Printed Circuit Board Overview

Printed circuit board or PCB connectors are heavy duty environmentally sealed connectors designed for wire-to-circuit board connections. TE Connectivity Industrial & Commercial Transportation's connectors are built to maintain the integrity and continuity of data and power signals in harsh environments. Developed and designed for heavy duty electronically equipped vehicles, TE's printed circuit board connector bodies will withstand dust, dirt, moisture, and vibration.

Available in a variety of styles from several different connector families, TE's printed circuit board connectors cover a range of pin counts from 2 to 76 and wire gauges from 10 to 22. Many of the connectors are available in straight, 90°, or solder pot options.



PRINTED CIRCUIT BOARD CONNECTOR OPTIONS

Product Line	Cavity Arrangements	Mating Connector Wire Size
AMPSEAL	8, 14, 23, 35	16-20 AWG
Circular DIN	2, 3, 4	2.5020 mm ²
DRC Series	24, 40, 50, 60, 70, 76	14-22 AWG
DT Series	2, 3, 4, 6, 8, 12	14-20 AWG
DTM Series	8, 12, 48 (flangeless)	16-22 AWG
DTP Series	4	10-14 AWG
HD10 Series	6,9	14-20 AWG
LEAVYSEAL	21, 39, 62, 92	6.020 mm ²
STRIKE	32	14-22 AWG
Superseal 1.0	26, 34, 60	1.2550 mm ²
EEC Enclosure and Flange Receptacle	12, 24, 36, 48 (DT series headers)	14-20 AWG
	12, 24 (DTM series headers)	16-22 AWG

Notes: DT series has flangeless options. Some arrangements of the DT and DTM series are available with A, B, C, and D keying options.

Note

See individual product line sections for part numbering system.



AMPSEAL CONNECTORS 90° OR STRAIGHT

Materials

Cover: Glass filled PBT Wire Seal: Silicone rubber Contacts: Tin or gold plated brass

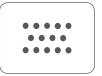
Mating Plugs

8 Position: 776286-* 14 Position: 776273-* 23 Position: 770680-* 35 Position: 776164-*





8 Positions 8 size 1.3 mm



14 Positions 14 size 1.3 mm



23 Positions 23 size 1.3 mm



35 Positions 35 size 1.3 mm

Note

See pages 11-20 for comprehensive AMPSEAL product information.

CIRCULAR DIN CONNECTORS STRAIGHT

Materials

Housing: Glass filled PBT & PA Flange Seal: Silicone rubber Contacts: CuZn, tin plated CuZn, gold plated

Mating Plugs

2 Position: 1-967325-3, 1-968968-3 (secondary locking) 3 Position: 1-967325-2, 1-968968-2 (secondary locking) 4 Position: 1-967325-1, 1-968968-1 (secondary locking)



2 Positions 2 size 2.5 mm



3 Positions 3 size 2.5 mm



4 Positions 4 size 2.5 mm

Note

See pages 35-44 for comprehensive Circular DIN product information.



DRC10 SERIES STRAIGHT

Materials

Housing: Glass filled PA and PPS Grommet: Silicone rubber Receptacle Threaded Insert: Stainless steel/brass

Contacts: Molded-in copper alloy, tin plated solder pot standard

(gold optional - see modifications)



DRC10-24P* 24 size 16

Mating Plugs

24 Pin: DRC16-24S* 40 Pin: DRC16-40S

Modifications

A004: Tin plated PCB pins AG02: Some terminals are gold plated



DRC10-40P*40 size 16



DRC13 SERIES 90°

Materials

Housing: Glass filled PA and PPS Receptacle Threaded Insert: Stainless steel/brass Contacts: Molded-in copper alloy, tin plated PCB pins standard (gold optional - see modifications) Mounting Seal: Silicone rubber

Mating Plugs

24 Pin: DRC16-24S* 40 Pin: DRC18-40S* 70 Pin: DRC16-70S*

Modifications

C023: 5mm² threaded insert

mounting holes

G002: Only outside terminal rows

are gold plated

N012: One piece connector design

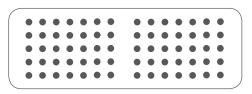




DRC13-24P* 24 size 16



DRC13-40P* 40 size 16



DRC13-70P* 70 size 16



DRC20/22 SERIES STRAIGHT

Materials

Housing: Glass filled PA and PPS Grommet: Silicone rubber Receptacle Threaded Insert:

Stainless steel/brass

Contacts: Molded-in copper alloy, gold plated mating side, tin plated PCB side (size 12 contacts are tin plated on mating and PCB sides) Mounting Seal: Silicone rubber

Mating Plugs

50 Pin: DRC26-50S**
60 Pin: DRC26-60S**
76 Pin: (2) DRC26-38S**



DRC20











DRC2*-50P* 50 size 20

DRC20-60P* 60 size 20

DRC20-76P**** 68 size 20, 8 size 12

DRC23 SERIES 90°

Materials

Housing: Glass filled PA and PPS Grommet: Silicone rubber Receptacle Threaded Insert:

Stainless steel/brass

Contacts: Molded-in copper alloy, gold plated PCB pins standard

(tin optional)

Mounting Seal: Silicone rubber

Mating Plugs

24 Pin: DRC26-24S* 40 Pin: DRC26-40S*

64 Pin: DRC26-24S*, DRC26-40S*

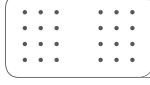


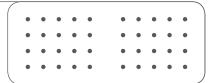
Modifications

N010: Custom mount

N012: One piece connector design







DRC2*-24** 24 size 20





Note

See pages 99-108 for comprehensive DRC series product information.

DRC2*-40** 40 size 20



DT13/15 SERIES 90° OR STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy, nickel plated mating side, tin plated PCB side (gold plating optional - contact your

representative)

Mounting Seal: Silicone rubber

Mating Plugs

2 Pin: DT06-2S 3 Pin: DT06-3S 4 Pin: DT06-4S 6 Pin: DT06-6S 8 Pin: DT06-08S* 12 Pin: DT06-12S*

Modifications

B016: Extended shell and additional

keys

G003: Gold plated pins





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DT1*-2P 2 size 16



DT1*-4P 4 size 16



DT1*-6P 6 size 16



DT1*-08P* 8 size 16 **A, B, C, D**



DT1*-12P* 12 size 16 **A, B, C, D**

Note

DT15

Camcar thread forming screws are recommended. See drawing.

DTF13 SERIES FLANGELESS 90°

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy, tin plated PCB side (gold plating optional - contact your representative)

Mating Plugs

2 Pin: DT06-2S 3 Pin: DT06-3S 4 Pin: DT06-4S 6 Pin: DT06-6S 12 Pin: DT06-12S*

Modifications

G003: Gold plated pins





DTF13-2P 2 size 16



DTF13-3P 3 size 16



DTF13-4P 4 size 16



DTF13-6P 6 size 16



DTF13-12P* 12 size 16 **A, B, C, D**



DTF15 SERIES FLANGELESS STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy, tin plated PCB side (gold plating

optional - contact your

representative)



DTF15-12P*

12 size 16

A, B, C, D



By fixing the connectors to the board prior to soldering, pressure can be greatly reduced at the solder joint.

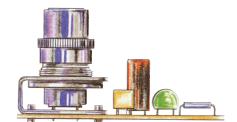
Mating Plugs

12 Pin: DT06-12S*

Modifications

G003: Gold plated pins





DTM13/15 SERIES 90° OR STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy, tin plated PCB side (gold plating

optional - contact your

representative)

Mounting Seal: Silicone rubber



DTM1*-12P*

12 size 20

A, B, C, D

Mating Plugs

12 Pin: DTM06-12S*





Note

See pages 109-132 for comprehensive DT Family product information.



DTMF15 SERIES STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy, tin plated (gold plating optional - contact your representative)

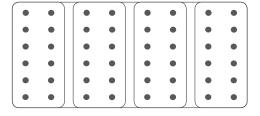
Mating Plugs

12 Pin: (4) DTM06-12S*

Modifications

B026: Alternate keying position





DTMF15-48P

(4) 12 size 20

DTP10/13/15 SERIES 90° OR STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy,

tin plated

Mounting Seal: Silicone rubber

Mating Plugs

4 Pin: (4) DTP06-4S





DTP1*-4P

4 size 12

HD10 SERIES STRAIGHT

Materials

Housing: Glass filled PA Contacts: Molded-in copper alloy,

nickel plated

Mounting Seal: Standard o-rings may be used

Mating Plugs

6 Pin: HD16-6-96S 9 Pin: HD16-9-96S

Modifications

NO05: Straight reduced diameter pins supplied as standard





HD10-6-96P-N005

6 size 16



HD10-9-96P-N005

9 size 16



LEAVYSEAL CONNECTORS 90° OR STRAIGHT

Materials

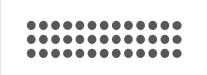
Housing: Glass filled PBT Contacts: CuSn, silver plated

Mating Plugs

21 Pin: 1-1534127-1, 1-2208688-1 (V0 rated material) 39 Pin: 5-1718321-3, 5-2208684-3 (V0 rated material) 62 Pin: 1-1418883-1 (A key), 2-1418883-1 (B key)

92 Pin: 1-703998-1 (NW 26 wire exit), 3-1703998-1 (NW 29 wire exit)





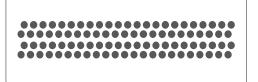


21 Positions 21 size 2.8

39 Positions 39 size 2.8

62 Positions

56 size 1.5 6 size 2.8



Note

See pages 63-78 for comprehensive LEAVYSEAL product information.

92 Positions

92 size 1.5

STRIKE13/15 SERIES 90° OR STRAIGHT

Materials

Housing: Glass filled PBT Contacts: Molded-in copper alloy, tin plated (gold plating optionalcontact your representative)

Mating Plugs

32 Pin: SRK06-MD*-32A-001

Modifications

G003: Gold plated pins





SRK1*-MD*-32A-001-***

4 Size 16 28 Size 20

Note

See pages 161-168 for comprehensive STRIKE series product information.



SUPERSEAL 1.0 MM CONNECTORS 90° OR STRAIGHT

Materials

Housing: Thermoplastic Contacts: Gold over Ni mating pins, tin-lead over

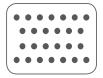
Ni - soldering pins

Mating Plugs

26 Pin: 3-1437290-7 34 Pin: 4-1437290-0

60 Pin: (1) 3-1437290-7 (26P), (1) 4-1437290-0 (34P)

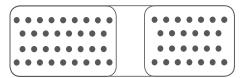








34 Positions 34 size 1.0 mm



60 Positions 60 size 1.0 mm

Note

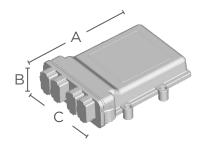
See pages 79-84 for comprehensive Superseal 1.0 product information.

Printed Circuit Board Enclosures and Headers

Compact circuit board enclosures that accept snap-in headers are available. The enclosure features a through hole mounting flange on each side, as well as optional venting. Designed with space to accommodate one or more DT or DTM series interfaces, the headers feature 90° pins. A radial flange seal provides environmental sealing to the enclosure. The headers mate with the DT and DTM standard plugs.



DT SERIES ENCLOSURE WITH HEADER DIMENSIONS



DT Series Enclosure with Header

Overall Length	Overall Height	Overall Width
A	B	C
7.93 (201.30)	2.15 (54.63)	6.30 (160.00)

Dimensions are for reference only



DT SERIES HEADER CONNECTOR

Materials

Contacts: Molded-in tin (gold plating optional - contact your representative)

Mating Plugs

12 Pin: DT06-12S* 24 Pin: (2) DT06-12S* 36 Pin: (3) DT06-12S*

Modifications

GR02: DT Series snap-in header with

gold plated pins

R015: DT Series snap-in header



DT13-12PA-****12 size 16 **A**



DT13-24PAB-****(2) 12 size 16 **A, B**



DT13-36PABC-**** (3) 12 size 16 **A, B, C**



DT13-48PABCD-**** (4) 12 size 16 **A, B, C, D**

Note

Keying position of receptacle must match keying position of mating plug(s).

DT SERIES PCB ENCLOSURE

Materials

Housing: Thermoplastic

Board Size

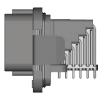
5" x 6.50"

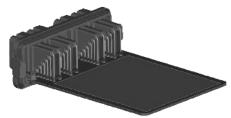
Venting

A: With vent hole B: Without vent hole

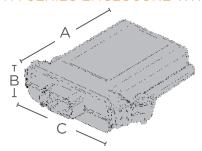


EEC-5X650*





DTM SERIES ENCLOSURE WITH HEADER DIMENSIONS



DTM Series Enclosure with Header

Overall Length	Overall Height	Overall Width
A	B	C
5.24 (133.03)	1.42 (36.00)	4.68 (118.80)

Dimensions are for reference only

DTM SERIES HEADER CONNECTOR

Materials

Contacts: Molded-in nickel mating side, tin plated PCB side

Mating Plugs

12 Pin: DTM06-12S* 24 Pin: (2) DTM06-12S*

Modifications

GR01: DTM Series snap-in header with gold plated pins



DTM13-12P*-****12 size 20 **A, B, C, D**



DTM13-12PA-12PB-****
(2) 12 size 20 **A, B**



DTM13-12PC-12PD-****(2) 12 size 20 **C, D**

Printed Circuit Board Connectors

DTM SERIES PCB ENCLOSURE

Materials

Housing: Thermoplastic

Board Size

3.25" x 4"

Venting

A: With vent hole B: Without vent hole

Modifications

E016: Molded in clear Ultem® material









EEC-325X4*-E016