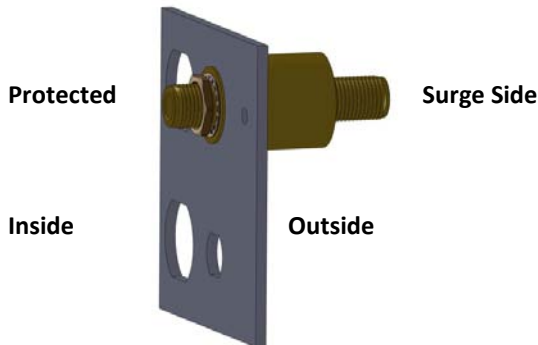


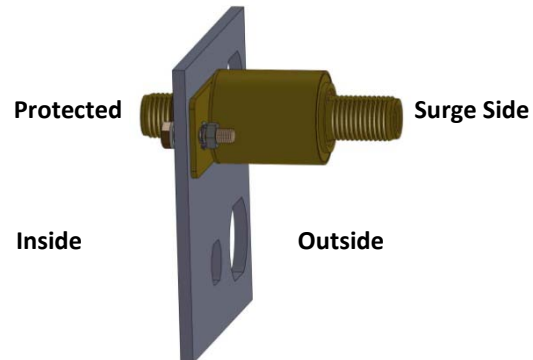
## LP-BTRW-NFF/NMS/NMP Coaxial Lightning Protector Installation Instructions

### LP-BTRW-NFF

#### Bulkhead mount without universal bracket



#### Bulkhead mount with universal bracket

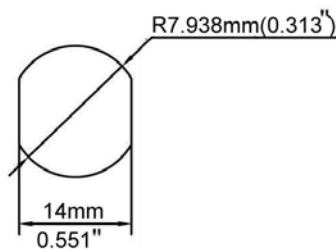
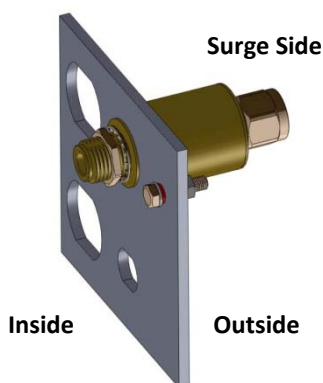


Place **protected side** connector in “double D” hole as shown. See below for recommended torque specifications. Bulkhead or equipment cabinet must be connected to ground with a large low resistance / impedance conductor. Ground system quality affects protector performance.

Place **protected side** connector in “double D” hole as shown. Drill 5.5mm (0.218”) hole if bracket is required. Attach bracket to grounded plate using M5x20mm bolt with flat-washer and weather seal gasket on **inside**. Use star-washer under nut **outside**.

### LP-BTRW-NMS

#### Bulkhead mount with universal bracket

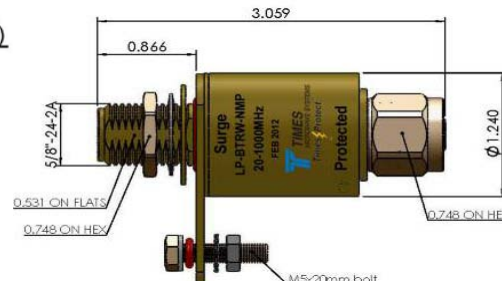


Type N Connector “Double D” hole  
Recommended panel mounting jamb nut torque  
**35 - 40 in-lbs (4.0 - 4.5 N-m)**  
Recommended connector coupling nut torque  
**6.2 - 9.7 in-lbs (0.7 - 1.1 N-m)**

Place **protected side** connector in “double D” hole as shown. Drill 5.5mm (0.218”) hole if bracket is required. Attach bracket to grounded bulkhead plate using M5x20mm bolt with flat-washer and weather seal gasket on **inside**. Use star-washer under nut **outside**.

### LP-BTRW-NMP

#### Provision for grounding lug with universal bracket



#### Ground Lug Attachment

Attach optional grounding conductor lug to universal bracket with M5x20mm bolt with star-washer under nut. Red weather seal gasket is not required. Note: **male connector is protected side**

## **Installation notes and recommendations**

- The LP-BTRW-N series is a unidirectional design with “surge” and “protected” sides marked on the device body. Position “surge” side toward anticipated surge source and “protected” side toward protected equipment. Although the protector will pass rf in both directions, only the surge side can reliably conduct multiple high current lightning strikes to ground.
- The LP-BTRW-N series protector is designed for outdoor use, and is weather resistant to IP67.
- The protector must be connected to ground through a flat conductive bulkhead or plate, and a low inductance/impedance conductor with minimum bends. The level of protection with *any* protector is most influenced by the quality of the attached earth ground system.
- If a grounded flat conductive bulkhead or panel is not available, an available LP-BFDN-CW right angle bracket mounted to any non-conductive surface can be grounded with a single hole lug.
- If the LP-BTRW-NMP is connected directly to the equipment cabinet, the included single hole mounting bracket provides an attachment point for a ground lug connecting to the closest known earth ground.
- The protector should not show continuity from connector center pin to center pin, or from either pin to shield. If there is measured resistance, the protector should be replaced.

### **Warranty (LP-BTRW-N series)**

Times Microwave Systems (the seller) warrants to the original purchaser its surge and lightning protection products used in commercial communications applications to be free from defects in material or workmanship which arise from proper and normal use and service for ten (10) years. In the event that the purchaser becomes aware of a defect within this period of time, the seller will, at its options, repair or provide to the purchaser new material in exchange for the defective material. In order to receive any remedy under this warranty, the purchaser must notify Times Microwave Systems of the defect and receive a return authorization. The entire liability of the seller shall be limited to the repair or provision of new material in exchange for the defective product. Seller shall not be liable for any consequential or incidental damages, cost of removal and re-installation of the product or any other costs incurred by the purchaser as a result of the defect. In no case shall the liability of the seller exceed the sales price of the surge and lightning protection products found to be defective. This constitutes the entire warranty provided by Times Microwave Systems. There are no other warranties provided, expressed or implied.

Times Microwave Systems

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