

# PRO-TRACE® TW CONNECTOR (PATENT #7335050)

Silicone Filled Tracer Wire Connector • Made from Polycarbonate • Impact and Crush Resistant • Water and Corrosion Proof  
Moisture, Chemical, and Oil Resistant • Connector for use in Damp, Wet and Submersible Locations  
300 Volts Max • RoHS Compliant • Direct Burial Rated

**“PRO-TRACE® TW CONNECTOR -- CONFIDENCE & RELIABILITY -- IT'S FOOL PROOF INSTALLATION”**



## Applications and Information

- **PRO-TRACE® TW Connector** is used for underground splices or connections for tracer wire and other applications not exceeding 300 Volts. The silicone filled connector is used to splice or branch-off multiple tracer wires to maintain continuity and provides corrosion proof protection from the underground elements.
- **PRO-TRACE® TW Connector** is superior to twist-on connectors, providing better strain relief and performance along with easier installation. They are fool proof, minimizing damage and error during installation and while in service.
- **PRO-TRACE® TW Connector** is a patented technology that uses applied hand pressure to close and lock in the connections with ease and is superior to wire nuts (twist-on). With wire nuts, wires are inserted and torqued until tight. If too much torque is applied the threading inside can become “stripped”. If too little torque is applied the wires may become loose.
- **PRO-TRACE® TW Connector** is a quality, low cost connector in the market specifically designed for copper tracer wire. Ask about **Tracer-Lock® Connector** our Flagship!
- **PRO-TRACE® TW Connector** is designed to work with copper, copper-clad steel (CCS), and stainless steel. See table 4 for wire combinations.

## Standards and References

**PRO-TRACE® TW Connector** meets or exceeds all applicable UL standards, and requirements of the National Electrical Code.

- Sealed Wire Connection System for use in Damp, Wet, Raintight, Watertight, Submersible and Direct Bury Locations

## Construction

**PRO-TRACE® TW Connector** is injection molded from polycarbonate that has outstanding temperature and high-impact resistance. It is superior to breaking and cracking. The outer housing is clear in color and provides visual confidence with each installation. The rotating handle is color coded to meet the APWA color code. The inner housing features a locking mechanism made from zinc and uses applied hand pressure that securely closes and locks the wire inside with ease. A corrosion proof silicone sealant fills the inner housing and provides longevity for each installation.

## Specification Example

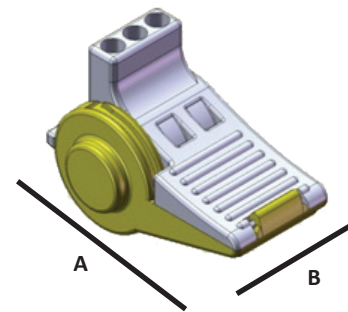
If tracer wire connectors are necessary, contractor shall use a PRO-TRACE® TW Connector (Part No: 73901) rated for direct burial use filled with silicone sealant to prevent corrosion at connection points.

**TABLE 1: WIRE COMBINATIONS (Conductor and Insulation Type Compatibility)**

CONDUCTOR TYPES						INSULATION TYPES		
SIZE	COPPER SD/MHD/HD	HF-CCS PRO-TRACE®	HS-CCS PRO-TRACE®	HDD-CCS PRO-TRACE®	STAINLESS TYPE 304	PVC/NYLON	PVC	LDPE, HDPE, XLPE
16 AWG	1-3 WIRES	1-3 WIRES	1-3 WIRES	NO	1-3 WIRES	TFN or TFFN	LV-UF	PE30, PE45
14 AWG	1-3 WIRES	1-3 WIRES	1-3 WIRES	NO	1-3 WIRES	THHN or THWN	TW, UF, THW, TWU	PE30, PE45, XHHW-2, USE-2
12 AWG	1-3 WIRES	1-3 WIRES	1-3 WIRES	NO	1-3 WIRES	THHN or THWN	TW, UF, THW, TWU	PE30, PE45, XHHW-2, USE-2
10 AWG	1-3 WIRES	NO	NO	NO	1-3 WIRES	THHN or THWN	TW, UF, THW, TWU	PE30, PE45, XHHW-2, USE-2

**TABLE 2: CONNECTOR (Physical and Electrical Properties)**

MEASUREMENTS	TYPICAL VALUES
Connector Size	2.375" (A) x 1.375" (B)
Maximum Voltage	300 Volts
Wire Range	Min #16 / Max #10 (See Table 1)
Temperature Rating	105°C (221°F)
Silicone Sealant Temperature	-40°F to 400°F



PRODUCT PART NO.	PRODUCT DESCRIPTION	PACKAGING		APPROX WEIGHT PER 100	STOCK
		INNER CARTON	MASTER CARTON		
<b>WEIGHTS, MEASUREMENTS AND PACKAGING</b>					
739010250	PRO-TRACE   TW CONNECTOR   MIN #16   MAX #10   300V   BLUE	100/Inner	300/Master	10 lbs	YES
739011250	PRO-TRACE   TW CONNECTOR   MIN #16   MAX #10   300V   YELLOW	100/Inner	300/Master	10 lbs	YES

\*\*\*\* ADDITIONAL COLORS AVAILABLE WITH MIN RUN CALL FOR DETAILS \*\*\*\*

## Installation Instructions

**STEP #1**

Open wings (handles) to 90 degrees position

**STEP #2**

Strip wires to 5/8". Use the strip guide molded into the connector for reference.

**STEP #3**

Insert striped wires into connector. The striped ends of the wires should be visible through the clear housing on the back.

**STEP #4**

Hold wires in place while squeezing wings (handles) together until the latch snaps shut.



Spec Revision PRO-TRACE TW Connector, v5, updated 11.8.2019

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