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 0.64mm, 1.0mm, 2.3mm, 4.8mm and 9.5mm types (0.64mm, 1.0mm, 2.3mm, 4.8mm and 8.0mm 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.
- PCB models are also available for connection to printed circuit boards.
- RoHS/ELV Compliant

特　長

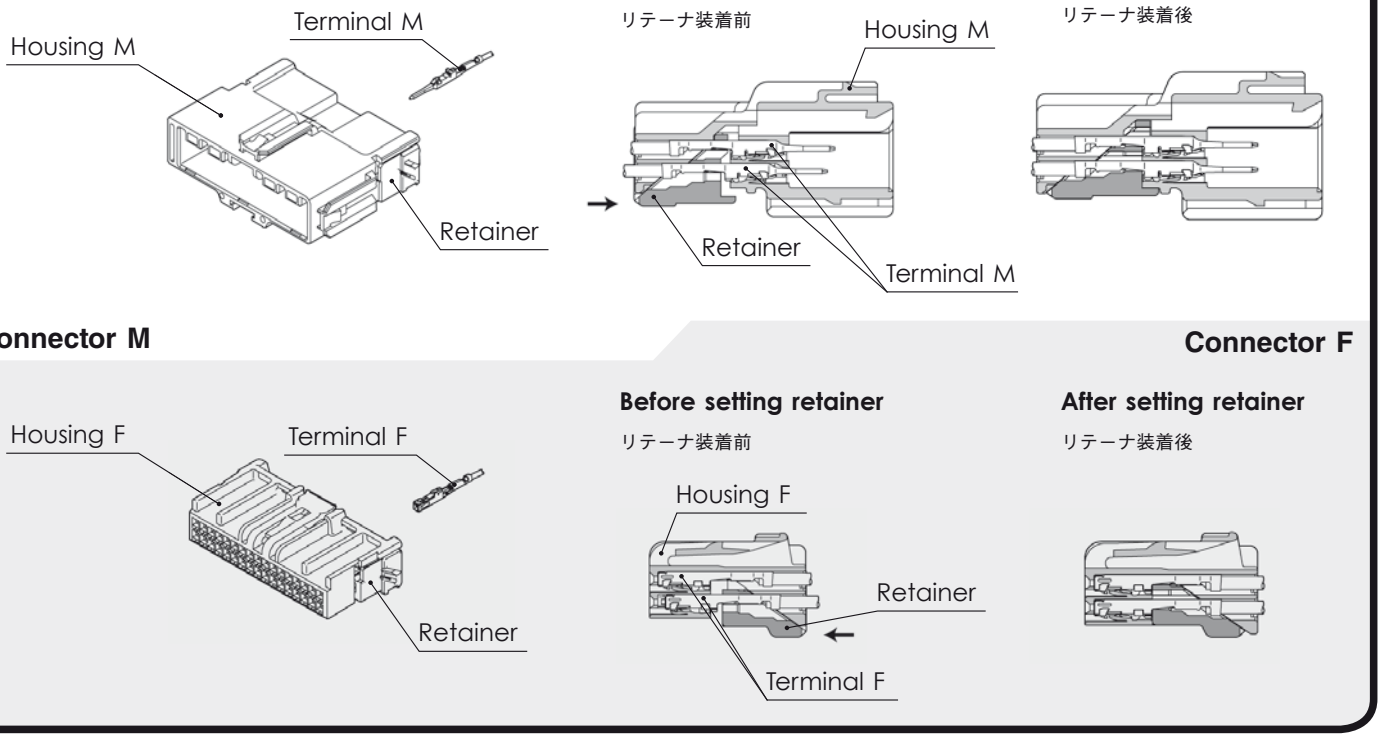
HE シリーズは、従来の HD シリーズを改良し、信頼性を向上させたコネクタです。ターミナル抜けやコネクタの半嵌合が起きにくい機構を備えています。
ターミナルサイズにより0.64mm・1.0mm・2.3mm・4.8mm・9.5mm(ハイブリッドは0.64mm・1.0mm・2.3mm・4.8mm・8.0mm）で構成されており、各種の制御回路並びに低パワー回路に対応することができます。

- 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。
- RoHS/ELV 対応

HE SERIES for STANDARD

0.64mm (025)

Structure／構造

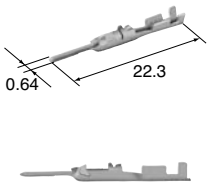


0.64mm (025)

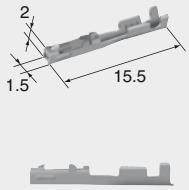
Terminal (UNIT : mm)

(S)

Cable size(mm²) **適用電線サイズ**	0.22～0.35
Cable overall diameter(mm) **電線仕上り外径**	0.95～1.4
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-4028)

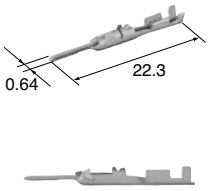


F (8100-4029)

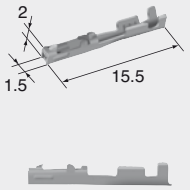
Cable size(mm²) **適用電線サイズ**	0.22～0.35
Cable overall diameter(mm) **電線仕上り外径**	0.95～1.4
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

(M)

Cable size(mm²) **適用電線サイズ**	0.5～0.75
Cable overall diameter(mm) **電線仕上り外径**	1.25～1.6
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-4027)



F (8100-4030)

Cable size(mm²) **適用電線サイズ**	0.5～0.75
Cable overall diameter(mm) **電線仕上り外径**	1.25～1.6
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

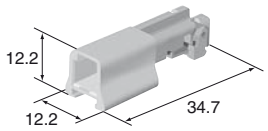
0.64mm (025)

Housing (UNIT : mm)

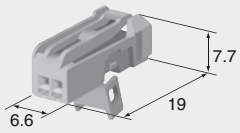
Ref: Terminal part No. **ターミナル参照頁**	C-02
Material **材　質**	PBT

2way

Color **色　相**	Natural 自然色



M (6098-5070)

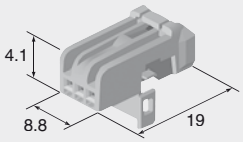


F (6098-5071)

Color **色　相**	Natural 自然色

3way

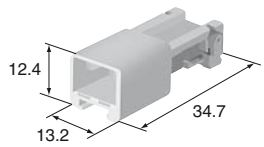
F (6098-5833)



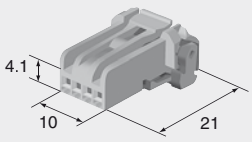
Color **色　相**	Natural 自然色

4way

Color **色　相**	Natural 自然色



M (6098-4944)

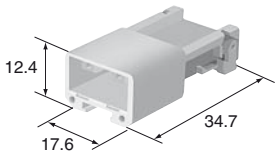


F (6098-4978)

Color **色　相**	Natural 自然色

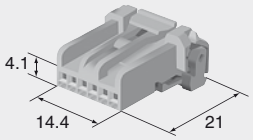
6way

Color 色 相	Natural 自然色



M (6098-4943)

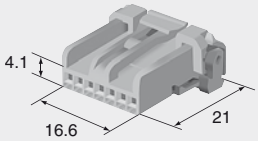
F (6098-4979)



Color 色 相	Natural 自然色

7way

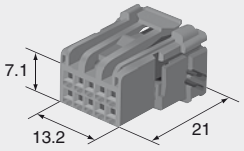
F (6098-5000)



Color 色 相	Natural 自然色

10way

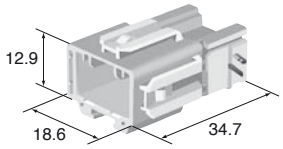
F (6098-4982)



Color 色 相	Green 緑

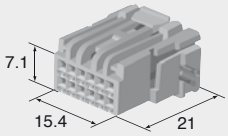
12way

Color 色 相	Natural 自然色



M (6098-4675)

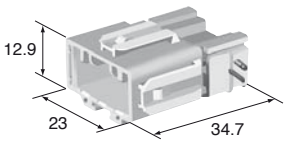
F (6098-4640)



Color 色 相	Natural 自然色

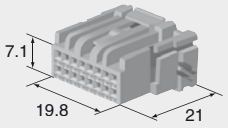
16way

Color 色 相	Natural 自然色



M (6098-4333)

F (6098-4339)



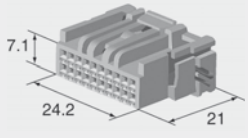
Color 色 相	Natural 自然色

20way

Color 色 相	Natural 自然色

M (6098-4589)

F (6098-4595)



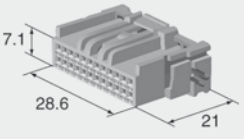
Color 色 相	Natural 自然色

24way

Color 色 相	Natural 自然色

M (6098-4588)

F (6098-4594)

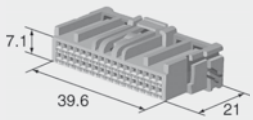


Color 色 相	Natural 自然色

34way

Color 色　相	Natural 自然色

M (6098-4590)



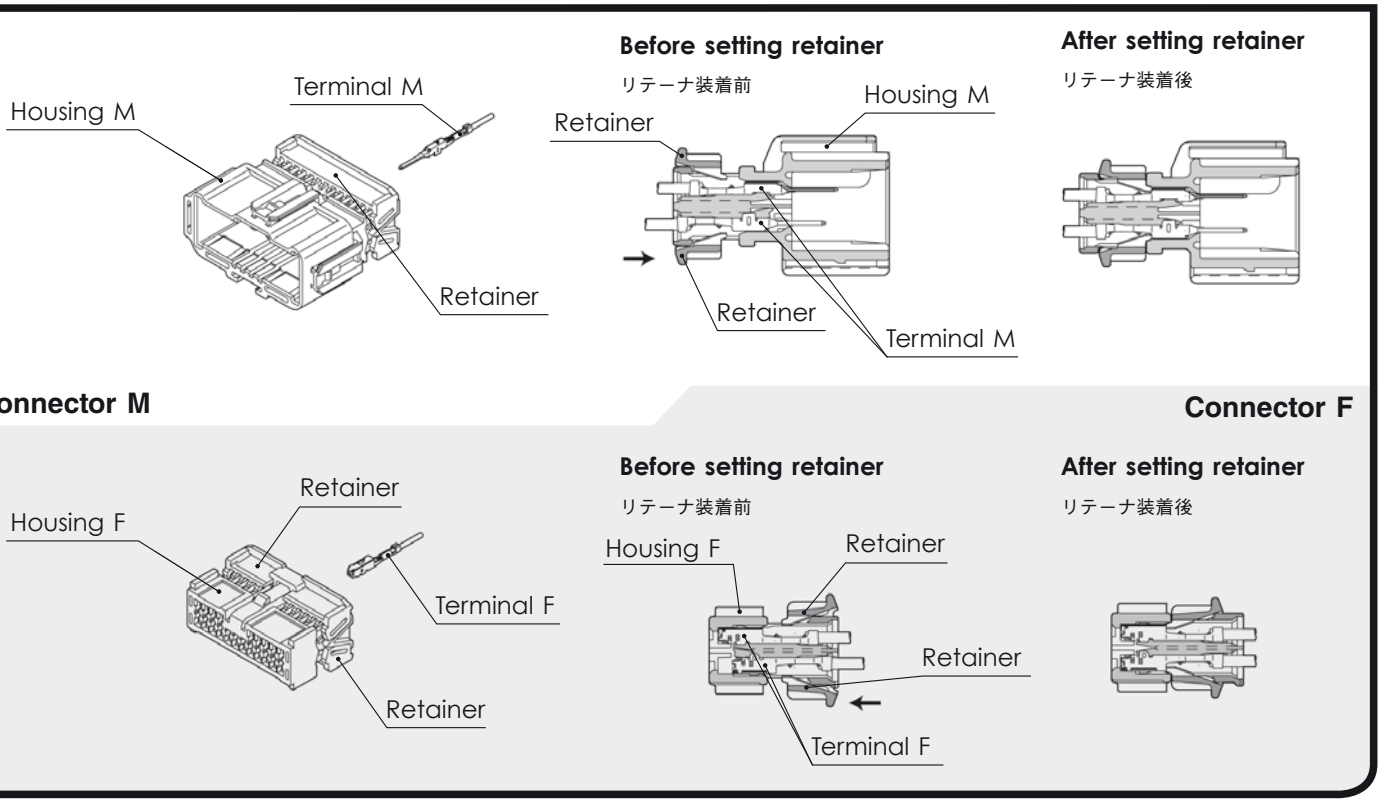
F (6098-4596)

Color 色　相	Natural 自然色

HE SERIES for STANDARD

1.0mm（040）

Structure／構造

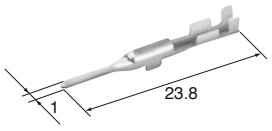


1.0mm（040）

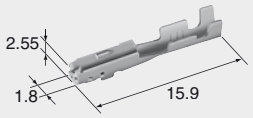
Terminal (UNIT : mm)

(SS)

Cable size(mm²) **適用電線サイズ**	0.22～0.35
Cable overall diameter(mm) **電線仕上り外径**	0.95～1.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-4307)

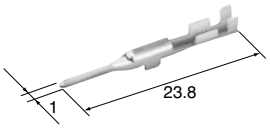


Cable size(mm²) **適用電線サイズ**	0.22～0.35
Cable overall diameter(mm) **電線仕上り外径**	0.95～1.1
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

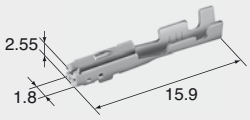
F (8100-4308)

(S)

Cable size(mm²) **適用電線サイズ**	0.3～0.85
Cable overall diameter(mm) **電線仕上り外径**	1.4～1.8
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-2972)



Cable size(mm²) **適用電線サイズ**	0.3～0.85
Cable overall diameter(mm) **電線仕上り外径**	1.4～1.8
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

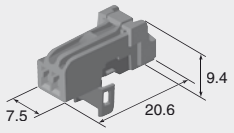
F (8100-2971)

1.0mm (040)

Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	C-06
Material **材　質**	PBT

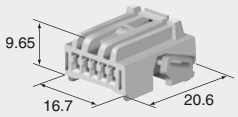
2way



F (6098-5888)

Color **色　相**	Light Gray 淡灰

5way

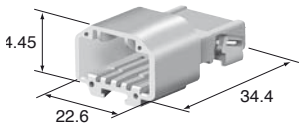


F (6098-2779)

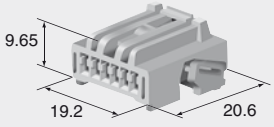
Color **色　相**	Natural 自然色

6way

Color **色　相**	Natural 自然色



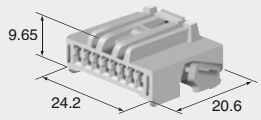
M (6098-2780)



F (6098-2781)

Color **色　相**	Natural 自然色

8way

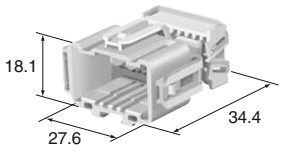


F (6098-2782)

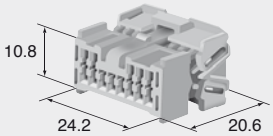
Color **色　相**	Natural 自然色

13way

Color 色 相 — Natural 自然色



M (6098-2788)

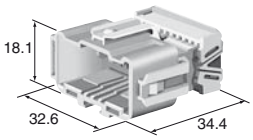


F (6098-2784)

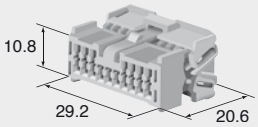
Color 色 相 — Natural 自然色

17way

Color 色 相 — Natural 自然色



M (6098-3369)

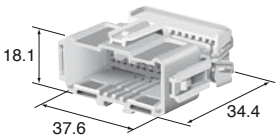


F (6098-2785)

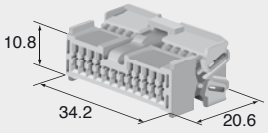
Color 色 相 — Natural 自然色

21way

Color 色 相 — Natural 自然色



M (6098-2789)



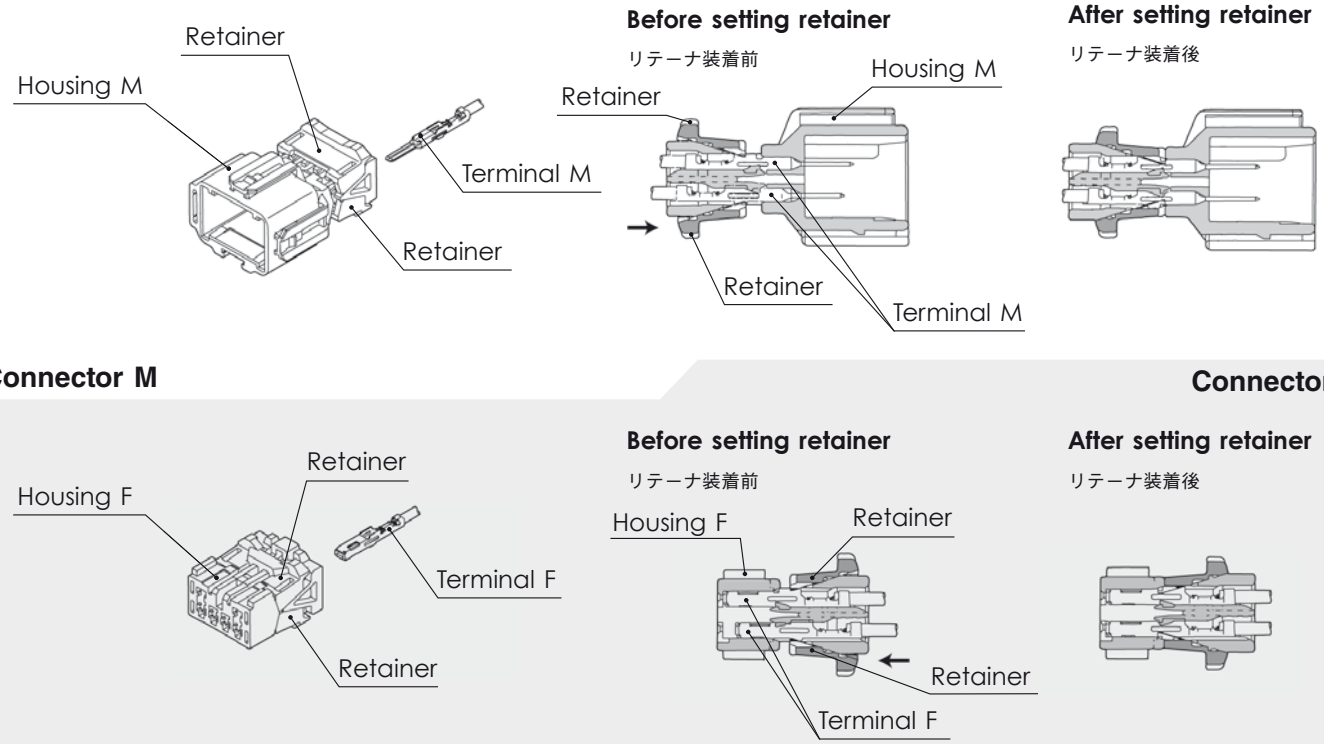
F (6098-2764)

Color 色 相 — Natural 自然色

HE SERIES for STANDARD

2.3mm (090)

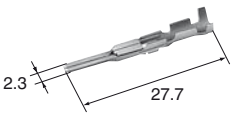
Structure／構造



2.3mm (090)

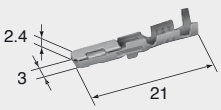
(S)

Cable size (mm²) **適用電線サイズ**	0.3～0.5
Cable overall diameter (mm) **電線仕上り外径**	1.4～2.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-1571)

F (8100-1470)

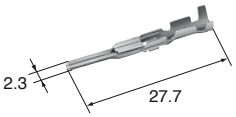


Cable size (mm²) **適用電線サイズ**	0.3～0.5
Cable overall diameter (mm) **電線仕上り外径**	1.4～2.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ

Terminal (UNIT : mm)

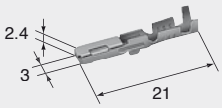
(M)

Cable size (mm²) **適用電線サイズ**	0.5～1.25
Cable overall diameter (mm) **電線仕上り外径**	2.0～2.9
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-1573)

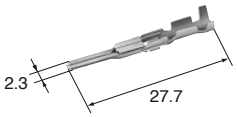
F (8100-1472)



Cable size (mm²) **適用電線サイズ**	0.5～1.25
Cable overall diameter (mm) **電線仕上り外径**	2.0～2.9
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ

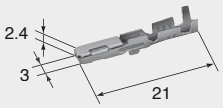
(L)

Cable size (mm²) **適用電線サイズ**	2.0
Cable overall diameter (mm) **電線仕上り外径**	2.6～3.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-1572)

F (8100-1471)



Cable size (mm²) **適用電線サイズ**	2.0
Cable overall diameter (mm) **電線仕上り外径**	2.6～3.1
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

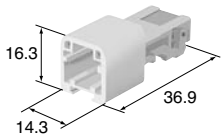
2.3mm (090)

Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	C-09
Material **材　質**	PBT

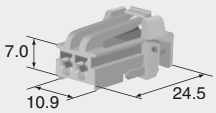
2way

Color **色　相**	Natural 自然色



M (6098-4901)

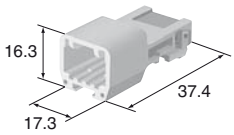
F (6098-4069)



Color **色　相**	Natural 自然色

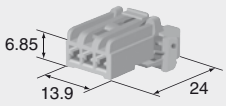
3way

Color **色　相**	Natural 自然色



M (6098-5049)

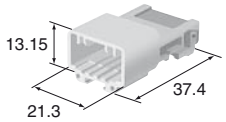
F (6098-4071)



Color **色　相**	Natural 自然色

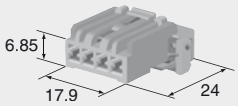
4way

Color **色　相**	Natural 自然色



M (6098-4902)

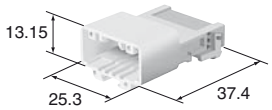
F (6098-4073)



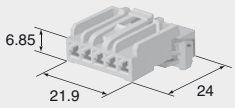
Color **色　相**	Natural 自然色

5way

Color 色 相	Natural 自然色



M (6098-4664)

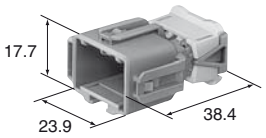


F (6098-4669)

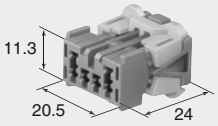
Color 色 相	Natural 自然色

6way

Color 色 相	Sky Blue 空色



M (6098-1373)

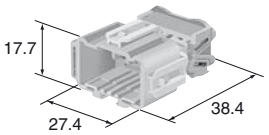


F (6098-1377)

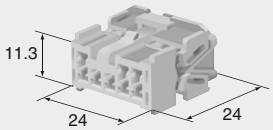
Color 色 相	Sky Blue 空色

8way

Color 色 相	Natural 自然色



M (6098-4661)

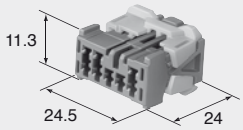


F (6098-4670)

Color 色 相	Natural 自然色

8way

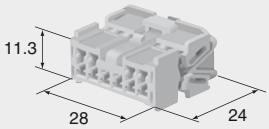
F (6098-1378)



Color 色 相	Green 緑

10way

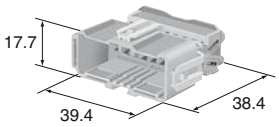
F (6240-5378)



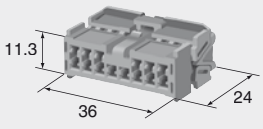
Color 色 相	Natural 自然色

14way

Color 色 相	Natural 自然色



M (6098-4662)

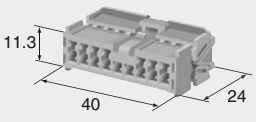


F (6098-4050)

Color 色 相	Natural 自然色

16way

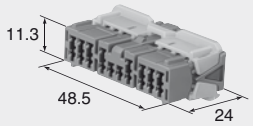
F (6098-3563)



Color 色 相	Natural 自然色

18way

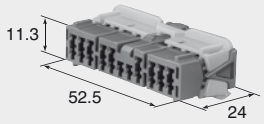
F（6098-1379）



Color **色　相**	Green 緑

20way

F（6098-1380）



Color **色　相**	Green 緑

HE SERIES for STANDARD

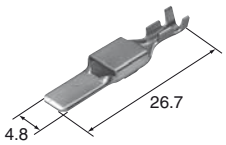
4.8mm (187)

4.8mm (187)

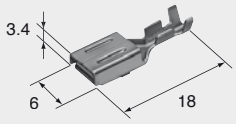
Terminal (UNIT : mm)

(S)

Cable size (mm²) 適用電線サイズ	0.3
Cable overall diameter (mm) 電線仕上り外径	1.4～1.9
Material 材　質	Brass 黄銅
Surface treatment 表面処理	Tin-plated Snメッキ



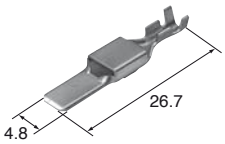
M (8100-1506)　　**F (8100-1507)**



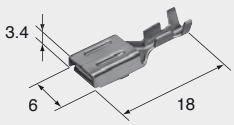
Cable size (mm²) 適用電線サイズ	0.3
Cable overall diameter (mm) 電線仕上り外径	1.4～1.9
Material 材　質	Heat-resistant copper alloy
Surface treatment 表面処理	Tin-plated Snメッキ

(M)

Cable size (mm²) 適用電線サイズ	0.5～1.25
Cable overall diameter (mm) 電線仕上り外径	1.6～2.9
Material 材　質	Brass 黄銅
Surface treatment 表面処理	Tin-plated Snメッキ



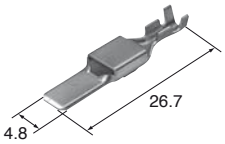
M (8100-0664)　　**F (8100-0606)**



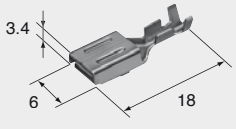
Cable size (mm²) 適用電線サイズ	0.5～1.25
Cable overall diameter (mm) 電線仕上り外径	1.6～2.9
Material 材　質	Heat-resistant copper alloy
Surface treatment 表面処理	Tin-plated Snメッキ

(L)

Cable size (mm²) 適用電線サイズ	2.0～3.0
Cable overall diameter (mm) 電線仕上り外径	2.6～3.8
Material 材　質	Brass 黄銅
Surface treatment 表面処理	Tin-plated Snメッキ



M (1500-0166)　　**F (8100-0782)**



Cable size (mm²) 適用電線サイズ	2.0～3.0
Cable overall diameter (mm) 電線仕上り外径	2.6～3.8
Material 材　質	Heat-resistant copper alloy
Surface treatment 表面処理	Tin-plated Snメッキ

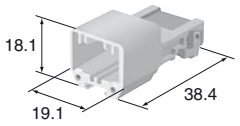
4.8mm (187)

Housing (UNIT : mm)

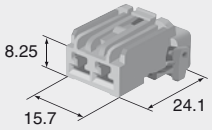
Ref: Terminal part No. **ターミナル参照頁**	C-13
Material **材　質**	PBT

2way

Color **色　相**	Natural 自然色



M (6098-5120)

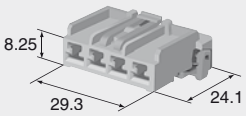


F (6098-5119)

Color **色　相**	Natural 自然色

4way

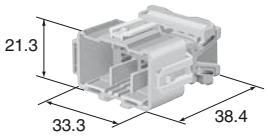
F (6098-4971)



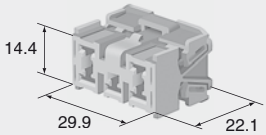
Color **色　相**	Natural 自然色

5way

Color **色　相**	Natural 自然色



M (6098-4663)



F (6098-4667)

Color **色　相**	Natural 自然色

HE SERIES for STANDARD

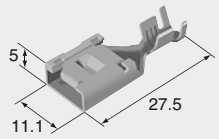
9.5mm (375)

9.5mm (375)

Terminal (UNIT : mm)

(S)

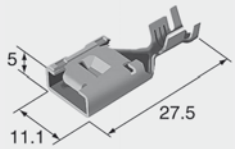
F (8240-0152)



Cable size (mm²) 適用電線サイズ	2.0～3.0
Cable overall diameter (mm) 電線仕上り外径	2.6～4.1
Material 材　質	Copper alloy 銅合金
Surface treatment 表面処理	Tin-plated Snメッキ

(M)

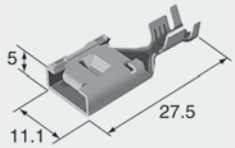
F (8240-0153)



Cable size (mm²) 適用電線サイズ	5.0～8.0
Cable overall diameter (mm) 電線仕上り外径	4.4～5.8
Material 材　質	Heat-resistant copper alloy
Surface treatment 表面処理	Tin-plated Snメッキ

(L)

F (8240-0154)



Cable size (mm²) 適用電線サイズ	10.0
Cable overall diameter (mm) 電線仕上り外径	6.5～6.9
Material 材　質	Heat-resistant copper alloy
Surface treatment 表面処理	Tin-plated Snメッキ

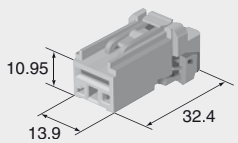
9.5mm (375)

Housing (UNIT : mm)

Ref: Terminal part No. ターミナル参照頁	C-15
Material 材　質	PBT

1way　rib A

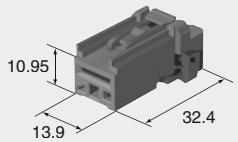
F (6098-4973)



Color 色　相	Natural 自然色

1way　rib B

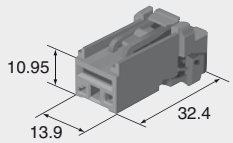
F (6098-4974)



Color 色　相	Black 黒

1way — rib C

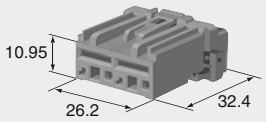
F（6098-4975）



Color **色　相**	Dark Green 濃緑

2way

F（6098-4977）



Color **色　相**	Green 緑

HE SERIES
for HYBRID

0.64mm, 2.3mm (025, 090)

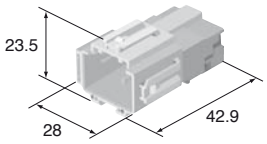
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[0.64mm] [2.3mm]	C-02 C-09
Material **材　質**	PBT	

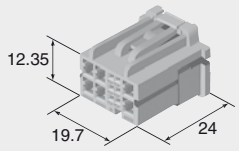
No. of way/ ( ) corresponds to 0.64mm, 2.3mm, in order from left to right.
極数／( ) 内表示：左から 0.64mm 極数、2.3mm 極数

12way (6+6)

Color / **色　相**: Natural / 自然色



M (6098-6161)

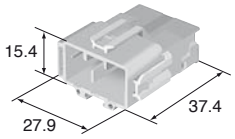


F (6098-6162)

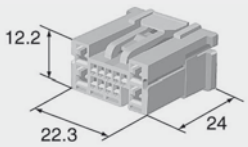
Color / **色　相**: Natural / 自然色

13way (9+4)

Color / **色　相**: Natural / 自然色



M (6098-5180)

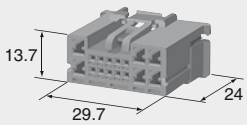


F (6098-6562)

Color / **色　相**: Natural / 自然色

16way (10+6)

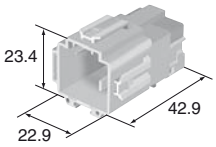
F (6098-5822)



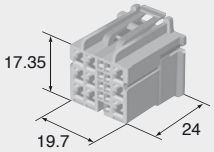
Color / **色　相**: Natural / 自然色

18way (9+9)

Color / **色　相**: Natural / 自然色



M (6098-4908)

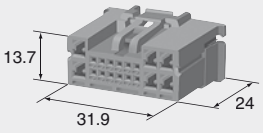


F (6098-6478)

Color / **色　相**: Natural / 自然色

18way (12+6)

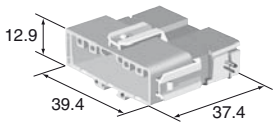
F (6098-5824)



Color **色　相**	Natural 自然色

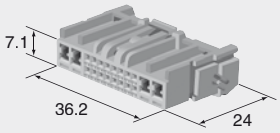
20way (16+4)

Color **色　相**	Natural 自然色



M (6098-4591)

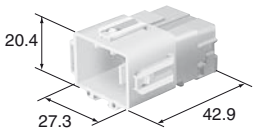
F (6098-4597)



Color **色　相**	Natural 自然色

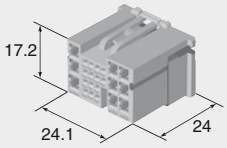
23way (14+9)

Color **色　相**	Natural 自然色



M (6098-4707)

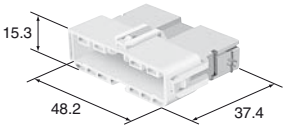
F (6098-6559)



Color **色　相**	Natural 自然色

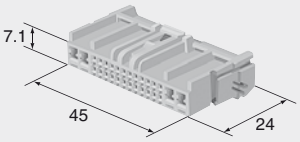
28way (24+4)

Color **色　相**	Natural 自然色



M (6098-4725)

F (6098-4726)



Color **色　相**	Natural 自然色

0.64mm, 4.8mm (025, 187)

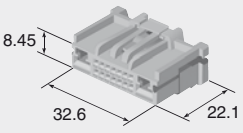
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[0.64mm] [4.8mm]	C-02 C-13
Material **材　質**	PBT	

No. of way/ ( ) corresponds to 0.64mm, 4.8mm, in order from left to right.
極数／( ) 内表示：左から 0.64mm 極数、4.8mm 極数

16way (14+2)

F (6098-6293)



Color **色　相**	Natural 自然色

1.0mm, 2.3mm (040, 090)

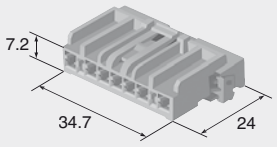
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[1.0mm] [2.3mm]	C-06 C-09
Material **材　質**	PBT	

No. of way/ ( ) corresponds to 1.0mm, 2.3mm, in order from left to right.
極数／( ) 内表示：左から1.0mm 極数、2.3mm 極数

9way (2+7)

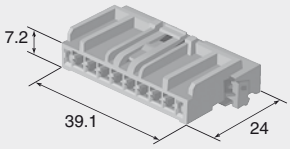
F (6098-4075)



Color **色　相**	Natural 自然色

10way (2+8)

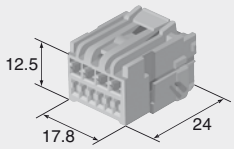
F (6098-4076)



Color **色　相**	Natural 自然色

10way (6+4)

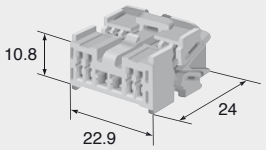
F (6098-4666)



Color **色　相**	Natural 自然色

10way (8+2)

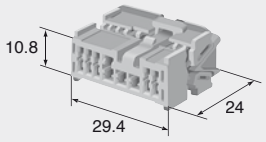
F (6098-3600)



Color **色　相**	Natural 自然色

14way (10+4)

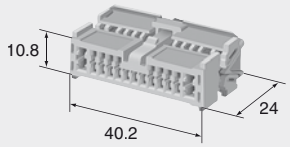
F (6098-3601)



Color **色　相**	Natural 自然色

23way (19+4)

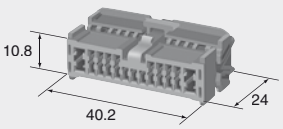
F (6098-3571)



Color **色　相**	Natural 自然色

23way (19+4)

F (6098-4367)



Color **色　相**	Brown 茶

1.0mm, 4.8mm (040, 187)

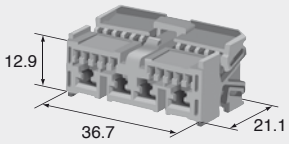
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[1.0mm] [4.8mm]	C-06 C-13
Material **材　質**	PBT	

No. of way/ ( ) corresponds to 1.0mm, 4.8mm, in order from left to right.
極数／( ) 内表示：左から1.0mm 極数、4.8mm 極数

14way (10+4)

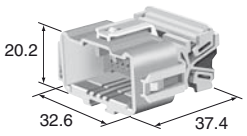
F (6098-4017)



Color **色　相**	Natural 自然色

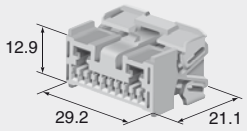
12way (10+2)

Color **色　相**	Natural 自然色



M (6098-3370)

F (6098-2786)



Color **色　相**	Natural 自然色

2.3mm, 4.8mm (090, 187)

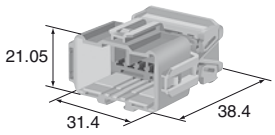
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[2.3mm] [4.8mm]	C-09 C-13
Material **材　質**	PBT	

No. of way/ ( ) corresponds to 2.3mm, 4.8mm, in order from left to right.
極数／( ) 内表示：左から2.3mm 極数、4.8mm 極数

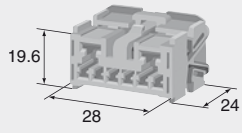
8way (6+2)

Color **色　相**	Natural 自然色



M (6098-5218)

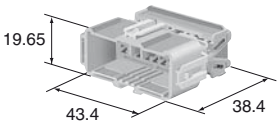
F (6098-5217)



Color **色　相**	Natural 自然色

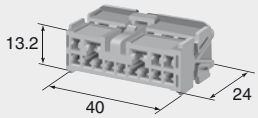
14way (12+2)

Color 色 相	Natural 自然色



M (6098-4660)

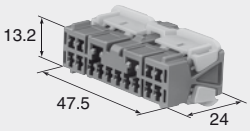
F (6098-3565)



Color 色 相	Natural 自然色

16way (14+2)

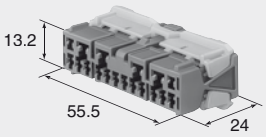
F (6950-1054)



Color 色 相	Green 緑

18way (14+4)

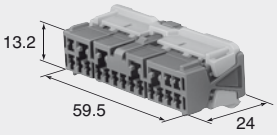
F (6950-1055)



Color 色 相	Green 緑

20way (16+4)

F (6950-1056)



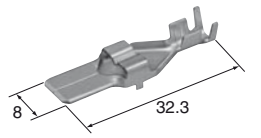
Color 色 相	Green 緑

8.0mm (312)

Terminal (UNIT : mm)

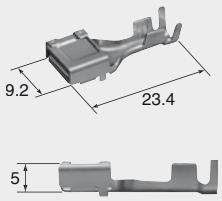
(S)

Cable size (mm²) 適用電線サイズ	0.5～1.25
Cable overall diameter (mm) 電線仕上り外径	1.6～2.9
Material 材 質	Brass 黄銅
Surface treatment 表面処理	Tin-plated Snメッキ



M (8100-0520)

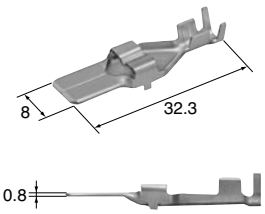
F (8100-0707)



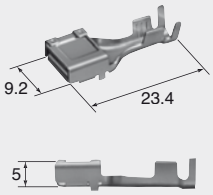
Cable size (mm²) 適用電線サイズ	0.5～1.25
Cable overall diameter (mm) 電線仕上り外径	1.6～2.9
Material 材 質	Brass 黄銅
Surface treatment 表面処理	Tin-plated Snメッキ

(M)

Cable size (mm²) **適用電線サイズ**	2.0～3.0
Cable overall diameter (mm) **電線仕上り外径**	2.6～4.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



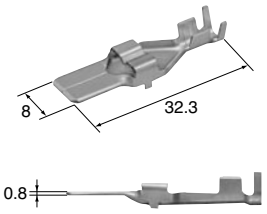
M (8100-0521)　　**F (8100-0706)**



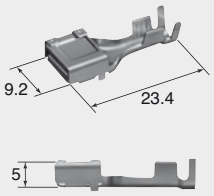
Cable size (mm²) **適用電線サイズ**	2.0～3.0
Cable overall diameter (mm) **電線仕上り外径**	2.6～4.1
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ

(L)

Cable size (mm²) **適用電線サイズ**	5.0～8.0
Cable overall diameter (mm) **電線仕上り外径**	4.4～5.8
Material **材　質**	Brass 黄銅
Surface treatment **表面処理**	Tin-plated Snメッキ



M (8100-0522)　　**F (8100-1553)**



Cable size (mm²) **適用電線サイズ**	5.0～8.0
Cable overall diameter (mm) **電線仕上り外径**	4.4～5.8
Material **材　質**	Heat-resistant copper alloy
Surface treatment **表面処理**	Tin-plated Snメッキ

4.8mm, 8.0mm (187, 312)

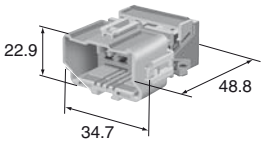
Housing (UNIT : mm)

Ref: Terminal part No. **ターミナル参照頁**	[4.8mm] [8.0mm]	C-13 C-21
Material **材　質**	PBT	

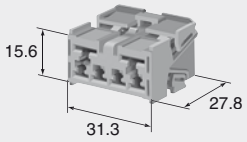
No. of way/ ( ) corresponds to 4.8mm, 8.0mm, in order from left to right.
極数／( ) 内表示：左から 4.8mm 極数、8.0mm 極数

6way (4+2)

Color **色　相**	Natural 自然色



M (6098-3567)　　**F (6098-3569)**



Color **色　相**	Natural 自然色

HE SERIES
for PCB

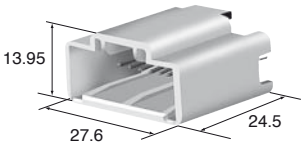
1.0mm (040)

Housing (UNIT : mm)

Material **材　質**	PBT G30

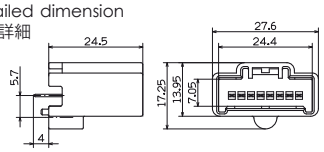
8way (Vertical type) (垂直)

M (6098-2925)

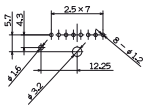


Connector F part No. **Fコネクタ品番**	6098-2782 (C-07)
Color **色　相**	Natural 自然色

●Detailed dimension
寸法詳細

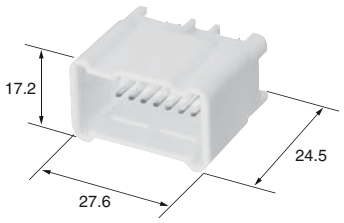


●Recommended demension of Circuit board
基板推奨詳細



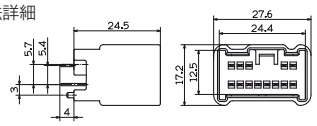
13way (Vertical type) (垂直)

M (6098-3239)

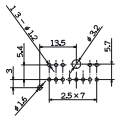


Connector F part No. **Fコネクタ品番**	6098-2784 (C-08)
Color **色　相**	Natural 自然色

●Detailed dimension
寸法詳細



●Recommended demension of Circuit board
基板推奨詳細



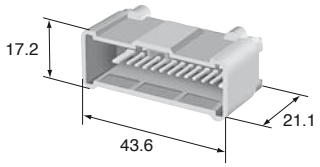
1.0mm, 2.3mm
(040, 090)

Housing (UNIT : mm)

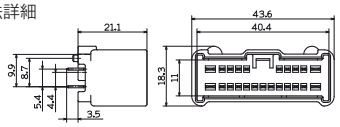
Material **材　質**	PBT G30

23way **(Vertical type)(垂直)**

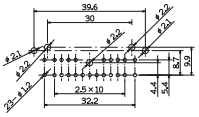
M(6098-3572)



●Detailed dimension
寸法詳細



●Recommended demension of Circuit board
基板推奨詳細



Connector F part No. **Fコネクタ品番**	6098-3571(C-19)
Color **色　相**	Natural 自然色

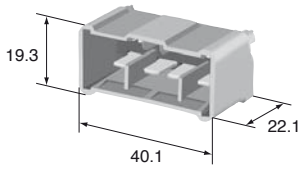
1.0mm, 4.8mm
(040, 187)

Housing (UNIT : mm)

Material **材　質**	PBT G30

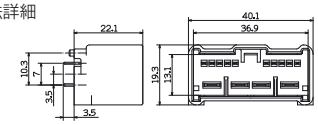
14way (**Vertical type**) (垂直)

M (6098-4018)

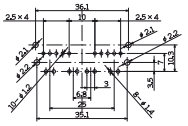


Connector F part No. **Fコネクタ品番**	6098-4017 (C-20)
Color **色　相**	Natural 自然色

●Detailed dimension
寸法詳細



●Recommended demension of Circuit board
基板推奨詳細



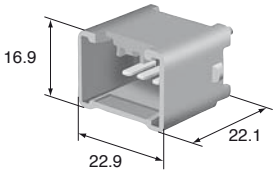
2.3mm (090)

Housing (UNIT : mm)

Material **材　質**	PBT G30

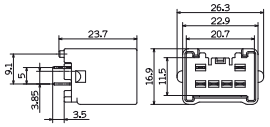
6way (**Vertical type**) (垂直)

M (6098-3616)

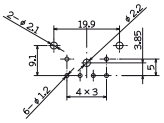


Connector F part No. **Fコネクタ品番**	6098-1377 (C-11)
Color **色　相**	Sky Blue 空色

●Detailed dimension
寸法詳細



●Recommended demension of Circuit board
基板推奨詳細



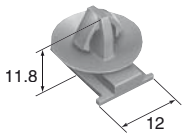
HE SERIES
COMMON USE PARTS

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。

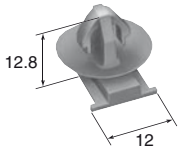
(6810-1203)

Clamp fitting hole size(mm) 適合穴サイズ	φ7
Clamp fitting thickness(mm) クランプ適合板厚	t=0.65～1.6
Material 材　質	6 Nylon
Color 色　相	Red 赤



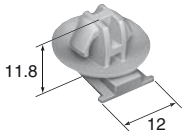
(6810-1217)

Clamp fitting hole size(mm) 適合穴サイズ	φ7
Clamp fitting thickness(mm) クランプ適合板厚	t=1.6～2.6
Material 材　質	6 Nylon
Color 色　相	Brown 茶



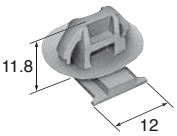
(6810-1204)

Clamp fitting hole size(mm) 適合穴サイズ	φ10
Clamp fitting thickness(mm) クランプ適合板厚	t=0.65～1.6
Material 材　質	6 Nylon
Color 色　相	Natural 自然色



(6810-1462)

Clamp fitting hole size(mm) 適合穴サイズ	6×12 (Square hole)
Clamp fitting thickness(mm) クランプ適合板厚	t=0.65～1.6
Material 材　質	6 Nylon
Color 色　相	Orange 橙

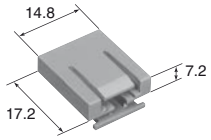


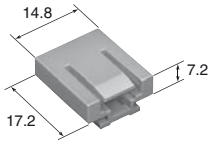
Body fastening clamp (Bracket type) (mm)

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。

(6910-0119)

Bracket direction ブラケット差込み方向	Connector mating direction コネクタ嵌合方向
Material 材　質	6 Nylon
Color 色　相	Red 赤



(6910-0120)

Bracket direction ブラケット差込み方向	Anti clock wise コネクタ嵌合の逆方向
Material 材　質	6 Nylon
Color 色　相	Natural 自然色