

## Installation Instructions TB Series



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### Warning

1. IMPORTANT SAFETY INSTRUCTIONS
2. Use each model on specified data applications only
3. The suppressor will interrupt communications in the event of self sacrifice.

Thank you for your recent purchase of our surge protection solution.  
Your satisfaction with our product and service is important to us.  
If you have any questions, comments or concerns, please contact us  
at 800.882.9110 or visit our website at [www.transtector.com](http://www.transtector.com).  
We look forward to continuing to serve your protection needs.

# Installation Instructions

## TB Series

### 1. Overview

The Thunderbolt (TB Series) offer outdoor data line series protection designed to support Ethernet / Cat5e applications including 10/100 / PoE, GbE AND GbE / PoE. These products incorporate advantages of coordinated high-power gas discharge tube (GDT) and self gated current transistor protection in a single protector, utilizing a weather sealed housing and RJ-45 connection interface.

### 2. Installation (see Figure 1)

2.1 Install the TB Series protector by mounting through a 29mm hole in the bulkhead or enclosure (see Figure 2). Be sure to orient the device with the “unprotected” side oriented out to the exposed wire direction (see Figure 1).

2.2 Attach an optional grounding conductor, 10awg minimum (not provided) between the ground lug on the Thunderbolt and the nearest Master Ground Bar connection. The grounding wires should be as short and straight as possible. Optional ground conductor is not needed for well bonded entry panels.

2.3 Slide the Cat5e cable through the strain relief cap. Install the IP67 rated strain relief over the cable between the cap and connector shroud. Slide the cable through the connector shroud. Place the shroud gasket on the unit over the M20 x 1.5 threaded portion. Plug the connector into the unit and torque the connector shroud down with 5 to 7 in-lbf to compress the gasket (do not over-tighten the connector shroud on the gasket). Slide the IP67 rated strain relief into the connector shroud (leaving approximately 1mm of the strain relief exposed). Torque the strain relief cap onto the connector shroud with 3 to 5 in-lbf. (see figure 2)

2.4 Install the Cat5e suitable cable to the “protected” side of the Thunderbolt to the sensitive equipment on the “indoor” side. IP67 rating can be achieved on the “protected” side using an additional strain relief assembly. This is included with certain models, but may also be purchased separately from Transtector (p/n: 1000-1354).

2.5 If shielded Cat5e cable is being used, then one end of the shield should be grounded to a solid Earth Ground, preferably to a master ground bar.

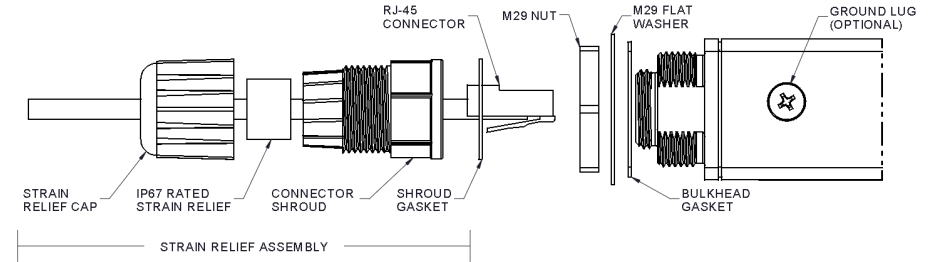
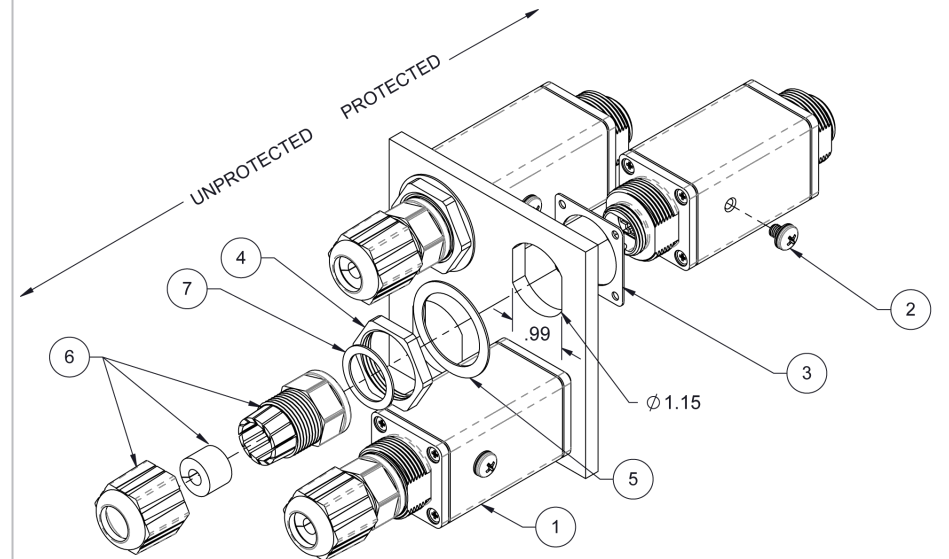


Figure 1: Connection Diagram



1	THUNDERBOLT (TB SERIES)
2	GROUND LUG/SCREW
3	BULKHEAD GASKET
4	M29 NUT
5	M29 FLAT WASHER
6	STRAIN RELIEF ASSEMBLY (1000-1354)
7	SHROUD GASKET
ITEM	DESCRIPTION

Figure 2: Mounting Diagram (Dimensions in Inches)