#### **DT Family Overview**

DEUTSCH DT, DTM, and DTP series environmentally sealed connectors are designed for cable to cable and cable to board applications. The DT connectors are used in harsh environment applications where even a small degradation in connection may be critical. Thermoplastic housings offer a wide operating temperature range and silicone rear wire and interface seals allow the connectors to withstand conditions of extreme temperature and moisture.

The DEUTSCH DT series general purpose connectors will provide reliability and performance on the engine or transmission, under the hood, on the chassis, or in the cab.



#### DT SERIES OVERVIEW

DEUTSCH DT series connectors offer field proven reliability and rugged quality. The DT design strengths include optional flange mounting, multi-pin arrangements, and design flexibility. The DT series offers the designer the ability to use multiple size 16 contacts, each with 13 amp continuous capacity, within a single shell.

#### DTP SERIES OVERVIEW

DEUTSCH DTP series connectors provide solutions for your power application requirements. Building on both the DT and DTM design strengths, the DTP connector line was developed to fill the need for higher amperage, multi-pin connectors.

The DTP series offers the designer the ability to use multiple size 12 contacts, each with 25 amp continuous capacity, within a single shell. The DTP connectors are currently available in two and four pin configurations.

#### DTM SERIES OVERVIEW

DEUTSCH DTM series connectors offer solutions to your smaller wire gauge applications. Building on the DT design strengths, the DTM connector line was developed to fill the need for lower amperage, multipin connectors. The DTM series offers the designer the ability to use multiple size 20 contacts, each with 7.5 amp continuous capacity, within a single shell.



# APPLICABLE PRODUCT DOCUMENTATION

Additional documentation is available for assistance with DT Family products. The following TE Connectivity document numbers may be helpful:

108-151009 (Product Specification, DT series) 108-151010 (Product Specification, DTM series)

#### DEUTSCH CONNECTOR PERFORMANCE SPECIFICATIONS

| Temperature:                     | Operating at temperatures -55°C to +125°C<br>• DTMH series: -55°C to +150°C   |
|----------------------------------|---|
| Durability:                      | No electrical or mechanical defects after 100 cycles of engagement and disengagement.   |
| Vibration:                       | No unlocking or unmating and exhibits no mechanical or<br>physical damage after sinusoidal vibration levels of 20 G's at 10<br>to 2000 Hz in each of the three mutually perpendicular planes.<br>No electrical discontinuities longer than 1 microsecond. |
| Fluid Resistance:                | Connectors show no damage when exposed to most fluids used in industrial applications.  |
| Insulation Resistance:           | 1000 megohms minimum at 25°C.   |
| Immersion:                       | IP68 rating   |
| Moisture Resistance:             | Properly wired and mated connections will withstand immersion under three feet of water without loss of electronic qualities or leakage.  |
| Dielectric Withstanding Voltage: | Current leakage less than 2 milliamps at 1500 volts AC.   |
| Thermal Cycle:                   | No cracking, chipping or leaking after 20 test cycles from -55°C to +125°C.   |

#### MATERIAL SPECIFICATIONS (DT, DTM, DTMH, DTP, DTV SERIES)

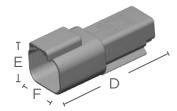
Grommet:Silicone rubberReceptacle<br/>Interfacial Seal:Silicone rubberReceptacle<br/>Threaded<br/>Inserts:Stainless steelShell:Glass filled PA

Wedgelocks: Glass filled PBT



# DT SERIES DIMENSIONS

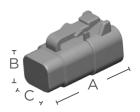




| DT Plug |                     |                     |                    | DT Receptacle       |                     |                    |
|---------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| Cavity  | Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F |
| 2       | 1.118 (28.4)        | .628 (15.95)        | .591 (15.01)       | 1.708 (43.38)       | .670 (17.02)        | .675 (17.15)       |
| 3       | 1.118 (28.4)        | .934 (23.72)        | .718 (18.23)       | 1.698 (43.13)       | .973 (24.71)        | .832 (21.13)       |
| 4       | 1.218 (30.94)       | .724 (18.39)        | .716 (18.19)       | 1.808 (45.92)       | .776 (19.71)        | .820 (20.83)       |
| 6       | 1.218 (30.94)       | .891 (22.63)        | .716 (18.19)       | 1.808 (45.92)       | .951 (24.16)        | .820 (20.83)       |
| 8       | 1.217 (30.91)       | .776 (19.71)        | 1.465 (37.21)      | 1.798 (45.67)       | 1.000 (25.40)       | 1.435 (36.45)      |
| 12      | 1.218 (30.94)       | .716 (18.19)        | 1.597 (40.56)      | 1.808 (45.92)       | .876 (22.25)        | 1.597 (40.56)      |

Dimensions are for reference only.

# DTM SERIES DIMENSIONS



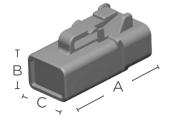


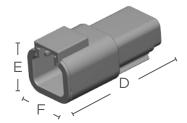
|        |                     | DTM Plug            |                    |                     | DTM Receptacle      |                    |
|--------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| Cavity | Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F |
| 2      | 1.085 (27.56)       | .508 (12.90)        | .475 (12.07)       | 1.620 (41.15)       | .638 (16.21)        | .651 (16.54)       |
| 3      | 1.085 (27.56)       | .551 (14.00)        | .640 (16.26)       | 1.620 (41.15)       | .638 (16.21)        | .861 (20.73)       |
| 4      | 1.185 (30.10)       | .695 (17.65)        | .600 (15.24)       | 1.720 (43.69)       | .772 (19.61)        | .756 (19.20)       |
| 6      | 1.185 (30.10)       | .817 (20.75)        | .600 (15.24)       | 1.720 (43.69)       | .937 (23.80)        | .756 (19.20)       |
| 8      | 1.185 (30.10)       | .600 (15.24)        | 1.245 (31.62)      | 1.720 (43.69)       | .796 (20.22)        | 1.245 (31.62)      |
| 12     | 1.185 (30.10)       | .600 (15.24)        | 1.575 (40.01)      | 1.720 (43.69)       | .796 (20.22)        | 1.575 (40.01)      |

Dimensions are for reference only.



# DTP SERIES DIMENSIONS





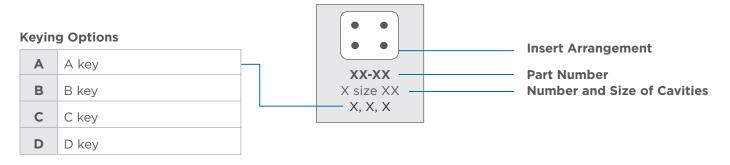
|        |                     | DTP Plug            |                    |                     | DTP Receptacle      |                    |
|--------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| Cavity | Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F |
| 2      | 1.364 (34.65)       | .711 (18.06)        | .732 (18.59)       | 1.861 (47.27)       | .869 (22.07)        | .872 (22.15)       |
| 4      | 1.364 (34.65)       | .960 (24.38)        | .868 (22.05)       | 1.861 (47.27)       | 1.048 (26.62)       | 1.060 (26.92)      |

Dimensions are for reference only.





## DT FAMILY CONFIGURATIONS



## DT SERIES CONFIGURATIONS



DTO\*-2\*

2 size 16



DTO\*-3\*

3 size 16

DT0\*-4\*

4 size 16

۲

4 size 20

DTO\*-6\*

DT0\*-08\*\* 8 size 16 A, B, C, D

DTO\*-12\*\* 12 size 16 A, B, C, D

# DTM SERIES CONFIGURATIONS

DTM0\*-2\*

2 size 20



DTM0\*-4\*

•

DTM0\*-6\* 6 size 20

6 size 16

|   | • | • | • |
|---|---|---|---|
| • | • | • | • |

DTMO\*-08\*\* 8 size 20 A, B, C, D

| ſ | • | • | • | • | • | • |
|---|---|---|---|---|---|---|
|   | • | • | • | • | • | • |

DTM0\*-12\*\* 12 size 20 A, B, C, D

# **DTP SERIES CONFIGURATIONS**





DTM0\*-3\*

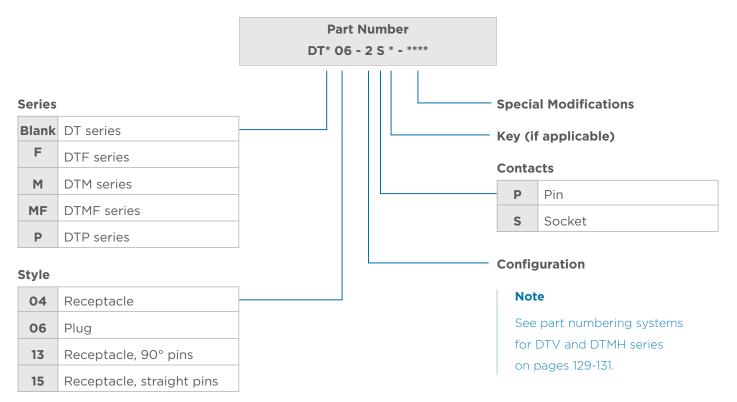
3 size 20

DTPO\*-2\* 2 size 12

DTPO\*-4\* 4 size 12



## PART NUMBERING SYSTEM



#### DT SERIES ORDERING INFORMATION

Here are some of the common part numbers in the DT series. Several additional connectors may be available.

| Position | Keying | Plug      | Receptacle | Plug<br>Reduced Dia. Seals | Receptacle<br>Reduced Dia. Seals |
|----------|--------|-----------|------------|----------------------------|----------------------------------|
| 2        | -      | DT06-2S   | DT04-2P    | DT06-2S-C015               | DT04-2P-C015                     |
| 3        | -      | DT06-3S   | DT04-3P    | DT06-3S-C015               | DT04-3P-C015                     |
| 4        | -      | DT06-4S   | DT04-4P    | DT06-4S-C015               | DT04-4P-C015                     |
| 6        | -      | DT06-6S   | DT04-6P    | DT06-6S-C015               | DT04-6P-C015                     |
|          | Key A  | DT06-08SA | DT04-08PA  | DT06-08SA-C015             | DT04-08PA-C015                   |
| 8        | Key B  | DT06-08SB | DT04-08PB  | DT06-08SB-C015             | DT04-08PB-C015                   |
| ð        | Key C  | DT06-08SC | DT04-08PC  | DT06-08SC-C015             | DT04-08PC-C015                   |
|          | Key D  | DT06-08SD | DT04-08PD  | DT06-08SD-C015             | DT04-08PD-C015                   |
|          | Key A  | DT06-12SA | DT04-12PA  | DT06-12SA-C015             | DT04-12PA-C015                   |
| 12       | Key B  | DT06-12SB | DT04-12PB  | DT06-12SB-C015             | DT04-12PB-C015                   |
| IZ       | Key C  | DT06-12SC | DT04-12PC  | DT06-12SC-C015             | DT04-12PC-C015                   |
|          | Key D  | DT06-12SD | DT04-12PD  | DT06-12SD-C015             | DT04-12PD-C015                   |



# DTM SERIES ORDERING INFORMATION

Here are some of the common part numbers in the DTM series. Several additional connectors may be available.

| Position | Keying | Plug       | Receptacle |
|----------|--------|------------|------------|
| 2        | -      | DTM06-2S   | DTM04-2P   |
| 3        | -      | DTM06-3S   | DTM04-3P   |
| 4        | -      | DTM06-4S   | DTM04-4P   |
| 6        | -      | DTM06-6S   | DTM04-6P   |
| 8        | Key A  | DTM06-08SA | DTM04-08PA |
|          | Key B  | DTM06-08SB | DTM04-08PB |
|          | Key C  | DTM06-08SC | DTM04-08PC |
|          | Key D  | DTM06-08SD | DTM04-08PD |
|          | Key A  | DTM06-12SA | DTM04-12PA |
| 12       | Key B  | DTM06-12SB | DTM04-12PB |
|          | Key C  | DTM06-12SC | DTM04-12PC |
|          | Key D  | DTM06-12SD | DTM04-12PD |

#### DTP SERIES ORDERING INFORMATION

Here are some of the common part numbers in the DTP series. Several additional connectors may be available.

|          |          |            | Plug                      | Receptacle                |
|----------|----------|------------|---------------------------|---------------------------|
| Position | Plug     | Receptacle | <b>Reduced Dia. Seals</b> | <b>Reduced Dia. Seals</b> |
| 2        | DTP06-2S | DTP04-2P   | DTP06-2S-C015             | DTP04-2P-C015             |
| 4        | DTP06-4S | DTP04-4P   | DTP06-4S-C015             | DTP04-4P-C015             |

# WIRE SEALING RANGE

The wire sealing range is the recommended outside diameter of the wire insulation required to maintain an environmental seal in the rear connector cavities.

| Contact Size                                  | Standard Seal          | Extra Thin Seal<br>E-Seal |
|---|------------------------|---------------------------|
| 20<br>14-22 AWG<br>(2.5-0.35mm <sup>2</sup> ) | .053120<br>(1.35-3.05) | -                         |
| 16<br>14-20 AWG<br>(2.0-0.5mm <sup>2</sup> )  | .088145<br>(2.23-3.68) | .053120<br>(1.35-3.05)    |
| 12<br>10-14 AWG<br>(6.0-2.0mm <sup>2</sup> )  | .134170<br>(3.40-4.32) | .097158<br>(2.46-4.01)    |



#### **Required Components**

# SECONDARY WEDGELOCKS

DEUTSCH DT style electrical connectors require secondary wedgelocks which are sold separately. The wedgelocks help confirm proper contact alignment within each connector. Secondary wedgelocks are assembled at the mating interface and press into place. If by chance the secondary wedgelocks are not properly seated during assembly, they will be pressed into locked position during the mating of the connector.

Adding to the design flexibility of the DT series, several wedgelocks offer keying options. Wedgelocks for enhanced seal retention plugs (P012) are also available.



#### **DT Series Receptacle Wedgelocks**

| W2P* | Wedgelock for 2 way receptacle<br>*A, B, C, D keying available |
|------|--|
| W3P* | Wedgelock for 3 way receptacle<br>*J1939 keying available      |
| W4P* | Wedgelock for 4 way receptacle<br>*A, B, C, D keying available |
| W6P  | Wedgelock for 6 way receptacle                                 |
| W8P  | Wedgelock for 8 way receptacle                                 |
| W12P | Wedgelock for 12 way receptacle                                |



#### **DT Series Plug Wedgelocks**

| W2S* | Wedgelock for 2 way plug<br>*A, B, C, D keying available |
|------|--|
| W3S* | Wedgelock for 3 way plug<br>*J1939 keying available      |
| W4S* | Wedgelock for 4 way plug<br>*A, B, C, D keying available |
| W6S  | Wedgelock for 6 way plug                                 |
| W8S  | Wedgelock for 8 way plug                                 |
| W12S | Wedgelock for 12 way plug                                |

#### Note

Wedgelocks for enhanced plugs (P012) are available.





# **DTM Series Receptacle Wedgelocks**

| WM-2P* | Wedgelock for 2 way receptacle<br>*A, B, C, D keying available |
|--------|--|
| WM-3P  | Wedgelock for 3 way receptacle                                 |
| WM-4P  | Wedgelock for 4 way receptacle                                 |
| WM-6P  | Wedgelock for 6 way receptacle                                 |
| WM-8P  | Wedgelock for 8 way receptacle                                 |
| WM-12P | Wedgelock for 12 way receptacle                                |

Wedgelock for 2 way receptacle

Wedgelock for 4 way receptacle



#### **DTM Series Plug Wedgelocks**

| WM-2S* | Wedgelock for 2 way plug<br>*A, B, C, D keying available |
|--------|--|
| WM-3S  | Wedgelock for 3 way plug                                 |
| WM-4S  | Wedgelock for 4 way plug                                 |
| WM-6S  | Wedgelock for 6 way plug                                 |
| WM-8S  | Wedgelock for 8 way plug                                 |
| WM-12S | Wedgelock for 12 way plug                                |



# DTP Series Receptacle Wedgelocks DTP S

| DTP Serie | es Plug Wedgelocks       |
|-----------|--------------------------|
| WP-2S     | Wedgelock for 2 way plug |

Wedgelock for 4 way plug

# **Special Modifications**

WP-2P

WP-4P

The DT series connectors offer several modifications to enhance the design flexibility and meet application specific needs. Options include enhanced seal retention, flanges, and connector body color just to mention a few. By combining the DT series connectors with the available modifications and accessories, the design possibilities are immense.

WP-4S

# **B016 MODIFICATION**

The B016 receptacle modification helps prevent mis-mating. The B016 is available for the DT 12 way connectors, DT13/15, and DTF13/15 PCB series connectors. In addition to the four keying positions (A, B, C, or D) and color coding, the B016 enhancement gives the user both visual and tactile proof of correct mating, thus helping eliminate mis-mating opportunities during assembly.

Please note the P012 plug is the required mate for the B016 receptacle to make the enhancement effective.







#### DETECTOR

The Detector connector has an integrated LED used for diagnostics. The transparent housing features reduced diameter seals and may be ordered with or without an end cap. Color coded wedgelocks for operating voltages, 12VDC and 24VDC are available.

| Description  | Part Number      |  |
|--|------------------|--|
| Plug, 2 way, LED, transparent Ultem<br>material, reduced diameter seals, end cap | DT06-2S-SDT-CE27 |  |
| Plug, 2 way, LED, transparent Ultem<br>material, reduced diameter seals          | DT06-2S-SDT-CE28 |  |
| Wedgelock, LED, 12V, yellow  | W2S-SDT-12V      |  |
| Wedgelock, LED, 24V, red   | W2S-SDT-24V      |  |

#### P012 MODIFICATION





The DT P012 plugs provide enhanced front seal retention resulting in an ultra tight environmental seal. The enhanced seal retention keeps the seal in place during mating and unmating. The P012 modification requires an enhanced P012 wedgelock. The DEUTSCH P012 modification is available in 2, 3, 4, 6, 8, and 12 cavity arrangements. P012 plugs have a black connector body except for the 8 and 12 cavity arrangements, where the color is based on the key.



#### C015 MODIFICATION

The C015 modification offers a reduced diameter insert cavity allowing for a proper seal with smaller wire insulation. The C015 modification is also referred to as an "E" seal.

# E003 MODIFICATION



The EOO3 modification offers a protective end cap attached to the rear of the connector. There are holes in the cap to allow the contacts to be inserted.





# E004 MODIFICATION

The E004 modification changes the connector body color to black.

# E005 MODIFICATION



The E005 modification offers a protective end cap attached to the rear of the connector and has a black connector body.

#### E007 & E008 MODIFICATION

To meet the application requirements where wires need added protection, the DT (E008) and DTM (E007) series may be supplied with shrink boot adapters. These adapters accept shrink tubing.



## FLANGE MODIFICATIONS

Designed to simplify wire routing and assembly, DT series receptacles are available in many mounting configurations and styles.

- Welded flange
- Welded flange BL04, BL08, CL03, L012, LE14
- Welded flange, end cap LE07, LE11
- Welded flange, shrink boot adapter LE08, LE12
- Sealed flange
- Sealed flange, end cap CL09, LE01, LE05, LE06, LE09, LE10, LE17, LE21
- Sealed flange, shrink boot adapter BL10, CL07

#### Note

Additional modifications are available, please contact your representative.



#### Accessories

Several accessory items are available to complement the connectors including boots, backshells, gaskets, dust caps, and mounting clips. Accessory items cover a wide array of design requirements such as assisting with mounting, providing additional protection, and offering enhanced aesthetics.

#### GASKETS



Moisture, dirt, salt, sand, and road debris can all work their way into electrical panels through unsealed mounting flanges. Rated to operate in environments from -70°F to +225°F (-56°C to +107°C), these rugged high quality neoprene gaskets form a tight seal between the panel face and connector flange to help keep out destructive elements. The gaskets have a thickness of .125" and the material meets the UL-94-HBF, Mil-R-6130C, and FMVSS-302 flammability specifications.



| Gasket Part Number | Connector Part Number             |
|--------------------|-----------------------------------|
| DT3P-L012-GKT      | DT04-3P-L012                      |
| DT4P-L012-GKT      | DT04-4P-L012                      |
| DTP4P-L012-GKT     | DTP04-4P-L012                     |
| DT8P-L012-GKT      | DT04-08P*-L012                    |
| DT12-L012-GKT      | DT04-12P*-L012<br>DTM04-12P*-L012 |

#### DUST CAPS



The DT series dust caps are made of either thermoplastic or durable plastisol and are designed to provide protection for the connector interface when the two halves are not mated. The plastisol caps, available for plugs and receptacles, are suitable for providing temporary protection from dirt, dust, and paint overspray. The thermoplastic caps provide an environmental seal for an unmated plug.



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| Cap Part Number | Connector Part Number           |
|-----------------|---------------------------------|
| 1011-344-0205   | DT06-2S                         |
| 1011-345-0305   | DT06-3S                         |
| 1011-346-0405   | DT06-4S                         |
| 1011-347-0605   | DT06-6S                         |
| 1011-348-0805   | DT06-08S*                       |
| 1011-349-1205   | DT06-12S*, DT16-15S*, DT16-18S* |





| Plastisol Dust Cap Part Number | <b>Connector Part Number</b> |  |  |
|--------------------------------|------------------------------|--|--|
| DTM3S-DC                       | DTM06-3S                     |  |  |
| DT3P-DC                        | DT04-3P                      |  |  |
| DT4P-DC                        | DT04-4P                      |  |  |
| DT6P-DC                        | DT04-6P                      |  |  |
| DTM12P-DC                      | DTM04-12P*                   |  |  |
| DT12P-DC, DT12P-DC-BK          | DT04-12P*                    |  |  |
| DT12S-DC                       | DT06-12S*                    |  |  |

#### BOOTS



Boots provide a professional looking finishing touch for DEUTSCH DT family connectors. Made of durable plastisol, these slip-on boots are not only aesthetically appealing, but also provide increased protection from dirt, paint overspray, and pressure washing. The plastisol boots are rated from -20°F to +212°F (-28°C to +100°C) and offer a slip-on design making installation quick and easy.



|  | Boot Part Number |                   |                   |
|--|------------------|-------------------|-------------------|
| <b>Receptacle Boot Description</b>               | <b>DT Series</b> | <b>DTM Series</b> | <b>DTP Series</b> |
| 2 way receptacle boot, gray                      | DT2P-BT          | DTM2P-BT          | DTP2P-BT          |
| 2 way receptacle boot, black                     | DT2P-BT-BK       | DTM2P-BT-BK       | DTP2P-BT-BK       |
| 3 way receptacle boot, gray                      | DT3P-BT          | DTM3P-BT          | -                 |
| 3 way receptacle boot, black                     | DT3P-BT-BK       | DTM3P-BT-BK       | -                 |
| 4 way receptacle boot, gray                      | DT4P-BT          | DTM4P-BT          | DTP4P-BT          |
| 4 way receptacle boot, gray,<br>enhanced length  | -                | -                 | DTP4P-BT-EN       |
| 6 way receptacle boot, gray                      | DT6P-BT          | DTM6P-BT          | -                 |
| 6 way receptacle boot, black                     | DT6P-BT-BK       | -                 | -                 |
| 8 way receptacle boot, gray                      | DT8P-BT          | DTM8P-BT          | -                 |
| 8 way receptacle boot, black                     | DT8P-BT-BK       | DTM8P-BT-BK       | -                 |
| 12 way receptacle boot, gray                     | DT12P-BT         | DTM12P-BT         | -                 |
| 12 way receptacle boot, black                    | DT12P-BT-BK      | DTM12P-BT-BK      | -                 |
| 12 way receptacle boot, gray,<br>enhanced length | DT12P-BT-EN      | -                 | -                 |

\*Distorting the boots can lessen their longevity





|  | Boot Part Number |                                       |             |  |
|--|------------------|---------------------------------------|-------------|--|
| Plug Boot Description                      | <b>DT Series</b> | <b>DTM Series</b>                     | DTP Series  |  |
| 2 way plug boot, gray                      | DT2S-BT          | DTM2S-BT                              | DTP2S-BT    |  |
| 2 way plug boot, black                     | DT2S-BT-BK       | DTM2S-BT-BK                           | -           |  |
| 3 way plug boot, gray                      | DT3S-BT          | DTM3S-BT                              | -           |  |
| 3 way plug boot, black                     | DT3S-BT-BK       | DTM3S-BT-BK                           | -           |  |
| 4 way plug boot, gray                      | DT4S-BT          | DTM4S-BT                              | DTP4S-BT    |  |
| 4 way plug boot, gray, enhanced<br>length  | -                | -                                     | DTP4S-BT-EN |  |
| 6 way plug boot, gray                      | DT6S-BT          | DTM6S-BT                              | -           |  |
| 6 way plug boot, black                     | DT6S-BT-BK       | -                                     | -           |  |
| 8 way plug boot, gray                      | DT8S-BT          | DTM8S-BT                              | -           |  |
| 8 way plug boot, black                     | DT8S-BT-BK       | DTM8S-BT-BK                           | -           |  |
| 12 way plug boot, gray                     | DT12S-BT         | DTM12S-BT                             | -           |  |
| 12 way plug boot, black                    | DT12S-BT-BK      | DTM12S-BT-BK                          | -           |  |
| 12 way plug boot, gray, enhanced<br>length | DT12S-BT-EN      | -                                     | -           |  |
| 48 way plug boot, gray                     | DT48S-BT         | -                                     | -           |  |
|  |                  | · · · · · · · · · · · · · · · · · · · |             |  |

\*Distorting the boots can lessen their longevity



#### BACKSHELLS

The DEUTSCH DT and DTM series backshells are designed to snap onto and mate with all standard (basic plug and receptacles without modifications that affect the rear of the connector) DT and DTM series connectors. The rigid, durable backshells offer a high level of protection and allow convoluted tubing to nest within the rear of the backshell. Straight (180°) and right angle (90°) versions and backshells with strain relief for jacketed cable are also available.



Since the backshells are designed to work with the standard DT and DTM connectors, tests should be conducted for fit and function of a backshell being used on any part with a modification.

| Connector | Style | Strain<br>Relief | Tubing size (mm)    | Part Number   |
|-----------|-------|------------------|---------------------|---------------|
| DT04-2P   | 180°  |                  | 6, 7.5, 8.5, and 10 | 1011-229-0205 |
|           | 180°  | Х                | 6, 7.5, 8.5, and 10 | 1011-257-0205 |
|           | 90°   |                  | 6, 7.5, 8.5, and 10 | 1011-230-0205 |
|           | 90°   | Х                | 6, 7.5, 8.5, and 10 | 1011-258-0205 |
| DT04-3P   | 180°  |                  | 6, 7.5, 8.5, and 10 | 1011-233-0305 |
|           | 180°  | Х                | 6, 7.5, 8.5, and 10 | 1011-261-0305 |
|           | 90°   |                  | 6, 7.5, 8.5, and 10 | 1011-234-0305 |
|           | 90°   | Х                | 6, 7.5, 8.5, and 10 | 1011-262-0305 |
| DT04-4P   | 180°  |                  | 6, 7.5, 8.5, and 10 | 1011-237-0405 |
|           | 180°  | Х                | 6, 7.5, 8.5, and 10 | 1011-265-0405 |
|           | 90°   |                  | 6, 7.5, 8.5, and 10 | 1011-238-0405 |
|           | 90°   | Х                | 6, 7.5, 8.5, and 10 | 1011-266-0405 |
| DT04-6P   | 180°  |                  | 8.5, 10, and 13     | 1011-241-0605 |
|           | 180°  | Х                | 8.5, 10, and 13     | 1011-269-0605 |
|           | 90°   |                  | 8.5, 10, and 13     | 1011-242-0605 |
|           | 90°   | Х                | 8.5, 10, and 13     | 1011-270-0605 |
| DT04-08P* | 180°  |                  | 8.5, 10, and 13     | 1011-245-0805 |
|           | 90°   |                  | 8.5, 10, and 13     | 1011-246-0805 |
| DT04-12P* | 180°  |                  | 10, 13, and 17      | 1011-249-1205 |
|           | 90°   |                  | 10, 13, and 17      | 1011-250-1205 |

#### **DT Series Receptacle Backshells**





| Connector     | Style | Relief | Tubing size (mm)    | Part Number   |
|---------------|-------|--------|---------------------|---------------|
| DT06-2S       | 180°  |        | 6, 7.5, 8.5, and 10 | 1011-227-0205 |
|               | 180°  | Х      | 6, 7.5, 8.5, and 10 | 1011-255-0205 |
|               | 90°   |        | 6, 7.5, 8.5, and 10 | 1011-228-0205 |
|               | 90°   | Х      | 6, 7.5, 8.5, and 10 | 1011-256-0205 |
| DT06-3S       | 180°  |        | 6, 7.5, 8.5, and 10 | 1011-231-0305 |
|               | 180°  | Х      | 6, 7.5, 8.5, and 10 | 1011-259-0305 |
|               | 90°   |        | 6, 7.5, 8.5, and 10 | 1011-232-0305 |
|               | 90°   | Х      | 6, 7.5, 8.5, and 10 | 1011-260-0305 |
| DT06-4S       | 180°  |        | 6, 7.5, 8.5, and 10 | 1011-235-0405 |
|               | 180°  | Х      | 6, 7.5, 8.5, and 10 | 1011-263-0405 |
|               | 90°   |        | 6, 7.5, 8.5, and 10 | 1011-236-0405 |
|               | 90°   | Х      | 6, 7.5, 8.5, and 10 | 1011-264-0405 |
| DT06-6S       | 180°  |        | 8.5, 10, and 13     | 1011-239-0605 |
|               | 180°  | Х      | 8.5, 10, and 13     | 1011-267-0605 |
|               | 90°   |        | 8.5, 10, and 13     | 1011-240-0605 |
|               | 90°   | Х      | 8.5, 10, and 13     | 1011-268-0605 |
| DT06-08S*     | 180°  |        | 8.5, 10, and 13     | 1011-243-0805 |
|               | 90°   |        | 8.5, 10, and 13     | 1011-244-0805 |
| DT06-12S*     | 180°  |        | 10, 13, and 17      | 1011-247-1205 |
|               | 90°   |        | 10, 13, and 17      | 1011-248-1205 |
| DT06-12S*-*** | 180°  |        | 13 and 17           | 1028-043-1205 |

#### **DT Series Plug Backshells**

Strain

Note: 1028-043-1205 backshell is designed to fit on 12 way plugs with modifications

# PULL OFF STRENGTH

| Connector             | F <sub>p</sub> [N] | F <sub>7</sub> [N] |  |
|-----------------------|--------------------|--------------------|--|
| DT04-2P / DT06-2S     | 50 / 50            | 50 / 10            |  |
| DT04-3P / DT06-3S     | 50 / 50            | 50 / 50            |  |
| DT04-4P / DT06-4S     | 50 / 50            | 50 / 25            |  |
| DT04-6P / DT06-6S     | 50 / 50            | 50 / 30            |  |
| DT04-08P* / DT06-08S* | 50 / 50            | 50 / 35            |  |
| DT04-12P* / DT06-12S* | 50 / 50            | 50 / 40            |  |







# **DTM Series Backshells**

| Connector                      | Style | Tubing size (mm) | Part Number   |
|--------------------------------|-------|------------------|---------------|
| DTM*04-2P                      | 180°  | 7.5 and 8.5      | 1028-021-0205 |
| DTM06-2S                       | 180°  | 7.5 and 8.5      | 1011-273-0205 |
| DTM*06-2S                      | 180°  | 8.5              | 1028-041-0205 |
| DTM*04-3P                      | 180°  | 8.5              | 1028-024-0305 |
| DTM*06-3S                      | 180°  | 8.5              | 1028-005-0305 |
| DTM*04-4P                      | 180°  | 8.5              | 1028-027-0405 |
| DTM*06-4S                      | 180°  | 8.5              | 1028-008-0405 |
| DTM06-6S                       | 180°  | 10 and 13        | 1028-011-0605 |
| DTM06-08S*                     | 180°  | 10 and 13        | 1028-013-0805 |
| DTM04-12P*                     | 180°  | 13 and 17        | 1028-034-1205 |
| DTM06-12S*                     | 180°  | 13 and 17        | 1028-015-1205 |
| Adapter for 2,<br>3, and 4 pin | 90°   | 7.5 and 8.5      | 1028-016-0005 |
| Adapter for 6<br>and 8 pin     | 90°   | 10 and 13        | 1028-017-0005 |



## MOUNTING CLIPS

Mounting clips are installed on the receptacle to mount DT series connectors. To meet design needs, the clips are available for several configurations and in plastic, stainless steel, or steel with zinc plating.









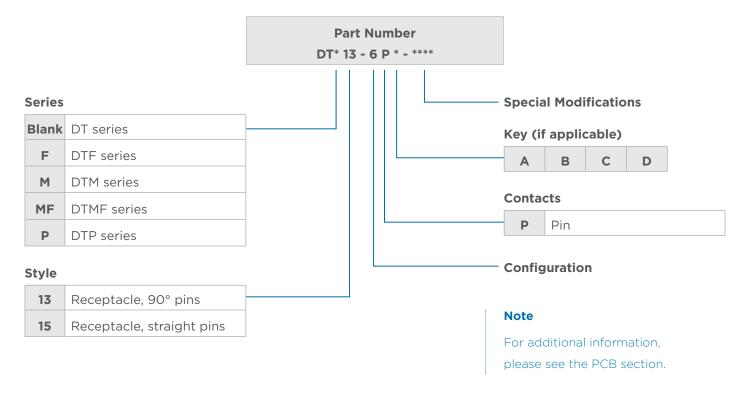
| Part Number   | Cavity<br>Arrangement               | Mounting<br>Direction | Color/Material           | Hole O.D.<br>inches (mm) |
|---|-------------------------------------|-----------------------|--------------------------|--------------------------|
| 1027-003-1200   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Stainless steel          | .433 (11.0)              |
| 1027-005-1200   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Stainless steel          | .512 (13.0)              |
| 1027-004-1200   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Steel w/<br>zinc plating | .512 (13.0)              |
| 1027-008-1200   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Side                  | Steel w/<br>zinc plating | .433 (11.0)              |
| 1027-013-1200/<br>1027-017-1200                                 | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Side                  | Steel w/<br>zinc plating | .323 (8.2)               |
| 1027-001-0800   | DT 8 cavity only                    | Straight              | Stainless steel          | .433 (11.0)              |
| 1027-006-0800   | DT 8 cavity only                    | Straight              | Stainless steel          | .512 (13.0)              |
| 1027-002-0800   | DT 8 cavity only                    | Straight              | Steel w/<br>zinc plating | .512 (13.0)              |
| 1027-014-0800   | DT 8 cavity only                    | Straight              | Steel w/<br>zinc plating | .323 (8.2)               |
| 1011-026-0205   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Gray<br>plastic          | .200 (5.08)              |
| 1011-030-0205   | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Black<br>plastic         |                          |
| 1011-310-0205*<br>*Connector<br>removeable with<br>50N of force | DT 2, 3, 4, 6, 12<br>DTM, DTP (all) | Straight              | Black<br>plastic         |                          |
| 1011-027-0805   | DT 8 cavity only                    | Straight              | Gray<br>plastic          | .200 (5.08)              |



## **DT Family Printed Circuit Board Connectors**

The DT Family offers printed circuit board (PCB) connectors that are heavy duty environmentally sealed connectors designed for wire-to-circuit board connections. Available in a variety of styles for the DT, DTM, and DTP connector series, DEUTSCH PCB connectors cover a range of pin counts from 2 to 48 and wire gauges from 10 to 22. Many of the connectors are available in straight or 90° pin options.

# PCB PART NUMBERING SYSTEM



# DT FAMILY PCB CONFIGURATIONS

|                               | Pin/Flange Style |                 |                |                        |  |  |
|-------------------------------|------------------|-----------------|----------------|------------------------|--|--|
| Connector Description         | 90° Flange       | Straight Flange | 90° Flangeless | Straight<br>Flangeless |  |  |
| 2 way receptacle, DT series   | DT13-2P          | DT15-2P         | DTF13-2P       | -                      |  |  |
| 3 way receptacle, DT series   | -                | -               | DTF13-3P       | -                      |  |  |
| 4 way receptacle, DT series   | DT13-4P          | DT15-4P         | DTF13-4P       | -                      |  |  |
| 4 way receptacle, DTP series  | DTP13-4P         | DTP15-4P        | -              | -                      |  |  |
| 6 way receptacle, DT series   | DT13-6P          | DT15-6P         | DTF13-6P       | -                      |  |  |
| 8 way receptacle, DT series   | DT13-08P*        | DT15-08P*       | -              | -                      |  |  |
| 12 way receptacle, DT series  | DT13-12P*        | DT15-12P*       | DTF13-12P*     | DTF15-12P*             |  |  |
| 12 way receptacle, DTM series | DTM13-12P*       | DTM15-12P*      | -              | -                      |  |  |
| 48 way receptacle, DTM series | -                | -               | -              | DTMF15-48P             |  |  |

\* = Keying (A, B, C, or D)

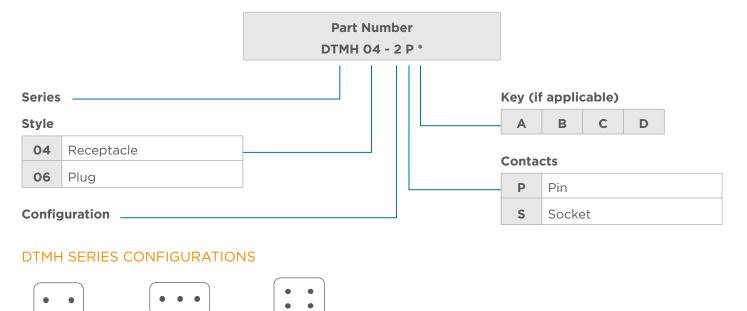


# **DTMH Series & High Temperature Modification Overview**

The DTMH series and DTM series EE04 modification connectors are environmentally sealed, high temperature connectors capable of operating in temperatures -55°C to +150°C. They accept size 20 contacts and carry 7.5 amps each. The DTMH connectors are available in 2-4 cavity arrangements and feature an integrated TPA for easy assembly. The EE04 connectors are available in 6, 8, and 12 cavity arrangements and require a secondary wedgelock.



# DTMH SERIES PART NUMBERING SYSTEM

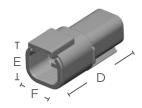


 DTMH0\*-2\*\*
 DTMH0\*-3\*\*
 DTMH0\*-4\*\*

 2 size 20
 3 size 20
 4 size 20

#### DTMH SERIES DIMENSIONS





**DTMH Plug** 

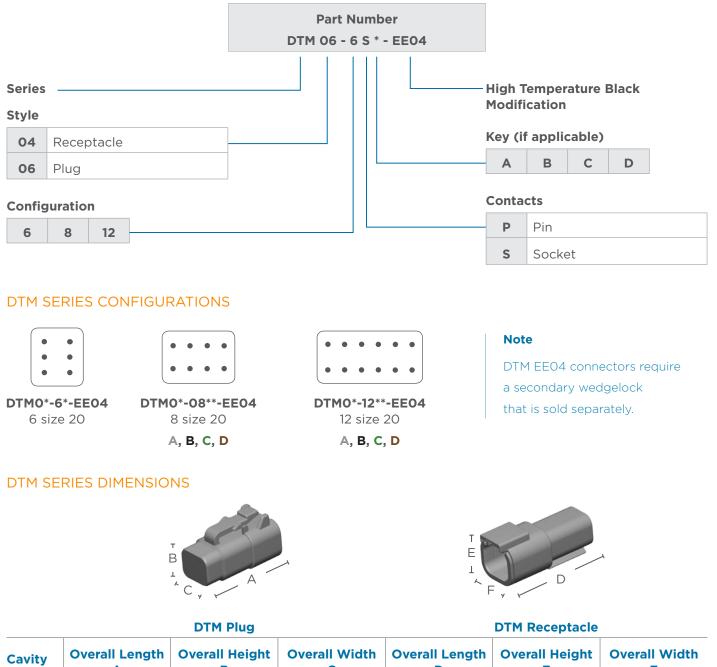


| Cavity | Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F |
|--------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| 2      | 1.085 (27.56)       | .508 (12.90)        | .555 (14.10)       | 1.620 (41.15)       | .638 (16.21)        | .729 (18.52)       |
| 3      | 1.085 (27.56)       | .558 (14.17)        | .640 (16.26)       | 1.620 (41.16)       | .638 (16.21)        | .894 (22.71)       |
| 4      | 1.185 (30.10)       | .652 (16.56)        | .680 (17.27)       | 1.720 (43.69)       | .772 (19.61)        | .834 (21.18)       |

Dimensions are for reference only.



# DTM SERIES (EE04 MOD) PART NUMBERING SYSTEM



| Cavity | Overall Length<br>A | Overall Height<br>B | Overall Width<br>C | Overall Length<br>D | Overall Height<br>E | Overall Width<br>F |
|--------|---------------------|---------------------|--------------------|---------------------|---------------------|--------------------|
| 6      | 1.185 (30.10)       | .817 (20.75)        | .600 (15.24)       | 1.720 (43.69)       | .937 (23.80)        | .756 (19.20)       |
| 8      | 1.185 (30.10)       | .600 (15.24)        | 1.245 (31.62)      | 1.720 (43.69)       | .792 (20.12)        | 1.245 (31.62)      |
| 12     | 1.185 (30.10)       | .600 (15.24)        | 1.575 (40.01)      | 1.720 (43.69)       | .796 (20.22)        | 1.575 (40.01)      |

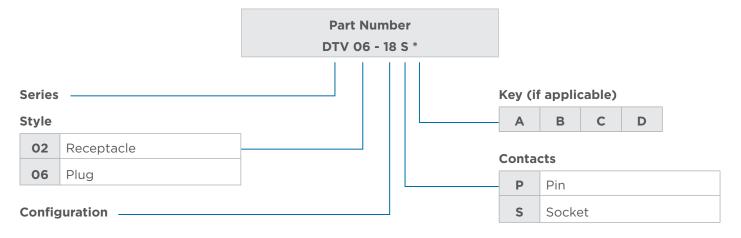
Dimensions are for reference only.

# **DTV Series Overview**

The DEUTSCH DTV series connectors offer the same time tested reliability and performance as the DT series, with the added flexibility of an 18 cavity flanged design.



#### DTV SERIES PART NUMBERING SYSTEM



# DTV SERIES DIMENSIONS



**DTV Plug** 

**DTV Receptacle** 

| Cavity | Overall Length | Overall Height | Overall Width | Overall Length | Overall Height | Overall Width |
|--------|----------------|----------------|---------------|----------------|----------------|---------------|
|        | A              | B              | C             | D              | E              | F             |
| 18     | 1.405 (35.69)  | 1.059 (26.90)  | 1.450 (36.83) | 2.495 (63.37)  | 1.786 (45.36)  | 3.194 (81.12) |

Dimensions are for reference only.

# SECONDARY WEDGELOCKS



#### DTV Series Receptacle Wedgelock



**DTV Series Plug Wedgelock** 

WV-18S Wedgelock for 18 way plug



#### **How To Instructions**

# CONTACT INSERTION



**Step 1:** Grasp crimped contact approximately one inch behind the contact barrel.



**Step 2:** Hold connector with rear grommet facing you.



**Step 3:** Push contact straight into connector grommet until a click is felt. A slight tug will confirm that it is properly locked in place.

#### Note

The receptacle is shown, use the same procedure for the plug.



**Step 4:** Once all contacts are in place, insert green wedge. The green wedge will snap into place.

# CONTACT REMOVAL



**Step 1:** Remove green wedge using needlenose pliers to pull wedge straight out.



**Step 2:** To remove the contacts, gently pull wire backwards, while at the same time releasing the locking finger by moving it away from the contact with a screwdriver.



**Step 3:** Hold the rear seal in place, as removing the contact will displace the seal.

