

DIN Connector Assemblies

- RoHS Compliant

Completely molded DIN connectors are available with TPC's Trex-Onics® high quality cable in industry standard configurations. A self-sealing design eliminates the need for rubber gaskets and an integrated LED illuminates the entire connector head that can be seen from 360°. Our DIN connectors provide environmental protection up to IP67/NEMA 6. They are RoHS Compliant and each unit has built-in surge suppression to protect against electrical spikes or surges.

TPC also offers the option to build your own DIN connector cord sets. Choose the plug style, DIN connection style, voltage, number of conductors, ground position, head style, DIN connector cable type, UOM, and length. Our sales team and engineers will work with you one-on-one to custom build the exact DIN connector for your needs.



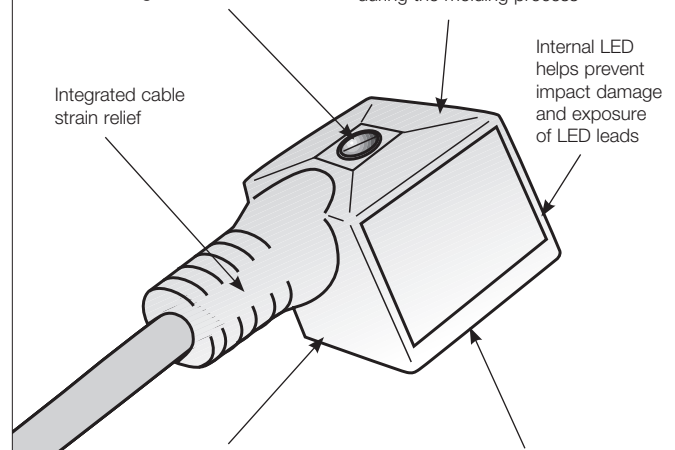
BLUNT CUT OR WITH A MICRO OR MINI PLUG

Captive stainless steel center screw offers easier installation and prevents loss in shipment and storage

Sealed internal housing prevents degradation of cable and components during the molding process

Integrated cable strain relief

Internal LED helps prevent impact damage and exposure of LED leads



Rugged impact resistant connector offers protection of up to IP67

No gasket required. Polyurethane shell is self sealing when installed properly, providing protection up to IP67

FEATURES & BENEFITS

- 1. SECURITY YELLOW TREX-ONICS® 18 AWG 3 CONDUCTOR CABLE WITH HEAVY-DUTY POLYURETHANE JACKET** — A superior first line defense against tearing abrasion, impact, oil, ozone and most chemicals.
- 2. RUGGED POLYURETHANE SHELL DESIGN** — Resists damage from impact, abrasion, oil and most chemicals.
- 3. ZYTEL INSERT** — Durable fiberglass filled nylon insert.
- 4. MOLDED ASSEMBLY** — DIN Plug is secured to the cord to seal the unit, preventing dust and moisture from damaging the internal wiring.
- 5. SURGE SUPPRESSION** — Built into each Plug to protect against electrical spikes or surges.
- 6. SUPER BRIGHT LED STATUS LIGHT** — Incorporated into translucent DIN body, protecting LED from damage. Easily visible from multiple angles.
- 7. SELF SEALING UNIT** — Polyurethane shell seals without the need for a gasket, providing protection up to IP67.
- 8. IP67/NEMA 6** — Once properly installed the connection is protected from dust, moisture and oil.
- 9. ALL POLYURETHANE MICRO OR MINI-HEAD DESIGN** — Ensures 100% bonding between jacket and head.
- 10. DIN CONNECTORS IN INDUSTRY STANDARD CONFIGURATIONS AVAILABLE WITH TPC TREX-ONICS® MINI OR MICRO QUICK-CONNECTS™**

DIN Connector Assemblies (Continued)

TERMS & TECHNOLOGY

What is DIN?

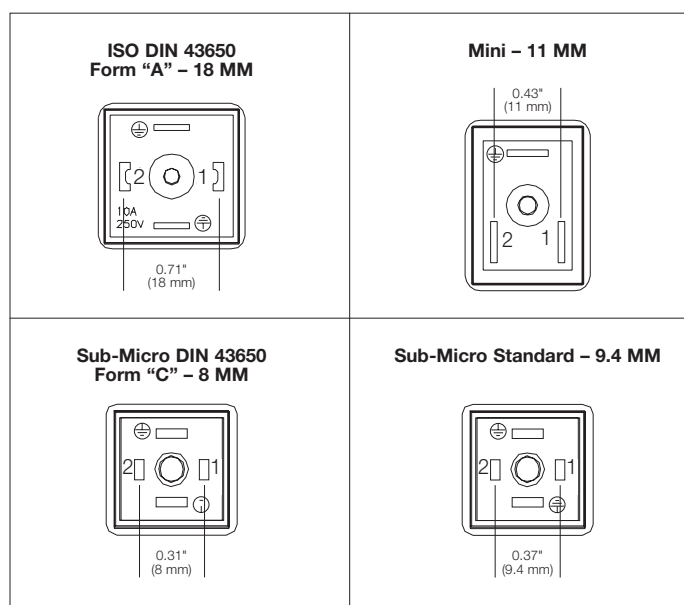
DIN (or Deutsch Industrial Normale) is a series of uniformity standards developed in Germany, which apply to commonly manufactured items.

What is DIN 43650?

DIN 43650 is the standard for a series of electrical connectors, which are commonly used with solenoids (especially those used on valves in hydraulics and pneumatics). Other applications include special sensors, such as pressure switches, optical switches and limit switches.

What does DIN 43650 include?

DIN 43650 is a family of four connectors:



Although their official names are listed on top, we generally refer to them as 18, 11, 9.4 or 8v millimeter, which is the actual spacing between PIN #1 and PIN #2.

How are the connectors applied?

Generally, the female connector is attached to the solenoid valve or sensor and the male Quick-Connect™ side or blunt cut end attaches to the controller. The DIN connectors are offered either as blunt cut cable or with molded mini or micro male Quick-Connects.

Why use a molded assembly?

While hand wiring a DIN connector is labor intensive, molded assemblies provide a more secure installation, offer technical advantages and save installation time, labor and cost. Considering the overall cost of the connector, wire, and labor, assemblies are generally less expensive.

Benefits of molded assemblies:

- Superior durability
- Impact resistance with cable strain relief
- All DIN 43650 pin configurations, EN175301-803
- Standard cable lengths of 2, 3, 4, 5 and 6 meters
- Built in LED and suppression

Additional advantages of TPC assemblies:

- Tighter surge suppression clamping
- Better circuit ratings
- Solid post molded construction
- Seal against dirt and moisture
- Shorter profile
- Superior cable for better durability

Why use surge suppression?

In solenoid valve applications, a magnetic field is created around the coil. When the power is turned off (as the coil is de-energized), the remaining magnetic field collapses back onto the coil. This creates an electrical surge which can exceed 3000 volts (this happens in both AC and DC applications, with operating voltages as low as 12 volts). The resulting surge can cause immediate and long-term component damage and may create problems with noise interference. Building surge suppression into the connector stops the transient surge at the source. The suppressor circuit offered with molded assemblies is a varistor (specifically an MOV), which is polarity independent, works with AC and DC, and offers a small release delay time.

ORDERING INFORMATION (MINIMUM PURCHASE MAY BE REQUIRED IF PRODUCT NOT STOCKED)

PART NO.	SIZE	STRANDING	NOMINAL O.D. (IN)	WT. (LBS) PER 1000'
60143	18/3	41/34	0.220	40
60144	18/4	41/34	0.240	45