

ELECTRONIC PACKAGING CAPABILITIES



DEUTSCH
CONNECTORS
A Step Ahead



Industrial Products Division

LOW PROFILE FLANGELESS PCB CONNECTOR

General Specifications

Dielectric Withstanding Voltage

Current leakage less than 2 milliamps at 1500 VAC.

Current Rating

125° C continuous

Contact Size	Max Current
#20	7.5 amps
#16	13 amps

Durability

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

Physical Shock

No unlocking, unmating or other unsatisfactory results after 50 g's in each of three mutually perpendicular planes.

Moisture Resistance

Water does not penetrate seals when submerged in three feet of water.

Vibration

Maintains continuity and exhibits no mechanical or physical damage after vibration levels of 20 g's between limits of 10 to 2000 Hz.

Temperature

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

Thermal Shock

No cracking, chipping or leaking after five cycles from -55° C to + 125° C.

Insulation Resistance

1000 megaohms minimum at 25° C.

Fluid Resistance

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

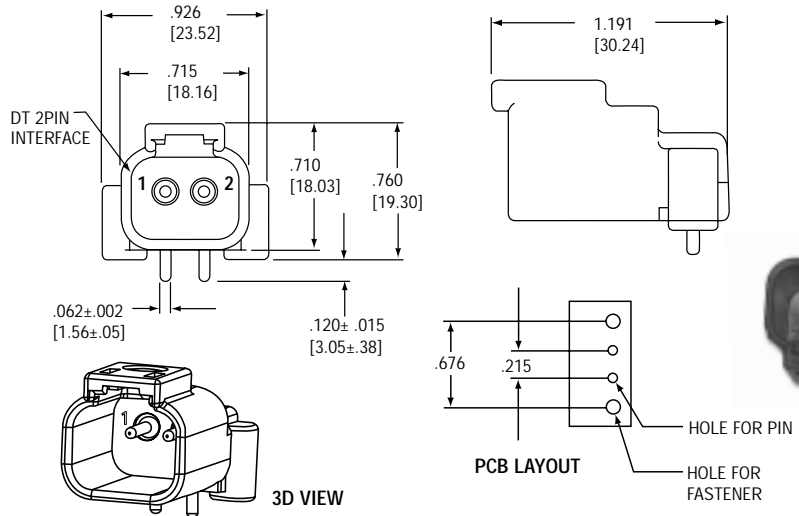
Material Specifications

Housing . . . Thermoplastic

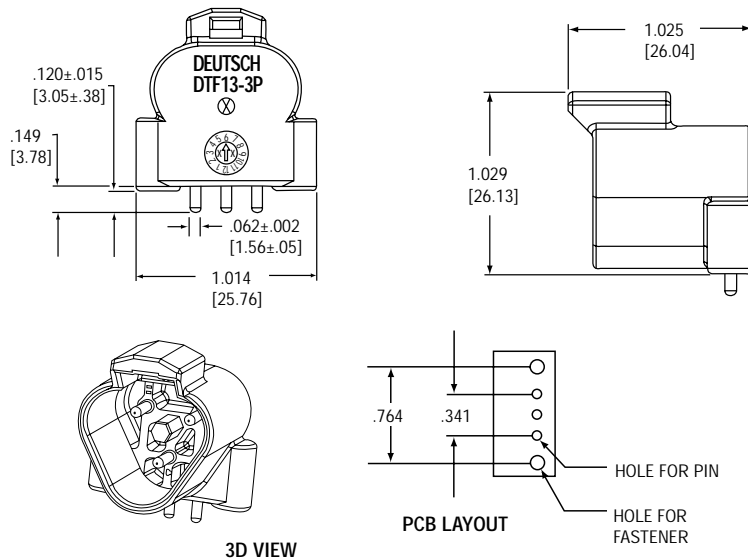
Seals Silicone Elastomer

Contacts . . . Copper Alloy, Tin Plated,
Gold (optional)

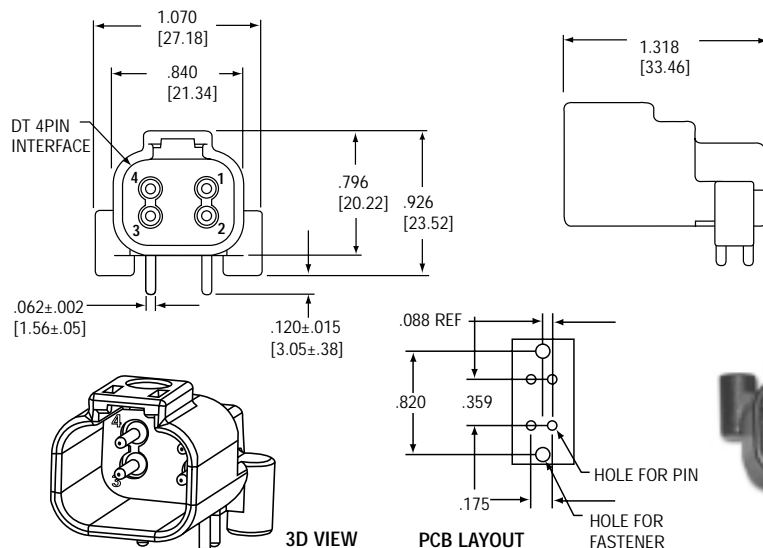
2 WAY RECEPTACLE 90° FLANGELESS



3 WAY RECEPTACLE 90° FLANGELESS

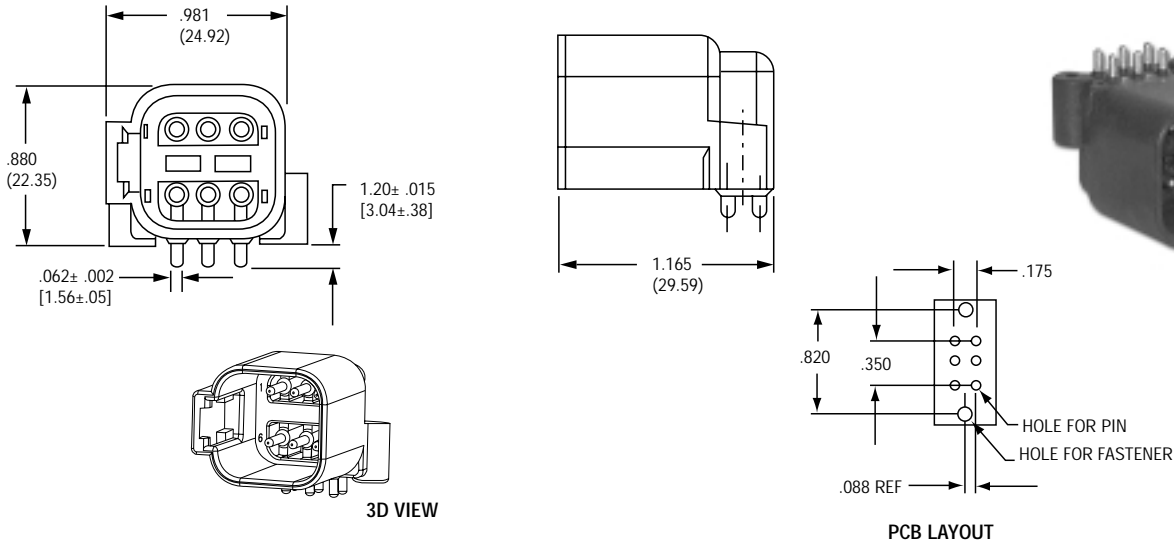


4 WAY RECEPTACLE 90° FLANGELESS

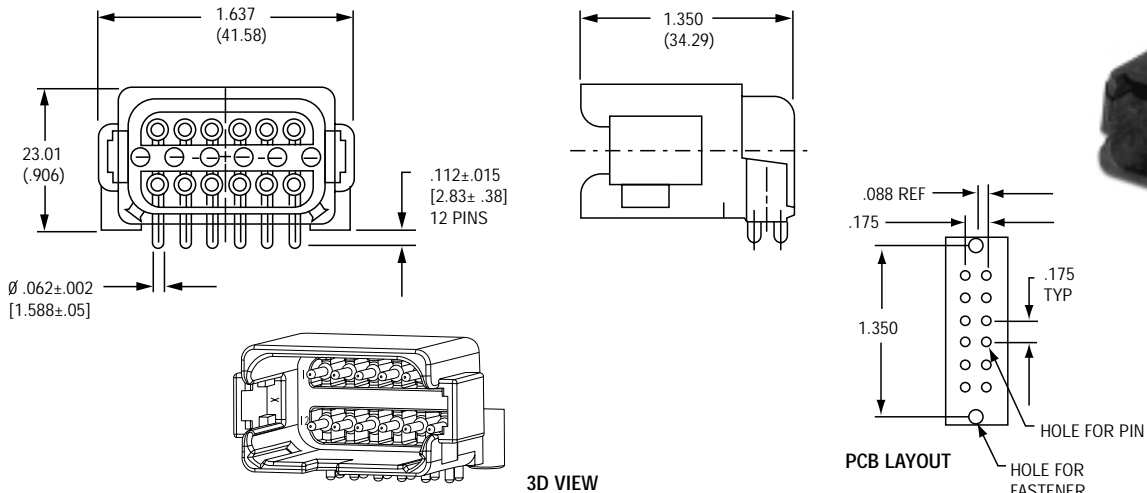


LOW PROFILE FLANGELESS PCB CONNECTOR

6 WAY RECEPTACLE 90° FLANGELESS



12 WAY RECEPTACLE 90° FLANGELESS



Application:

- Electronic Control Modules
- Low Profile Requirements
- Enclosures where PCB and header are potted-in

Here's the low profile solution to your electronic enclosure needs. The DTF and DTMF Series are designed to be potted into a printed circuit board enclosure. These flangeless headers are environmentally sealed when mated to the DT06 and DTM06 Series plug connectors.

For application flexibility the DTF13 and DTMF13 Series are supplied with right angle (90°) terminations. The DTF15 and DTMF15 Series denote straight pins. The DTF utilizes the size 16 contact, while the DTMF uses the size 20.

Consult factory for availability of various options.

ORDERING INFORMATION

DTF 13 - 6 P * - ****

Series Prefix
DTF or DTMF

13 = 90°
15 = Straight

Special Modification

Polarizing Position
(if applicable)

P = Pin

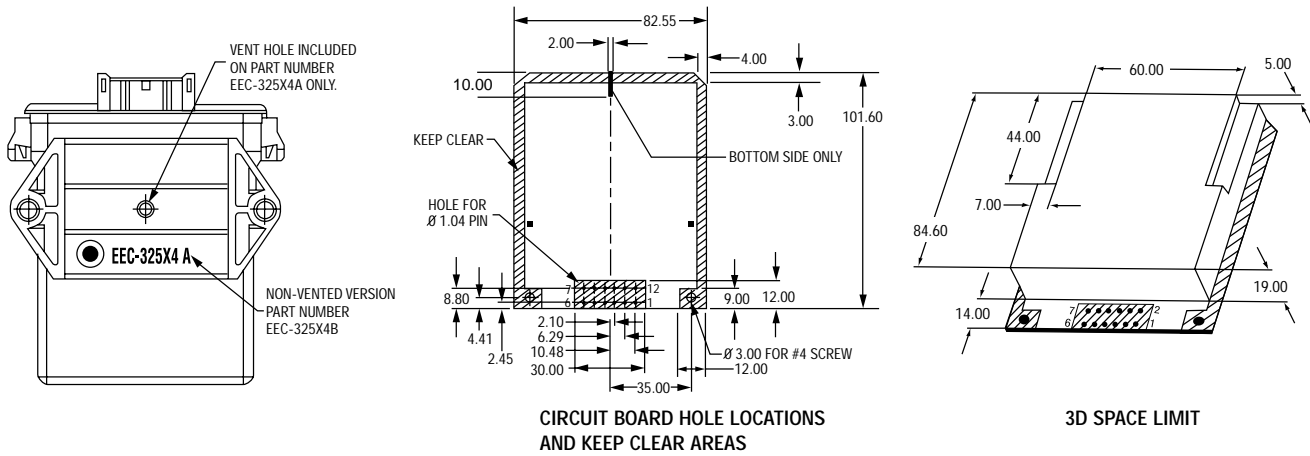
Pin Count
(2, 3, 4, 6, 08 or 12)

Mating Plug: DT06-2S-****
DT06-3S-****
DT06-4S-****
DT06-6S-****
DT06-08S*-****
DT06-12S*-****

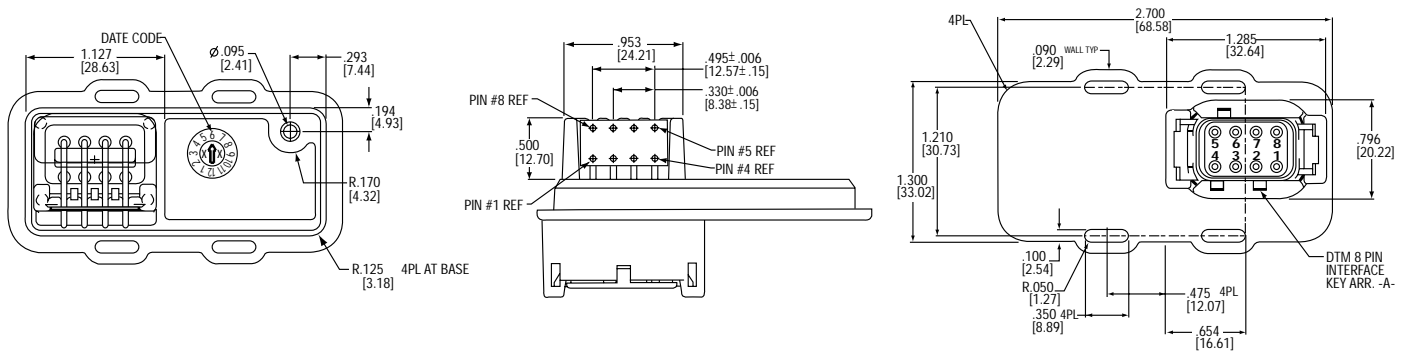
DTM06-2S-****
DTM06-3S-****
DTM06-4S-****
DTM06-6S-****
DTM06-08S*-****
DTM06-12S*-****

PCB ENCLOSURE AND FLANGE CONNECTOR

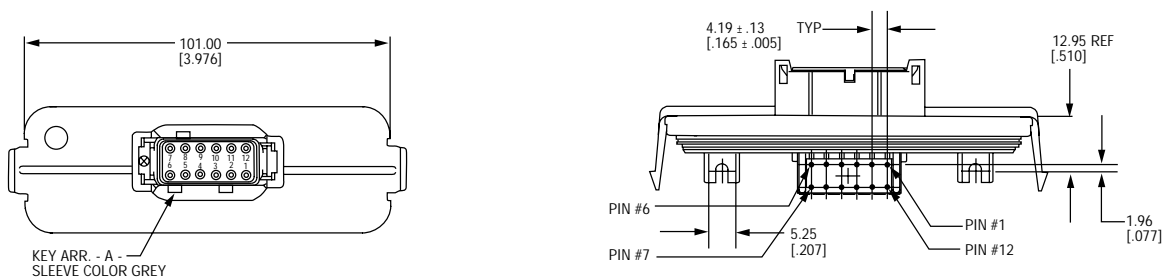
PCB ENCLOSURE



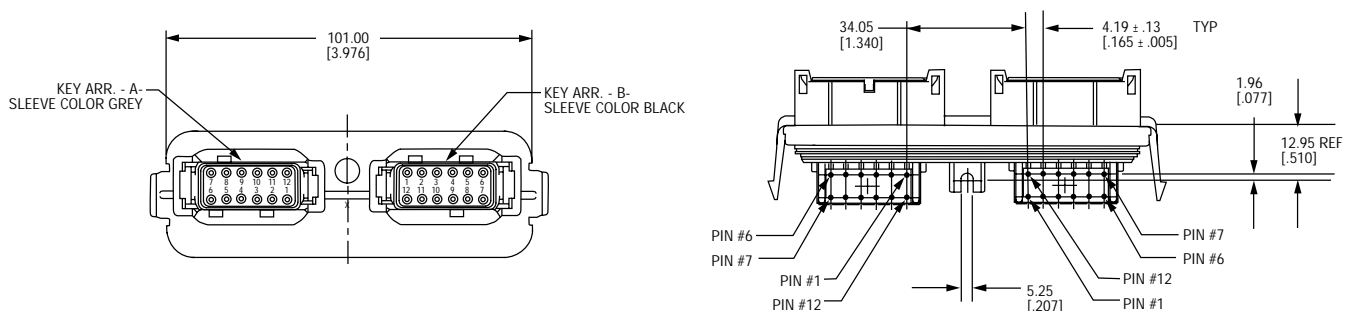
8 WAY RECEPTACLE FOR CUSTOMER-PROVIDED ENCLOSURE



12 WAY RECEPTACLE FOR DEUTSCH ENCLOSURE



24 WAY RECEPTACLE FOR DEUTSCH ENCLOSURE



PCB ENCLOSURE AND FLANGE CONNECTOR

Application:

- Electronic Control Modules
- Diagnostic and Data Acquisition
- Multiplex Systems
- Sensor Products
- Compact Package: enclosure w/integral header
- Vented or Non-vented Enclosure

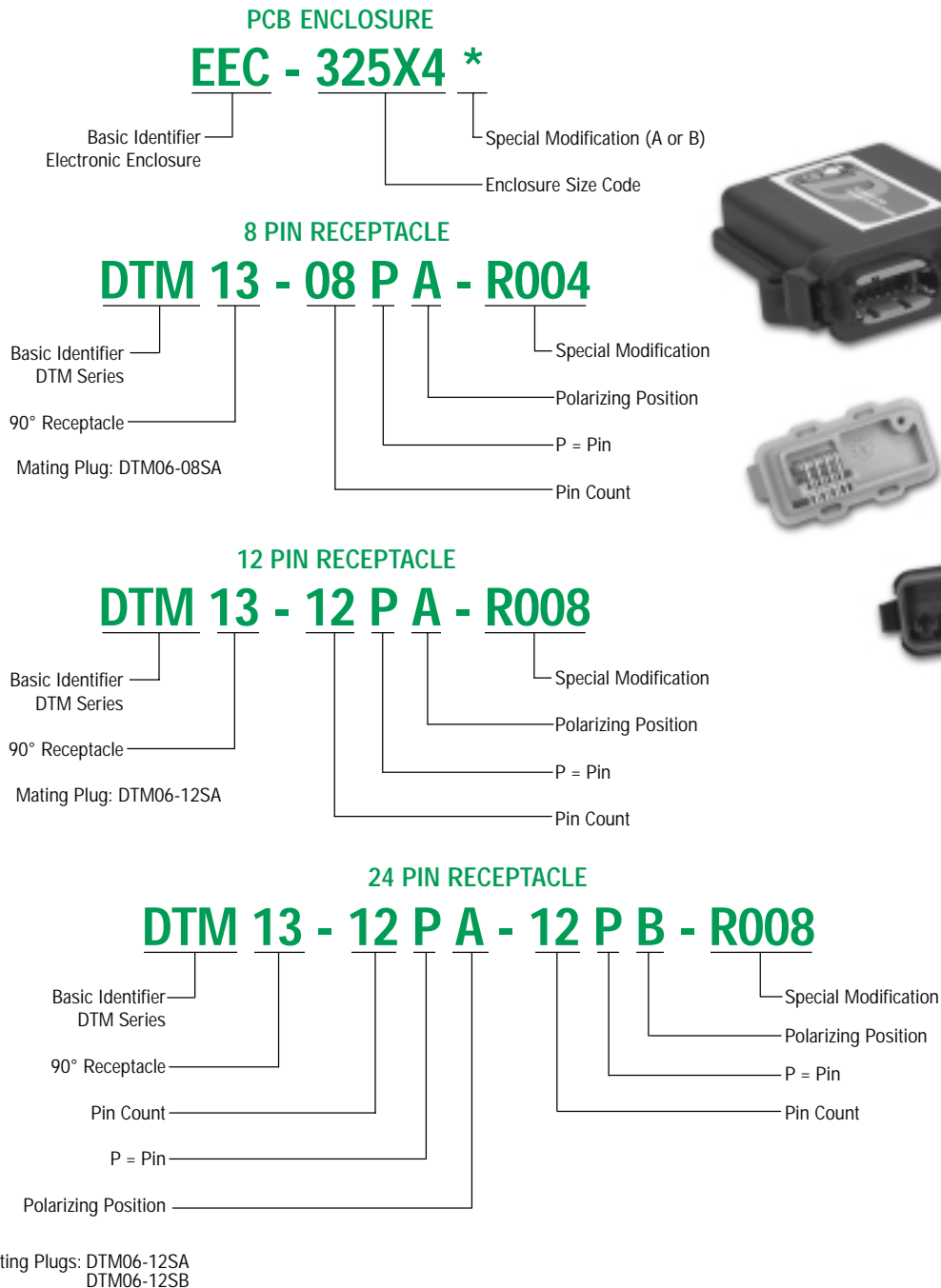
Deutsch IPD offers a compact circuit board enclosure that will receive a snap-in header. The enclosure features a through hole mounting flange on each side, as well as optional venting.

Designed with space to accommodate one or more DT or DTM Series interfaces, the flanged header features 90° pins. A radial flange seal provides environmental sealing to the enclosure.

The flanged receptacles mate with the Deutsch DT06 and DTM06 Series standard plugs. These plugs can utilize either solid or stamped and formed contacts.

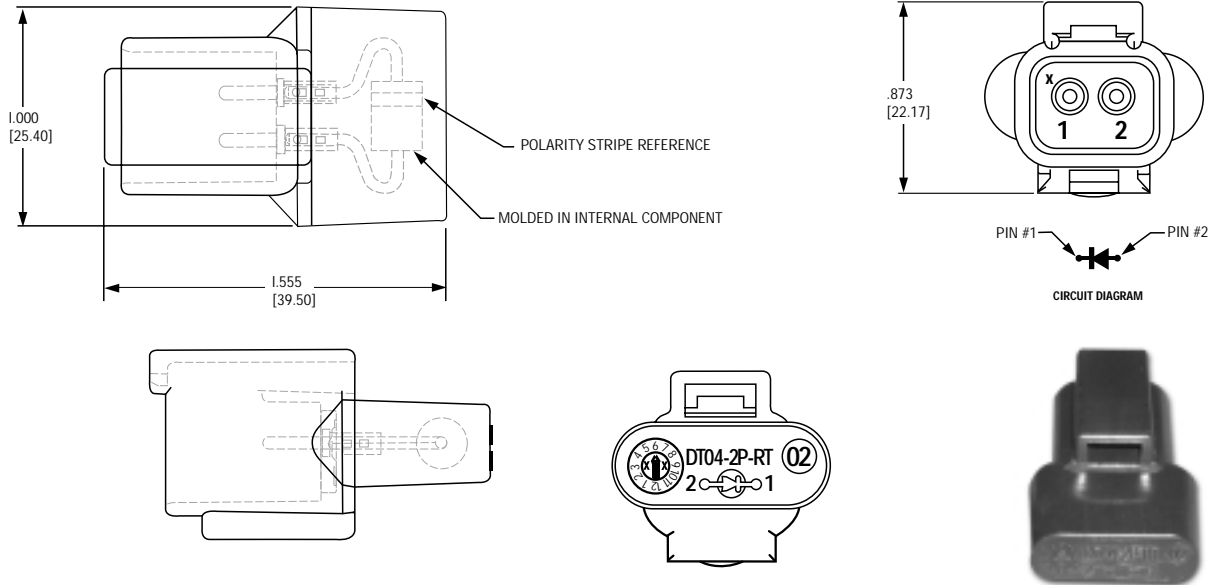
Consult factory for availability of various options.

ORDERING INFORMATION

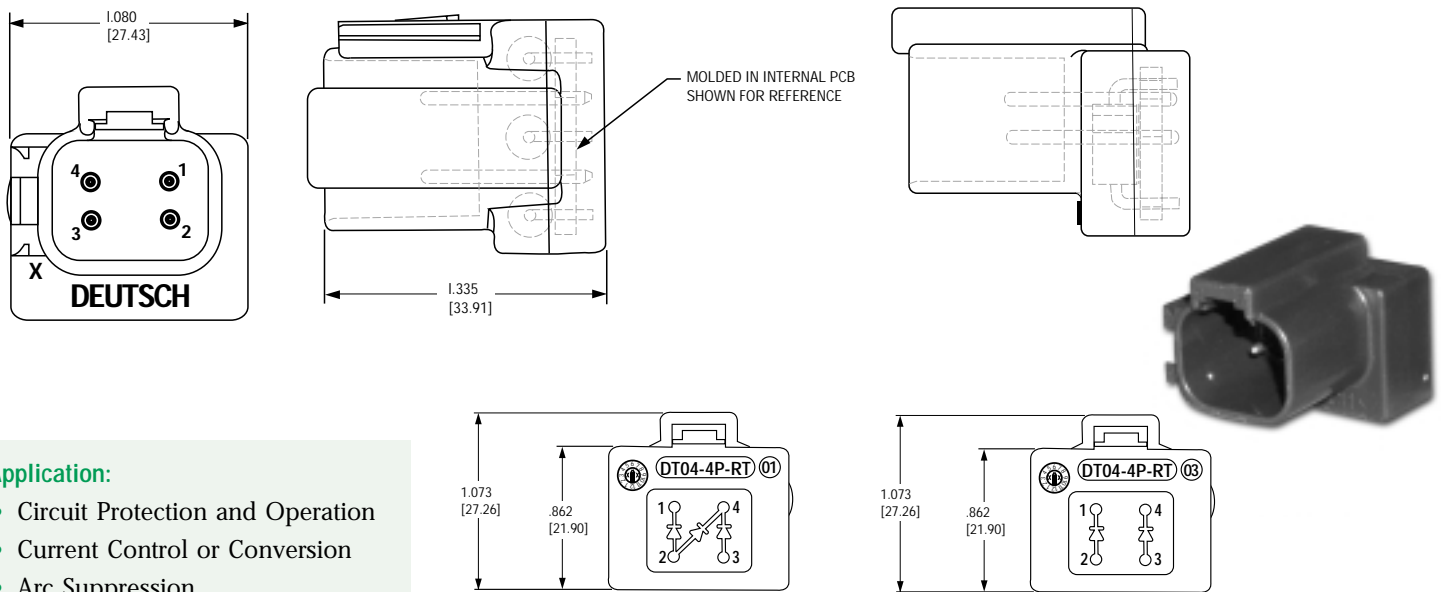


ELECTRONIC PACKAGE

DT SERIES 2 WAY ELECTRONIC PACKAGE



DT SERIES 4 WAY ELECTRONIC PACKAGE



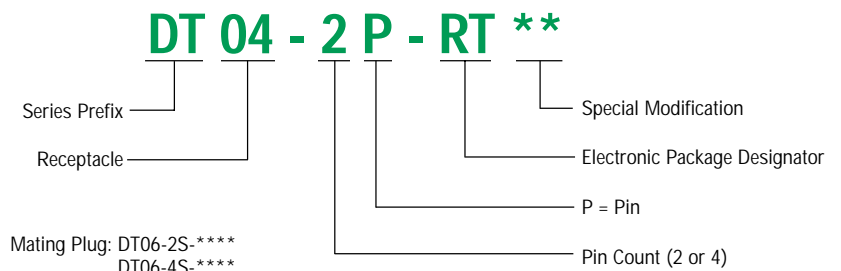
Application:

- Circuit Protection and Operation
- Current Control or Conversion
- Arc Suppression

Eliminate all wet processes and dramatically improve performance and repeatability of spliced applications. Using common Deutsch contacts and crimp tooling, the Electronic Package can insert a standard DT Series interface at any location. Anticipate application needs or react to real emergencies reliably and cost effectively.

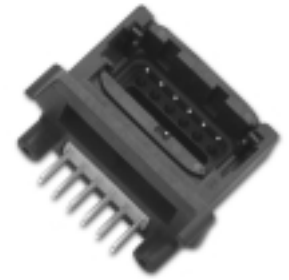
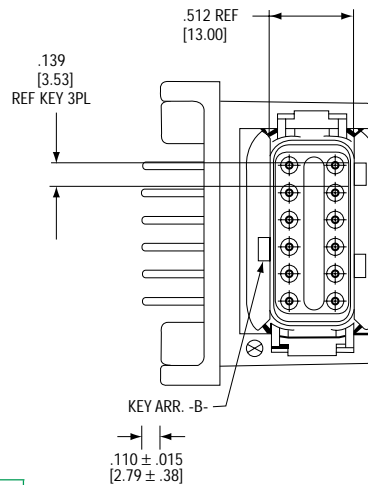
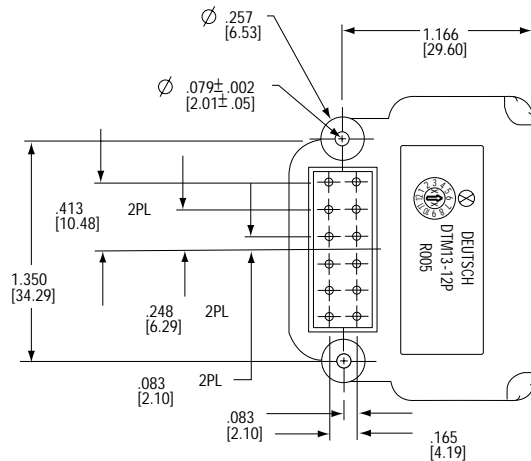
Various electronic components can be molded into this connector. Axial components having a volume similar to the diodes used in the Electronic Packages shown here can be substituted. When you need a Deutsch interface that takes advantage of active electronic circuit components, contact the factory for details.

ORDERING INFORMATION

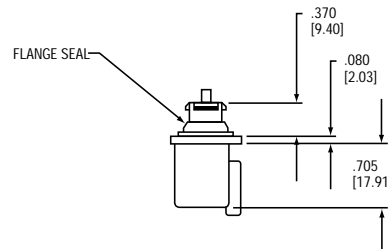
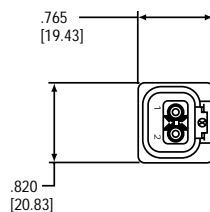
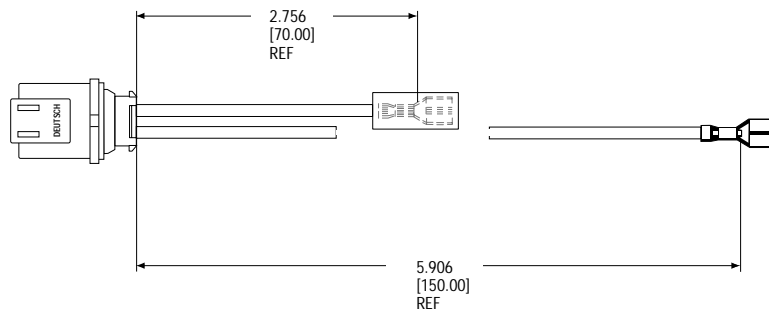


INTEGRATED HOUSING CONNECTORS

DTM SERIES 12 WAY RECEPTACLE



DT SERIES 2 WAY SNAP IN RECEPTACLE



Application:

- Electronic Gauges
- Work Lamps
- PCB Enclosures

The need for integrated interconnections keeps growing with evolving electronics technology. Integrated housing connectors are one of the solutions to difficult design problems characteristic of Deutsch IPD engineering innovation.

The DTM Series 12-way PCB connector has been designed to exit from a gauge housing or any printed circuit board enclosure. It features size 20, right angle (90°) terminations. Sealing can be achieved against the enclosure with a customer-provided flange seal or potting.

The DT Series 2-way snap-in receptacle features molded-in straight pins. Designed to snap into a work lamp or other housing, it includes a flange seal to provide environmental sealing to the housing. A customer specific pigtail is used to transition from the Deutsch size 16 terminal to customer-specific terminals.

Consult factory for more details.

ORDERING INFORMATION

DTM 13 - 12 P B - R005

Series Prefix: DTM
90° Receptacle: 13
Mating Plug: DTM06-12SB
Polarizing Position: P
Pin Count: 12
Special Modification: B - R005

DT 04 - 2 P - RL**

Series Prefix: DT
Receptacle: 04
Mating Plug: DT06-2S-****
Polarizing Position: P
Pin Count: 2
Special Modification: RL**

DEUTSCH CONNECTOR FAMILY

A COMMON SYSTEM OF CONTACTS KNOWN WORLDWIDE



DEUTSCH COMMON CONTACT SYSTEM

Fundamental to the Deutsch connector series is the principle that all wires are terminated by a single contact system. The only variation in contacts is that dictated by wire gauge. The word "common" describes the Deutsch contact system well. Deutsch contacts, whether solid or stamped and formed, can be assembled into the entire Deutsch connector family. Let's look at the common system of contacts, tooling, processes, and terminations in detail:

COMMON CONTACTS

The basic system uses five contact sizes: 4, 8, 12, 16, & 20. These are the only contacts that an O.E.M. or their supplier need stock no matter what connector is being terminated. Two styles of Deutsch contacts are available - solid crimp types, manufactured by a cold heading process of solid copper alloys. Stamped and formed contacts are manufactured with a series of progressive dies. Both contacts are interchangeable within the connector and are selected based upon the user's application. Stocking costs, engineering costs, and termination costs are all slashed, because the number of evaluations, test procedures, test reports, process standards, drawing notes, etc., are reduced, if not eliminated.

COMMON TOOLING

Two hand crimp tools are used to crimp the five different sizes of contacts to the wire end. For semi-automation to full automation, one universal crimp tool will crimp the volume required for wire termination.

COMMON PROCESSING

Using Deutsch contacts means that the way an O.E.M. supplier attaches a wire to its terminus never varies. This procedural standard allows electrical workers to become highly proficient in terminating Deutsch connectors.

COMMON TERMINATIONS

The selection of Deutsch connectors means that all contact terminations will be the same, thus reducing the chance of errors in the harness system. Performance, reliability, and maintainability are critical to any electrical system. The use of a common contact system eliminates many of the failures reported in harnesses where hundreds of different types of terminations are used. The end result of selecting Deutsch is increased profits and long term performance.



For Regional Information Contact ...

DEUTSCH

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