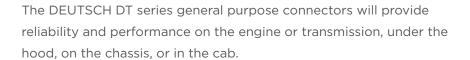
DT Family Overview

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.





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

• 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

physical damage after sinusoidal vibration levels of 20 G's at 10 to 2000 Hz in each of the three mutually perpendicular planes.

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 rubber

Receptacle Silicone rubber

Interfacial Seal:

Receptacle

Threaded Stainless steel

Inserts:

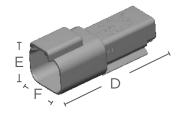
Shell: Glass filled PA

Wedgelocks: Glass filled PBT



DT SERIES DIMENSIONS





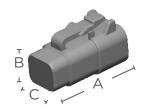
DT Plug

DT Receptacle

Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width 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





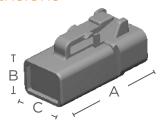
DTM Plug

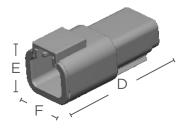
DTM Receptacle

Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width 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)



DTP SERIES DIMENSIONS





DTP Plug

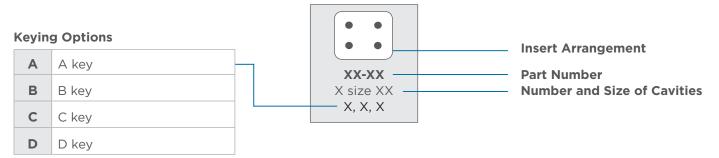
DTP Receptacle

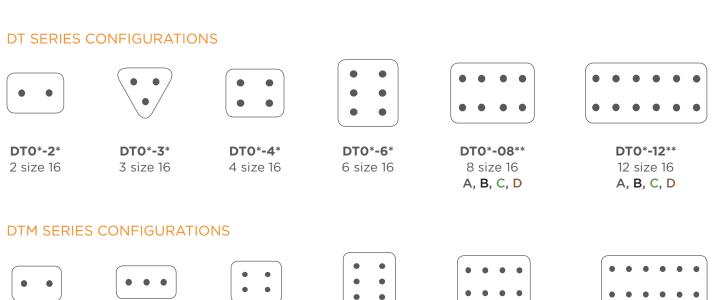
Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width F
2	1.364 (34.65)	.711 (18.06)	.732 (18.59)	1.861 (47.27)	.869 (22.07)	.872 (22.15)
4	1.364 (34.65)	.960 (24.38)	.868 (22.05)	1.861 (47.27)	1.048 (26.62)	1.060 (26.92)





DT FAMILY CONFIGURATIONS





DTM0*-6*

6 size 20

DTM0*-08**

8 size 20

A, B, C, D

DTP SERIES CONFIGURATIONS

DTM0*-3*

3 size 20

DTM0*-4*

4 size 20

DTM0*-2*

2 size 20

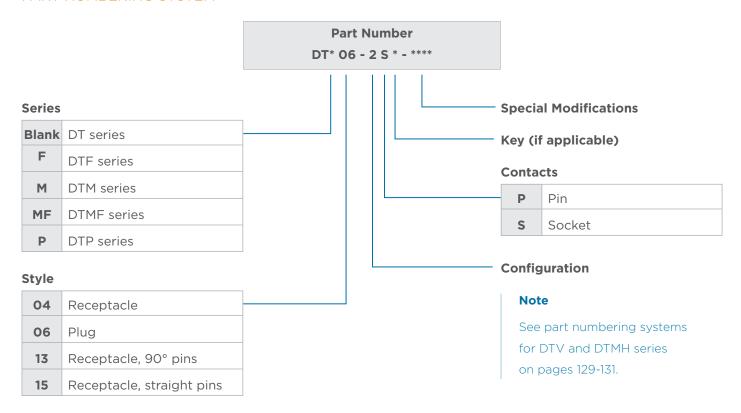


DTM0*-12**

12 size 20

A, B, C, D

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.

				Plug	Receptacle
Position	Keying	Plug	Receptacle	Reduced Dia. Seals	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
0	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
14	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
	Key A	DTM06-08SA	DTM04-08PA
0	Key B	DTM06-08SB	DTM04-08PB
8	Key C	DTM06-08SC	DTM04-08PC
	Key D	DTM06-08SD	DTM04-08PD
	Key A	DTM06-12SA	DTM04-12PA
10	Key B	DTM06-12SB	DTM04-12PB
12	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.

Position	Plug	Receptacle	Reduced Dia. Seals	Reduced Dia. Seals
2	DTP06-2S	DTPO4-2P	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 E-Seal
20 14-22 AWG (2.5-0.35mm ²)	.053120 (1.35-3.05)	-
16 14-20 AWG (2.0-0.5mm²)	.088145 (2.23-3.68)	.053120 (1.35-3.05)
12 10-14 AWG (6.0-2.0mm²)	.134170 (3.40-4.32)	.097158 (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 *A, B, C, D keying available
W3P*	Wedgelock for 3 way receptacle *J1939 keying available
W4P*	Wedgelock for 4 way receptacle *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 *A, B, C, D keying available
W3S*	Wedgelock for 3 way plug *J1939 keying available
W4S*	Wedgelock for 4 way plug *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

Wedgelock for 2 way receptacle *A, B, C, D keying available
Wedgelock for 3 way receptacle
Wedgelock for 4 way receptacle
Wedgelock for 6 way receptacle
Wedgelock for 8 way receptacle
Wedgelock for 12 way receptacle





DTM Series Plug Wedgelocks

WM-2S*	Wedgelock for 2 way plug *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

WP-2P	Wedgelock for 2 way receptacle
WP-4P	Wedgelock for 4 way receptacle

DTP Series Plug Wedgelocks

WP-2S	Wedgelock for 2 way plug
WP-4S	Wedgelock for 4 way plug

Special Modifications

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.

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 material, reduced diameter seals, end cap	DT06-2S-SDT-CE27
Plug, 2 way, LED, transparent Ultem 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 E003 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 BLO4, BLO8, CLO3, LO12, 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 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.







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*



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.









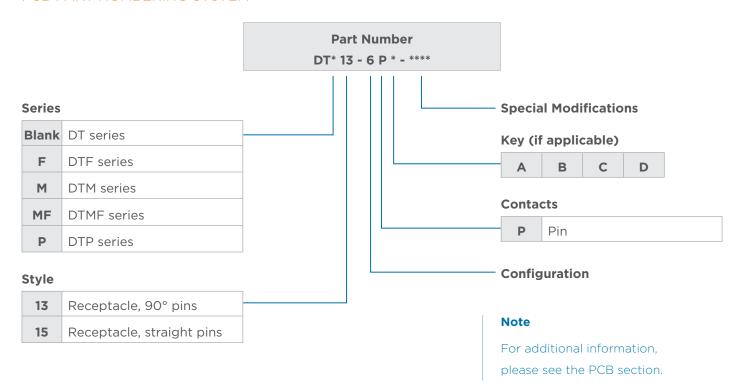
Part Number	Cavity Arrangement	Mounting Direction	Color/Material	Hole O.D. inches (mm)
1027-003-1200	DT 2, 3, 4, 6, 12 DTM, DTP (all)	Straight	Stainless steel	.433 (11.0)
1027-005-1200	DT 2, 3, 4, 6, 12 DTM, DTP (all)	Straight	Stainless steel	.512 (13.0)
1027-004-1200	DT 2, 3, 4, 6, 12 DTM, DTP (all)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

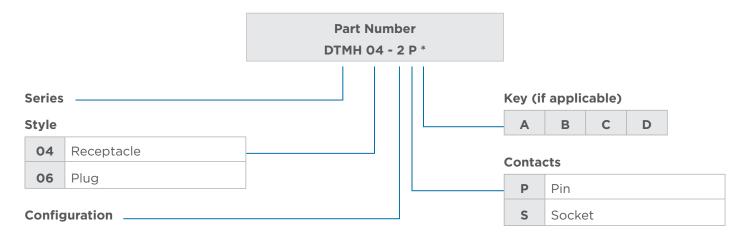


DTMH Series & High Temperature Modification Overview

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



DTMH SERIES CONFIGURATIONS







DTMH Plug

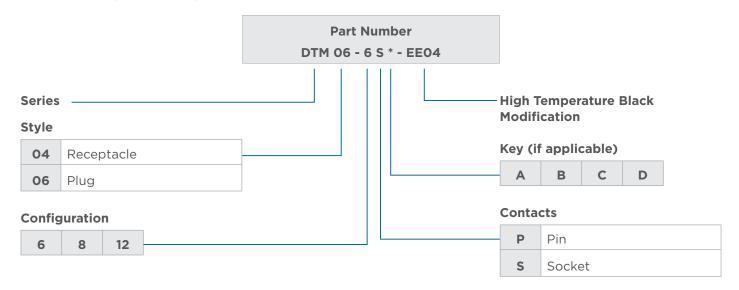


DTMH Receptacle

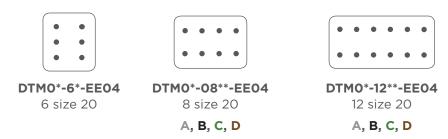
Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width F
2	1.085 (27.56)	.508 (12.90)	.555 (14.10)	1.620 (41.15)	.638 (16.21)	.729 (18.52)
3	1.085 (27.56)	.558 (14.17)	.640 (16.26)	1.620 (41.16)	.638 (16.21)	.894 (22.71)
4	1.185 (30.10)	.652 (16.56)	.680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



DTM SERIES (EE04 MOD) PART NUMBERING SYSTEM



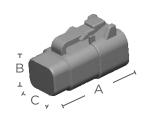
DTM SERIES CONFIGURATIONS



Note

DTM EE04 connectors require a secondary wedgelock that is sold separately.

DTM SERIES DIMENSIONS





DTM Plug

DTM Receptacle

Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width 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)



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.

