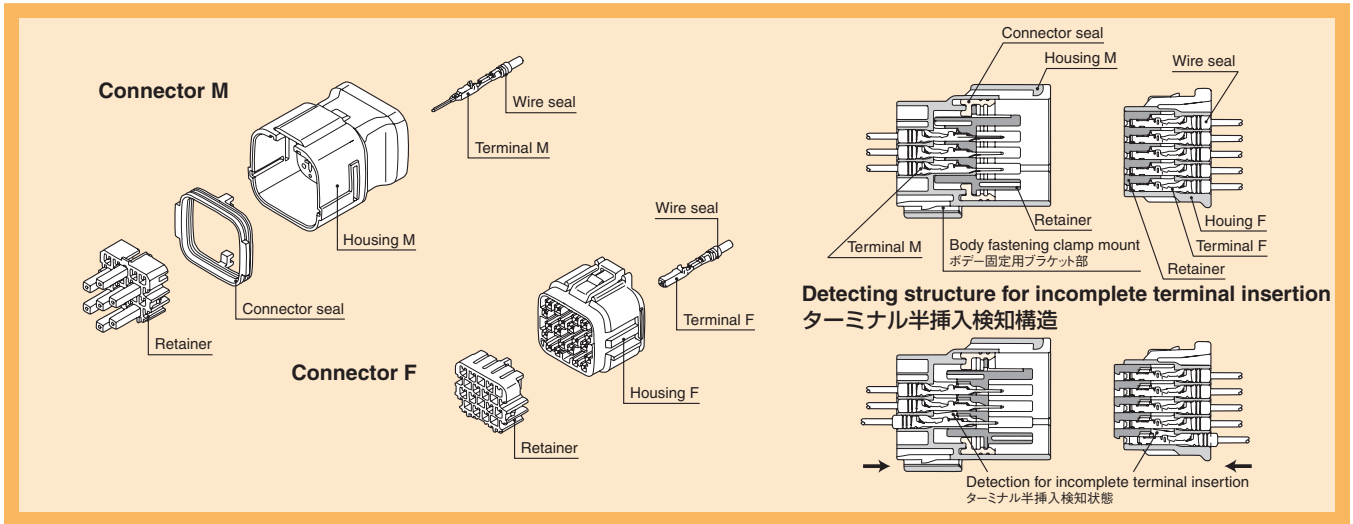
- ターミナルが半挿入の状態では、リテーナが装着できない機構になっています。
- コネクタは、ボデー側のブラケットに直接固定することができます。
- またコネクタにはボデーに固定するためのクランプ（クリップ）を装着することができます。

# DL SEALED SERIES

040(1.0 mm) / STANDARD

A compact sealed connector with TPA (Terminal position assurance) mechanism.  
2重係止構造の小型防水コネクタです。

## Structure / 構造

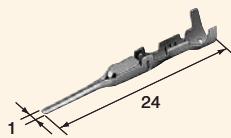


## Terminal (mm)

※ For terminal selection, please contact our sales staff.  
※ Surface treatment of gold-plated is available to meet your needs.  
Thick size is for the time being now.

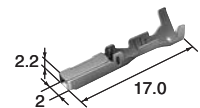
※ ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。  
※ Auメッキ仕様については、必要に応じ設定は可能です。  
尚、太物サイズについては、現在の所、暫定とさせていただきます。

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



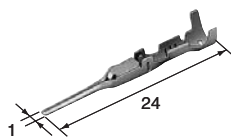
M(8100-2566)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



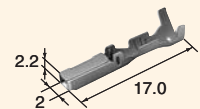
F(8100-1466)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



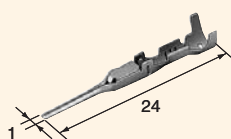
M(8100-2616)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



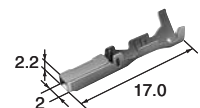
F(8100-1501)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



M(8100-2567)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



F(8100-1467)

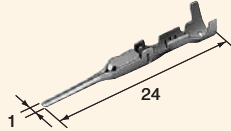
Heat-resistant copper alloy=耐熱銅合金

0-02

040

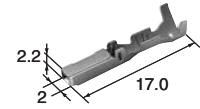
040

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Brass<br>黄銅                    |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.25<br>(Tab thickness : 0.64) |



**M(8100-2615)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25                |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                           |
| Thickness (mm)<br>板厚                     | 0.2                            |



**F(8100-1502)**

Heat-resistant copper alloy=耐熱銅合金

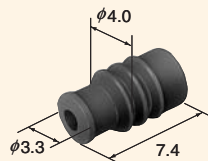
### Wire seals (mm)

- The wire seals are common to M and F.
- Please use silicon wire seal, when using AEX cable.

- ワイヤシールはM、F共用です。
- AEX電線をご使用時はシリコン材質製ゴムを指定ください。

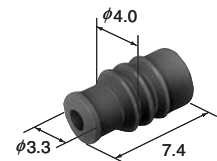
040

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.4 mm below 1.8 mm<br>1.4 mmを越え1.8 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Reddish Brown<br>ベンガラ色                             |
| Pack (piece)<br>収容数(個)                 | 2000   |



S Type **(7165-0547)**

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.8 mm below 2.2 mm<br>1.8 mmを越え2.2 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Blue   |
| Pack (piece)<br>収容数(個)                 | 2000   |

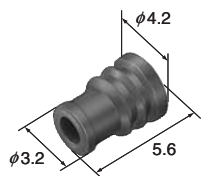


M Type **(7165-0548)**

0-03

040

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.3 mm below 2.2 mm<br>1.3 mmを越え2.2 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Reddish Brown<br>ベンガラ色                             |
| Pack (piece)<br>収容数(個)                 | 1000   |



**(7165-0386)**

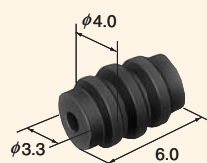
### Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.

- ダミー栓はM、F共用です。
- unnecessary terminal holesを塞ぐために、ダミー栓を使用します。

040

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



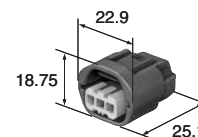
**(7165-0432)**

## Housing (mm)

Material / P.B.T.

3way

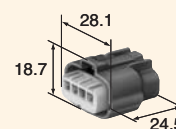
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03 |
| Color<br>色相                        | Gray |



**F(6189-0734)**

4way

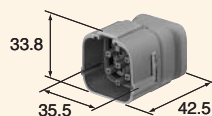
|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03      |
| Color<br>色相                        | Dark Gray |



**F(6189-0551)**

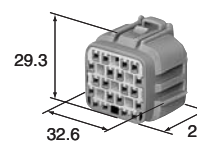
20way

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03                          |
| Color<br>色相                        | Gray                          |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE1 |



**M(6188-0494)**

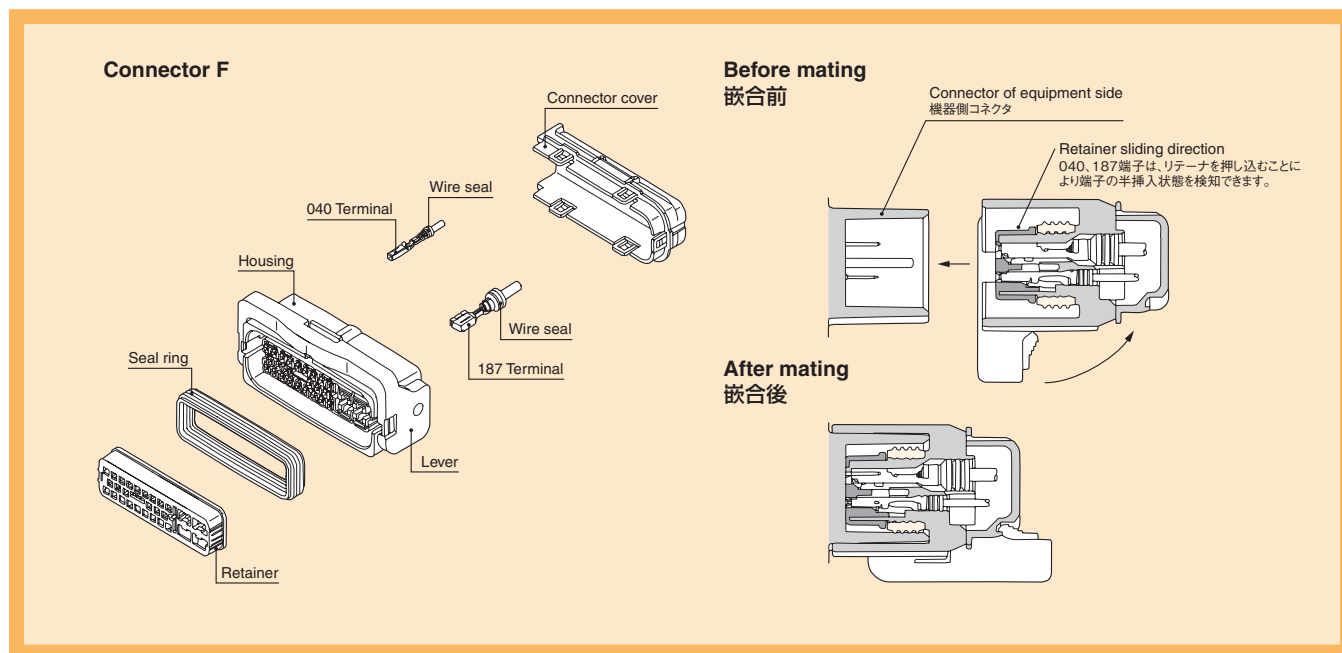
|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03 |
| Color<br>色相                        | Gray |



**F(6189-0714)**

0-04

## Structure / 構造



0-05

## Terminal

●Ref: 040 Terminal List (Page O-02), 187 Terminal List (Page O-16)

●040ターミナルはO-02、187ターミナルはO-16に掲載。

## Wire seals

●Ref: 040 Wire seal List (Page O-03)

●Ref: 187 Wire seal List (Page B-21)

●The wire seals are common to M and F.

●040ワイヤシールはO-03に掲載。

●187ワイヤシールはB-21に掲載。

●ワイヤシールはM、F共用です。

## Dummy plugs

●Ref: 040 Dummy plug List (Page O-03),  
187 Dummy Plug List (Page O-16)

●Dummy plugs are common to M and F

●040ダミー栓はO-03、187ダミー栓はO-16に掲載。

●ダミー栓はM、F共用です。



# DL SEALED SERIES

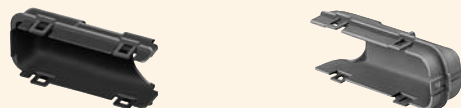
040, 187(1.0 mm, 4.8 mm) / HYBRID

## Housing (mm)

Material / P.B.T.

No. of way / ( ) corresponds to 040, 187, in order from left to right.

極数 / ( ) 内表示 : 左から040極数、187極数



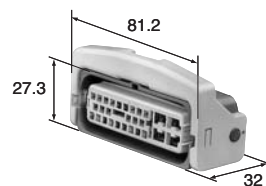
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [040] O-02<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [040] O-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [040] O-03<br>[187] O-16 |
| Color<br>色相                        | Black                    |

20way  
(16+4)

Left side Cover No. (6911-1927) Right side Cover No. (6911-0687)



Special shape Cover No. (6911-2396)



F(6189-6968)



|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [040] O-02<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [040] O-03<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [040] O-03<br>[187] O-16 |
| Color<br>色相                        | Gray                     |

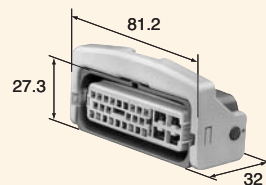
0-06

28way  
(24+4)

Left side Cover No. (6911-1927) Right side Cover No. (6911-0687)

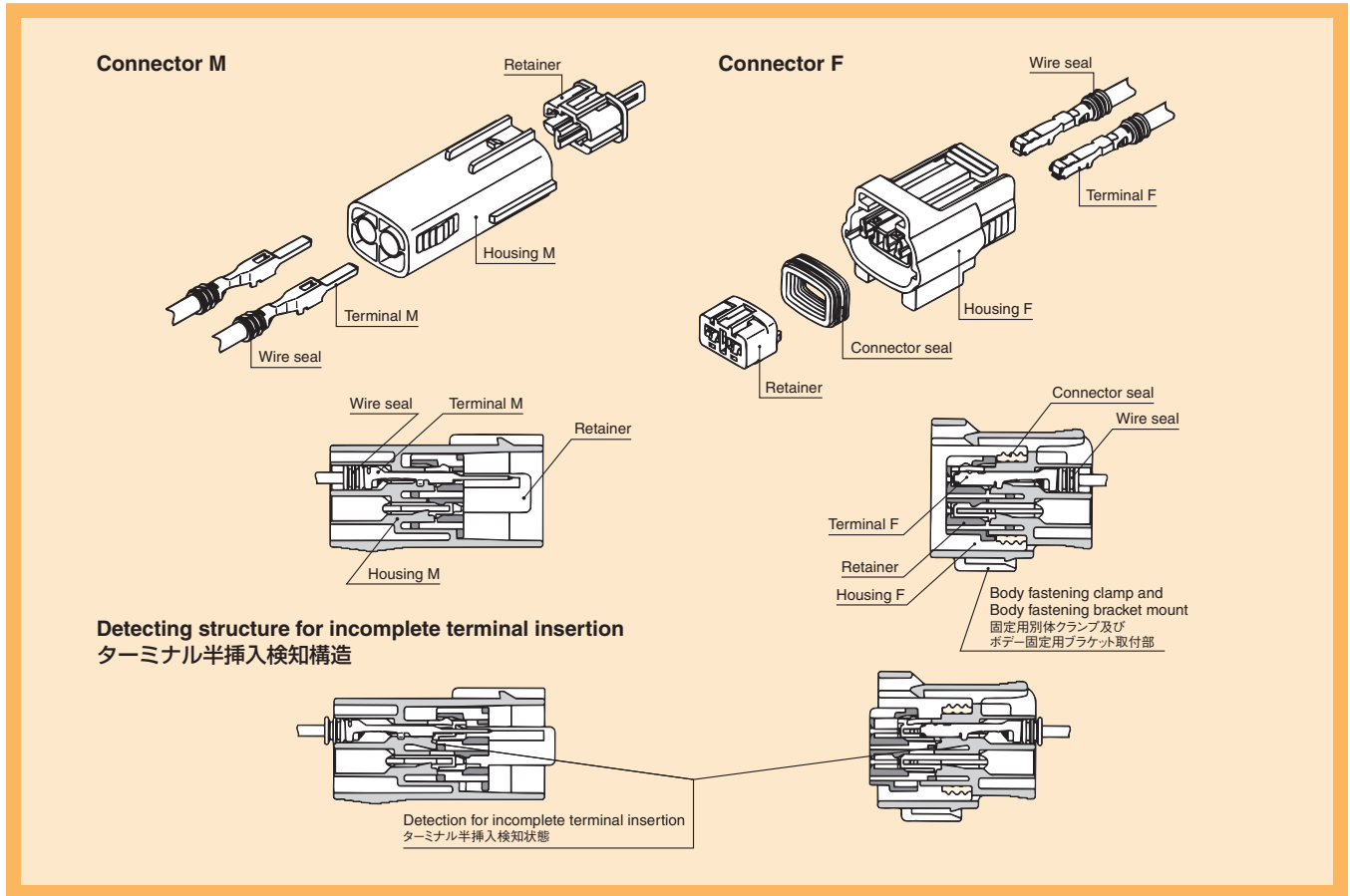


Special shape Cover No. (6911-2396)



F(6189-6967)

## Structure / 構造



0-07

## Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                       |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |

**M(8230-4472)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |

**F(8100-1427)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                       |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ          |
| Reel (piece)<br>リール(個)                   | 4000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |

**M(1500-0159)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |

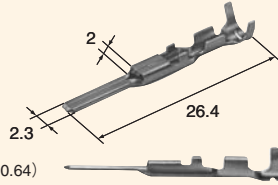
**F(8100-1458)**

Heat-resistant copper alloy=耐熱銅合金

090  
(S)

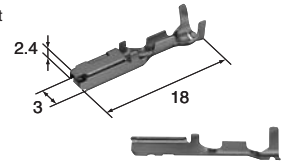
090  
(M)

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                     |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



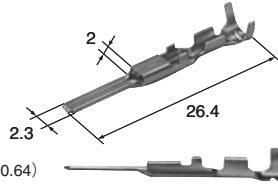
**M(8230-4562)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



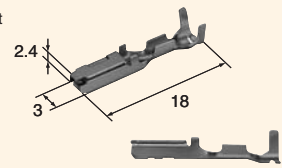
**F(8100-1429)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                     |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ          |
| Reel (piece)<br>リール(個)                   | 3500                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



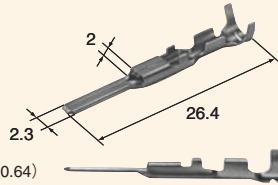
**M(1500-0169)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                      |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



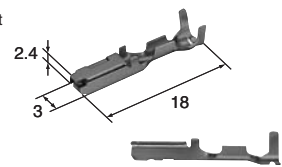
**F(8100-1460)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                      |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



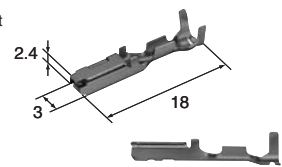
**M(8230-4552)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8100-1428)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Gold-plated<br>Auメッキ           |
| Reel (piece)<br>リール(個)                   | 3500                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8100-1459)**

Heat-resistant copper alloy=耐熱銅合金

0-08

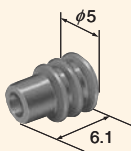
090  
(L)

### Wire seals (mm)

●The wire seals are common to M and F.

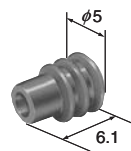
●ワイヤシールはM、F共用です。

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.1 mm below 1.5 mm<br>1.1 mmを越え1.5 mm以下 |
| Material<br>材質                         | N.B.R.   |
| Color<br>色相                            | Red  |
| Pack (piece)<br>収容数(個)                 | 1000   |



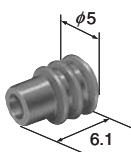
SS Type (7165-0210)

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.5 mm below 2.0 mm<br>1.5 mmを越え2.0 mm以下 |
| Material<br>材質                         | N.B.R.   |
| Color<br>色相                            | Blue   |
| Pack (piece)<br>収容数(個)                 | 2000   |



S Type (7165-0118)

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 2.0 mm below 2.9 mm<br>2.0 mmを越え2.9 mm以下 |
| Material<br>材質                         | N.B.R.   |
| Color<br>色相                            | Brown  |
| Pack (piece)<br>収容数(個)                 | 2000   |



M Type (7165-0119)

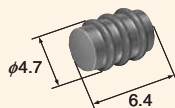
090

### Dummy plugs (mm)

●Dummy plugs are common to M and F.  
●Dummy plugs are used to blind unused terminal holes.

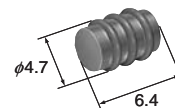
●ダミー栓はM、F共用です。  
● unnecessary terminal holes to be sealed for, dummy plug is used.

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Brown  |
| Pack (piece)<br>収容数(個) | 1000   |



(7161-9787)

|                        |          |
|------------------------|----------|
| Material<br>材質         | Silicone |
| Color<br>色相            | Green    |
| Pack (piece)<br>収容数(個) | 1000     |



(7165-0193)

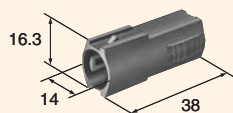
090

0-09

### Housing (mm)

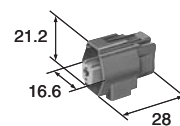
Material / P.B.T. or Low water absorption Nylon

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



M(6195-0240)

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |

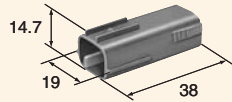


F(6195-0066)

1way

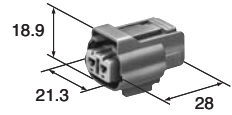
2way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0006)**

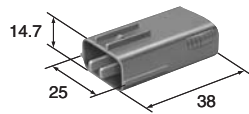
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0003)**

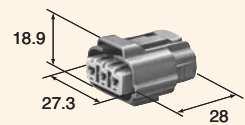
3way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0012)**

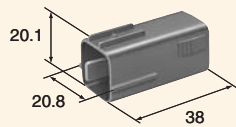
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0009)**

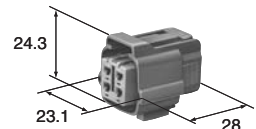
4way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0018)**

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |

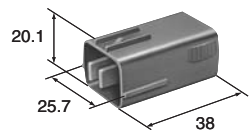


**F(6195-0015)**

0-10

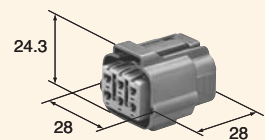
6way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0024)**

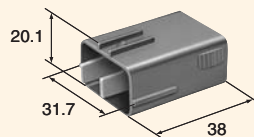
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0021)**

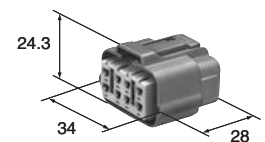
8way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0054)**

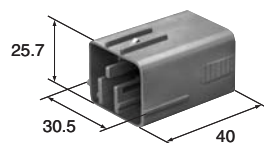
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0051)**

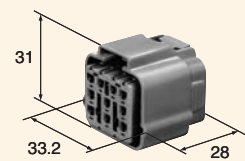
10way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07       |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09       |
| Color<br>色相                        | Light Gray |



**M(6195-0167)**

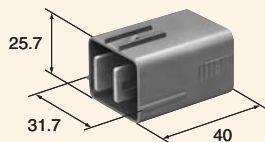
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Light Gray                    |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0164)**

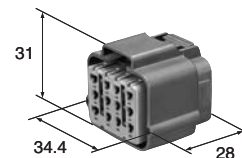
12way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**M(6195-0152)**

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0149)**

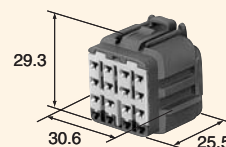
16way

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE1 |



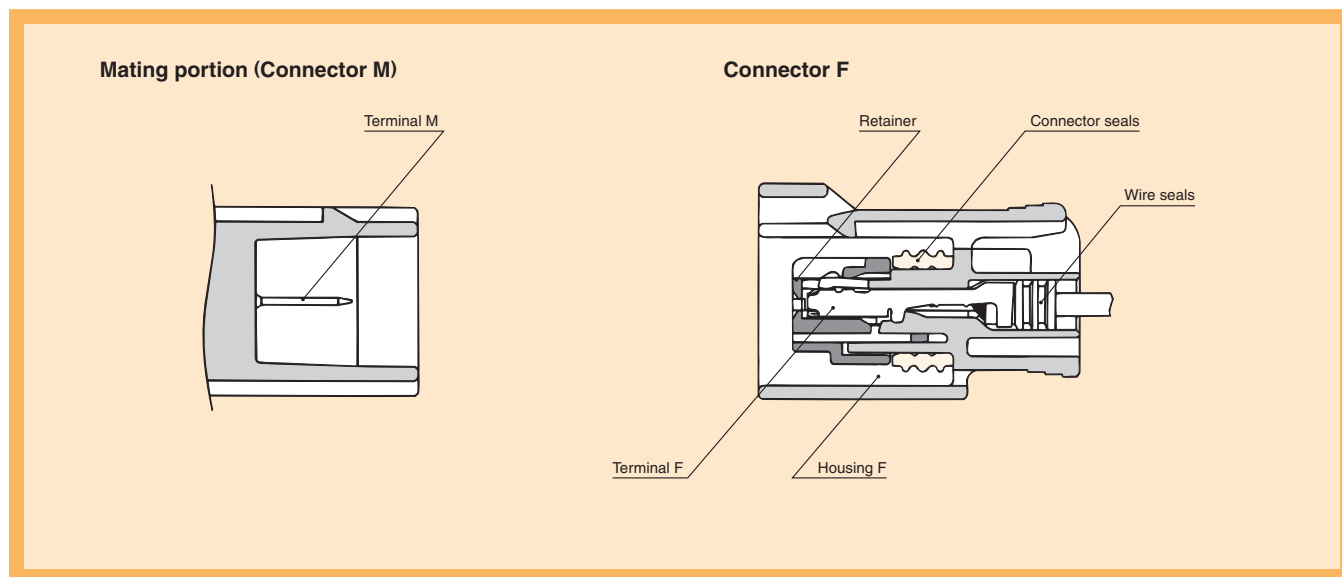
**M(6188-0495)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6189-0715)**

## Structure / 構造



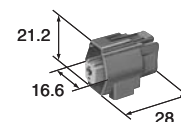
0-12

## Housing (mm)

Material / P.B.T.

1way

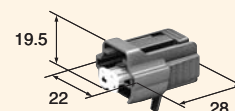
|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6195-0066)**

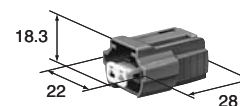
2way  
(Special Shape)  
(異形)

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6195-0041)**

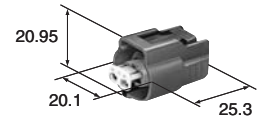
|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6195-0043)**

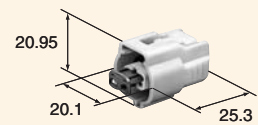
2way  
(Special Shape)  
(異形)

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09  |
| Color<br>色相                        | Black |



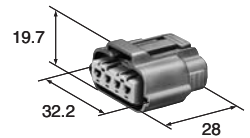
**F(6195-0062)**

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09    |
| Color<br>色相                        | Natural |



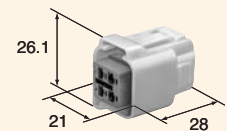
**F(6195-0064)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



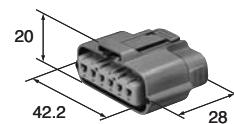
**F(6195-0030)**

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09    |
| Color<br>色相                        | Natural |



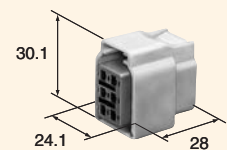
**F(6195-0032)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6195-0035)**

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09    |
| Color<br>色相                        | Natural |



**F(6195-0157)**

4way

6way

0-13

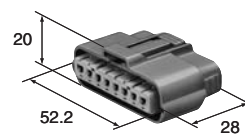


# DL SEALED SERIES

090(2.3 mm)/DIRECT CONNECTION TO MATING DEVICES

8way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09      |
| Color<br>色相                        | Dark Gray |



**F(6195-0038)**

0-14

These connectors are used closest to the engine where the ambient temperature is the highest. Also special copper alloy terminals with high heat resistance last a long life. エンジンルームの中でもとくに温度条件の厳しいエンジン回りなどに使用します。耐熱性に優れた特殊銅合金のターミナルは、長時間安定した性能を発揮します。

### Housing (mm)

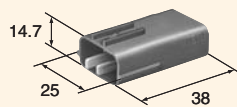
Material / Low water absorption Nylon

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

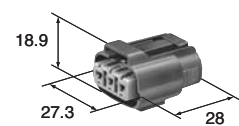
3way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07       |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09       |
| Color<br>色相                        | Dark Brown |



**M(6195-0243)**

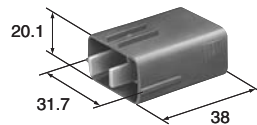
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Brown                    |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0247)**

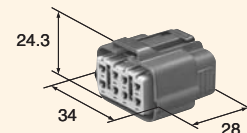
8way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07       |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09       |
| Color<br>色相                        | Dark Brown |



**M(6195-0245)**

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-09                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-09                          |
| Color<br>色相                        | Dark Brown                    |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



**F(6195-0249)**

### Terminal (mm)

●Ref: 090 Terminal List (Page O-07)

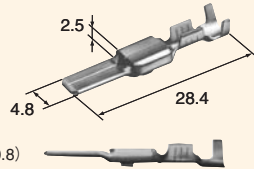
※For terminal selection, please contact our sales staff.

●090ターミナルはO-07に掲載。

※ターミナル選定にあつては必ず弊社営業担当にお問い合わせください。

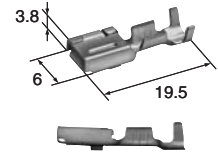
187  
(S)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 3000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8100-0463)

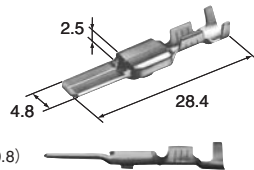
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-0661)

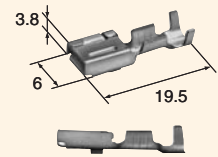
187  
(M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                     |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 3000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8100-0464)

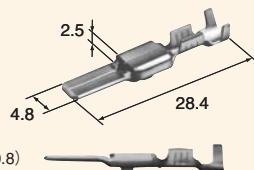
|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                       |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2500                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-0660)

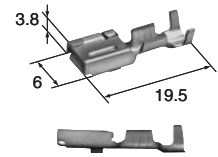
187  
(L)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 2500                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |



M(8100-0465)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |



F(8100-0468)

Heat-resistant copper alloy=耐熱銅合金

### Wire seals

- The wire seals are common to M and F.
- Please use silicone wire seal, when using AEX cable.
- Ref: 090 Wire seal List (Page O-09)
- Ref: 187 Wire seal List (Page B-21)

- ワイヤシールはM、F共用です。
- AEX電線をご使用時はシリコン材質製ゴム栓をご指定ください。
- 090ワイヤシールはO-09に掲載。
- 187ワイヤシールはB-21に掲載。

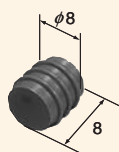
### Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.
- Ref: 090 Dummy plug List (page O-09)

- ダミー栓はM、F共用です。
- 不必要なターミナル穴を塞ぐために、ダミー栓を使用します。
- 090ダミー栓はO-09に掲載。

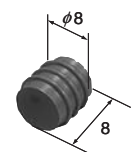
187

|                        |           |
|------------------------|-----------|
| Material<br>材質         | N.B.R.    |
| Color<br>色相            | Dark Gray |
| Pack (piece)<br>収容数(個) | 1000      |



(7165-0145)

|                        |          |
|------------------------|----------|
| Material<br>材質         | Silicone |
| Color<br>色相            | Green    |
| Pack (piece)<br>収容数(個) | 1000     |



(7165-0195)

### Housing (mm)

Material / P.B.T.

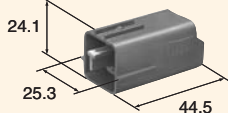
No. of way / ( ) corresponds to 090, 187, in order from left to right.  
 ※For terminal selection, please contact our sales staff.

極数 / ( ) 内表示 : 左から090極数、187極数

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

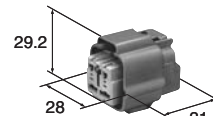
4way  
(2+2)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16 |
| Color<br>色相                        | Dark Gray                |



M(6195-0072)

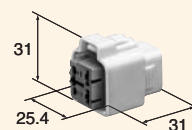
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16      |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



F(6195-0069)

4way  
(2+2)  
(Special shape)  
(異形)

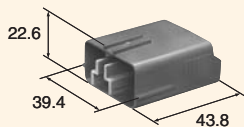
|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16 |
| Color<br>色相                        | Natural                  |



F(6195-0074)

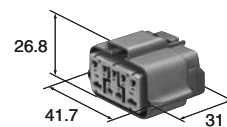
9way  
(7+2)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16 |
| Color<br>色相                        | Dark Gray                |



M(6195-0173)

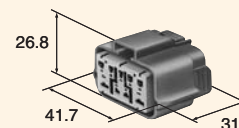
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16      |
| Color<br>色相                        | Dark Gray                     |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



F(6195-0170)

9way  
(7+2)  
(Special shape)  
(異形)

|                                    |                          |
|------------------------------------|--------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | [090] O-07<br>[187] O-16 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | [090] O-09<br>[187] B-21 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | [090] O-09<br>[187] O-16 |
| Color<br>色相                        | Black                    |

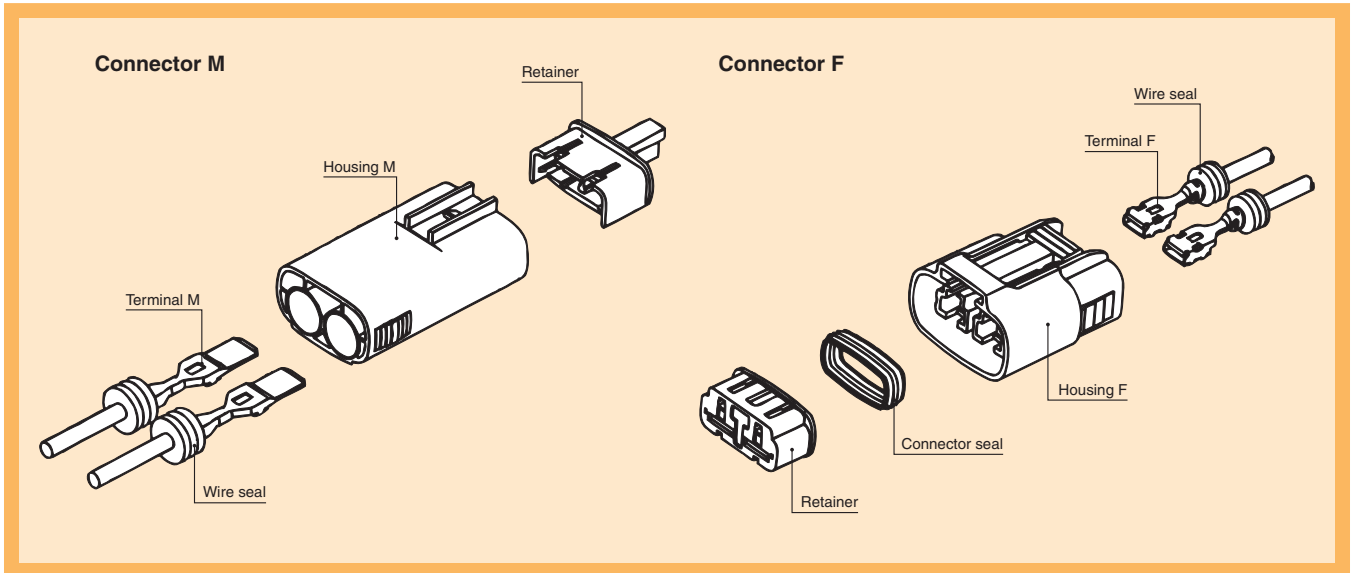


F(6195-0238)

# DL SEALED SERIES

305(7.8 mm) / STANDARD

## Structure / 構造



0-18

## Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

305 (M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 1000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |

M(8100-0499)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |

F(8100-0498)

305 (L)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 1000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |

M(8100-0798)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |

F(8100-0797)

Heat-resistant copper alloy=耐熱銅合金

# DL SEALED SERIES

305(7.8 mm) / STANDARD

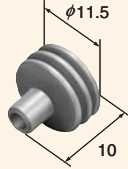
## Wire seals (mm)

●The wire seals are common to M and F.

●ワイヤシールはM、F共用です。

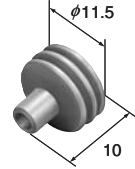
305

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 2.9~3.8 |
| Material<br>材質                         | N.B.R   |
| Color<br>色相                            | Gray    |
| Pack (piece)<br>収容数(個)                 | 1000    |



M Type (7165-0132)

|  |         |
|--|---------|
| Cable overall diameter (mm)<br>電線仕上り外径 | 4.4~5.8 |
| Material<br>材質                         | N.B.R   |
| Color<br>色相                            | Black   |
| Pack (piece)<br>収容数(個)                 | 1000    |



L Type (7165-0133)

## Dummy plugs (mm)

●Dummy plugs are common to M and F.

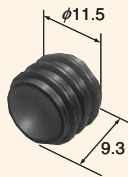
●ダミー栓はM、F共用です。

●Dummy plugs are used to blind unused terminal holes.

●不必要なターミナル穴を塞ぐために、ダミー栓を使用します。

305

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



(7165-0180)

0-19

## Housing (mm)

Material / P.B.T.

Color / Dark Gray

1way

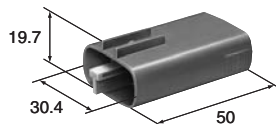
|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-18                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-19                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-19                          |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



F(6195-0155)

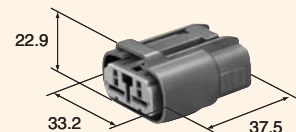
2way

|                                    |      |
|------------------------------------|------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-18 |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-19 |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-19 |



M(6195-0057)

|                                    |                               |
|------------------------------------|-------------------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-18                          |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-19                          |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-19                          |
| Note<br>備考                         | O-20<br>Bracket Clamp : TYPE2 |



F(6195-0060)



## ▶▶ Body fastening clamp (mm) ◀◀

040 standard type, 090 standard type, heat resistant type, hybrid type and 305 standard type connectors, the clamp can be installed.

※The detail dimensions for the mounting portion are specified in drawing

Material / P.B.T.

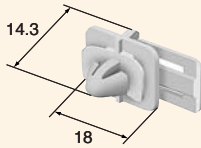
Note) Before using the product, please contact our sales staff.

040標準・090標準・耐熱・ハイブリッド、305標準のコネクタには、ボデー固定用クランプを必要に応じて取付けることができます。

※取付部詳細寸法は、別途図面により規定します。

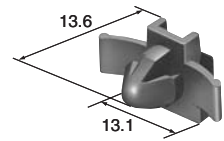
注) 当製品ご使用に際しては必ず弊社営業担当にお問い合わせください。

|                      |           |
|----------------------|-----------|
| Color<br>色相          | Natural   |
| Thickness (mm)<br>板厚 | t=0.6~1.6 |
| hole size<br>穴径      | φ7.0      |



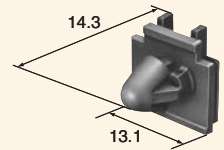
TYPE 1 (6810-2653)

|                      |           |
|----------------------|-----------|
| Color<br>色相          | Dark Gray |
| Thickness (mm)<br>板厚 | t=0.6~2.0 |
| hole size<br>穴径      | 7.2×10.2  |



Note) TYPE 2 (他社製) (CLIP LA0167C11)

|                      |           |
|----------------------|-----------|
| Color<br>色相          | Brown     |
| Thickness (mm)<br>板厚 | t=0.7~2.0 |
| hole size<br>穴径      | 7.2×10.2  |

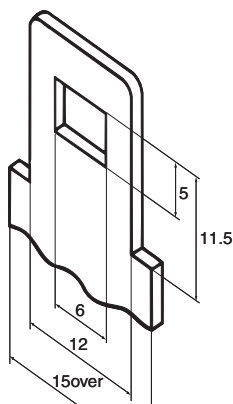


TYPE 2 (6810-1584) (CLIP 71-102-BR)

0-20

## ▶▶ Bracket for attaching (mm) ◀◀

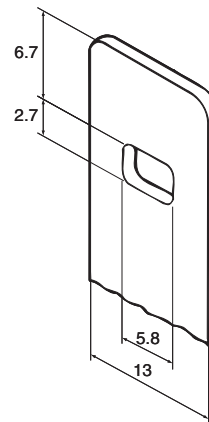
|                |            |
|----------------|------------|
| 040 / STANDARD | For 20 way |
| 090 / STANDARD | For 16 way |



TYPE 1

t=1.2mm

|                      |                           |
|----------------------|---------------------------|
| 090 / STANDARD       | For 1·2·3·4·6·8·10·12 way |
| 090 / HEAT RESISTANT | For 3·8 way               |
| 090, 187 / HYBRID    | For 4(2+2)·9(7+2) way     |
| 305 / STANDARD       | For 1·2 way               |



TYPE 2

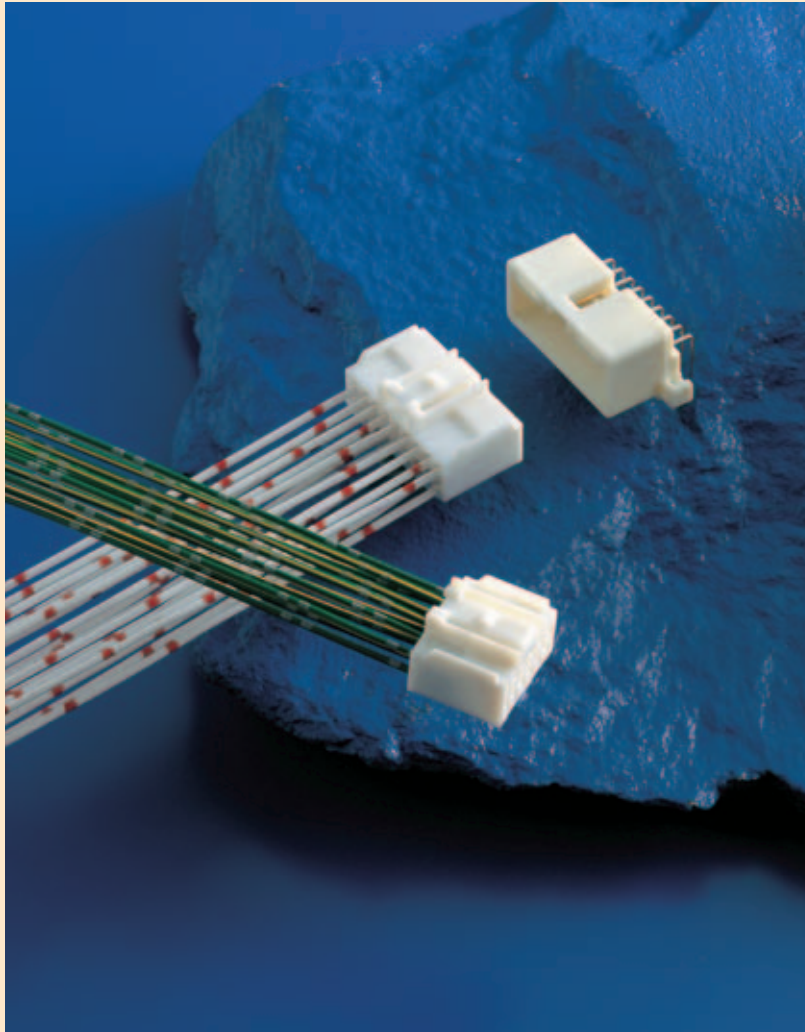
t=1.2mm

Bracket for fixing the body 040 standard type, 090 standard type, heat resistant type, hybrid type and 305 standard type connectors can be installed directly on the bracket on the body as necessary.

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing.

Insert the bracket directly into the mount for the body fastening clamp which is provided on the connector.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# SL SERIES

P-01

## Features

The SL connector series is a highly reliable connector with a single locking structure. This series consists 060, 090, and 110 types (060, 110, 187, and 312 types for the hybrid model) classified according to terminal size, covering an extensive array of applications from signal circuits to low power circuits.

- The employment of an inertia locking system ensures the complete engagement of the connectors (this system is not incorporated in some connectors).
- These connectors can be directly secured to a bracket on the car body.
- A PCB model is also available for connection to printed circuit boards.  
(Note: Please use a dedicated jig for this connector series. Our sales staff are available for inquiries related to this jig.)

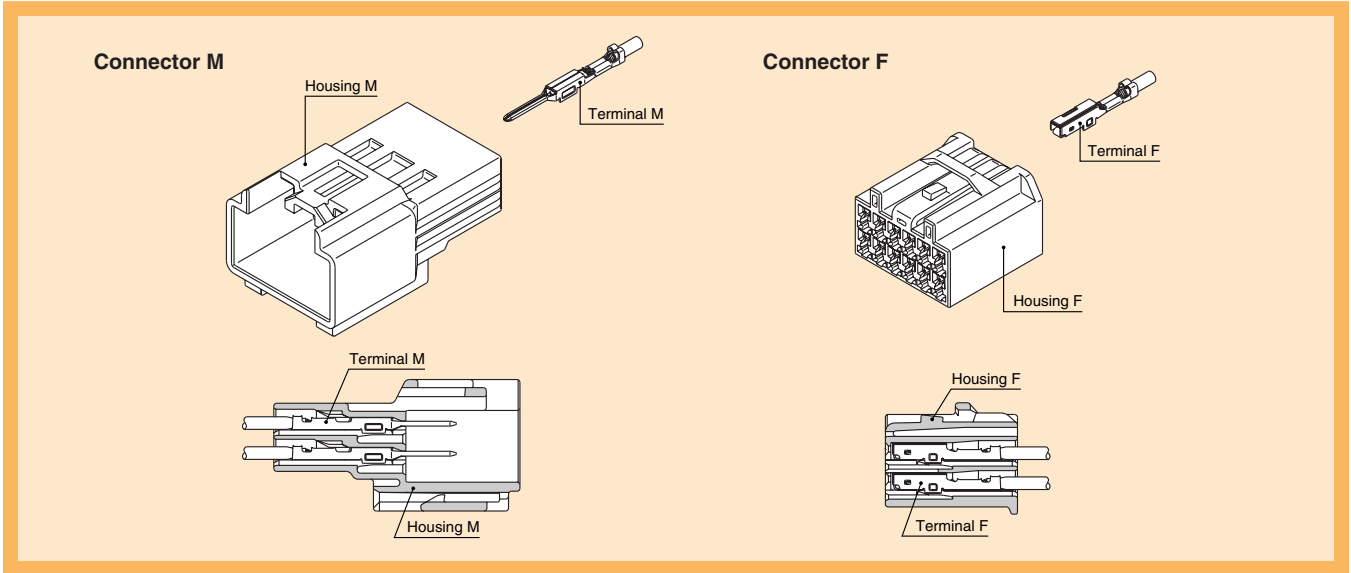
## 特長

SLシリーズコネクタは単係止構造でより信頼性を高めたコネクタです。ターミナルサイズにより060・090・110（ハイブリッドは060・110・187・312）で構成されており、信号回路から低パワー回路まで幅広くご利用いただけます。

- 慣性ロック方式の採用によりコネクタ嵌合不足を防止することができます。（慣性ロック方式でないコネクタが一部あります。）
- コネクタは、ボデー側のブラケットに直接固定することができます。
- プリント基板との接続に適したPCBタイプも設定しました。  
（注意 この製品をご使用いただく場合は専用の導通治具をお使い下さい。導通治具に関しては弊社営業担当にご確認ください）



### Structure / 構造



### Terminal (mm)

Note) L size terminal can be used for 14 and 34 poled connectors with insertion cavity specified.  
For details please contact our sales staff.

※Lサイズターミナルの使用できるコネクタは限定されます。  
必ず弊社営業担当にお問い合わせください。

P-02

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 5000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |

M(8100-3382)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |

F(8100-3391)

060 (S)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Gold-plated Auメッキ            |
| Reel (piece)<br>リール(個)                   | 5000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |

M(8230-4883)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Gold-plated Auメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |

F(8240-0135)

060 (M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25              |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 4000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |

M(8100-3383)

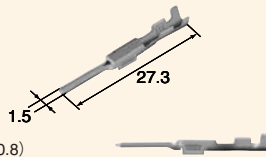
|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75, 0.85~1.25             |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |

F(8100-3392)

Heat-resistant copper alloy=耐熱銅合金

060  
(L)

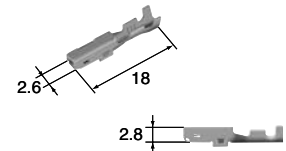
|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                          |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 4000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |



Note)

**M(8100-3384)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                         |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |



Note)

**F(8100-3393)**

Heat-resistant copper alloy=耐熱銅合金

### Housing (mm)

Material / P.B.T.

Color / Natural

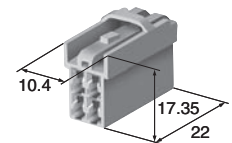
Note) Connector can be used together with 2 mm<sup>2</sup> wire are 14 and 34 poled connectors.

For details of each product, please contact our sales staff.

注) Lサイズターミナルの使用できるコネクタは限定されます。必ず弊社営業担当にお問い合わせください。

4way

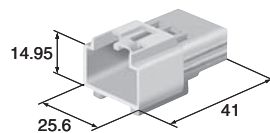
Ref: Terminal part No. P-02  
ターミナル参照頁



**F(6098-3456)**

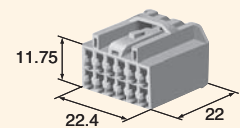
12way

Ref: Terminal part No. P-02  
ターミナル参照頁



**M(6098-3449)**

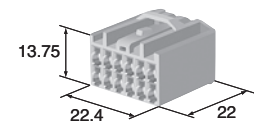
Ref: Terminal part No. P-02  
ターミナル参照頁



**F(6098-3457)**

12way

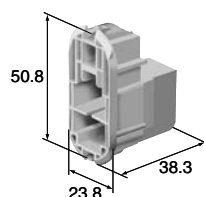
Ref: Terminal part No. P-02  
ターミナル参照頁



**F(6098-4876)**

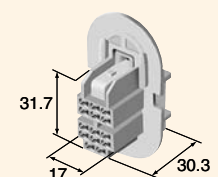
14way

Ref: Terminal part No. P-02  
ターミナル参照頁



**M(6098-3448)**

Ref: Terminal part No. P-02  
ターミナル参照頁



**F(6098-3455)**

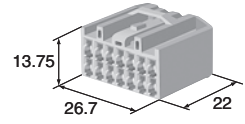
Note)

Note)

P-03

14way

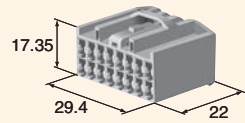
Ref: Terminal part No. P-02  
ターミナル参照頁



Note) **F(6098-4877)**

16way

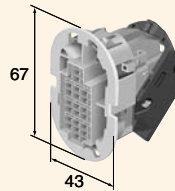
Ref: Terminal part No. P-02  
ターミナル参照頁



**F(6098-3453)**

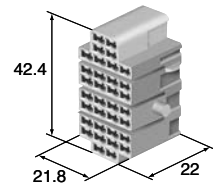
34way

Ref: Terminal part No. P-02  
ターミナル参照頁



Note) **M(6098-3868)**

Ref: Terminal part No. P-02  
ターミナル参照頁



Note) **F(6098-3866)**

# SL SERIES

060, 110(1.5 mm, 2.8 mm)/HYBRID

## Terminal

●Ref:060 Terminal (page P-02), 110 Terminal (page P-09)  
**Note)** L size terminal can be used for 14 poled connectors with insertion cavity specified.  
 For details please contact our sales staff.

●060ターミナルはP-02、110ターミナルはP-09に掲載。  
 注) Lサイズターミナルの使用できるコネクタは限定されます。  
 必ず弊社営業担当にお問い合わせください。

## Housing (mm)

Material/P.B.T.

Color/Natural

No. of way/( ) corresponds to 060, 110, in order from left to right.

**Note)** Connector can be used together with 2 mm<sup>2</sup> wire are 14 poled connectors.

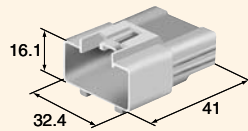
For details of each product, please contact our sales staff.

極数/( )内表示: 左から060極数、110極数  
 注) Lサイズターミナルの使用できるコネクタは限定されます。  
 必ず弊社営業担当にお問い合わせください。

Ref: Terminal part No. [060] P-02  
 ターミナル参照頁 [110] P-09

Ref: Terminal part No. [060] P-02  
 ターミナル参照頁 [110] P-09

14way  
(10+4)

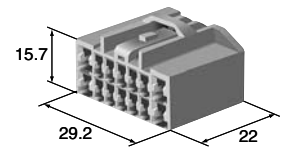


Note)

**M(6098-3450)**

Note)

**F(6098-3458)**



# SL SERIES

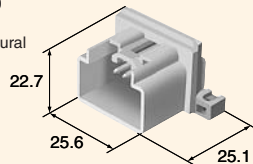
060(1.5 mm)/PCB

## Housing (mm)

Material/P.B.T.

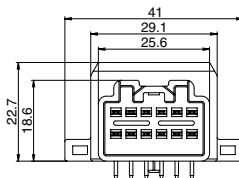
12way

Connector F part No. (6098-3457)  
 Fコネクタ品番  
 Terminal type 060  
 端子タイプ  
 Color Natural  
 色相

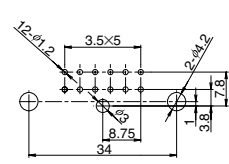


**M(6098-4912)**

●Dimensional drawing

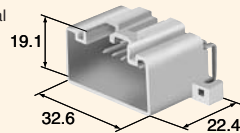


●Mounting drawing



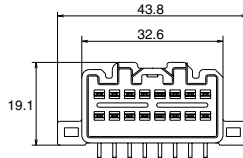
16way

Connector F part No. (6098-3453)  
 Fコネクタ品番  
 Terminal type 060  
 端子タイプ  
 Color Natural  
 色相

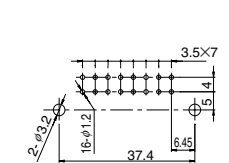


**M(6098-3451)**

●Dimensional drawing

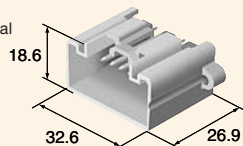


●Mounting drawing



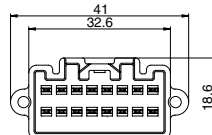
16way  
(Vertical type)  
(垂直)

Connector F part No. (6098-3453)  
 Fコネクタ品番  
 Terminal type 060  
 端子タイプ  
 Color Natural  
 色相

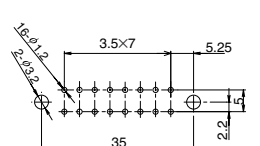


**M(6098-4892)**

●Dimensional drawing



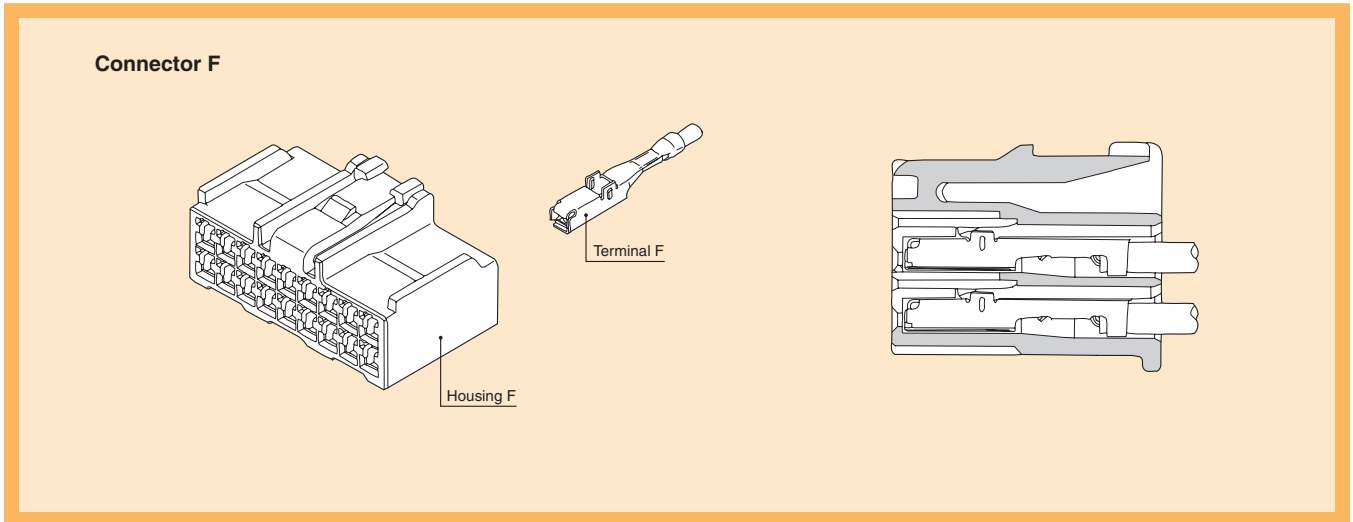
●Mounting drawing



P-05

This series is based on DL connector, which had been single locking mechanism.  
DLシリーズをベースとし、単係止化したコネクタです。

### Structure / 構造

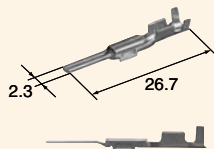


### Terminal (mm)

Regarding "Gold-plated Terminal", please see "A-24".

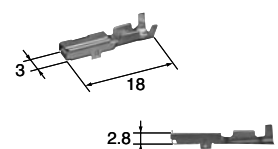
AuメッキターミナルはA-24に掲載。

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                       |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



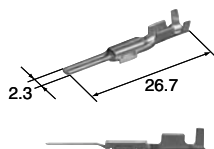
**M(8230-4492)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5             |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



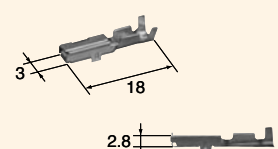
**F(8240-4882)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25                      |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 5000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



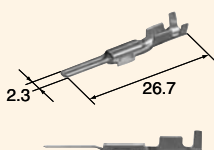
**M(8230-4502)**

|  |                     |
|--|---------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.5~1.25            |
| Material<br>材質                           | Brass<br>黄銅         |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ |
| Reel (piece)<br>リール(個)                   | 4000                |
| Thickness (mm)<br>板厚                     | 0.25                |



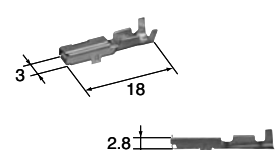
**F(8240-4892)**

|  |                               |
|--|-------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                           |
| Material<br>材質                           | Brass<br>黄銅                   |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                          |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.64) |



**M(8230-4512)**

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0                            |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                           |
| Thickness (mm)<br>板厚                     | 0.25                           |



**F(8240-4942)**

Heat-resistant copper alloy=耐熱銅合金

P-06

090

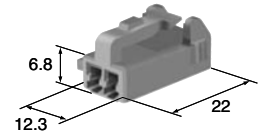
## Housing (mm)

Material / P.B.T.

Color / Natural

2way

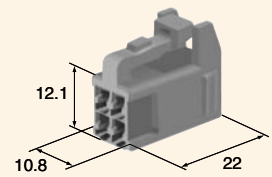
Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6240-5337)**

4way

Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6240-0538)**

6way

Ref: Terminal part No. P-06  
ターミナル参照頁

Note  
備考  
With body fastening clamp  
回り止めクランプ付

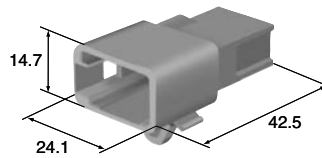
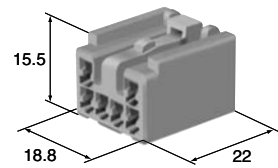


Plate thickness range for clamp :  
t=0.6~2.0mm  
Hole=7.2mm×12mm

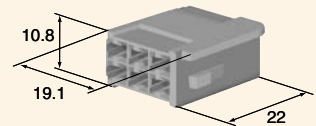
**M(6098-2679)**

Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6240-5339)**

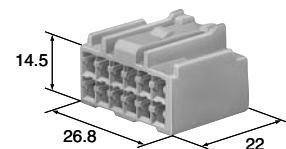
Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6098-2680)**

12way

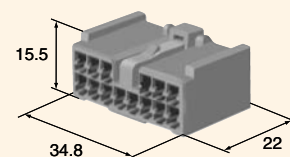
Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6098-1714)**

14way

Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6098-1747)**

Plate thickness range for clamp=クランプ適用板厚

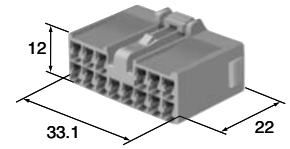
P-07

# SL SERIES

090(2.3 mm) / STANDARD

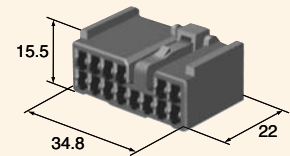
14way

Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6098-2101)**

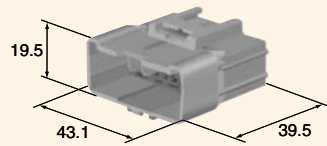
Ref: Terminal part No. P-06  
ターミナル参照頁  
Color Black  
色相



**F(6098-1774)**

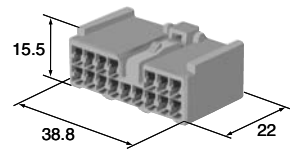
16way

Ref: Terminal part No. P-06  
ターミナル参照頁



**M(6098-1744)**

Ref: Terminal part No. P-06  
ターミナル参照頁

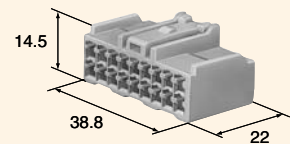


**F(6098-1746)**

P-08

18way

Ref: Terminal part No. P-06  
ターミナル参照頁



**F(6098-1627)**

# SL SERIES

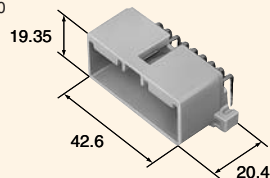
090(2.3 mm) / PCB

## Housing (mm)

Material / P.B.T.

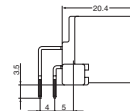
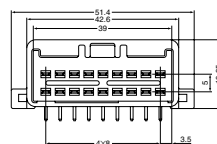
18way

Connector F part No. (6098-1622)  
Fコネクタ品番  
Terminal type 090  
端子タイプ  
Color Natural  
色相

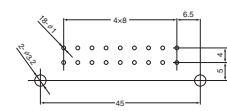


**M(6098-1622)**

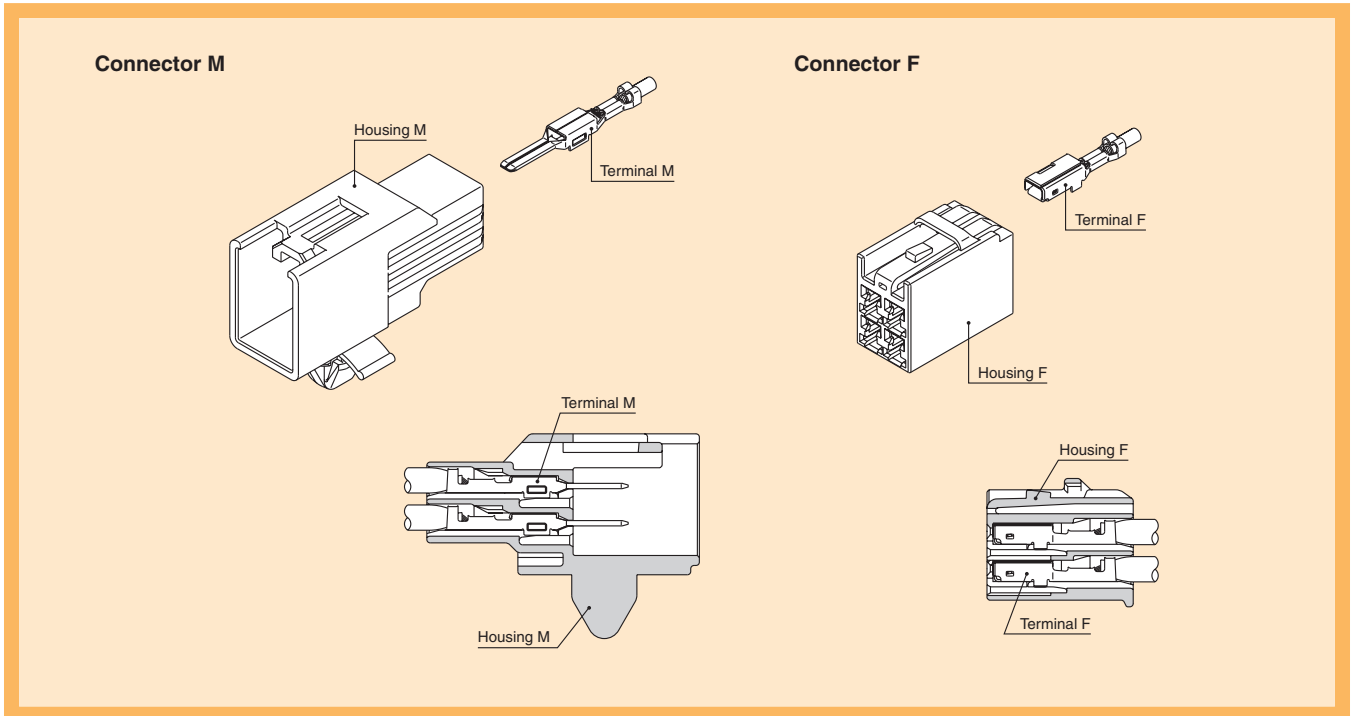
### ● Dimensional drawing



### ● Mounting drawing



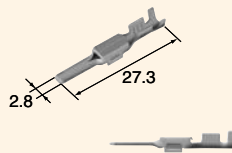
### Structure / 構造



### Terminal (mm)

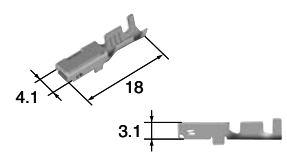
110 (S)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.8)   |



M(8100-3385)

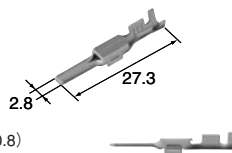
|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3                         |



F(8100-3394)

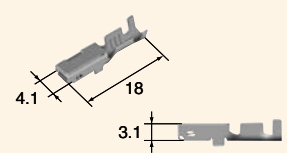
110 (M)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                   |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.8)   |



M(8100-3386)

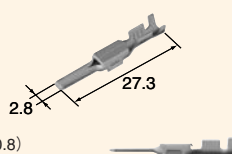
|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.85~1.25                   |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3                         |



F(8100-3395)

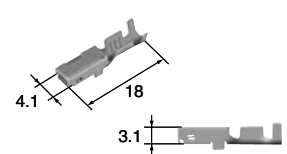
110 (L)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3 (Tab thickness : 0.8)   |



M(8100-3387)

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 2000                        |
| Thickness (mm)<br>板厚                     | 0.3                         |



F(8100-3396)

Heat-resistant copper alloy=耐熱銅合金



# SL SERIES

110(2.8 mm) / STANDARD

## Housing (mm)

Material / P.B.T.

Color / Natural

4way

Ref: Terminal part No.  
ターミナル参照頁 P-09

Note  
備考

With body fastening clamp  
回り止めクランプ付

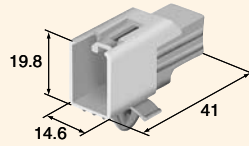
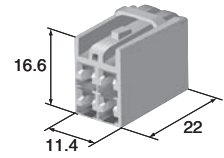


Plate thickness range for clamp :  
t=0.6~2.0mm  
Hole=7.2mm×10.2mm

**M(6098-3452)**

Ref: Terminal part No.  
ターミナル参照頁 P-09



**F(6098-3459)**

Plate thickness range for clamp=クランプ適用板厚

# SL SERIES

110, 312(2.8 mm, 7.8 mm) / HYBRID

## Terminal

●Ref:110 Terminal (page P-09), 312 Terminal (page A-33)

●110ターミナルはP-09、312ターミナルはA-33に掲載。

## Housing (mm)

Material / P.B.T.

No. of way / ( ) corresponds to 110, 312, in order from left to right.

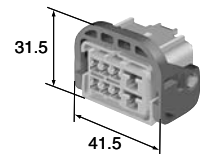
極数 / ( ) 内表示 : 左から110極数、312極数

P-10

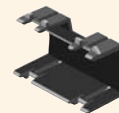
8way  
(6+2)

Ref: Terminal part No.  
ターミナル参照頁 [110] P-09  
[312] A-33

Color  
色相 Natural



**F(6950-1176)**



Cover No. **(6911-2452)**

# SL SERIES

187, 312(4.8 mm, 7.8 mm)/HYBRID

## Terminal

●Ref:187 Terminal (page A-30), 312 Terminal (page A-33)

●187ターミナルはA-30、312ターミナルはA-33に掲載。

## Housing (mm)

Material/P.B.T.

Color/Natural

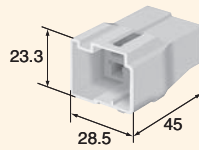
No. of way/( ) corresponds to 187, 312, in order from left to right.

極数/( )内表示：左から187極数、312極数

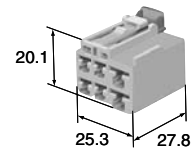
Ref: Terminal part No. [187] A-30  
ターミナル参照頁 [312] A-33

Ref: Terminal part No. [187] A-30  
ターミナル参照頁 [312] A-33

6way  
(4+2)



M(6098-2729)



F(6098-2676)

# SL SERIES

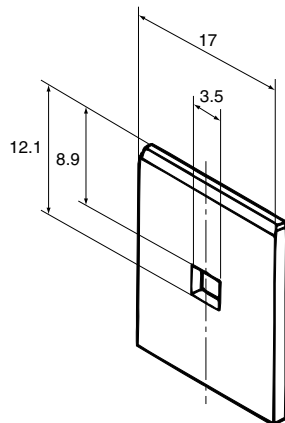
## BRACKETS

### ▶▶ Bracket for attaching (mm) ◀◀

060 / STANDARD For 12 way

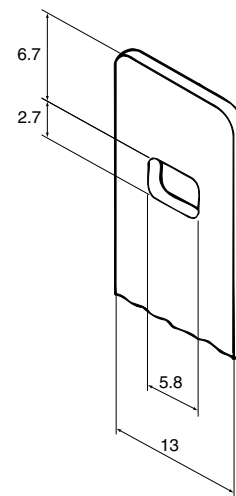
060 / HYBRID For 14 (10+4) way

090 / STANDARD For 16 way



t=1.4mm

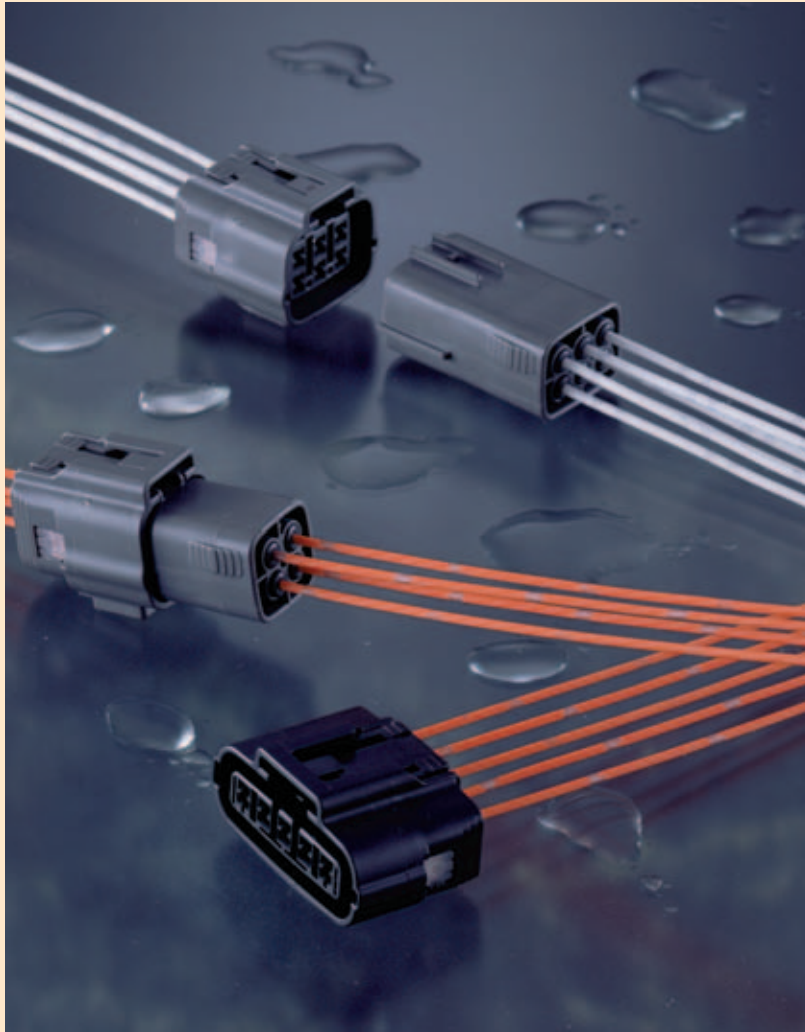
187 / HYBRID For 6 (4+2) way



t=1.2mm

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing. Please contact our sales staff.

※上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。



# SL SEALED SERIES

Q-01

## Features

The SL sealed connector series is a highly reliable connector with a single locking structure.

This series consists of 040, 060, 090, and 312 types classified according to terminal size, covering an extensive array of applications from signal to power circuits.

- An inertia locking system is used to prevent semi-engagement.
- These connectors can be directly secured to a bracket on the car body.

In addition, an extra clip can be attached to the connector to secure it to the car body.

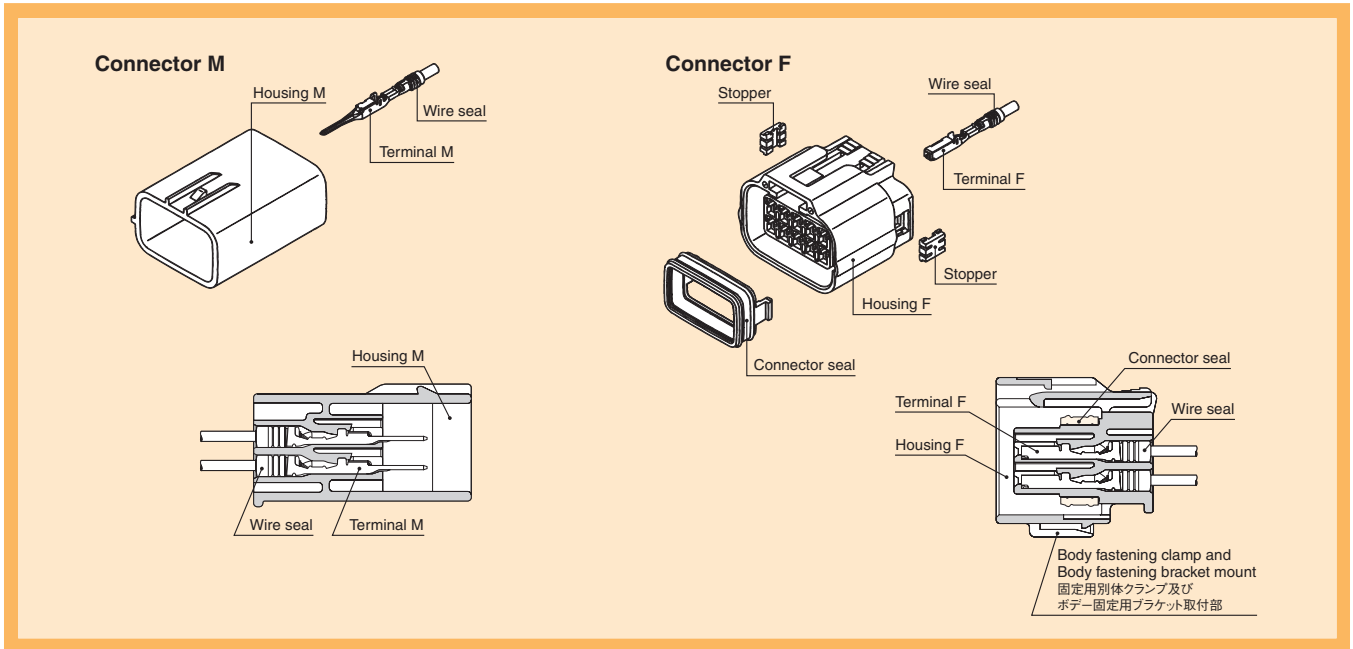
(Note: Please use a dedicated jig for this connector series. Our sales staff are available for inquiries related to this jig.)

## 特長

SL防水シリーズは、単係止構造でより信頼性を高めたコネクタです。ターミナルサイズにより040・060・090・312で構成されており、信号回路からパワー回路まで幅広くご利用いただけます。

- コネクタ半嵌合の起きにくい慣性ロック方式です。
- コネクタは、ボデー側のブラケットに直接固定することができます。またコネクタにはボデーに固定するためのクランプ（クリップ）を装着することができます。  
(注意 この製品をご使用いただく場合は専用の導通治具をお使い下さい。導通治具に関しては弊社営業担当にご確認ください)

### Structure / 構造



### Terminal

●Ref: 040 Terminal List (Page O-02)

●040ターミナルはO-02に掲載。

### Wire seals

●Ref: 040 Wire seal List (Page O-03)

●040ワイヤシールはO-03に掲載。

### Dummy plugs

●Ref: 040 Dummy plug List (Page O-03)

●040ダミー栓はO-03に掲載。

### Body fastening clamp

●Ref: Body fastening clamp List (Page Q-18)

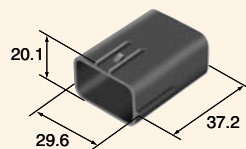
●固定用クランプはQ-18に掲載。

### Housing (mm)

Material / P.B.T.

8way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03  |
| Color<br>色相                        | Black |



M(6181-0520)

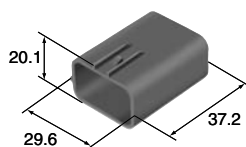
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03  |
| Color<br>色相                        | Black |



F(6189-0767)

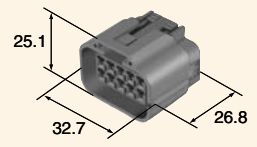
10way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03      |
| Color<br>色相                        | Dark Gray |



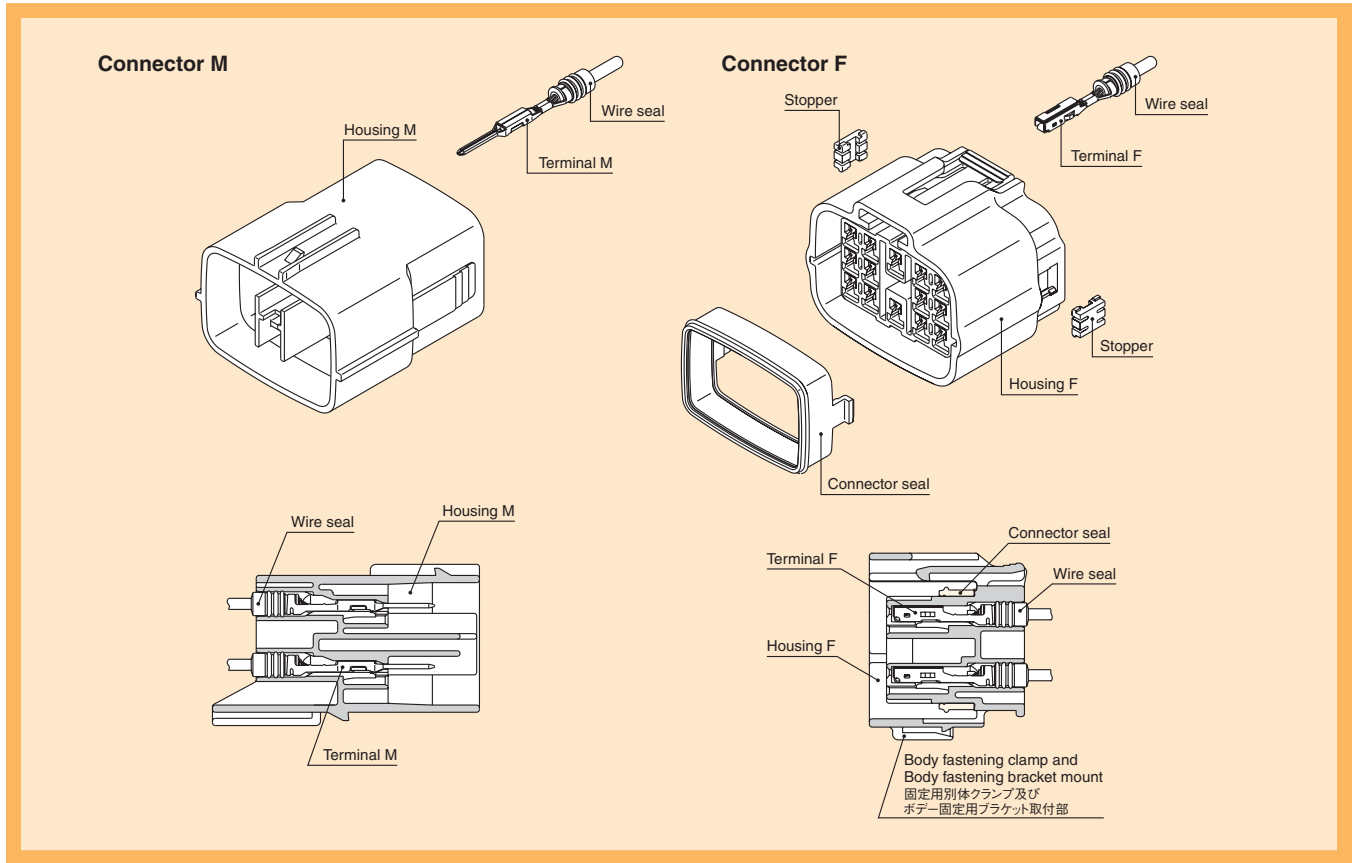
M(6181-0521)

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-02      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | O-03      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | O-03      |
| Color<br>色相                        | Dark Gray |



F(6189-0768)

### Structure / 構造



Q-03

### Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 4000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |

**M(8100-3388)**

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                      |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Gold-plated Auメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |

**M(8100-3504)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |

**F(8100-3397)**

|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.3~0.5                     |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Gold-plated Auメッキ           |
| Reel (piece)<br>リール(個)                   | 4000                        |
| Thickness (mm)<br>板厚                     | 0.25                        |

**F(8100-3402)**

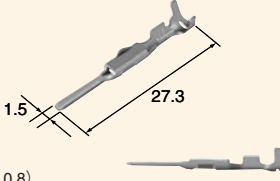
Heat-resistant copper alloy=耐熱銅合金

060  
(S)

# SL SEALED SERIES

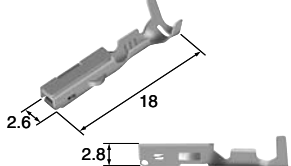
060(1.5 mm) / STANDARD

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                    |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 3500                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |



**M(8100-3389)**

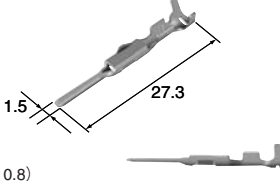
|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                   |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                        |
| Thickness (mm)<br>板厚                     | 0.25                        |



**F(8100-3398)**

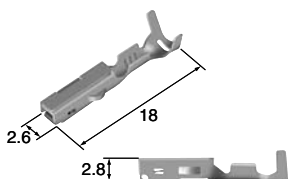
060  
(M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 0.75~0.85                    |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Gold-plated Auメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |



**M(8100-3403)**

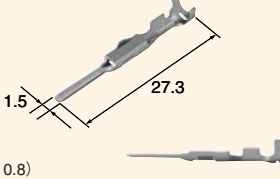
|  |                             |
|--|-----------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                    |
| Material<br>材質                           | Heat-resistant copper alloy |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ            |
| Reel (piece)<br>リール(個)                   | 3500                        |
| Thickness (mm)<br>板厚                     | 0.25                        |



**F(8100-3399)**

060  
(L)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 1.25~2.0                     |
| Material<br>材質                           | Heat-resistant copper alloy  |
| Surface treatment<br>表面処理                | Tin-plated Snメッキ             |
| Reel (piece)<br>リール(個)                   | 3500                         |
| Thickness (mm)<br>板厚                     | 0.3<br>(Tab thickness : 0.8) |



**M(8100-3390)**

Heat-resistant copper alloy=耐熱銅合金

## Wire seals

●Ref: 060 Wire seal List (Page Q-06)

●060ワイヤシールはQ-06に掲載。

## Dummy plugs

●Ref: 060 Dummy plug List (Page Q-07)

●060ダミー栓はQ-07に掲載。

## Housing (mm)

Material / P.B.T.

2way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-1076)**

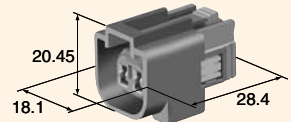
2way

|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE2 |



**M(6181-6509)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



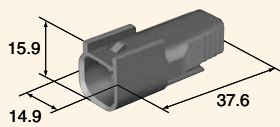
**F(6189-1073)**

# SL SEALED SERIES

060(1.5 mm) / STANDARD

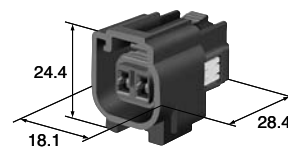
2way

|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Black               |
| Note<br>備考                         | Q-18<br>Clamp:TYPE2 |



**M(6181-6492)**

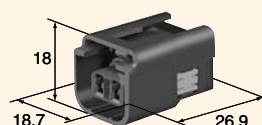
|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Black               |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



**F(6189-1115)**

2way

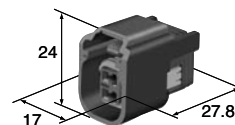
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-1147)**

2way

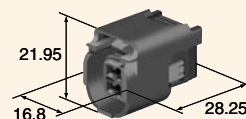
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-1144)**

2way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



**F(6189-1150)**

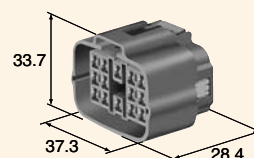
14way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



**M(6181-0629)**

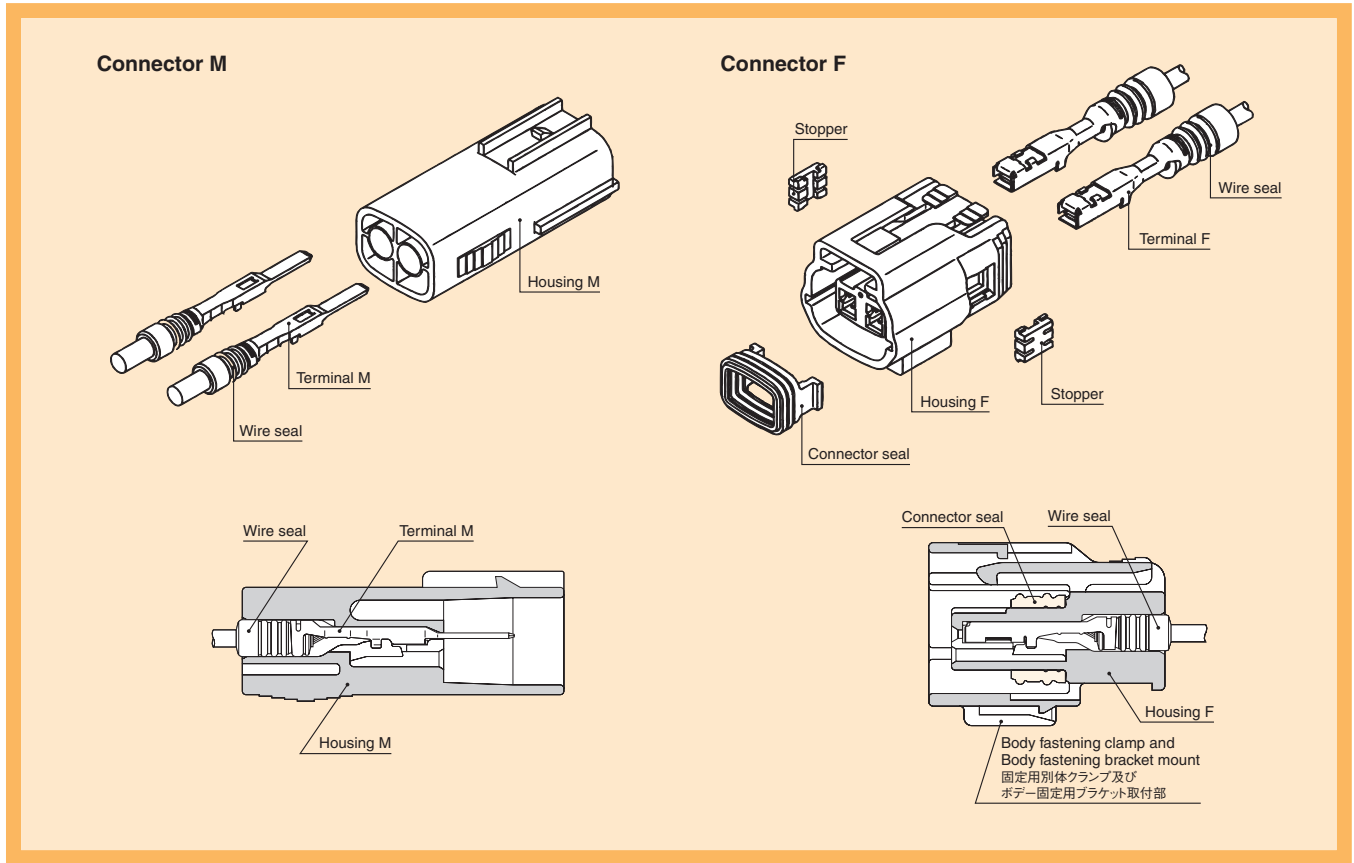
|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-03                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



**F(6189-1004)**

Q-05

## Structure / 構造



Q-06

## Terminal

●Ref: 090 Terminal List (Page O-07)

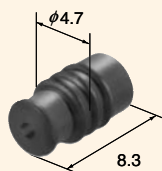
●090ターミナルはO-07に掲載。

## Wire seals (mm)

●The wire seals are common to M and F.

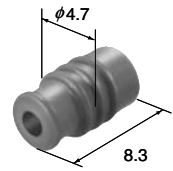
●ワイヤシールはM、F共用です。

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.4 mm below 1.6 mm<br>1.4 mmを越え1.6 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Black  |
| Pack (piece)<br>収容数(個)                 | 2000   |



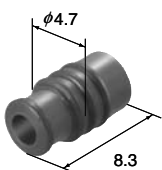
S Type (7165-0516)

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 1.6 mm below 2.4 mm<br>1.6 mmを越え2.4 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Gray   |
| Pack (piece)<br>収容数(個)                 | 2000   |



M Type (7165-0515)

|  |  |
|--|--|
| Cable overall diameter (mm)<br>電線仕上り外径 | Over than 2.4 mm below 2.7 mm<br>2.4 mmを越え2.7 mm以下 |
| Material<br>材質                         | Silicone   |
| Color<br>色相                            | Dark Green   |
| Pack (piece)<br>収容数(個)                 | 2000   |



L Type (7165-0514)

090



# SL SEALED SERIES

090(2.3 mm) / STANDARD

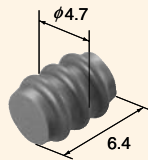
## Dummy plugs (mm)

- Dummy plugs are common to M and F.
- Dummy plugs are used to blind unused terminal holes.

- ダミー栓はM、F共用です。
- 不要なターミナル穴を塞ぐために、ダミー栓を使用します。

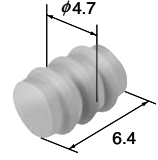
090

|                        |       |
|------------------------|-------|
| Material<br>材質         | N.B.R |
| Color<br>色相            | Brown |
| Pack (piece)<br>収容数(個) | 1000  |



(7161-9787)

|                        |          |
|------------------------|----------|
| Material<br>材質         | Silicone |
| Color<br>色相            | Green    |
| Pack (piece)<br>収容数(個) | 1000     |



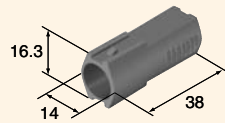
(7165-0193)

## Housing (mm)

Material / P.B.T.

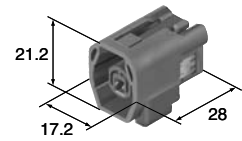
1way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



M(6181-0436)

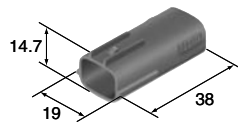
|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



F(6189-0639)

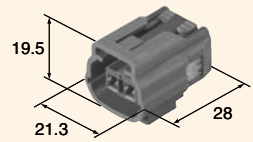
2way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



M(6181-0437)

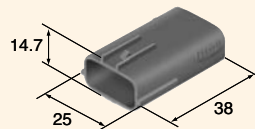
|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



F(6189-0640)

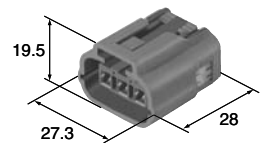
3way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



M(6181-0438)

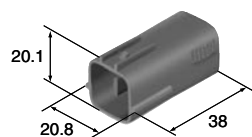
|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



F(6189-0638)

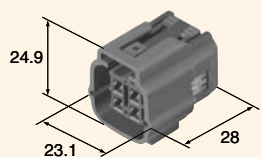
4way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



M(6181-0439)

|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



F(6189-0643)

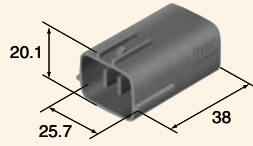
Q-07

# SL SEALED SERIES

090(2.3 mm) / STANDARD

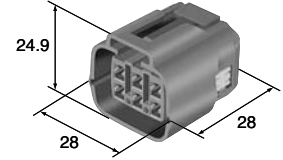
6way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



**M(6181-0440)**

|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



**F(6189-0648)**

Q-08

# SL SEALED SERIES

090(2.3 mm) / DIRECT CONNECTION TO MATING DEVICES

These are sealed connectors (only female type) which are directly connected to various kinds of electric units, functional parts, and devices.

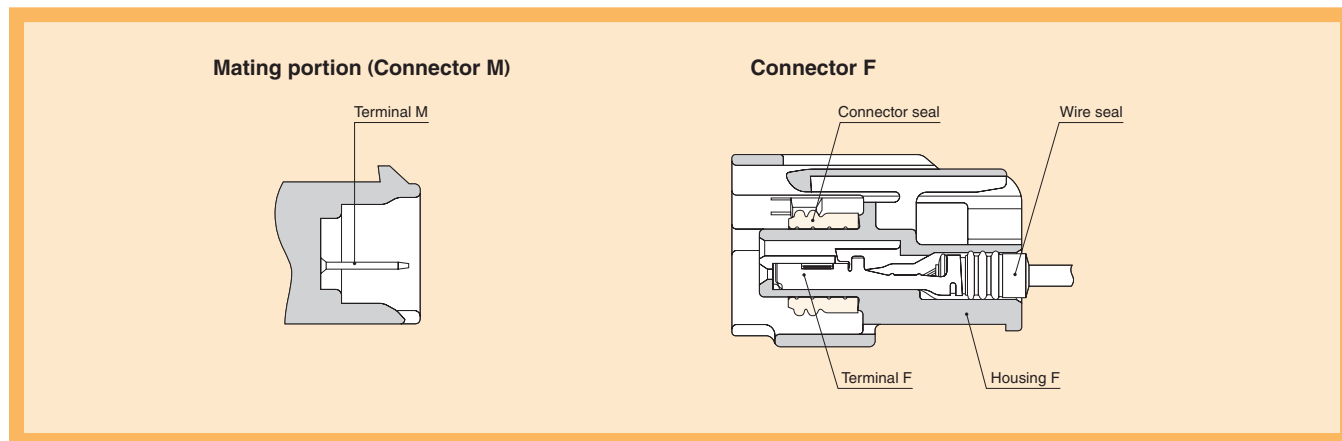
It makes the connection simpler and more reliable.

They can be adjusted to meet specific requirements of each counter units and / or parts.

機器等に直接接続する防水コネクタです。

それぞれの機器に合わせた極数の設定が出来ます。

## Structure / 構造

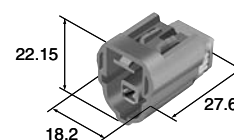


## Housing (mm)

Material / P.B.T..

1way

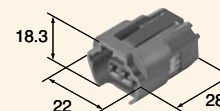
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Green |



**F(6189-6920)**

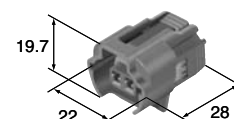
2way  
(Special Shape)  
(異形)

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



**F(6189-0650)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



**F(6189-0651)**

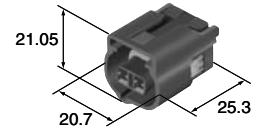
Q-09

# SL SEALED SERIES

090(2.3 mm)/DIRECT CONNECTION TO MATING DEVICES

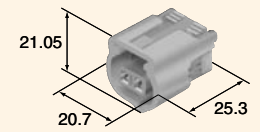
2way  
(Special Shape)  
(異形)

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



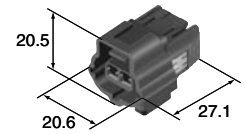
**F(6189-0642)**

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07    |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06    |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07    |
| Color<br>色相                        | Natural |



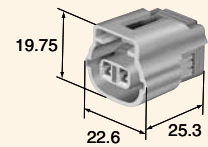
**F(6189-0641)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



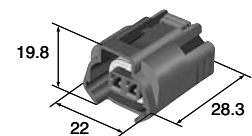
**F(6189-0653)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



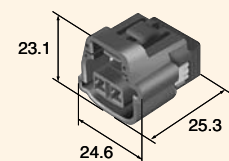
**F(6189-1091)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-6891)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



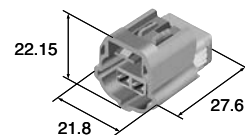
**F(6189-1086)**

Q-10

2way

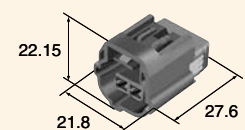
2way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07       |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07       |
| Color<br>色相                        | Light Gray |



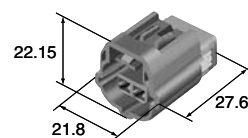
**F(6189-6922)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



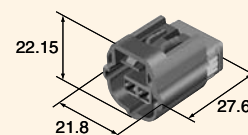
**F(6189-6866)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



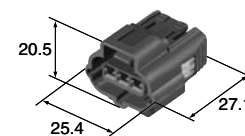
**F(6189-6921)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



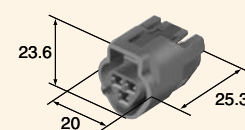
**F(6189-6867)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-0645)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



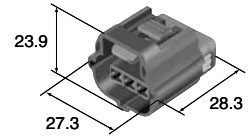
**F(6189-0646)**

3way

Q-11

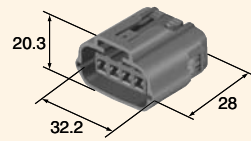
3way

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



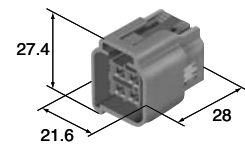
**F(6189-6870)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



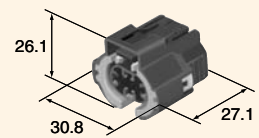
**F(6189-0644)**

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07      |
| Color<br>色相                        | Dark Gray |



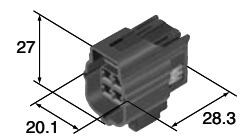
**F(6189-0652)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



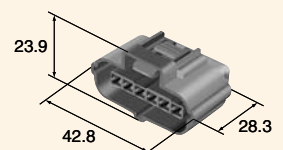
**F(6189-0647)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-0718)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | O-07  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-06  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-07  |
| Color<br>色相                        | Black |



**F(6189-6871)**

Q-12

4way

# SL SEALED SERIES

090(2.3 mm)/DIRECT CONNECTION TO MATING DEVICES

5way

Ref: Terminal part No. O-07

ターミナル参照頁

Ref: Wire seal No. Q-06

ワイヤシール参照頁

Ref: Dummy plug No. Q-07

ダミー栓参照頁

Color Black

色相



**F(6189-0657)**

### Terminal

●Ref:090 Terminal List (Page B-11)

●090ターミナルはB-11に掲載。

### Wire seals (mm)

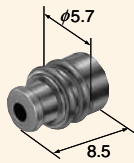
●The wire seals are common to M and F.

●P6 : For 6mm pitch housing

●ワイヤシールはM、F共用です。

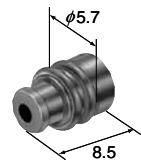
●P6 : 6ミリピッチ用

|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AX・AEX/0.3) (AVS/0.3) (AVSS/0.3~0.85)<br>(AVSSX・AESSX/0.3~0.75) (CAVUS/0.85~1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 1.4~2.0  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Dark Brown   |
| Pack (piece)<br>収容数(個)                   | 2000   |



S type (7165-0349)

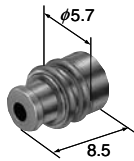
|  |  |
|--|--|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/0.5~0.85) (AVX・AEX/0.5~0.75)<br>(AVS/0.5~0.85) (AVSS/1.25)<br>(AVSSX・AESSX/1.25) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.0~2.5  |
| Material<br>材質                           | Silicone   |
| Color<br>色相                              | Dark Green   |
| Pack (piece)<br>収容数(個)                   | 2000   |



M type (7165-0395)

090  
(For P6)

|  |   |
|--|---|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | (AV/1.25) (AVX・AEX/1.25) (AVS/1.25)<br>(AVSS/2.0) (AVSSX・AESSX/2.0) |
| Cable overall diameter (mm)<br>電線仕上り外径   | 2.5~2.9   |
| Material<br>材質                           | Silicone  |
| Color<br>色相                              | Dark Gray   |
| Pack (piece)<br>収容数(個)                   | 2000  |



L type (7165-0351)

Q-14

### Dummy plugs (mm)

●Dummy plugs are common to M and F.

●Dummy plugs are used to blind unused terminal holes.

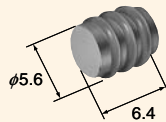
●P6 : For 6mm pitch housing

●ダミー栓はM、F共用です。

●不必要なターミナル穴を塞ぐために、ダミー栓を使用します。

●P6 : 6ミリピッチ用

|                        |        |
|------------------------|--------|
| Material<br>材質         | N.B.R. |
| Color<br>色相            | Black  |
| Pack (piece)<br>収容数(個) | 1000   |



For P6 (7160-9465)

090  
(For P6)



## Housing (mm)

Material / P.B.T.

3way

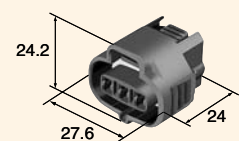
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-14  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-14  |
| Color<br>色相                        | Black |



**F(6189-6898)**

3way

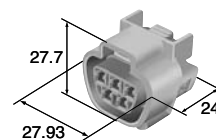
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11  |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-14  |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-14  |
| Color<br>色相                        | Black |



**F(6189-6912)**

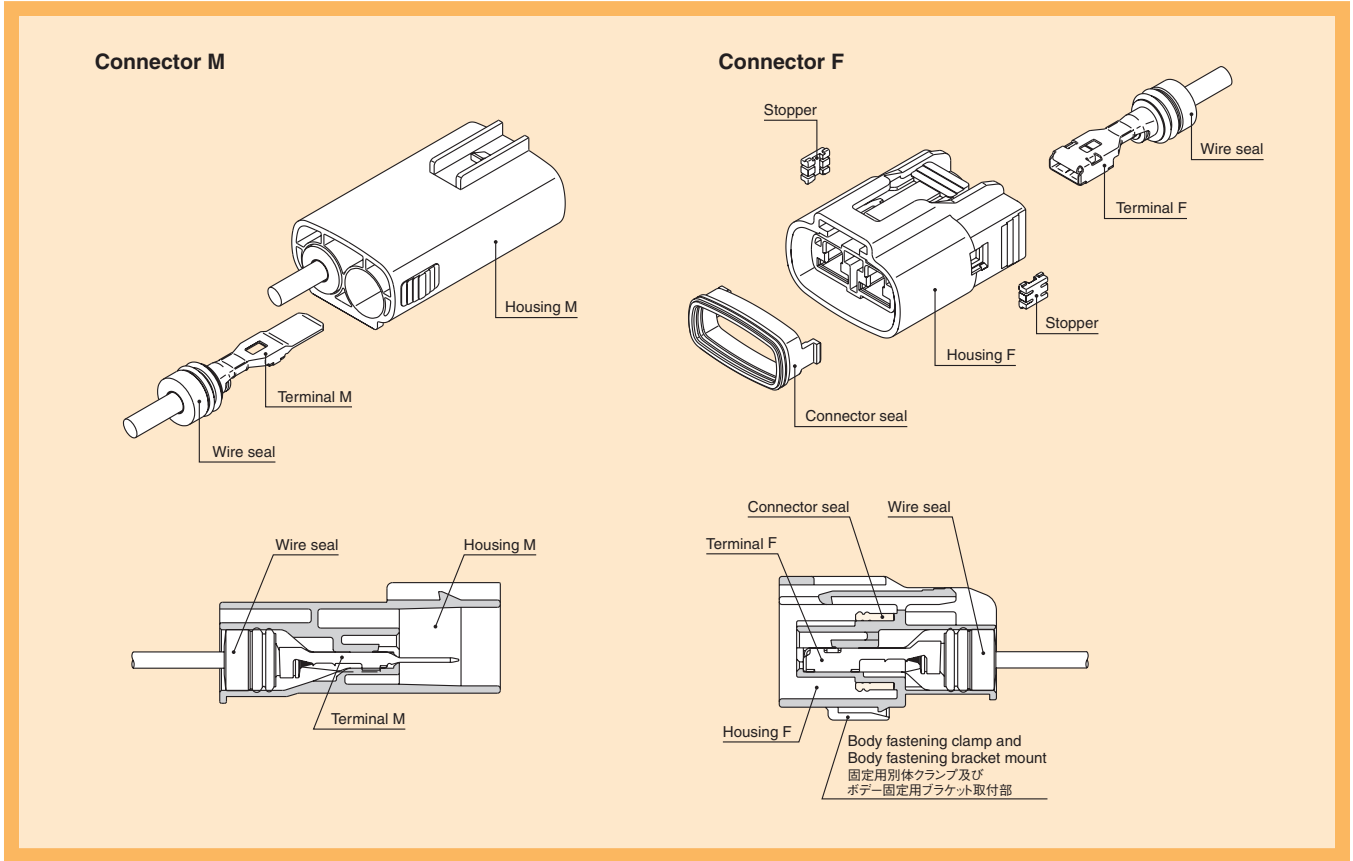
5way

|                                    |            |
|------------------------------------|------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | B-11       |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | Q-14       |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | Q-14       |
| Color<br>色相                        | Light Gray |



**F(6189-1085)**

### Structure / 構造



Q-16

### Terminal (mm)

※For terminal selection, please contact our sales staff.

※ターミナル選定にあたっては、必ず弊社営業担当にお問い合わせください。

312 (M)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 1000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |

M(8100-3259)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 2.0~3.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |

F(8100-3257)

312 (L)

|  |                              |
|--|------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                      |
| Material<br>材質                           | Brass<br>黄銅                  |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ          |
| Reel (piece)<br>リール(個)                   | 1000                         |
| Thickness (mm)<br>板厚                     | 0.4<br>(Tab thickness : 0.8) |

M(8100-3260)

|  |                                |
|--|--------------------------------|
| Cable size (mm <sup>2</sup> )<br>適用電線サイズ | 5.0~8.0                        |
| Material<br>材質                           | Heat-resistant<br>copper alloy |
| Surface treatment<br>表面処理                | Tin-plated<br>Snメッキ            |
| Reel (piece)<br>リール(個)                   | 1000                           |
| Thickness (mm)<br>板厚                     | 0.4                            |

F(8100-3258)

Heat-resistant copper alloy=耐熱銅合金

## Wire seals

●Ref: 312 Wire seal List (Page B-24)

●312ワイヤシールはB-24に掲載。

## Dummy plugs

●Ref: 312 Dummy plug List (Page B-24)

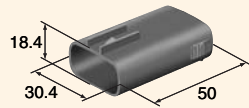
●312ダミー栓はB-24に掲載。

## Housing (mm)

Material / P.B.T.

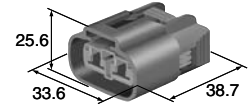
2way

|                                    |           |
|------------------------------------|-----------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-16      |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24      |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24      |
| Color<br>色相                        | Dark Gray |



**M(6181-0613)**

|                                    |                     |
|------------------------------------|---------------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | Q-16                |
| Ref: Wire seal No.<br>ワイヤシール参照頁    | B-24                |
| Ref: Dummy plug No.<br>ダミー栓参照頁     | B-24                |
| Color<br>色相                        | Dark Gray           |
| Note<br>備考                         | Q-18<br>Clamp:TYPE1 |



**F(6189-0915)**

### ▶▶ Body fastening clamp (mm) ◀◀

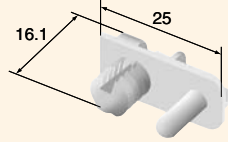
040 standard type, 060 standard type, 090 standard type and 312 standard type connectors, the clamp can be installed.

※The detail dimensions for the mounting portion are specified in drawing

040標準・060標準・090標準・312標準のコネクタには、ボデー固定用クランプを必要に応じて取付けることができます。

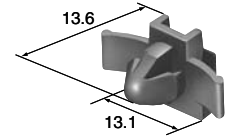
※取付部詳細寸法は、別途図面により規定します。

|                      |         |
|----------------------|---------|
| Material<br>材質       | PA66    |
| Color<br>色相          | Natural |
| Thickness (mm)<br>板厚 | t=0.2   |
| hole size<br>穴径      | φ 7.0   |



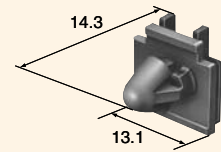
TYPE 2 (6810-4982) (CLIP-060-2M)

|                      |           |
|----------------------|-----------|
| Material<br>材質       | P.B.T.    |
| Color<br>色相          | Dark Gray |
| Thickness (mm)<br>板厚 | t=0.6~2.0 |
| hole size<br>穴径      | 7.2×10.2  |



TYPE 1 (他社製) (CLIP LA0167C11)

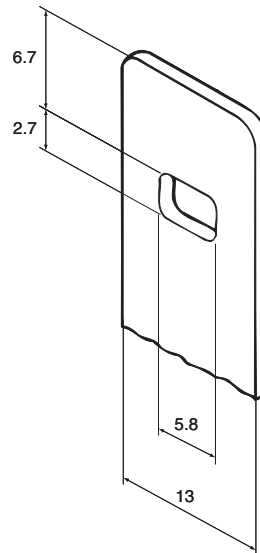
|                      |           |
|----------------------|-----------|
| Material<br>材質       | P.B.T.    |
| Color<br>色相          | Brown     |
| Thickness (mm)<br>板厚 | t=0.7~2.0 |
| hole size<br>穴径      | 7.2×10.2  |



TYPE 1 (6810-1584) (CLIP 71-102-BR)

### ▶▶ Bracket for attaching (mm) ◀◀

|                |                     |
|----------------|---------------------|
| 040 / STANDARD | For 8・10 way        |
| 060 / STANDARD | For 2 (some)・14 way |
| 090 / STANDARD | For 1・2・3・4・6 way   |
| 312 / STANDARD | For 2 way           |



Note)

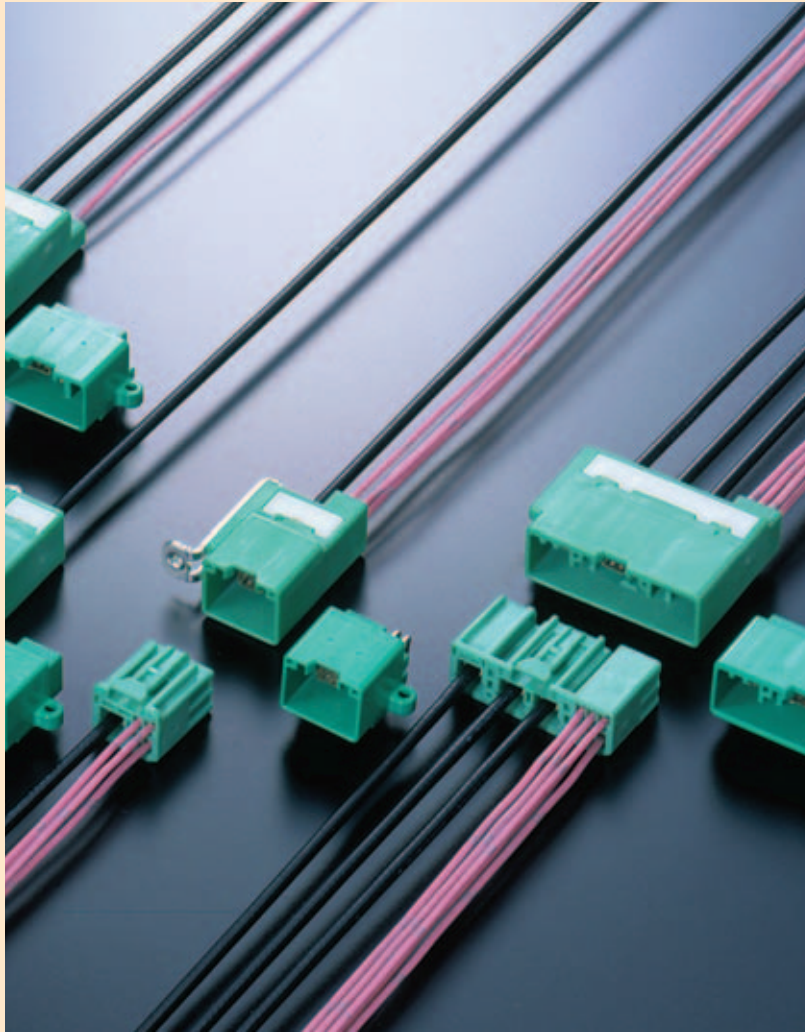
t=1.2mm

Bracket for fixing the body 040 standard type, 060 standard type, 090 standard type and 312 standard type connectors can be installed directly on the bracket on the body as necessary.

Note) The dimensions as shown here are reference dimensions and detail dimensions for mounting portion of the bracket are specified in the official drawing.

Insert the bracket directly into the mount for the body fastening clamp which is provided on the connector.

040標準・060標準・090標準・312標準のコネクタには、必要に応じてボデー側ブラケットに直接取付けることができます。  
注) 上図寸法は参考寸法です。取付部詳細寸法は別途図面により規定しますので、弊社営業担当にお問い合わせください。  
コネクタにあるクランプ取付用のガイドに、直接ブラケットを差し込みます。



# HFC SERIES

## Features

HFC (High Frequency Connector) series are connectors that connect on-board multimedia devices, such as GPS, TV, VICS and etc., and coaxial wires. These are also suitable for mobile telephone and sensor circuit.

- It reduces reflection/transmission loss and restrains noise radiation. It achieved smaller size with higher performance.
- Hybrid types for high frequency coaxial wire and automobile wire (AV) are established. (It supports diversity receiving system).
- Retainer for secondary lock is assembled beforehand and the structure allows the high frequency coaxial wire and AV wire to be set by one operation. Therefore improvement of assembling operation can be planned.

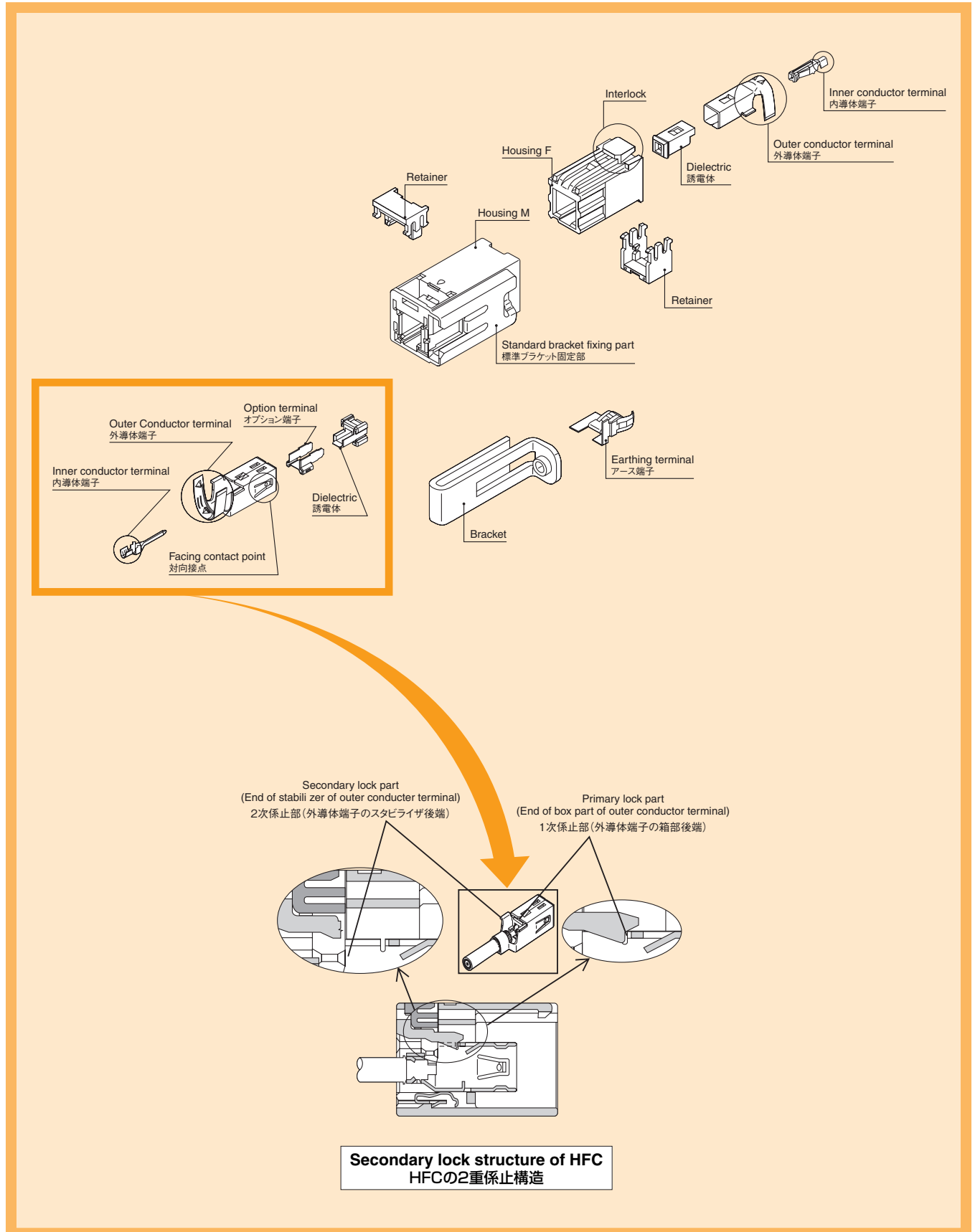
## 特長

HFCシリーズ（高周波コネクタ）はGPS・TV・VICSなどの車載マルチメディア機器と同じ同軸線の接続用コネクタで車載電話・センサ回路にも適したコネクタです。

- 伝送損失、反射、ノイズ放射を抑制し、小型高性能化を実現しています。
- 高周波同軸線と自動車用電線（AV）のハイブリッドタイプを設定しています。（ダイバシティ受信方式に対応しています。）
- 二重係止用リテーナは予め組み付けられており、高周波同軸線とAV線が同一作業でセットできる構造により、組み付け作業の向上が図れます。

R-01

### Structure / 構造



R-02

### Basic specification / 基本仕様

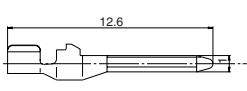
|                                      |                     |  |
|--------------------------------------|---------------------|--|
| <b>Type</b>                          |                     | 1 way coaxial wire<br>1 way coaxial wire + 4 way AV wire<br>1 way coaxial wire + 6 way AV wire<br>2 way coaxial wire + 1 way AV wire<br>3 way coaxial wire + 6 way AV wire |
| <b>Contact resistance</b><br>接触抵抗    | Coaxial wire<br>同軸線 | Max. 10mΩ (Initial / 初期)   |
| <b>Insulation resistance</b><br>絶縁抵抗 | AV wire<br>AV線      | Max. 5mΩ (Initial / 初期)  |
| <b>Insulation resistance</b><br>絶縁抵抗 |                     | 100MΩ or more  |
| <b>Working temperature</b><br>使用温度   |                     | -30°C ~ +80°C  |
| <b>VSWR (2.5GHz)</b>                 |                     | 1.5 (average)  |

|                       |            |                        |  |
|-----------------------|------------|------------------------|--|
| <b>Material</b><br>材質 | M Terminal | Inner conductor<br>内導体 | Brass (Sn plating)<br>黄銅 (Snメッキ)                           |
|                       |            | Outer conductor<br>外導体 |  |
|                       | F Terminal | Inner conductor<br>内導体 | Phosphor bronze for spring (Sn plating)<br>バネ用リン青銅 (Snメッキ) |
|                       |            | Outer conductor<br>外導体 | Brass (Sn plating)<br>黄銅 (Snメッキ)                           |

Note) AV wire = Max. AVSS0.5mm<sup>2</sup> (Terminal is TS040 type:Ref.A-10).  
注) AV線=最大AVSS0.5mm<sup>2</sup>(ターミナルはTS040 : A-10参照)

### Inner conductor terminal (mm)

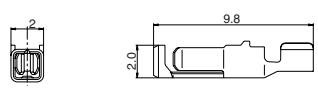
M



- Quantity on one reel (piece)
- リール巻数(個)  
12000

**s(8100-2798) M(8100-2799) L(8100-3204)**

F

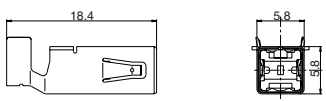


- Quantity on one reel (piece)
- リール巻数(個)  
12000

**s(8100-2801) M(8100-2802) L(8100-3203)**

### Outer conductor terminal (mm)

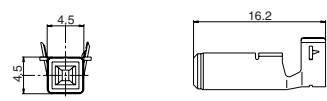
M



- Quantity on one reel (piece)
- リール巻数(個)  
M : 1500  
L : 1000

**M(8100-3457) L(8100-3458)**

F



- Quantity on one reel (piece)
- リール巻数(個)  
M : 1500  
L : 1000

**M(8100-3459) L(8100-3460)**

R-03

### Applicable coaxial wire / 適用同軸線

|   |         |         |      |                     |
|---|---------|---------|------|---------------------|
| Applicable coaxial wire (Note 1)<br>適用同軸線 注1) | 1.5C-2V | 1.5D-2V | 2.4D | Low capacity<br>低容量 |
| Inner conductor terminal<br>内導体ターミナル          | S       | M       | L    | (Note 2)<br>注2)     |
| Outer conductor terminal<br>外導体ターミナル          | M       | M       | L    | L                   |

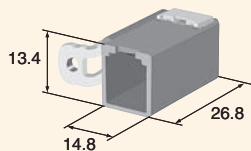
(Note 1) For some coaxial wire and wire makers, it might be inapplicable. Please contact our sales representative for more details.

(Note 2) Please refer to instruction manual (T-250) for matching of applicable coaxial wires and terminals.  
注1) 同軸線、電線メーカーによっては適用できないことがありますので弊社営業担当にお問い合わせ下さい。  
注2) 適用同軸線及び適合ターミナルの組み合わせについては、取扱説明書(T-250)をご参照ください。

### Housing (mm)

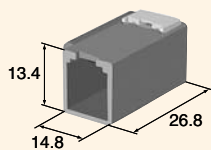
1 way  
coaxial  
wire

|                                    |              |
|------------------------------------|--------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03         |
| Color<br>色相                        | Green        |
| Note<br>備考                         | With bracket |



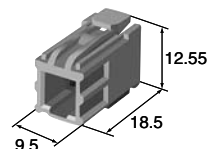
**M(6098-2714) Atype**

|                                    |                 |
|------------------------------------|-----------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03            |
| Color<br>色相                        | Green           |
| Note<br>備考                         | Without bracket |



**M(6098-2712) Atype**

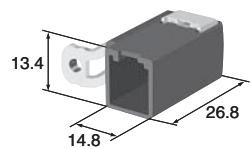
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03  |
| Color<br>色相                        | Green |



**F(6098-2724) Atype**

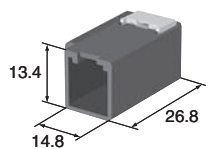
1 way  
coaxial  
wire

|                                    |              |
|------------------------------------|--------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03         |
| Color<br>色相                        | Green        |
| Note<br>備考                         | With bracket |



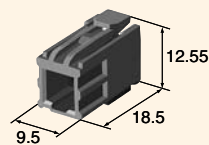
**M(6098-2963) Btype**

|                                    |                 |
|------------------------------------|-----------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03            |
| Color<br>色相                        | Green           |
| Note<br>備考                         | Without bracket |



**M(6098-2965) Btype**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03  |
| Color<br>色相                        | Green |

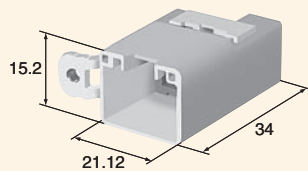


**F(6098-2961) Btype**

R-04

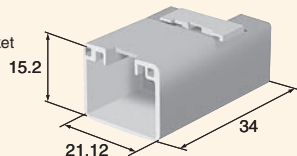
1 way coaxial  
wire + 4 way  
AV wire

|                                    |              |
|------------------------------------|--------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03         |
| Color<br>色相                        | Green        |
| Note<br>備考                         | With bracket |



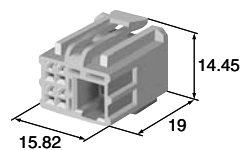
**M(6098-2719)**

|                                    |                 |
|------------------------------------|-----------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03            |
| Color<br>色相                        | Green           |
| Note<br>備考                         | Without bracket |



**M(6098-2718)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03  |
| Color<br>色相                        | Green |

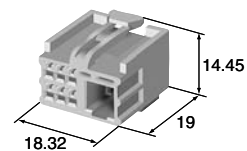


**F(6098-2726)**



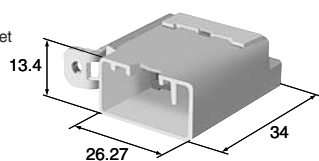
1 way coaxial  
wire + 6 way  
AV wire

|                                    |         |
|------------------------------------|---------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03    |
| Color<br>色相                        | Natural |



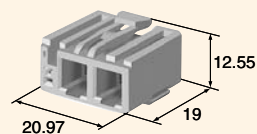
**F(6098-4744)**

|                                    |              |
|------------------------------------|--------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03         |
| Color<br>色相                        | Green        |
| Note<br>備考                         | With bracket |



**M(6098-2722)**

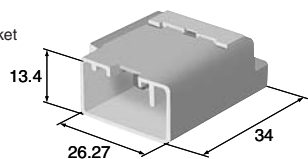
|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03  |
| Color<br>色相                        | Green |



**F(6098-2728)**

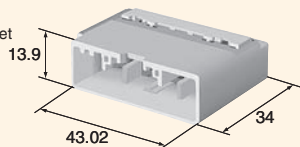
2 way coaxial  
wire + 1 way  
AV wire

|                                    |                 |
|------------------------------------|-----------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03            |
| Color<br>色相                        | Green           |
| Note<br>備考                         | Without bracket |



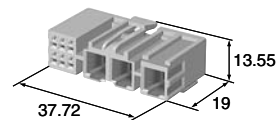
**M(6098-2721)**

|                                    |                 |
|------------------------------------|-----------------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03            |
| Color<br>色相                        | Green           |
| Note<br>備考                         | Without bracket |



**M(6098-2949)**

|                                    |       |
|------------------------------------|-------|
| Ref: Terminal part No.<br>ターミナル参照頁 | R-03  |
| Color<br>色相                        | Green |



**F(6098-2951)**

3 way coaxial  
wire + 6 way  
AV wire

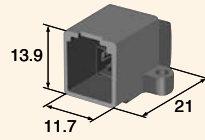
※Without earthing terminal  
アースターミナル無し

R-05

## Housing (mm)

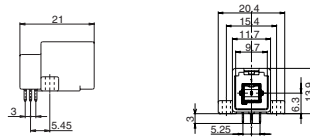
1 way  
coaxial  
wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2724) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Green       |

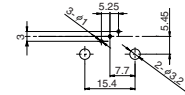


**M(6098-4057) Atype**

● Dimensional drawing

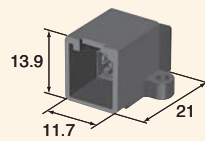


● Mounting drawing



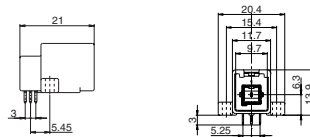
1 way  
coaxial  
wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2961) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Green       |

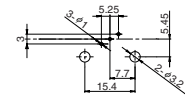


**M(6098-4059) Btype**

● Dimensional drawing

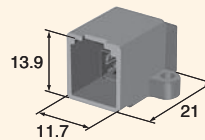


● Mounting drawing



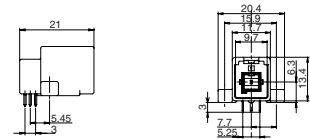
1 way  
coaxial  
wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2724) |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Green       |

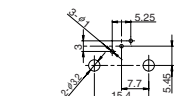


**M(6098-5164) Atype**

● Dimensional drawing



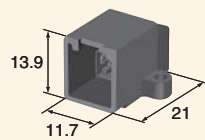
● Mounting drawing



R-06

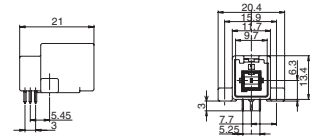
1 way  
coaxial  
wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2961) |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Green       |

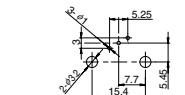


**M(6098-5168) Btype**

● Dimensional drawing

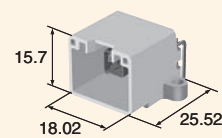


● Mounting drawing



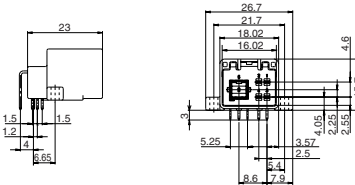
1 way coaxial  
wire + 4 way  
AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2726) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Green       |

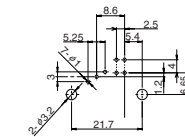


**M(6098-4052)**

● Dimensional drawing

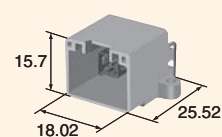


● Mounting drawing



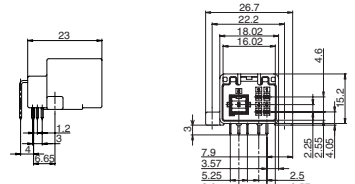
1 way coaxial  
wire + 4 way  
AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2726) |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Green       |

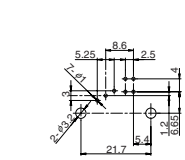


**M(6098-5159)**

● Dimensional drawing

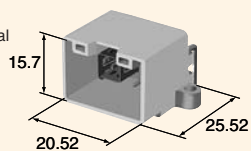


● Mounting drawing



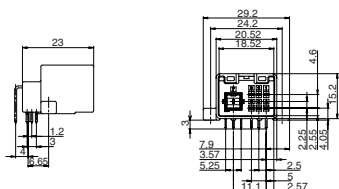
1 way coaxial wire + 6 way AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4744) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Natural     |

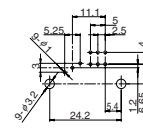


**M(6098-4742)**

● Dimensional drawing

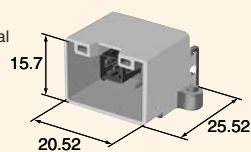


● Mounting drawing



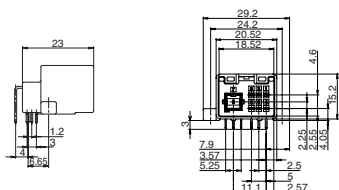
1 way coaxial wire + 6 way AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-4744) |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Natural     |

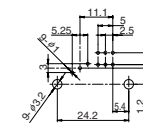


**M(6098-5224)**

● Dimensional drawing

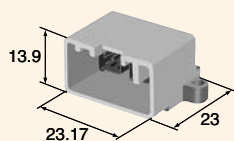


● Mounting drawing



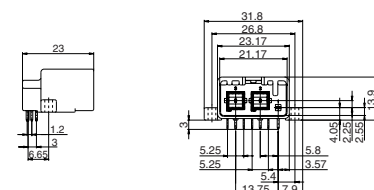
2 way coaxial wire + 1 way AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2728) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Green       |

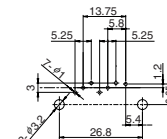


**M(6098-4053)**

● Dimensional drawing

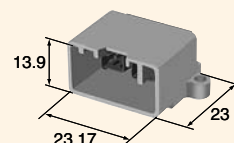


● Mounting drawing



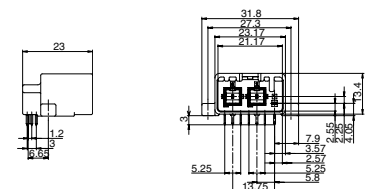
2 way coaxial wire + 1 way AV wire

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2728) |
| Material<br>材質                  | S.P.S.      |
| Color<br>色相                     | Green       |

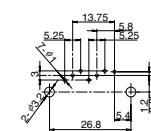


**M(6098-5174)**

● Dimensional drawing

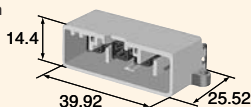


● Mounting drawing



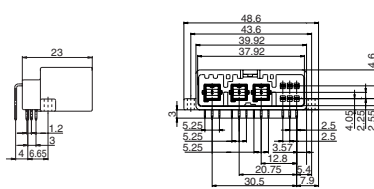
3 way coaxial wire + 6 way AV wire (Horizontal type)

|                                 |             |
|---------------------------------|-------------|
| Connector F part No.<br>Fコネクタ品番 | (6098-2951) |
| Material<br>材質                  | P.B.T.      |
| Color<br>色相                     | Green       |

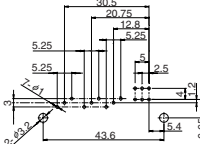


**M(6098-4055)**

● Dimensional drawing



● Mounting drawing



# INDEX

# 索引

(1)

| Part No.  | Page |
|-----------|------|
| 1300-3111 | A-26 |
| 1300-3783 | A-26 |
| 1300-4682 | A-28 |
| 1300-4927 | A-28 |
| 1500-0081 | H-08 |
| 1500-0081 | I-06 |
| 1500-0105 | D-02 |
| 1500-0105 | G-02 |
| 1500-0105 | J-02 |
| 1500-0106 | G-02 |
| 1500-0106 | J-02 |
| 1500-0110 | D-02 |
| 1500-0110 | G-02 |
| 1500-0133 | G-02 |
| 1500-0134 | G-02 |
| 1500-0159 | O-07 |
| 1500-0166 | E-14 |
| 1500-0166 | H-06 |
| 1500-0169 | O-08 |
| 1500-0181 | A-15 |
| 6090-1001 | I-03 |
| 6090-1011 | I-03 |
| 6090-1021 | I-04 |
| 6090-1031 | I-03 |
| 6090-1041 | I-03 |
| 6090-1051 | I-04 |
| 6090-1056 | I-05 |
| 6090-1061 | I-11 |
| 6090-1064 | I-11 |
| 6090-1071 | I-11 |
| 6090-1073 | I-11 |
| 6090-1081 | I-11 |
| 6090-1086 | I-12 |
| 6090-1087 | I-12 |
| 6090-1090 | I-11 |
| 6090-1099 | I-11 |
| 6090-1101 | I-11 |
| 6090-1107 | I-11 |
| 6090-1112 | I-12 |
| 6090-1113 | I-12 |
| 6090-1117 | I-07 |
| 6090-1118 | I-08 |
| 6090-1119 | I-07 |
| 6090-1120 | I-07 |
| 6090-1121 | I-08 |
| 6090-1122 | I-04 |
| 6090-1123 | I-03 |
| 6090-1124 | I-04 |
| 6090-1125 | I-04 |
| 6090-1126 | I-03 |
| 6090-1127 | I-05 |
| 6090-1131 | I-03 |
| 6090-1136 | I-03 |
| 6090-1149 | I-04 |
| 6090-1182 | I-07 |
| 6090-1183 | I-07 |
| 6090-1218 | I-04 |
| 6090-1219 | I-07 |
| 6090-1220 | I-05 |
| 6090-1221 | I-11 |
| 6090-1224 | I-07 |
| 6090-1230 | I-07 |
| 6090-1231 | I-07 |
| 6090-1250 | I-07 |
| 6090-1251 | I-07 |
| 6090-1254 | I-05 |

| Part No.  | Page |
|-----------|------|
| 6090-1256 | I-04 |
| 6098-0149 | A-31 |
| 6098-0151 | A-31 |
| 6098-0154 | A-32 |
| 6098-0156 | A-32 |
| 6098-0208 | H-10 |
| 6098-0210 | H-10 |
| 6098-0212 | H-09 |
| 6098-0214 | H-09 |
| 6098-0216 | H-09 |
| 6098-0218 | H-09 |
| 6098-0220 | H-09 |
| 6098-0222 | H-09 |
| 6098-0224 | H-09 |
| 6098-0226 | H-09 |
| 6098-0228 | H-09 |
| 6098-0230 | H-09 |
| 6098-0232 | H-09 |
| 6098-0234 | H-09 |
| 6098-0239 | H-03 |
| 6098-0240 | H-03 |
| 6098-0241 | H-03 |
| 6098-0242 | H-03 |
| 6098-0243 | H-03 |
| 6098-0244 | H-03 |
| 6098-0245 | H-03 |
| 6098-0246 | H-03 |
| 6098-0247 | H-03 |
| 6098-0248 | H-03 |
| 6098-0249 | H-04 |
| 6098-0250 | H-04 |
| 6098-0251 | H-04 |
| 6098-0252 | H-04 |
| 6098-0253 | H-04 |
| 6098-0254 | H-04 |
| 6098-0255 | H-04 |
| 6098-0256 | H-04 |
| 6098-0257 | H-04 |
| 6098-0258 | H-04 |
| 6098-0259 | H-04 |
| 6098-0260 | H-04 |
| 6098-0323 | A-31 |
| 6098-0325 | A-31 |
| 6098-0343 | H-03 |
| 6098-0344 | H-03 |
| 6098-0441 | A-34 |
| 6098-0464 | H-05 |
| 6098-0518 | A-32 |
| 6098-0814 | H-05 |
| 6098-0822 | A-31 |
| 6098-0824 | A-31 |
| 6098-0886 | A-20 |
| 6098-0889 | A-20 |
| 6098-0891 | A-20 |
| 6098-0903 | A-17 |
| 6098-0905 | A-16 |
| 6098-0907 | A-16 |
| 6098-0909 | A-19 |
| 6098-0911 | A-15 |
| 6098-0913 | A-19 |
| 6098-0914 | A-16 |
| 6098-0916 | A-17 |
| 6098-0918 | A-16 |
| 6098-0922 | A-15 |
| 6098-0923 | A-16 |
| 6098-0924 | A-16 |

| Part No.  | Page |
|-----------|------|
| 6098-0963 | A-16 |
| 6098-0964 | A-16 |
| 6098-0978 | A-21 |
| 6098-0999 | L-04 |
| 6098-1007 | L-04 |
| 6098-1009 | L-04 |
| 6098-1022 | L-08 |
| 6098-1023 | L-08 |
| 6098-1025 | A-21 |
| 6098-1027 | L-06 |
| 6098-1042 | A-18 |
| 6098-1045 | A-18 |
| 6098-1061 | A-18 |
| 6098-1063 | A-18 |
| 6098-1065 | A-16 |
| 6098-1104 | A-34 |
| 6098-1106 | L-08 |
| 6098-1107 | L-08 |
| 6098-1108 | L-06 |
| 6098-1109 | L-07 |
| 6098-1116 | L-02 |
| 6098-1117 | L-02 |
| 6098-1120 | L-02 |
| 6098-1121 | L-02 |
| 6098-1122 | L-07 |
| 6098-1132 | A-21 |
| 6098-1137 | A-18 |
| 6098-1139 | A-18 |
| 6098-1141 | L-03 |
| 6098-1164 | A-19 |
| 6098-1169 | A-19 |
| 6098-1198 | L-05 |
| 6098-1214 | L-04 |
| 6098-1235 | A-17 |
| 6098-1246 | A-16 |
| 6098-1250 | A-17 |
| 6098-1263 | A-20 |
| 6098-1274 | A-18 |
| 6098-1277 | A-20 |
| 6098-1278 | A-34 |
| 6098-1282 | L-03 |
| 6098-1331 | N-11 |
| 6098-1333 | N-11 |
| 6098-1335 | N-11 |
| 6098-1371 | E-13 |
| 6098-1373 | E-16 |
| 6098-1374 | E-13 |
| 6098-1377 | E-16 |
| 6098-1378 | E-17 |
| 6098-1379 | E-17 |
| 6098-1380 | E-17 |
| 6098-1389 | A-18 |
| 6098-1397 | E-12 |
| 6098-1398 | E-12 |
| 6098-1442 | L-08 |
| 6098-1443 | L-08 |
| 6098-1489 | A-32 |
| 6098-1620 | N-07 |
| 6098-1622 | P-08 |
| 6098-1624 | N-05 |
| 6098-1626 | N-05 |
| 6098-1627 | P-08 |
| 6098-1714 | P-07 |
| 6098-1715 | L-06 |
| 6098-1716 | A-32 |
| 6098-1744 | P-08 |

| Part No.  | Page |
|-----------|------|
| 6098-1746 | P-08 |
| 6098-1747 | P-07 |
| 6098-1774 | P-08 |
| 6098-1813 | N-07 |
| 6098-1815 | N-07 |
| 6098-1819 | A-13 |
| 6098-1851 | A-32 |
| 6098-1998 | N-06 |
| 6098-2013 | N-05 |
| 6098-2016 | N-06 |
| 6098-2056 | N-06 |
| 6098-2101 | P-08 |
| 6098-2103 | N-06 |
| 6098-2137 | A-34 |
| 6098-2155 | A-35 |
| 6098-2158 | N-05 |
| 6098-2159 | A-14 |
| 6098-2161 | A-12 |
| 6098-2163 | A-12 |
| 6098-2165 | A-14 |
| 6098-2206 | N-05 |
| 6098-2208 | N-05 |
| 6098-2211 | A-32 |
| 6098-2214 | A-14 |
| 6098-2220 | A-12 |
| 6098-2245 | N-06 |
| 6098-2257 | A-14 |
| 6098-2287 | N-07 |
| 6098-2289 | N-05 |
| 6098-2303 | A-12 |
| 6098-2329 | M-11 |
| 6098-2434 | A-14 |
| 6098-2437 | A-12 |
| 6098-2676 | P-11 |
| 6098-2679 | P-07 |
| 6098-2680 | P-07 |
| 6098-2712 | R-04 |
| 6098-2714 | R-04 |
| 6098-2718 | R-04 |
| 6098-2719 | R-04 |
| 6098-2721 | R-05 |
| 6098-2722 | R-05 |
| 6098-2724 | R-04 |
| 6098-2726 | R-04 |
| 6098-2728 | R-05 |
| 6098-2729 | P-11 |
| 6098-2764 | E-08 |
| 6098-2779 | E-08 |
| 6098-2780 | E-08 |
| 6098-2781 | E-08 |
| 6098-2782 | E-08 |
| 6098-2784 | E-08 |
| 6098-2785 | E-08 |
| 6098-2786 | E-09 |
| 6098-2788 | E-08 |
| 6098-2789 | E-08 |
| 6098-2810 | A-14 |
| 6098-2893 | A-35 |
| 6098-2923 | E-11 |
| 6098-2931 | A-12 |
| 6098-2949 | R-05 |
| 6098-2951 | R-05 |
| 6098-2961 | R-04 |
| 6098-2963 | R-04 |
| 6098-2965 | R-04 |
| 6098-3240 | E-11 |

SELECTION TABLE

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

INDEX

| Part No.  | Page |
|-----------|------|
| 6098-3369 | E-08 |
| 6098-3370 | E-09 |
| 6098-3448 | P-03 |
| 6098-3449 | P-03 |
| 6098-3450 | P-05 |
| 6098-3451 | P-05 |
| 6098-3452 | P-10 |
| 6098-3453 | P-04 |
| 6098-3455 | P-03 |
| 6098-3456 | P-03 |
| 6098-3457 | P-03 |
| 6098-3458 | P-05 |
| 6098-3459 | P-10 |
| 6098-3563 | E-17 |
| 6098-3565 | E-18 |
| 6098-3567 | E-21 |
| 6098-3569 | E-21 |
| 6098-3571 | E-09 |
| 6098-3572 | E-11 |
| 6098-3600 | E-09 |
| 6098-3601 | E-09 |
| 6098-3616 | E-19 |
| 6098-3802 | A-03 |
| 6098-3810 | A-03 |
| 6098-3818 | A-08 |
| 6098-3826 | A-08 |
| 6098-3866 | P-04 |
| 6098-3868 | P-04 |
| 6098-3869 | A-03 |
| 6098-3877 | A-03 |
| 6098-3885 | A-03 |
| 6098-3893 | A-08 |
| 6098-3901 | A-08 |
| 6098-3909 | A-03 |
| 6098-3917 | A-03 |
| 6098-3925 | A-03 |
| 6098-3933 | A-08 |
| 6098-3941 | A-08 |
| 6098-3966 | H-11 |
| 6098-4008 | A-04 |
| 6098-4010 | A-04 |
| 6098-4013 | A-04 |
| 6098-4015 | A-04 |
| 6098-4017 | E-09 |
| 6098-4018 | E-11 |
| 6098-4023 | A-09 |
| 6098-4050 | E-17 |
| 6098-4052 | R-06 |
| 6098-4053 | R-07 |
| 6098-4055 | R-07 |
| 6098-4057 | R-06 |
| 6098-4059 | R-06 |
| 6098-4069 | E-16 |
| 6098-4071 | E-16 |
| 6098-4073 | E-16 |
| 6098-4333 | E-04 |
| 6098-4339 | E-04 |
| 6098-4367 | E-10 |
| 6098-4565 | N-03 |
| 6098-4567 | N-03 |
| 6098-4569 | N-03 |
| 6098-4588 | E-04 |
| 6098-4590 | E-04 |
| 6098-4591 | E-05 |
| 6098-4594 | E-04 |
| 6098-4595 | E-04 |

| Part No.  | Page |
|-----------|------|
| 6098-4596 | E-04 |
| 6098-4597 | E-05 |
| 6098-4640 | E-03 |
| 6098-4660 | E-18 |
| 6098-4661 | E-16 |
| 6098-4662 | E-17 |
| 6098-4663 | E-20 |
| 6098-4664 | E-16 |
| 6098-4667 | E-20 |
| 6098-4669 | E-16 |
| 6098-4670 | E-16 |
| 6098-4675 | E-03 |
| 6098-4707 | E-06 |
| 6098-4708 | E-06 |
| 6098-4725 | E-06 |
| 6098-4726 | E-06 |
| 6098-4740 | A-04 |
| 6098-4742 | R-07 |
| 6098-4744 | R-05 |
| 6098-4747 | A-09 |
| 6098-4756 | A-04 |
| 6098-4827 | A-10 |
| 6098-4831 | A-05 |
| 6098-4859 | E-04 |
| 6098-4876 | P-03 |
| 6098-4877 | P-04 |
| 6098-4892 | P-05 |
| 6098-4901 | E-16 |
| 6098-4902 | E-16 |
| 6098-4908 | E-05 |
| 6098-4910 | E-05 |
| 6098-4912 | P-05 |
| 6098-4943 | E-03 |
| 6098-4944 | E-03 |
| 6098-4971 | E-20 |
| 6098-4973 | E-22 |
| 6098-4974 | E-22 |
| 6098-4975 | E-23 |
| 6098-4977 | E-23 |
| 6098-4978 | E-03 |
| 6098-4979 | E-03 |
| 6098-4982 | E-03 |
| 6098-5000 | E-03 |
| 6098-5049 | E-16 |
| 6098-5070 | E-03 |
| 6098-5071 | E-03 |
| 6098-5119 | E-20 |
| 6098-5120 | E-20 |
| 6098-5159 | R-06 |
| 6098-5164 | R-06 |
| 6098-5168 | R-06 |
| 6098-5174 | R-07 |
| 6098-5180 | E-05 |
| 6098-5181 | E-05 |
| 6098-5217 | E-18 |
| 6098-5218 | E-18 |
| 6098-5224 | R-07 |
| 6098-5267 | K-03 |
| 6098-5269 | K-03 |
| 6098-5271 | K-03 |
| 6098-5273 | K-03 |
| 6098-5275 | K-04 |
| 6098-5277 | K-04 |
| 6098-5279 | K-04 |
| 6098-5281 | K-04 |
| 6098-5283 | K-04 |

| Part No.  | Page |
|-----------|------|
| 6098-5285 | K-04 |
| 6098-5287 | K-05 |
| 6098-5289 | K-05 |
| 6098-5291 | K-05 |
| 6098-5293 | K-05 |
| 6098-5295 | K-05 |
| 6098-5297 | K-05 |
| 6098-5310 | K-03 |
| 6098-5312 | K-03 |
| 6098-5314 | A-10 |
| 6098-5368 | A-09 |
| 6098-5585 | K-05 |
| 6098-5592 | A-09 |
| 6098-5594 | A-06 |
| 6098-5604 | A-06 |
| 6098-5613 | A-07 |
| 6098-5622 | A-07 |
| 6098-5631 | A-07 |
| 6098-5641 | A-07 |
| 6098-5650 | A-06 |
| 6098-5659 | A-06 |
| 6098-5668 | A-22 |
| 6098-5677 | A-22 |
| 6098-5686 | A-23 |
| 6098-5695 | A-23 |
| 6098-5704 | A-23 |
| 6098-5713 | A-23 |
| 6098-5798 | A-09 |
| 6098-5822 | E-05 |
| 6098-5824 | E-05 |
| 6098-6050 | A-22 |
| 6098-6053 | A-22 |
| 6098-6055 | A-06 |
| 6098-6083 | A-06 |
| 6098-6090 | A-06 |
| 6098-6097 | A-06 |
| 6098-6104 | A-06 |
| 6098-6111 | A-06 |
| 6098-6451 | K-03 |
| 6098-6452 | K-03 |
| 6098-6455 | K-04 |
| 6098-6456 | K-04 |
| 6098-6457 | K-04 |
| 6180-1181 | D-04 |
| 6180-2181 | D-04 |
| 6180-2191 | D-08 |
| 6180-2321 | D-04 |
| 6180-2405 | D-08 |
| 6180-2451 | J-03 |
| 6180-2591 | D-10 |
| 6180-2617 | D-10 |
| 6180-3241 | D-05 |
| 6180-3261 | D-04 |
| 6180-3451 | J-03 |
| 6180-3891 | D-10 |
| 6180-4181 | D-06 |
| 6180-4181 | J-03 |
| 6180-4593 | D-11 |
| 6180-4771 | D-05 |
| 6180-6181 | D-06 |
| 6180-6181 | J-03 |
| 6180-6591 | D-11 |
| 6180-6771 | D-05 |
| 6180-8451 | J-04 |
| 6181-0070 | G-04 |
| 6181-0071 | G-04 |

| Part No.  | Page |
|-----------|------|
| 6181-0072 | G-04 |
| 6181-0073 | G-04 |
| 6181-0074 | G-04 |
| 6181-0075 | G-04 |
| 6181-0076 | G-05 |
| 6181-0077 | G-05 |
| 6181-0227 | G-03 |
| 6181-0381 | F-11 |
| 6181-0436 | Q-07 |
| 6181-0437 | Q-07 |
| 6181-0438 | Q-07 |
| 6181-0439 | Q-07 |
| 6181-0440 | Q-08 |
| 6181-0511 | M-09 |
| 6181-0512 | M-10 |
| 6181-0513 | M-08 |
| 6181-0514 | M-09 |
| 6181-0515 | M-07 |
| 6181-0516 | M-08 |
| 6181-0520 | Q-02 |
| 6181-0521 | Q-02 |
| 6181-0522 | M-10 |
| 6181-0532 | M-08 |
| 6181-0536 | M-09 |
| 6181-0613 | Q-17 |
| 6181-0629 | Q-05 |
| 6181-0664 | M-09 |
| 6181-0665 | M-09 |
| 6181-0666 | M-10 |
| 6181-0667 | M-10 |
| 6181-0668 | M-08 |
| 6181-0669 | M-09 |
| 6181-0670 | M-07 |
| 6181-0671 | M-08 |
| 6181-1001 | I-03 |
| 6181-4451 | J-04 |
| 6181-6492 | Q-05 |
| 6181-6509 | Q-04 |
| 6185-0862 | M-04 |
| 6185-0865 | M-05 |
| 6185-0866 | M-05 |
| 6185-0867 | M-04 |
| 6185-0868 | M-05 |
| 6185-0869 | M-05 |
| 6185-1101 | M-05 |
| 6185-1169 | M-05 |
| 6185-1171 | M-05 |
| 6185-1173 | M-06 |
| 6185-1175 | M-06 |
| 6185-1177 | M-06 |
| 6185-1179 | M-06 |
| 6187-1171 | D-04 |
| 6187-1561 | D-04 |
| 6187-2171 | D-04 |
| 6187-2311 | D-04 |
| 6187-2581 | D-10 |
| 6187-2607 | D-10 |
| 6187-2801 | J-03 |
| 6187-3231 | D-05 |
| 6187-3271 | D-05 |
| 6187-3281 | D-04 |
| 6187-3801 | J-03 |
| 6187-3901 | D-10 |
| 6187-4441 | J-03 |
| 6187-4561 | D-05 |
| 6187-4583 | D-11 |

| Part No.  | Page |
|-----------|------|
| 6187-6561 | D-05 |
| 6187-6581 | D-11 |
| 6187-6801 | J-03 |
| 6187-8691 | J-04 |
| 6188-0004 | D-05 |
| 6188-0018 | D-05 |
| 6188-0047 | B-14 |
| 6188-0049 | B-25 |
| 6188-0066 | B-16 |
| 6188-0067 | B-17 |
| 6188-0083 | B-21 |
| 6188-0091 | B-18 |
| 6188-0096 | B-25 |
| 6188-0099 | B-15 |
| 6188-0101 | B-19 |
| 6188-0108 | B-14 |
| 6188-0129 | B-22 |
| 6188-0141 | B-16 |
| 6188-0173 | B-16 |
| 6188-0175 | B-17 |
| 6188-0187 | B-19 |
| 6188-0209 | B-17 |
| 6188-0217 | B-16 |
| 6188-0221 | B-19 |
| 6188-0229 | B-14 |
| 6188-0259 | B-22 |
| 6188-0266 | B-14 |
| 6188-0282 | B-15 |
| 6188-0327 | B-16 |
| 6188-0415 | B-18 |
| 6188-0442 | B-16 |
| 6188-0470 | B-15 |
| 6188-0494 | O-04 |
| 6188-0495 | O-11 |
| 6188-0539 | B-19 |
| 6188-0551 | M-04 |
| 6188-0552 | M-05 |
| 6188-0553 | M-05 |
| 6188-0554 | M-04 |
| 6188-0555 | M-05 |
| 6188-0556 | M-05 |
| 6188-0557 | M-05 |
| 6188-0558 | M-05 |
| 6188-0559 | M-06 |
| 6188-0560 | M-06 |
| 6188-0589 | F-03 |
| 6188-0590 | F-04 |
| 6188-0624 | B-14 |
| 6188-0657 | F-03 |
| 6188-0658 | F-04 |
| 6188-0663 | M-05 |
| 6188-0696 | B-05 |
| 6188-0706 | B-05 |
| 6188-0736 | M-06 |
| 6188-0738 | M-06 |
| 6188-0779 | B-05 |
| 6188-4691 | J-04 |
| 6188-4797 | B-04 |
| 6188-4914 | B-06 |
| 6188-4920 | B-04 |
| 6189-0027 | D-08 |
| 6189-0028 | D-08 |
| 6189-0029 | D-09 |
| 6189-0031 | D-08 |
| 6189-0033 | D-08 |
| 6189-0035 | D-07 |

| Part No.  | Page |
|-----------|------|
| 6189-0039 | D-07 |
| 6189-0056 | D-07 |
| 6189-0060 | D-08 |
| 6189-0100 | B-14 |
| 6189-0101 | B-25 |
| 6189-0126 | B-16 |
| 6189-0127 | B-17 |
| 6189-0129 | G-04 |
| 6189-0130 | G-04 |
| 6189-0131 | G-04 |
| 6189-0132 | G-04 |
| 6189-0133 | G-04 |
| 6189-0134 | G-04 |
| 6189-0135 | G-05 |
| 6189-0136 | G-05 |
| 6189-0143 | B-19 |
| 6189-0144 | B-18 |
| 6189-0145 | B-21 |
| 6189-0165 | B-22 |
| 6189-0166 | B-18 |
| 6189-0172 | B-25 |
| 6189-0179 | B-15 |
| 6189-0181 | B-19 |
| 6189-0199 | B-14 |
| 6189-0249 | B-14 |
| 6189-0264 | B-14 |
| 6189-0319 | B-16 |
| 6189-0323 | B-17 |
| 6189-0368 | B-17 |
| 6189-0372 | B-16 |
| 6189-0376 | B-19 |
| 6189-0381 | B-16 |
| 6189-0386 | G-03 |
| 6189-0388 | B-14 |
| 6189-0390 | B-18 |
| 6189-0425 | B-22 |
| 6189-0443 | B-15 |
| 6189-0504 | B-16 |
| 6189-0551 | O-04 |
| 6189-0552 | F-07 |
| 6189-0555 | F-11 |
| 6189-0557 | B-18 |
| 6189-0566 | B-14 |
| 6189-0573 | B-15 |
| 6189-0588 | B-22 |
| 6189-0591 | F-06 |
| 6189-0593 | F-07 |
| 6189-0596 | F-07 |
| 6189-0611 | B-15 |
| 6189-0612 | B-19 |
| 6189-0617 | F-07 |
| 6189-0630 | B-19 |
| 6189-0638 | Q-07 |
| 6189-0639 | Q-07 |
| 6189-0640 | Q-07 |
| 6189-0641 | Q-10 |
| 6189-0642 | Q-10 |
| 6189-0643 | Q-07 |
| 6189-0644 | Q-12 |
| 6189-0645 | Q-11 |
| 6189-0646 | Q-11 |
| 6189-0647 | Q-12 |
| 6189-0648 | Q-08 |
| 6189-0650 | Q-09 |
| 6189-0651 | Q-09 |
| 6189-0652 | Q-12 |

| Part No.  | Page |
|-----------|------|
| 6189-0653 | Q-10 |
| 6189-0656 | B-16 |
| 6189-0657 | Q-13 |
| 6189-0682 | B-15 |
| 6189-0694 | B-15 |
| 6189-0714 | O-04 |
| 6189-0715 | O-11 |
| 6189-0718 | Q-12 |
| 6189-0725 | M-18 |
| 6189-0727 | M-18 |
| 6189-0734 | O-04 |
| 6189-0760 | M-07 |
| 6189-0761 | M-08 |
| 6189-0766 | M-09 |
| 6189-0767 | Q-02 |
| 6189-0768 | Q-02 |
| 6189-0770 | M-10 |
| 6189-0772 | M-11 |
| 6189-0773 | M-12 |
| 6189-0774 | M-12 |
| 6189-0775 | M-12 |
| 6189-0776 | M-12 |
| 6189-0777 | M-12 |
| 6189-0778 | M-12 |
| 6189-0779 | M-13 |
| 6189-0780 | M-13 |
| 6189-0781 | M-13 |
| 6189-0782 | M-13 |
| 6189-0783 | M-13 |
| 6189-0784 | M-14 |
| 6189-0786 | M-15 |
| 6189-0787 | M-15 |
| 6189-0788 | M-16 |
| 6189-0789 | M-16 |
| 6189-0790 | M-16 |
| 6189-0791 | M-16 |
| 6189-0792 | M-17 |
| 6189-0793 | M-17 |
| 6189-0794 | M-17 |
| 6189-0795 | M-17 |
| 6189-0796 | M-09 |
| 6189-0797 | M-09 |
| 6189-0798 | M-10 |
| 6189-0799 | M-16 |
| 6189-0800 | M-16 |
| 6189-0801 | M-17 |
| 6189-0802 | M-08 |
| 6189-0804 | B-10 |
| 6189-0815 | M-17 |
| 6189-0816 | M-08 |
| 6189-0818 | M-09 |
| 6189-0847 | M-09 |
| 6189-0848 | M-13 |
| 6189-0855 | F-04 |
| 6189-0856 | B-25 |
| 6189-0886 | B-10 |
| 6189-0887 | F-04 |
| 6189-0890 | F-03 |
| 6189-0891 | F-04 |
| 6189-0892 | B-09 |
| 6189-0915 | Q-17 |
| 6189-0928 | M-08 |
| 6189-0929 | M-08 |
| 6189-0930 | M-09 |
| 6189-0940 | F-03 |
| 6189-0950 | M-08 |

| Part No.  | Page |
|-----------|------|
| 6189-0951 | M-07 |
| 6189-0954 | M-10 |
| 6189-0955 | M-10 |
| 6189-1004 | Q-05 |
| 6189-1012 | F-04 |
| 6189-1046 | B-05 |
| 6189-1048 | B-07 |
| 6189-1073 | Q-04 |
| 6189-1076 | Q-04 |
| 6189-1081 | F-04 |
| 6189-1083 | B-05 |
| 6189-1085 | Q-15 |
| 6189-1086 | Q-10 |
| 6189-1091 | Q-10 |
| 6189-1092 | B-06 |
| 6189-1093 | M-12 |
| 6189-1094 | M-12 |
| 6189-1095 | M-12 |
| 6189-1096 | M-12 |
| 6189-1097 | M-12 |
| 6189-1098 | M-13 |
| 6189-1099 | M-13 |
| 6189-1100 | M-13 |
| 6189-1102 | M-09 |
| 6189-1103 | M-09 |
| 6189-1104 | M-08 |
| 6189-1105 | M-08 |
| 6189-1106 | M-09 |
| 6189-1107 | M-07 |
| 6189-1108 | M-10 |
| 6189-1109 | M-10 |
| 6189-1115 | Q-05 |
| 6189-1128 | B-06 |
| 6189-1130 | B-04 |
| 6189-1132 | B-04 |
| 6189-1133 | B-06 |
| 6189-1134 | B-05 |
| 6189-1135 | B-06 |
| 6189-1136 | B-08 |
| 6189-1142 | B-05 |
| 6189-1144 | Q-05 |
| 6189-1147 | Q-05 |
| 6189-1149 | Q-05 |
| 6189-1150 | Q-05 |
| 6189-1160 | B-08 |
| 6189-1161 | B-04 |
| 6189-1163 | B-07 |
| 6189-1231 | B-04 |
| 6189-1240 | B-05 |
| 6189-4171 | D-06 |
| 6189-6171 | D-06 |
| 6189-6866 | Q-11 |
| 6189-6867 | Q-11 |
| 6189-6870 | Q-12 |
| 6189-6871 | Q-12 |
| 6189-6891 | Q-10 |
| 6189-6894 | B-08 |
| 6189-6898 | Q-15 |
| 6189-6912 | Q-15 |
| 6189-6920 | Q-09 |
| 6189-6921 | Q-11 |
| 6189-6922 | Q-11 |
| 6189-6934 | B-07 |
| 6189-6967 | O-06 |
| 6189-6968 | O-06 |
| 6189-6978 | B-08 |

| Part No.  | Page |
|-----------|------|
| 6189-6979 | B-08 |
| 6189-6987 | B-06 |
| 6189-7020 | B-04 |
| 6189-7073 | B-04 |
| 6189-7077 | B-07 |
| 6189-7100 | B-05 |
| 6195-0003 | O-10 |
| 6195-0006 | O-10 |
| 6195-0009 | O-10 |
| 6195-0012 | O-10 |
| 6195-0015 | O-10 |
| 6195-0018 | O-10 |
| 6195-0021 | O-10 |
| 6195-0024 | O-10 |
| 6195-0030 | O-13 |
| 6195-0032 | O-13 |
| 6195-0035 | O-13 |
| 6195-0038 | O-14 |
| 6195-0041 | O-12 |
| 6195-0043 | O-12 |
| 6195-0051 | O-10 |
| 6195-0054 | O-10 |
| 6195-0057 | O-19 |
| 6195-0060 | O-19 |
| 6195-0062 | O-13 |
| 6195-0064 | O-13 |
| 6195-0066 | O-09 |
| 6195-0066 | O-12 |
| 6195-0069 | O-17 |
| 6195-0072 | O-17 |
| 6195-0074 | O-17 |
| 6195-0149 | O-11 |
| 6195-0152 | O-11 |
| 6195-0155 | O-19 |
| 6195-0157 | O-13 |
| 6195-0164 | O-10 |
| 6195-0167 | O-10 |
| 6195-0170 | O-17 |
| 6195-0173 | O-17 |
| 6195-0238 | O-17 |
| 6195-0240 | O-09 |
| 6195-0243 | O-15 |
| 6195-0245 | O-15 |
| 6195-0247 | O-15 |
| 6195-0249 | O-15 |
| 6240-0538 | P-07 |
| 6240-1001 | C-07 |
| 6240-1003 | C-07 |
| 6240-1004 | C-03 |
| 6240-1006 | C-05 |
| 6240-1016 | C-07 |
| 6240-1033 | A-28 |
| 6240-1077 | A-27 |
| 6240-1081 | C-04 |
| 6240-1093 | A-34 |
| 6240-1101 | C-04 |
| 6240-1107 | A-26 |
| 6240-1120 | A-26 |
| 6240-1131 | C-04 |
| 6240-1158 | A-28 |
| 6240-1161 | C-05 |
| 6240-1181 | C-05 |
| 6240-1201 | C-05 |
| 6240-5001 | C-07 |
| 6240-5002 | C-03 |
| 6240-5003 | C-05 |

| Part No.  | Page |
|-----------|------|
| 6240-5021 | C-03 |
| 6240-5031 | A-27 |
| 6240-5035 | A-28 |
| 6240-5081 | C-04 |
| 6240-5088 | A-28 |
| 6240-5101 | C-04 |
| 6240-5118 | A-26 |
| 6240-5131 | C-04 |
| 6240-5160 | A-26 |
| 6240-5161 | C-05 |
| 6240-5181 | C-05 |
| 6240-5201 | C-05 |
| 6240-5221 | C-05 |
| 6240-5337 | P-07 |
| 6240-5339 | P-07 |
| 6240-5378 | E-17 |
| 6241-0011 | C-09 |
| 6241-0121 | C-09 |
| 6241-0153 | C-09 |
| 6241-0241 | A-29 |
| 6241-0261 | A-29 |
| 6241-0281 | A-29 |
| 6242-1011 | C-06 |
| 6242-1031 | C-07 |
| 6242-1061 | C-07 |
| 6242-5031 | C-07 |
| 6242-5061 | C-07 |
| 6243-1011 | C-06 |
| 6243-1021 | C-07 |
| 6244-5061 | C-03 |
| 6244-5121 | C-04 |
| 6244-5141 | C-04 |
| 6244-5161 | C-04 |
| 6245-0011 | C-09 |
| 6245-0021 | C-09 |
| 6245-0121 | C-08 |
| 6245-0131 | C-08 |
| 6245-0141 | C-09 |
| 6245-0173 | C-09 |
| 6245-0261 | A-29 |
| 6245-0281 | A-29 |
| 6245-0301 | A-29 |
| 6248-5270 | A-27 |
| 6248-5275 | A-27 |
| 6248-5276 | A-27 |
| 6248-5309 | N-10 |
| 6248-5310 | N-10 |
| 6248-5311 | N-10 |
| 6249-1229 | A-27 |
| 6249-1234 | A-27 |
| 6249-1235 | A-27 |
| 6249-1243 | A-26 |
| 6249-1248 | N-09 |
| 6249-1249 | N-10 |
| 6249-1250 | N-10 |
| 6249-1251 | N-09 |
| 6249-1252 | N-10 |
| 6249-1253 | N-10 |
| 6249-1265 | N-10 |
| 6249-1266 | N-10 |
| 6400-0010 | I-09 |
| 6400-0011 | I-10 |
| 6400-0012 | I-09 |
| 6400-0013 | I-09 |
| 6400-0014 | I-09 |
| 6400-0015 | I-10 |

| Part No.  | Page |
|-----------|------|
| 6400-0016 | I-10 |
| 6400-0081 | I-09 |
| 6400-0186 | I-10 |
| 6409-0070 | I-10 |
| 6409-0071 | I-09 |
| 6409-0072 | I-09 |
| 6409-0073 | I-09 |
| 6409-0074 | I-10 |
| 6409-0075 | I-10 |
| 6409-0076 | I-09 |
| 6409-0255 | I-09 |
| 6409-0603 | I-10 |
| 6440-0128 | I-10 |
| 6440-0129 | I-10 |
| 6440-0135 | I-10 |
| 6440-0136 | I-10 |
| 6520-0348 | A-26 |
| 6520-0349 | A-26 |
| 6520-0492 | A-26 |
| 6520-0549 | A-25 |
| 6520-0550 | A-25 |
| 6520-0561 | A-25 |
| 6520-0564 | A-25 |
| 6520-0577 | A-26 |
| 6520-0996 | A-27 |
| 6520-1004 | A-27 |
| 6520-1009 | A-27 |
| 6520-1142 | A-29 |
| 6520-1150 | A-29 |
| 6520-1230 | A-27 |
| 6520-1466 | A-34 |
| 6810-1203 | E-24 |
| 6810-1203 | H-12 |
| 6810-1204 | E-24 |
| 6810-1204 | H-12 |
| 6810-1217 | E-24 |
| 6810-1217 | H-12 |
| 6810-1462 | E-24 |
| 6810-1462 | H-12 |
| 6810-1584 | O-20 |
| 6810-1584 | Q-18 |
| 6810-2653 | O-20 |
| 6810-4982 | Q-18 |
| 6910-0119 | E-24 |
| 6910-0119 | H-12 |
| 6910-0120 | E-24 |
| 6910-0120 | H-12 |
| 6911-0442 | L-07 |
| 6911-0462 | L-06 |
| 6911-0483 | L-06 |
| 6911-0687 | O-06 |
| 6911-1927 | O-06 |
| 6911-2396 | O-06 |
| 6911-2452 | P-10 |
| 6918-0322 | G-04 |
| 6918-0323 | G-04 |
| 6918-0324 | G-04 |
| 6918-0325 | G-04 |
| 6918-0326 | G-04 |
| 6918-0327 | G-04 |
| 6918-0328 | G-04 |
| 6918-0329 | G-04 |
| 6918-0330 | G-04 |
| 6918-0331 | G-04 |
| 6918-0332 | G-04 |
| 6918-0333 | G-04 |

| Part No.  | Page |
|-----------|------|
| 6918-0334 | G-05 |
| 6918-0335 | G-05 |
| 6918-0336 | G-05 |
| 6918-0337 | G-05 |
| 6918-0698 | G-03 |
| 6918-0699 | G-03 |
| 6918-1013 | L-06 |
| 6918-1260 | F-07 |
| 6918-1263 | F-11 |
| 6918-1267 | F-11 |
| 6918-1370 | F-06 |
| 6918-1371 | F-07 |
| 6918-1469 | F-07 |
| 6918-1594 | M-11 |
| 6918-1594 | M-12 |
| 6918-1594 | M-15 |
| 6918-1594 | M-16 |
| 6918-1595 | M-13 |
| 6918-1595 | M-16 |
| 6918-1595 | M-17 |
| 6918-1596 | M-13 |
| 6918-1596 | M-17 |
| 6918-1597 | M-14 |
| 6918-1597 | M-17 |
| 6918-1598 | M-08 |
| 6918-1598 | M-09 |
| 6918-1599 | M-08 |
| 6918-1599 | M-09 |
| 6918-1600 | M-09 |
| 6918-1601 | M-09 |
| 6918-1602 | M-10 |
| 6918-1603 | M-10 |
| 6918-1604 | M-13 |
| 6918-1604 | M-17 |
| 6918-1605 | M-18 |
| 6918-1607 | M-18 |
| 6918-1636 | M-11 |
| 6918-1651 | M-07 |
| 6918-1651 | M-08 |
| 6918-1652 | M-08 |
| 6918-1653 | M-07 |
| 6918-1653 | M-08 |
| 6918-1654 | M-08 |
| 6918-1762 | F-04 |
| 6918-1773 | M-04 |
| 6918-1774 | M-04 |
| 6918-1774 | M-05 |
| 6918-1775 | M-05 |
| 6918-1776 | M-05 |
| 6918-1779 | M-06 |
| 6918-1780 | M-06 |
| 6918-1833 | F-04 |
| 6918-1835 | F-03 |
| 6918-1835 | F-04 |
| 6918-1979 | F-03 |
| 6918-2056 | F-04 |
| 6918-2128 | F-04 |
| 6950-0366 | H-11 |
| 6950-0978 | H-11 |
| 6950-0981 | H-06 |
| 6950-0982 | H-06 |
| 6950-0989 | H-07 |
| 6950-0990 | H-07 |
| 6950-0991 | H-06 |
| 6950-0992 | H-06 |
| 6950-1030 | H-11 |

| Part No.  | Page |
|-----------|------|
| 6950-1053 | E-14 |
| 6950-1054 | E-18 |
| 6950-1055 | E-18 |
| 6950-1056 | E-18 |
| 6950-1058 | E-14 |
| 6950-1176 | P-10 |
| 7160-8234 | B-13 |
| 7160-8234 | D-03 |
| 7160-8234 | J-02 |
| 7160-9465 | B-13 |
| 7160-9465 | D-03 |
| 7160-9465 | J-03 |
| 7160-9465 | Q-14 |
| 7160-9785 | D-03 |
| 7160-9787 | D-03 |
| 7161-9785 | D-03 |
| 7161-9787 | B-13 |
| 7161-9787 | D-03 |
| 7161-9787 | F-10 |
| 7161-9787 | G-03 |
| 7161-9787 | O-09 |
| 7161-9787 | Q-07 |
| 7165-0076 | B-13 |
| 7165-0076 | D-03 |
| 7165-0118 | F-09 |
| 7165-0118 | G-03 |
| 7165-0118 | O-09 |
| 7165-0119 | F-09 |
| 7165-0119 | G-03 |
| 7165-0119 | O-09 |
| 7165-0130 | F-10 |
| 7165-0131 | F-10 |
| 7165-0132 | O-19 |
| 7165-0133 | O-19 |
| 7165-0145 | B-21 |
| 7165-0145 | F-10 |
| 7165-0145 | O-16 |
| 7165-0172 | F-10 |
| 7165-0180 | B-24 |
| 7165-0180 | O-19 |
| 7165-0193 | F-06 |
| 7165-0193 | O-09 |
| 7165-0193 | Q-07 |
| 7165-0194 | F-06 |
| 7165-0195 | O-16 |
| 7165-0198 | F-06 |
| 7165-0210 | O-09 |
| 7165-0342 | B-12 |
| 7165-0343 | B-12 |
| 7165-0344 | B-12 |
| 7165-0346 | B-21 |
| 7165-0347 | B-21 |
| 7165-0348 | B-21 |
| 7165-0349 | B-13 |
| 7165-0349 | Q-14 |
| 7165-0351 | B-13 |
| 7165-0351 | Q-14 |
| 7165-0356 | B-21 |
| 7165-0385 | F-06 |
| 7165-0385 | F-09 |
| 7165-0385 | G-03 |
| 7165-0386 | O-03 |
| 7165-0392 | B-24 |
| 7165-0393 | B-24 |
| 7165-0395 | B-13 |
| 7165-0395 | Q-14 |

| Part No.  | Page |
|-----------|------|
| 7165-0400 | B-24 |
| 7165-0432 | F-03 |
| 7165-0432 | O-03 |
| 7165-0471 | M-04 |
| 7165-0472 | M-04 |
| 7165-0473 | M-03 |
| 7165-0474 | M-03 |
| 7165-0514 | Q-06 |
| 7165-0515 | Q-06 |
| 7165-0516 | Q-06 |
| 7165-0547 | O-03 |
| 7165-0548 | O-03 |
| 7165-0621 | F-03 |
| 7165-0622 | F-03 |
| 7165-0683 | B-24 |
| 7165-0728 | B-09 |
| 7165-0796 | B-03 |
| 7165-0797 | B-03 |
| 7165-0815 | B-03 |
| 7165-0842 | B-13 |
| 7165-0851 | B-03 |
| 7165-0891 | B-03 |
| 7165-1043 | B-03 |
| 7165-1131 | M-04 |
| 7165-1198 | B-03 |
| 7165-1199 | B-03 |
| 7165-1312 | B-03 |
| 8100-0452 | B-23 |
| 8100-0457 | B-11 |
| 8100-0458 | B-11 |
| 8100-0459 | B-12 |
| 8100-0460 | B-11 |
| 8100-0461 | B-11 |
| 8100-0462 | B-12 |
| 8100-0463 | B-20 |
| 8100-0463 | F-09 |
| 8100-0463 | O-16 |
| 8100-0464 | B-20 |
| 8100-0464 | F-09 |
| 8100-0464 | O-16 |
| 8100-0465 | B-20 |
| 8100-0465 | F-09 |
| 8100-0465 | O-16 |
| 8100-0466 | B-20 |
| 8100-0467 | B-20 |
| 8100-0468 | B-20 |
| 8100-0468 | F-09 |
| 8100-0468 | O-16 |
| 8100-0498 | O-18 |
| 8100-0499 | O-18 |
| 8100-0507 | B-23 |
| 8100-0508 | B-23 |
| 8100-0520 | A-33 |
| 8100-0520 | E-21 |
| 8100-0521 | A-33 |
| 8100-0521 | E-21 |
| 8100-0522 | A-33 |
| 8100-0522 | E-21 |
| 8100-0544 | A-15 |
| 8100-0594 | B-12 |
| 8100-0606 | E-14 |
| 8100-0606 | H-06 |
| 8100-0660 | F-09 |
| 8100-0660 | O-16 |
| 8100-0661 | F-09 |
| 8100-0661 | O-16 |

| Part No.  | Page |
|-----------|------|
| 8100-0664 | E-14 |
| 8100-0664 | H-06 |
| 8100-0706 | E-21 |
| 8100-0707 | A-33 |
| 8100-0707 | E-21 |
| 8100-0782 | E-14 |
| 8100-0782 | H-06 |
| 8100-0797 | O-18 |
| 8100-0798 | O-18 |
| 8100-0817 | B-12 |
| 8100-1007 | B-12 |
| 8100-1008 | B-12 |
| 8100-1340 | B-11 |
| 8100-1341 | A-24 |
| 8100-1342 | A-25 |
| 8100-1344 | B-11 |
| 8100-1346 | A-24 |
| 8100-1347 | A-25 |
| 8100-1427 | O-07 |
| 8100-1428 | O-08 |
| 8100-1429 | O-08 |
| 8100-1458 | O-07 |
| 8100-1459 | O-08 |
| 8100-1460 | O-08 |
| 8100-1462 | E-12 |
| 8100-1466 | O-02 |
| 8100-1467 | O-02 |
| 8100-1469 | E-12 |
| 8100-1470 | E-15 |
| 8100-1471 | E-15 |
| 8100-1472 | E-15 |
| 8100-1501 | O-02 |
| 8100-1502 | O-03 |
| 8100-1506 | E-14 |
| 8100-1506 | H-06 |
| 8100-1507 | E-14 |
| 8100-1507 | H-06 |
| 8100-1553 | A-33 |
| 8100-1553 | E-21 |
| 8100-1555 | A-31 |
| 8100-1555 | N-11 |
| 8100-1571 | E-15 |
| 8100-1572 | E-15 |
| 8100-1573 | E-15 |
| 8100-1710 | N-04 |
| 8100-1978 | N-04 |
| 8100-2493 | A-33 |
| 8100-2512 | N-04 |
| 8100-2513 | N-04 |
| 8100-2514 | N-04 |
| 8100-2566 | O-02 |
| 8100-2567 | O-02 |
| 8100-2615 | O-03 |
| 8100-2616 | O-02 |
| 8100-2729 | A-11 |
| 8100-2730 | A-11 |
| 8100-2798 | R-03 |
| 8100-2799 | R-03 |
| 8100-2801 | R-03 |
| 8100-2802 | R-03 |
| 8100-2971 | E-07 |
| 8100-2972 | E-07 |
| 8100-2980 | B-23 |
| 8100-3067 | F-02 |
| 8100-3068 | F-02 |
| 8100-3177 | F-02 |

| Part No.  | Page |
|-----------|------|
| 8100-3178 | F-02 |
| 8100-3203 | R-03 |
| 8100-3204 | R-03 |
| 8100-3257 | Q-16 |
| 8100-3258 | Q-16 |
| 8100-3259 | Q-16 |
| 8100-3260 | Q-16 |
| 8100-3382 | P-02 |
| 8100-3383 | P-02 |
| 8100-3384 | P-03 |
| 8100-3385 | P-09 |
| 8100-3386 | P-09 |
| 8100-3387 | P-09 |
| 8100-3388 | Q-03 |
| 8100-3389 | Q-04 |
| 8100-3390 | Q-04 |
| 8100-3391 | P-02 |
| 8100-3392 | P-02 |
| 8100-3393 | P-03 |
| 8100-3394 | P-09 |
| 8100-3395 | P-09 |
| 8100-3396 | P-09 |
| 8100-3397 | Q-03 |
| 8100-3398 | Q-04 |
| 8100-3399 | Q-04 |
| 8100-3402 | Q-03 |
| 8100-3403 | Q-04 |
| 8100-3455 | B-02 |
| 8100-3456 | B-02 |
| 8100-3457 | R-03 |
| 8100-3458 | R-03 |
| 8100-3459 | R-03 |
| 8100-3460 | R-03 |
| 8100-3504 | Q-03 |
| 8100-3617 | B-02 |
| 8100-3622 | A-02 |
| 8100-3623 | A-02 |
| 8100-3624 | A-02 |
| 8100-3625 | A-02 |
| 8100-3626 | A-02 |
| 8100-3627 | A-03 |
| 8100-3628 | A-02 |
| 8100-3629 | A-03 |
| 8100-3635 | A-11 |
| 8100-3636 | A-11 |
| 8100-3708 | B-02 |
| 8100-3803 | M-02 |
| 8100-3804 | M-03 |
| 8100-3805 | M-02 |
| 8100-3806 | M-03 |
| 8100-4027 | E-02 |
| 8100-4027 | N-02 |
| 8100-4028 | E-02 |
| 8100-4028 | N-02 |
| 8100-4029 | E-02 |
| 8100-4029 | N-02 |
| 8100-4030 | E-02 |
| 8100-4030 | N-02 |
| 8100-4172 | M-03 |
| 8100-4173 | M-03 |
| 8100-4307 | E-07 |
| 8100-4308 | E-07 |
| 8230-4040 | C-08 |
| 8230-4040 | H-08 |
| 8230-4040 | I-06 |
| 8230-4042 | C-08 |





## Digital catalog

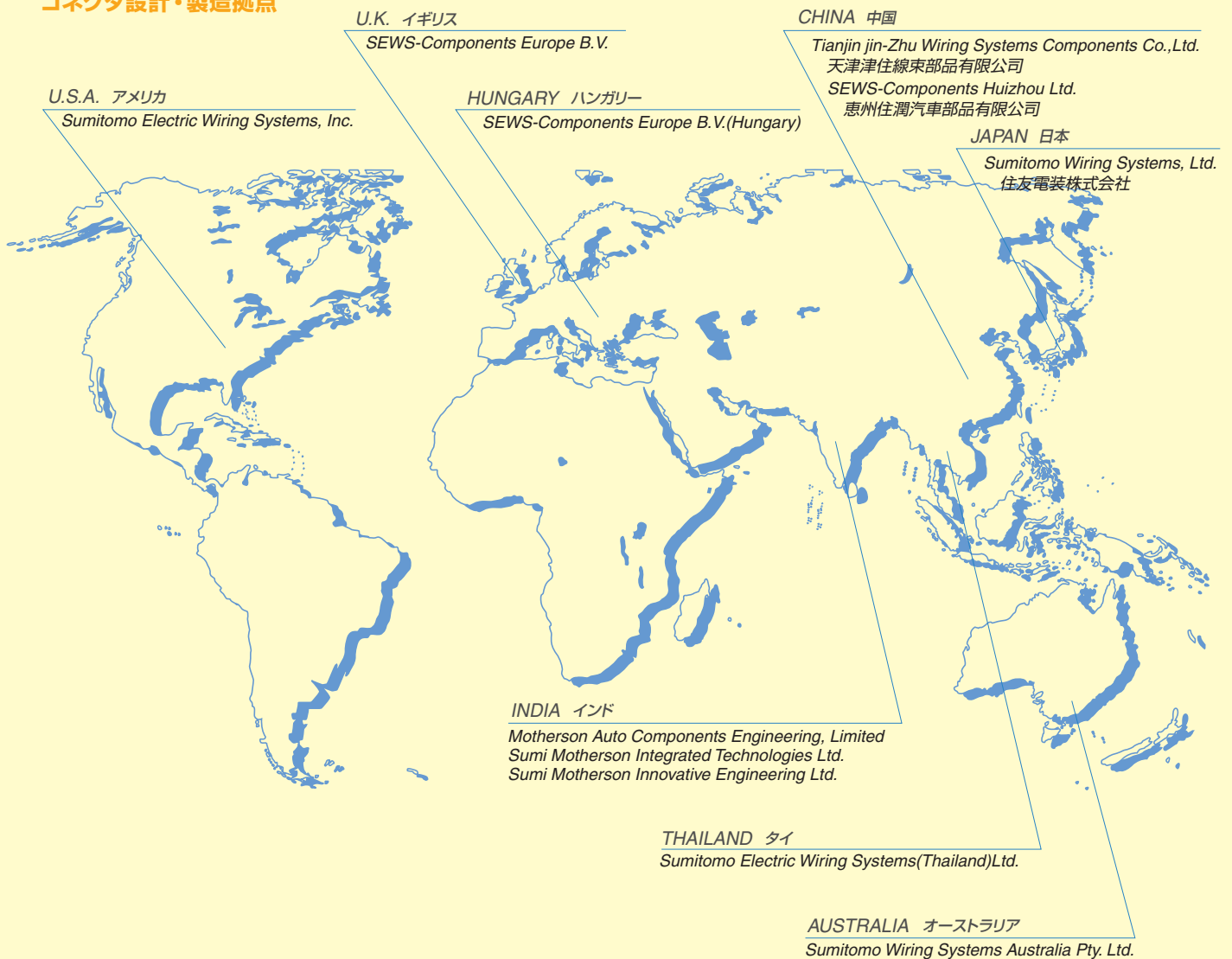
A digital connector catalog is available on the Sumitomo Wiring Systems home page under "Product information".  
Digital catalogue has connectors which are not on this catalogue.

URL: <http://www.sws.co.jp>

住友電装ホームページの「製品情報」に「コネクタ電子カタログ」を掲載中です。  
電子カタログには本カタログに掲載されていないコネクタも掲載しております。

## Connector design and manufacturing network

### コネクタ設計・製造拠点



\*Product specifications may be subject to change without notice in order to improve quality.

Before using the product, please obtain a "customer drawing" from our sales staff.

\*Any comments regarding this catalog are welcome. We would appreciate it if you would notify us of any comments.

※製品の仕様は、予告なく変更することがあります。

製品ご採用の際は、弊社営業担当に「お客様用図面」をご請求ください。

※本カタログに関して、何かお気づきの点がございましたら、お手数ですが弊社営業担当にお申し付けください。

# Connect with the Best



## Sumitomo Wiring Systems, Ltd.

### Head Office (Yokkaichi)

1-14 Nishisuehiro-cho, Yokkaichi, Mie 510-8503, Japan

### Head Office (Tokyo)

Akasaka Center Bldg. 2-5F 1-3-12, Motoakasaka, Minato-ku, Tokyo 107-0051, Japan

## JAPAN Network -Sales Office Locations-

### 東京営業部

東京都港区元赤坂1丁目3番12号(赤坂センタービル2号館5階) 〒107-0051  
TEL(03)3423-6170 FAX(03)3423-6237

### 名古屋営業部

名古屋市西区牛島町6番1号(名古屋ルーセントタワー25階) 〒451-6025  
TEL(052)582-6222 FAX(052)582-6228

### 刈谷営業部

愛知県刈谷市相生町2丁目29番(K-frontビル4階) 〒448-0027  
TEL (0566)28-3800 FAX (0566)28-3804

### 大阪営業部

大阪市中央区今橋4丁目3番18号(HK今橋ビル3階) 〒541-0042  
TEL (06)6229-1960 FAX (06)6229-1965

### 大阪営業部 北陸営業所

石川県金沢市米泉町6丁目10番 〒921-8044  
TEL (076)280-7943 FAX (076)280-7946

### 大阪営業部 広島カスタマーセンター

広島市東区光町1丁目9番2号(第4寺岡ビル3階) 〒732-0052  
TEL (082)261-4688 FAX (082)261-4766

### International Sales Department (Tokyo Office)

Akasaka Center Bldg. 2-5F 1-3-12, Motoakasaka, Minato-ku, Tokyo 107-0051, Japan  
TEL(81)3-3423-6180 FAX(81)3-3423-6217

### International Sales Department (Nagoya Office)

Nagoya Lucent Tower 25F 6-1, Ushijima-cho, Nishi-ku, Nagoya, Aichi 451-6025, Japan  
TEL(81)52-582-6221 FAX(81)52-582-6227

## Global Network -Sales Office Locations-

### U.S.A.

#### Sumitomo Wiring Systems (U.S.A.) Inc.

39555 Orchard Hill Place, Suite L60 Novi, MI 48375-5523 U.S.A.  
TEL +(1)248-347-9450 FAX +(1)248-347-9451

### Hungary

#### SEWS-Components Europe B.V.

Andrassy ut 100, Budapest 1062, Hungary  
TEL +(36)1889-0500 FAX +(36)1889-0501

### China

#### H.K. Wiring Systems, Ltd.

Unit C, 9/F, CDW Bldg. 382-392 Castle Peak Road, Tsuen Wan, N.T., Hong Kong  
TEL +(85)2-2411-0806 FAX +(85)2-2413-6098

### Thailand

#### SWS Logistics & Marketing (Thailand) Co.,Ltd.

35th Fl. CRC Tower, All Seasons Place 87/2 Wireless Rd., Lumpini, Patumwan,  
Bangkok 10330 Thailand  
TEL +(66)6392-5441 FAX +(66)6292-6432

### Singapore

#### Sumitomo Electric Automotive Products (Singapore) Pte, Ltd.

100 Beach Road #17-10 Shaw Towers, Singapore 189702  
TEL +(65)6392-5441 FAX +(65)6292-6432

### Australia

#### SWS Australia Pty. Ltd.

23 Scanlon Drive, Epping, Victoria 3076, Australia  
TEL +(61)3-9912-2800 FAX +(61)3-9408-0331

Printed on recycled paper, for conservation of the nature.  
Printed in Japan, as of April 2009

本カタログは、2009年4月現在のものです。  
自然保護のため、このカタログはリサイクルペーパー並びに  
エコインキを使用しています。