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**DT Series** Technical Manual

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A STEP AHEAD

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#### **DT Series** Technical Manual



### **DT Series** Technical Manual



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#### **Environmentally-Sealed Transportation Connectors**



#### **Deutsch DTM Series**

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Deutsch DTM Series of transportation connectors feature a miniature contact with an enhanced design based on the world class, field-proven Deutsch DT Series.

The DTM is the connector to be used in harsh environmental application where reliable signal circuits are critical to operating performance. Typical applications include on or around the engine, the transmission and under the hood.



#### **Deutsch DT Series**

An environmentally-sealed connector designed specifically for cable to cable applications on the engine or transmission, under the hood, on the chassis or in the cab. On signal level circuits in harsh environmental conditions, where even a small degradation in connection may be critical, the Deutsch DT Series general purpose connectors will provide the reliability and performance at the lowest cost.



#### **Deutsch DTP Series**

Deutsch's DTP Series connectors are the answer to all of your most demanding power application requirements. DTP Series connectors offer the proven reliability and quality of Deutsch's DT Series, combined with the added flexibilty of using power contacts.



#### **Deutsch DT Bussed Series**

Utilizing the Deutsch DT receptacle shell, Deutsch has combined the rugged characteristics of the DT product line with a bussing device allowing the elimination of various harness splices. By using internal stamped bussed contacts this product can be configured in whatever arrangement meets your individual needs in the DT shell size that matches your requirements. Complete bussing flexibility in a compact, economical package.



#### **Deutsch DTHD Series**

Deutsch developed the DTHD Series for those applications requiring a complete, environmentally sealed, single power circuit termination. The plug features an integral coupling latch that provides tactile and audible feedback during coupling. The rugged thermoplastic receptacle is designed as an inline for cable to cable applications and is supplied with an integral Vee-Groove to accept mounting, clips, brackets and flanges.

mounting, clips, brackets and t	ianges.
Features	Benefits
Integral Connector Latch	Tactile and Audible Assembly Feedback
Rugged Thermoplastic Housing	Field Proven Long Service Life
-55° C to +125° C Operating Temperature	Engine Compartment Rated
Available Configurations:	
DTM/DT 2, 3, 4, 6, 8 & 12 - Size 20/16	Meets Most Harness Design Requirements
DTP 2 & 4 - Size 12	
DTHD 1 - Size 4, 8 & 12	
Silicone Seals:	Superior Environmental Seal
DTM: Accepts AWG 22 - 16 wire	Seals on .053" to .120 dia.(1.35mm to 3.05mm)
DT: Accepts AWG 20 - 14 wire	Seals on .053" to .145 dia.(1.35mm to 3.68 mm)
DTP: Accepts AWG 14 - 10 wire	Seals on .097" to .170 dia.(2.46mm to 4.32mm)
DTHD: Accepts AWG 14 - 6 wire	Seals on .134 to .292 dia. (3.40mm to 7.42mm)
Crimp Contacts with Option of Gold or Nickel	Low Costs, High Reliability Terminals for Data &
Finish, Solid or Stamped Construction	Signal Transmission
Current rating all contacts @ 125° C no derating	
DTM - 7.5 Amps	
DT - 13 Amps	Meets Most Signal Requirements
DTP - 25 Amps	
DTHD - 25 to 100 Amps	
Fail-Safe Secondary Locks All (Except DTHD)	Positive Contact Retention
Hand Insertable/Removable Contacts	No Special Tools Required (Except DTHD)

DTHD - 25 to 100 Amps	
Fail-Safe Secondary Locks All (Except DTHD)	Positive Contact Retention
Hand Insertable/Removable Contacts	No Special Tools Required (Except DTHD)
Budget Minded	Low Installation Costs



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#### **Product Line Overview**

#### **Deutsch DTM Series**

Deutsch DTM Series of transportation connectors feature a miniature contact with an enhanced design based on the world class, field-proven Deutsch "DT Series".

The DTM is the connector to be used in harsh environmental applications where reliable signal circuits are critical to operating performance. Typical applications include on or around the engine, the transmission and under the hood. In fact, everywhere data signals or critical electronic circuits go, the field proven Deutsch design of the DTM will provide reliable peak connector performance.

The low cost, size 20 contacts terminate AWG 16 to 22 gauge wire (0.5mm² to 1.5mm²). Closed entry socket (female) contacts featuring spring action fingers are protected by a stainless steel hood. This allows for positive axial alignment while mating and prevents probe damage during testing.

Thermoplastic housings offer a wide operating temperature range (- $55^{\circ}$  C to + $125^{\circ}$  C). Silicone rear wire and internal peripheral interface seals allow the DTM to withstand moisture and fluids.

#### **Deutsch DT Series**

Deutsch DT Series of environmentally-sealed, connectors are designed specifically for cable to cable applications on the engine or transmission, under the hood, on the chassis or in the cab. Where signal level circuits in harsh environmental conditions, where even a small degradation in connection may be critical, the Deutsch DT Series general purpose connectors will provide the reliability and performance at the lowest cost.

Thermoplastic (-55° C to + 125° C rated) housings and silicone seals are used to allow the connector to withstand conditions of extreme temperature and moisture. The connector may be employed with either solid-copper crimp type contacts for critical circuits or budget-minded stamped and formed contacts. In either selection, the spring action is designed in the socket and shrouded by a stainless steel hood that provides closed entry for positive axial alignment during mating, and eliminates probe damage from occurring. Contact insertion and withdrawal require no special tools and are retained in locked position by dielectic fingers, molded as an integral part of the housing. Secondary locks are assembled at the mating interfaces. If by chance the secondary locks are not properly seated during assembly, they will be pressed into locked position during the mating of the connector.

#### **Deutsch DTP Series**

Building on both the DT and DTM design strengths, the DTP connector line was developed to fill the need for higher amperage, multi-pin, inexpensive connectors. The series meets the same specifications as the DTM and DT but offers the designer the ability to use multiple 12 gauge contacts, each with a 25 amp continuous capacity, within a single shell.

Based on the DTM overall design, it offers the protected interfacial seal located within the receptacle shell. Standard multi-seal grommet is used in both the plug and receptacle. Currently available in two and four pin configurations.

#### **Deutsch DT Bussed Series**

These standard "DT" receptacle shells feature internal pin type contact buss bar arrangements that allow common connections from 3 to 12 size 16 contacts. Buss bars are available in standard nickel or gold to match common Deutsch Industrial contacts.

Other features include the use of standard "DT" plugs to mate with these environmental receptacles. Plugs with any Deutsch modification are intermatable.

#### **Deutsch DTHD Series**

Deutsch developed the DTHD Series for those applications requiring a complete, environmentally sealed, single power circuit termination. DTHD plugs and receptacles can be permanently assembled with thermoplastic end caps that prevent removal of the silicone wire seal grommets. Designed for diesel engine, electronic fuel injectors, automatic transmissions, ABS brakes and other applications that involve fuel and oil exposure. These end caps provide the additional reliability required for critical wiring circuits.



#### **DT Series** Technical Manual



#### MATERIAL SPECIFICATIONS

#### Plug/Receptacle

Shell: Thermoplastic
Wedge: Thermoplastic
Grommet: Silicone Rubber

#### **Contacts**

Pin: Copper Alloy Socket: Copper Alloy

Finish: Nickel (optional - gold) Plated

#### **Sealing Plugs**

Thermoplastic: (All sizes)

#### **GENERAL SPECIFICATIONS**

#### **Dielectric Withstanding Voltage**

Current leakage less than 2 milliamps at 1500 VAC

#### **Insulation Resistance:**

1000 megohms minimum at 25° C.

**Current Rating** (Contact current rating @ 125°C (continuous)

Size 20: 7.5 amps

Size 16: 13 amps

Size 12: 25 amps

Size 8: 60 amps

Size 4: 100 amps

#### **Submersion:**

Properly wired and mated connection will withstand immersion under three feet of water without loss of electronic qualities or leakage.

#### **Fluid Resistance:**

Connectors show no damage when exposed to most fluids used in industrial applications.

#### 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.

#### Temperature:

Operative at temperatures from -55°C to +125°C. Continuous at rated current.

#### **Contact Retention:**

Contacts withstand a minimum load of:

20 lbs (89N) for size 20

25 lbs (111N) for size 16

30 lbs (133N) for size 12

35 lbs (156N) for size 8

35 lbs (156N) for size 4

#### Thermal Cycle:

No cracking, chipping or leaking after 20 test cycles from  $-55^{\circ}$ C to  $+125^{\circ}$ C.

#### **Durability:**

No electrical or mechanical defects after 100 cycles of engagement and disengagement.

	CON	TACT R	ESISTAN	CE
CONTACT SIZE	WIRE GAUGE AWG(mm²)	Test Current (Amps)	Resistance (mV) Solids	Resistance (mV) Stamped & Formed
20	<b>20</b> (.50)	7.5	60	100
	<b>18</b> (.80)	7.5	60	100
	<b>16</b> (1.0)	7.5	60	100
16	<b>20</b> (.50)	7.5	60	100
	<b>18</b> (.80)	10	60	100
	<b>16</b> (1.0)	13	60	100
	<b>14</b> (2.0)	13	60	100
12	<b>14</b> (2.0)	18	60	100
	<b>12</b> (3.0)	25	60	100
8	8 (8.60)	60	60	N/A
	<b>10</b> (5.60)	60	60	N/A
4	<b>6</b> (13.0)	100	60	N/A

WI	RE SEALING RA	ANGE
	RECOMMENDED WIF	re insulation o.d.
CONTACT SIZE	N-SEAL	E-SEAL
#20	.053120 (1.35-3.05)	N/A
#16	.088145 (2.24-3.68)	.053120 (1.35-3.05)
#12	.134170 (3.40-4.32)	.097158 (2.46-4.01)
#8	.190240 (4.83-6.10)	N/A
#4	.280292 (7.11-7.42)	N/A



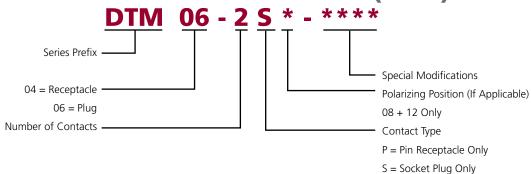
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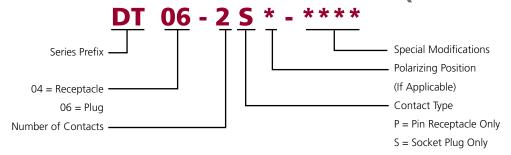
## **DT Series** Technical Manual



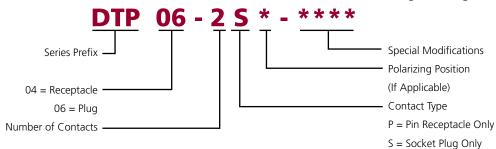




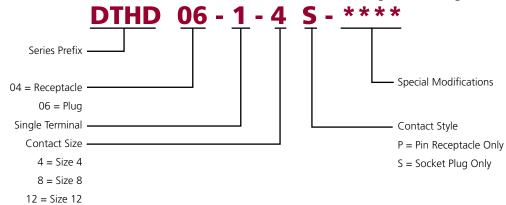
## **PART NUMBERING SYSTEM (DT & DT Bussed)**



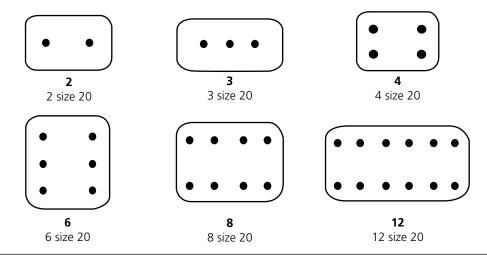
## **PART NUMBERING SYSTEM (DTP)**



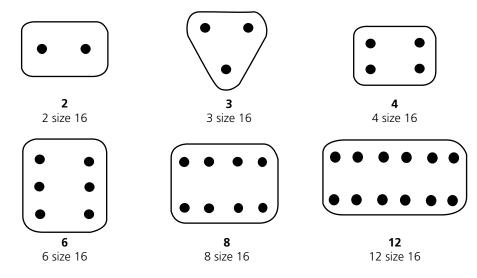
## **PART NUMBERING SYSTEM (DTHD)**



#### **DTM Series Size 20 Contacts**



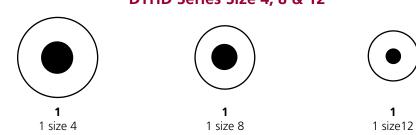
#### **DT & DT BUSSED Series Size 16 Contacts**



#### **DTP Series Size 12 Contacts**



#### DTHD Series Size 4, 8 & 12



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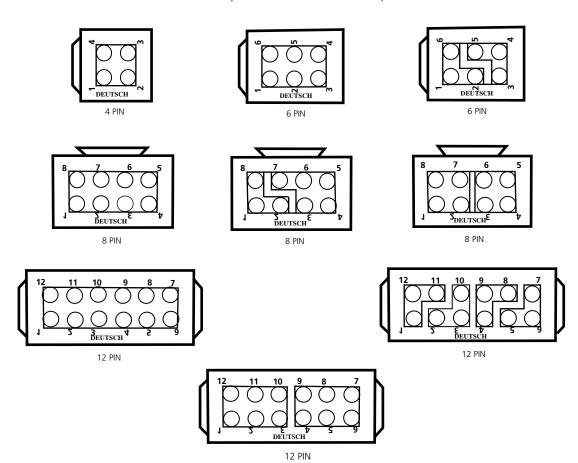


## **DT Series** Technical Manual



#### **DT Series BUSSED Arrangements**

Standard DT Receptacles Bussed to Customer Specifications



Arrangements shown are currently available. For additional arrangements contact factory.

## ALL PART NUMBERS ARE FOR "BLACK"

8

MAX CURRENT RATINGS	NICKEL BUSS P/N	GOLD BUSS P/N	MATING PLUG P/N
4 PIN = 26 AMPS	DT04-4P-EP13	DT04-4P-EP12	DT06-4S-***
6 PIN = 39 AMPS	DT04-6P-EP13	DT04-6P-EP12	DT06-6S-***
3 PIN = 13 AMPS	DT04-6P-EP14	DT04-6P-EP15	DT06-6S-***
8 PIN = 52 AMPS	DT-8PB-P021	DT04-8PB-P016	DT06-08SB-***
5 PIN = 26 AMPS	DT04-8PB-PO28	DT04-8PB-PO29	DT06-08SB-***
4 PIN = 26 AMPS	DT04-8PB-P026	DT04-8PB-P027	DT06-08SB-***
3 PIN = 13 AMPS	DT04-3P-***	DT04-3P-***	DT06-3S-***
12 PIN = 76 AMPS	DT04-12PB-P021	DT04-12PB-P016	DT06-12SB-***
6 PIN = 39 AMPS	DT04-12PB-P026	DT04-12PB-P027	DT06-12SB-***
3 PIN = 13 AMPS	DT04-12PB-P030	DT04-12PB-P031	DT06-12SB-***

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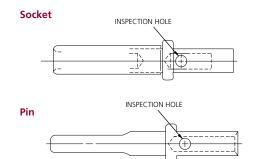
PLEASE CONSULT FACTORY FOR AVAILABILITY AND ALTERNATE KEYING

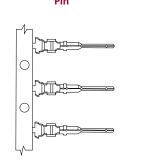
## CONTACTS AND APPLICATION DATA Solid Contacts

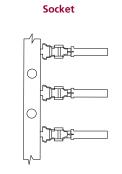
	SOLID CONTACT PART NUMBERS		WIRE SIZE AWG (mm²)	RECOMMENDED STRIP LENGTH INCHES (mm)	MIN CONTACT RETENTION LBS (N)	REF CRIMP TENSILE LBS (N)	MAX RATED AMPS AT 125°C CONTINUOUS
SIZE	PIN	SOCKET					
20	0460-202-20**	0462-201-20**	20 (0.50)	.156218 (3.96 - 5.54)	20 (89)	20 (89)	7.5
16	0460-202-16**	0462-201-16**	16-20 (1.0 - 0.50)	.250312 (6.35 - 7.92)	25 (111)	35-20 (156-89)	13
16	0460-215-16**	0462-209-16**	14 (2.0)	.250312 (6.35 - 7.92)	25 (111)	70 (311)	13
12	0460-204-12**	0462-203-12**	12-14 (3.0 - 2.0)	.222284 (5.64 - 7.21)	30 (134)	75-70 (334 - 311)	25
8	0460-204-08**	0462-203-08**	8-10 (8.0 - 5.0)	.430492 (10.92 - 12.50)	35 (156)	125-90 (556-400)	60
4	0460-204-04**	0462-203-04**	6 (13.0)	.430492 (10.92-12.50)	35 (156)	300 (1334)	100

<sup>\*</sup> See Envelope Print 0425-205-0000. Consult factory for alternate finishes.

#### Solid Contacts Stamped and Formed Contacts







#### **Stamped & Formed Contacts**

	STAMPED & FORMED CONTACT PART NUMBERS		CARRIER STRIP	WIRE SIZE AWG (mm2)	WIRE INSULATION	RECOMMENDED STRIP LENGTH	MIN CONT. RETENTION	REF CRIMP TENSILE	MAX RATED AMPS AT 125°C
SIZE	PIN	SOCKET	IDENTIFICATION		O.D. RANGE	INCHES (mm)	LBS (N)	LBS (N)	CONTINUOUS
20	1060-20-01**	1062-20-01**	20 - 01	16 - 22 (1.0 - 0.35)	.075125 (1.91 - 3.15)	.150200 (3.81 - 5.08)	20 (89)	20 - 10 (89 - 45)	7.5
20	1060-20-02**	1062-20-02**	20 - 02	16 - 22 (1.0 - 0.35)	.051085 (1.30 - 2.16)	.150200 (3.81 - 5.08)	20 (89)	20 - 10 (89 - 45)	7.5
20	N/A	1062-20-03**	20 - 03	16 - 22 (1.0 - 0.35)	.075125 (1.91 - 3.15)	.150200 (3.81 - 5.08)	20 (89)	20 - 10 (89 - 45)	7.5
16	1060-14-01**	1062-14-01**	14-16	14 - 18 (2.075)	.095150 (2.41 - 3.81)	.150200 (3.81 - 5.08)	25 (111)	25 (111)	13
16	1060-14-10**	1062-14-10**	14 -16	14 - 18 (2.075)	.095150 (2.41 - 3.81)	.150200 (3.81 - 5.08)	25 (111)	25 (111)	13
16	1060-16-01**	1062-16-01**	16 - 18	14 - 18 (2.075)	.075140 (1.91 - 3.55)	.150200 (3.81 - 5.08)	25 (111)	25 (111)	13
16	1060-16-06**	1062-16-06**	0.5 - 1.0	16 - 20 (1.0 - 0.50)	055100 (1.40 - 2.54)	.150200 (3.81 - 5.08)	25 (111)	25 - 15 (111 - 67)	13
16	1060-16-07**	1062-16-07**	0.75 - 2.0	14 - 18 (2.075)	.075140 (1.91 - 3.55)	.150200 (3.81 - 5.08)	25 (111)	25 (111)	13
16	1060-16-09**	1062-16-09**	16 - 18	14 - 18 (2.075)	.075140 (1.91 - 3.55)	.150200 (3.81 - 5.08)	25 (111)	25 (111)	13
16	1060-16-12**	1062-16-12**	1.0 - 2.5	12 - 16 (2.5 - 1.0)	.075140 (1.91 - 3.55)	.175225 (4.45 - 5.72)	25 (111)	25 (111)	13
16	N/A	1062-16-14**	14 - 16	12 - 16 (2.5 - 1.0)	.075140 (1.91 - 3.55)	.175225 (4.45 - 5.72)	25 (111)	25 (111)	13
12	1060-12-01**	1062-12-01**	12 - 14	12 - 14 (4.0 - 2.0)	.113176 (2.87 - 4.47)	.225275 (5.72 - 6.991)	30 (134)	70 (311)	25
12	1060-12-02**	1062-12-02**	10 - 12	10 - 12 (6.0 - 4.0)	.140204 (3.56 - 5.18)	.225275 (5.72 - 6.99)	30 (134)	70 (311)	25

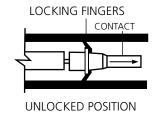
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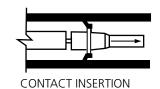
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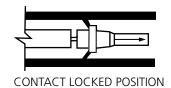
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#### **Contact Retention System (DTHD)**

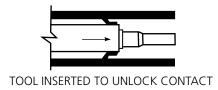
Rquired Removal Tool (See page 12)

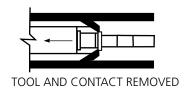




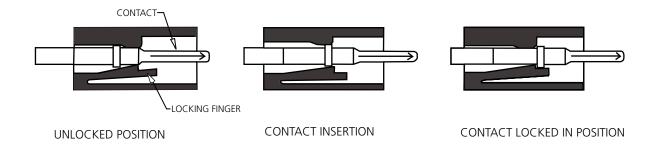


#### **Contact Insertion Procedure**

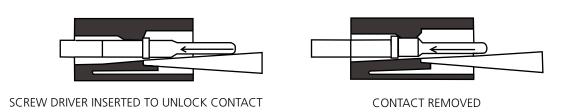




#### **Contact Insertion System (DTM/DT/DTP)**



#### **Contact Removal Procedure (DTM/DT/DTP)**



#### **Assembly Contact Insertion (DTM, DT, DTP)**



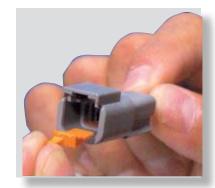
1. Grasp crimped contact approximately 1.0" (25.4mm) behind the contact barrel.



2. Hold connector with rear grommet facing you.



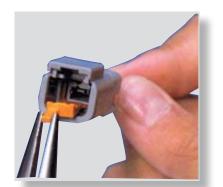
3. Push contact straight into connector grommet until a click is felt. A slight tug will confirm that it is properly locked in place.



4. Once all contacts are in place, insert orange wedge: receptacles - with half holes aligning with contacts. Plugs - with contacts aligning behind full holes. The orange wedge will snap into place.

NOTE: The receptacle is shown - use the same procedure for plug.

#### **Contact Removal**



1. Remove orange wedge using needlenose pliers to pull wedge straight out.



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.



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

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#### Accessories







Accessories 3

To meet the application requirements where wires are to be protected, the DT Series may be supplied with boot adaptors. These will accept shaped boots / sleeves or shrink tubing. Parts for standard or thin wall wire are available.

#### **Shrink Boot Adaptor Modification Numbers**

**Part Number - Plugs** 

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Part Number - Receptacles

Wire Sealing Range: Standard - 2.24mm - 3.68mm wire insulation diameter Thin wall - 1.35mm wire insulation diameter

Number		Gr	еу	Bla	ack	Number		G	rey	Bl	ack
of Ways	Basic Part Number	Std.	Thin Wall	Std.	Thin Wall	of Ways	Basic Part Number	Std.	Thin Wall	Std.	Thin Wall
2	DT06-2S	-E008	-CE04	-EP11	-CE13	2	DT04-2P	-E008	-CE04	-EE11	-CE09
3	DT06-3S	-E008	-CE04	-EP11	-CE13	3	DT04-3P	-E008	-CE04	-EE11	-CE09
4	DT06-4S	-E008	-CE04	-EP11	-CE13	4	DT04-4P	-E008	-CE04	-EE11	-CE09
6	DT06-6S	-E008	-CE04	-EP11	-CE13	6	DT06-6P	-E008	-CE04	-EE11	-CE09
8	DT06-8SA	-E008	-CE04	-EP11	-CD13	8	DT04-8PA	-E008	-CE04	-EE11	-CE09
12	DT06-12SA	-E008	-CE04	-EP11	-CD13	12	DT04-12PA	-E008	-CE04	-EE11	-CE09

#### **DTHD Removal Tools**

#### **Sealing Plugs**

NORM	AL WIRE	SEALS (N)	EXTRA THIN	I WALL V	VIRE SEALS (E)	SEA	LING PLUG
PART NO.	SIZE	WIRE RANGE AWG	PART NO.	SIZE	WIRE RANGE AWG	CONTACT SIZE	PART NO.
114010	12	12-14	0411-337-1205	12	12-14	20	0413-204-2005
114008	8	8-10	0411-353-0805	8	8-10	16 -12	114017
114009	4	6	114009	114009 4		8	114018
						Λ	114019

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#### **DT Mounting Clips**

#### Metal Mounting Clips







1027-001-0800

1027-003-1200

1027-004-1200



1027-005-1200

1027-014-0800



1011-026-0205 (Thru Hole)



1011-027-0805 (Thru Hole)



1011-030-0205 (Snap Fit)



1011-310-0205 (W/Self Mounting Stud)

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#### **Metal Mounting Clips**

#### **Plastic Mounting Clips**

Part Number	Used On	Material	Hole O.D. in. (mm)	Part Number	Used On	Material	Color
1027-003-1200	DTM (all) DT 2, 3, 4, 6, 12 DTP (all) DTHD (all)	Stainless Steel	.433 (11.0)	1011-026-0205	DTM (all) DT 2, 3, 4, 6, 12 DTP (all) DTHD (all)	Plastic	Gray
1027-005-1200	DTM (all) DT 2, 3, 4, 6, 12 DTP (all) DTHD (all)	Stainless Steel	.512 (13.0)	1011-027-0805	DT 8 Cavity Only	Plastic	Gray
1027-004-1200	DTM (all) DT 2, 3, 4, 6, 12 DTP (all) DTHD (all)	Stainless Steel w/Zinc Plating	.512 (13.0)	1011-027-0805	DTM (all) DT 2, 3, 4, 6, 12 DTP (all) DTHD (all)	Plastic	Black
1027-001-0800	DT 8 cavity only	Stainless Steel	.433 (11.0)				
1027-014-0800	DT 8 cavity only	Stainless Steel w/Zinc Plating	.323 (8.2)				

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### Accessories



## **DT Series** Technical Manual

## Accessories

#### **Back Shells**

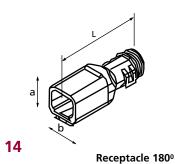
The Deutsch range of Back Shells is designed to snap fix onto the full range of standard DT connectors (i.e. without end cap). The innovative design allows each unit to accommodate several different sizes of slit or unslit corrugated tubes.

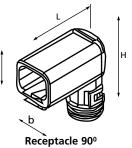
They are available for both plugs and receptacles and the options include straight (180°) and right angled (90°) adaptors for 2, 3, 4, 6, 8 and 12 way, additionally a version equipped with strain relief features 2, 3, 4 and 6 way for jacked cables.

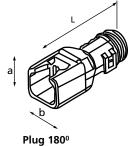
Material: PA 6.6 / black IP rating: IP40 Operating Temperatures: -40 to 125° C Handling Temperature: -5 to 45° C

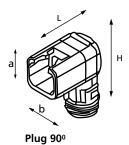
IP rating: IP40		Handling Temperature: -5 to 45° C						
	O 11 1		En	velope Dimen	sions (mm)			
Connector	Outlet	Strain Relief	a	b	L	Н	Item No.	Part No.
DT04-2P	180	Х	18,0	17,0	54,5	-	61031-23	1011-257-0205
	180		18,0	17,0	54,5	-	61031-33	1011-229-0205
	90	Х	18,0	17,0	40,0	37,0	61031-24	1011-258-0205
	90		18,0	17,0	40,0	37,0	61031-34	1011-230-0205
DT06-2S	180	X	16,0	17,0	45,5	-	61031-25	1011-255-0205
	180		16,0	17,0	45,5	-	61031-35	1011-227-0205
	90	X	16,0	17,0	31,0	37,0	61031-26	1011-256-0205
	90		16,0	17,0	31,0	37,0	61031-36	1011-228-0205
DT04-3P	180	X	25,0	23,0	64,5	-	61051-23	1011-261-0305
	180		25,0	23,0	64,5	-	61051-33	1011-233-0305
	90	X	25,0	23,0	44,0	48,0	61051-24	1011-262-0305
	90		25,0	23,0	44,0	48,0	61051-34	1011-234-0305
DT06-3S	180	X	21,0	23,0	56,0		61051-25	1011-259-0305
	180		21,0	23,0	56,0	-	61051-35	1011-231-0305
	90	Х	21,0	23,0	36,0	48,0	61051-26	1011-260-0305
	90		21,0	23,0	36,0	48,0	61051-36	1011-232-0305
DT04-4P	180	Х	22,0	22,0	59,5	-	61048-23	1011-265-0405
	180		22,0	22,0	59,5	-	61048-33	1011-237-0405
	90	Х	22,0	22,0	43,0	45,0	61048-24	1011-266-0405
	90		22,0	22,0	43,0	45,0	61048-34	1011-238-0405
DT06-4S	180	Х	20,0	22,0	53,0	-	61048-25	1011-263-0405
	180		20,0	22,0	53,0	-	61048-35	1011-235-0405
	90	Х	20,0	22,0	35,0	45,0	61048-26	1011-264-0405
	90		20,0	22,0	35,0	45,0	61048-36	1011-236-0405
DT06-6P	180	Х	26,0	21,5	64,0	-	61057-23	1011-269-0605
	180		26,0	21,5	64,0	-	61057-33	1011-241-0605
	90	Х	26,0	21,5	43,0	50,0	61057-24	1011-270-0605
	90		26,0	21,5	43,0	50,0	61057-34	1011-242-0605
DT06-6S	180	Х	23,5	20,0	55,5	-	61057-25	1011-267-0605
	180		23,5	20,0	55,5	-	61057-35	1011-239-0605
	90	х	23,5	21,0	38,0	50,0	61057-26	1011-268-0605
	90		23,5	21,0	38,0	50,0	61057-36	1011-240-0605
DT-04-8P	180		27,5	28,0	62,0	-	61049-33	1011-245-0805
	90		27,5	28,0	47,5	50,5	61049-34	1011-246-0805
DT06-8S	180		26,5	28,5	57,0	-	61049-35	1011-243-0805
	90		24,5	28,5	39,5	49,0	61049-36	1011-244-0805
DT04-12P	180		26,0	35,5	63,5	-	61052-33	1011-249-1205
	90		26,0	36,5	53,0	50,5	61052-34	1011-250-1205
DT06-12S	180		23,0	36,0	58,5	-	61052-35	1011-247-1205
	90		23,0	36,0	43,5	50,0	61052-36	1011-248-1205

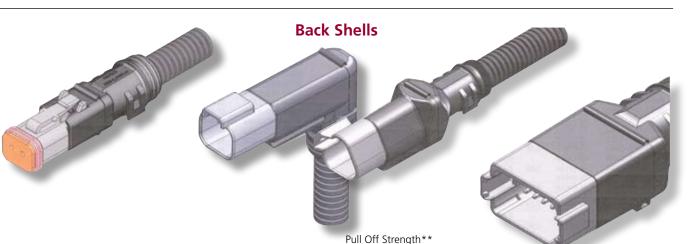
#### Tube Size by Connector and Additional Length (mm) needed

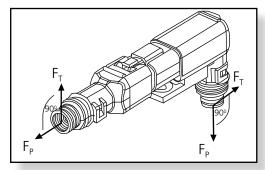












F<sub>P</sub>(N) Connector F<sub>P</sub>(N) DT04-2P / DT06-2S 50 / 50 50 / 10 50 / 50 DT04-3P / DT06-3S 50 / 50 DT04-4P / DT06-4S 50 / 50 50/25 50/30 DT04-6P / DT06-6S 50 / 50 DT04-8P / DT06-8S 50 / 50 50/35 50 / 40 DT04-12P / DT06-12S 50 / 50

\*\* Valid for unslit corrugated tubes. Follow also connector mounting instruction: no force must apply to wires and connector to maintain continuous tightness of the connection.

Tube size by connector and additional length (mm) needed

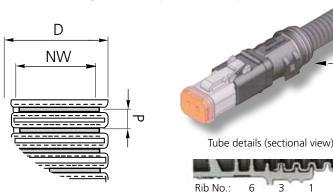
Connect	or	NW6	NW7,5	NW8,5	NW10	NW13	NW17
DT04-2P / DT0	T04-2P / DT06-2S		X + 16,0	X + 10,0	X + 7,0	-	-
DT04-3P / DT06-3S		X + 18,0	X + 18,0	X + 12,5	X + 7,0	-	-
DT04-4P / DT06-4S		X + 16,0	X + 16,0	X + 10,0	X+ 13,0	-	-
DT04-6P / DT06-6S		-	-	X + 20,0	X + 14,0	X + 7,0	-
DT04-8P / DT06-8S		-	-	X + 20,0	X + 24,5	X + 8,0	-
DT04-12P / DT06-12S		-	-	-	-	X + 16,0	X + 10,0
Corrugated	D	9,3	10,0	11,7	13,0	15,8	21,2
Tube Details	Р	2,8	2,7	2,4	2,7	2,7	3,3

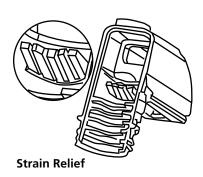
X = Tube length needed for harness

#### Ribs to be used for tube mounting\*

Mbs to be used for tube mounting											
Connector	NW6	NW7,5	NW8,5	NW10	NW13	NW17					
DT04-2P / DT06-2S	6	6	4	3	-	-					
DT04-3P / DT06-3S	7	7	5	3	-	-					
DT04-4P / DT06-4S	6	6	4	3	-	-					
DT04-6P / DT06-6S	-	-	7	5	3	-					
DT04-8P / DT06-8S	-	-	7	5	3	-					
DT04-12P / DT06-12S	-	-	-	7	5	3					

<sup>\*</sup> The corrugated tube must be placed into the ribs as per the above table.





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