

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.

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, multi-pin 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.

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.

DT Family

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)

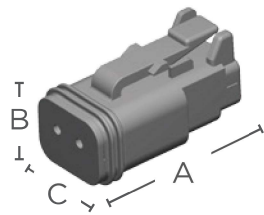
DEUTSCH CONNECTOR PERFORMANCE SPECIFICATIONS

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.

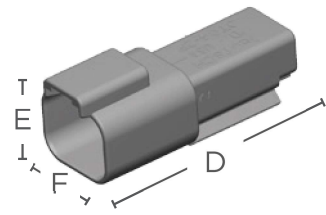
MATERIAL SPECIFICATIONS (DT, DTM, DTMH, DTP, DTV SERIES)

Grommet:	Silicone rubber
Receptacle Interfacial Seal:	Silicone rubber
Receptacle Threaded Inserts:	Stainless steel
Shell:	Glass filled PA
Wedgelocks:	Glass filled PBT

DT SERIES DIMENSIONS



DT Plug

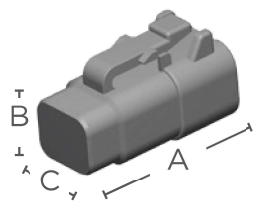


DT Receptacle

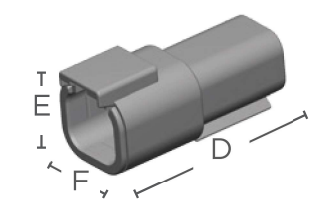
Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width F
2	1.118 (28.4)	.628 (15.95)	.591 (15.01)	1.708 (43.38)	.670 (17.02)	.675 (17.15)
3	1.118 (28.4)	.934 (23.72)	.718 (18.23)	1.698 (43.13)	.973 (24.71)	.832 (21.13)
4	1.218 (30.94)	.724 (18.39)	.716 (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

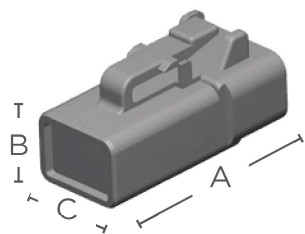


DTM Receptacle

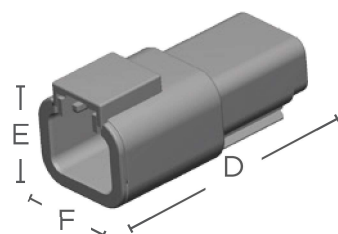
Cavity	Overall Length A	Overall Height B	Overall Width C	Overall Length D	Overall Height E	Overall Width F
2	1.085 (27.56)	.508 (12.90)	.475 (12.07)	1.620 (41.15)	.638 (16.21)	.651 (16.54)
3	1.085 (27.56)	.551 (14.00)	.640 (16.26)	1.620 (41.15)	.638 (16.21)	.861 (20.73)
4	1.185 (30.10)	.695 (17.65)	.600 (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)

Dimensions are for reference only.

DTP SERIES DIMENSIONS



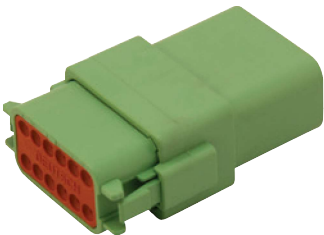
DTP Plug



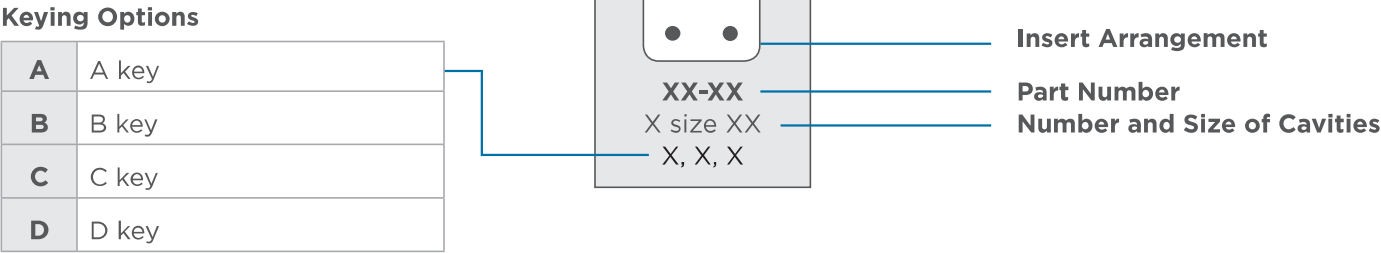
DTP Receptacle

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)

Dimensions are for reference only.



DT FAMILY CONFIGURATIONS



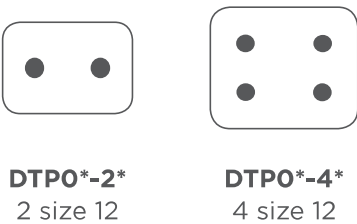
DT SERIES CONFIGURATIONS



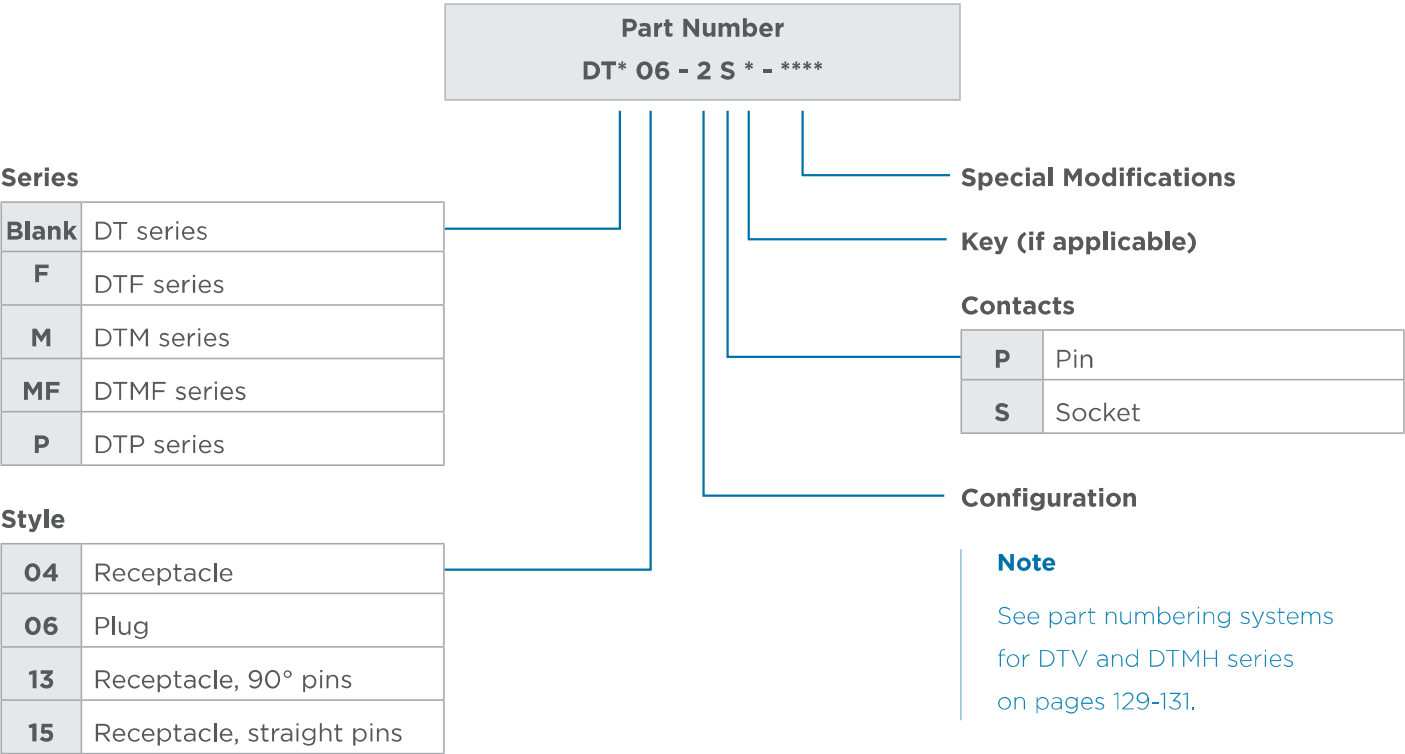
DTM SERIES CONFIGURATIONS



DTP SERIES CONFIGURATIONS



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 Reduced Dia. Seals	Receptacle 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
8	Key A	DT06-08SA	DT04-08PA	DT06-08SA-C015	DT04-08PA-C015
	Key B	DT06-08SB	DT04-08PB	DT06-08SB-C015	DT04-08PB-C015
	Key C	DT06-08SC	DT04-08PC	DT06-08SC-C015	DT04-08PC-C015
	Key D	DT06-08SD	DT04-08PD	DT06-08SD-C015	DT04-08PD-C015
12	Key A	DT06-12SA	DT04-12PA	DT06-12SA-C015	DT04-12PA-C015
	Key B	DT06-12SB	DT04-12PB	DT06-12SB-C015	DT04-12PB-C015
	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
12	Key A	DTM06-12SA	DTM04-12PA
	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.

Position	Plug	Receptacle	Plug Reduced Dia. Seals	Receptacle Reduced Dia. Seals
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 E-Seal
20 14-22 AWG (2.5-0.35mm ²)	.053-.120 (1.35-3.05)	-
16 14-20 AWG (2.0-0.5mm ²)	.088-.145 (2.23-3.68)	.053-.120 (1.35-3.05)
12 10-14 AWG (6.0-2.0mm ²)	.134-.170 (3.40-4.32)	.097-.158 (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.