

Gas Barriers

For Coaxial Cables and Rigid Transmission Lines

Types RLA050-, RLA150-, RLA350-, RLA450-, RLA650-, RLA675-, RLA775-, & RLA875- 16

Description

The Gas Barriers in this series are designed for use with transmission lines and cables. Type RLA150-16 has one gas port that enters the barrier on the pressurized side of the insulator. The others have two or more gas ports.

NOTICE

Maximum pressurization values (normally less than 10 psig) are determined by the lowest rated system component and should not be exceeded. All gas barriers listed are rated at 10 psig maximum. Consult applicable manufacturer's pressurization specifications before interfacing with other than ERI systems.

Gas Barrier Installation Instructions

1. Refer to Figure 1. The gas barrier is shipped completely assembled and includes the O-ring seal and connecting hardware. The port enters the Type RLA150-16 gas barrier on the pressurized side of the insulator. This side of the barrier must be facing the pressure side of the system when the barrier is installed. Barriers having two plugs may be turned either way.
2. Seat the O-ring seal in the barrier flange groove. Be sure both the seal and groove are clean, as any foreign matter may prevent the assembly from being pressure tight. A thin coating of silicone grease on the seal will help hold the seal in place during assembly. Make certain there is no silicone grease on the flange contact face.
3. Join the gas barrier to the transmission line by inserting the inner connector (extending from the barrier) into the inner conductor of the transmission line. See that the alignment pins are aligned with the alignment holes in the flanges. Push the assembly together, making certain the seal remains in place.
4. Repeat the above steps when connecting the transmission line to the other end of the gas barrier using the procedure and precautions mentioned. Install and alternately snug the mounting hardware at 180° intervals while maintaining a uniform gap between flanges. Perform the final torquing sequence in a circular pattern according to the torque specification table. Do not overtighten. When properly installed, a small uniform gap should be noted around the flange circumference. **Note:** Use an anti-seize compound on all stainless hardware to prevent galling. If hardware becomes galled during the tightening procedure, remove the damaged hardware by sawing or breaking and install replacement hardware to ensure proper electrical contact between mating surfaces.
5. Remove the port plug (or plugs if different pressures are used). Wrap gas inlet/outlet fitting threads with PTFE tape and connect to 1/8-27 NPTF gas barrier port. Securely tighten inlet/outlet fitting to 2 ft-lb (2.6 N-m).

Hardware Size	Torque Values
1/4" (6 mm)	7 ft-lb (9 N-m)
5/16" (8 mm)	12 ft-lb (16 N-m)
3/8" (10 mm)	21 ft-lb (28 N-m)

Table 1.

Type No.	Line Size, in.	Gas Ports	Impedance, Ohms	Dimension A, in. (mm)	Dimension B, in. (mm)	Hardware Size, in.
RLA050-16	7/8	2	50	1-1/8 (29)	2-1/4 (57)	1/4
RLA150-16	1-5/8	1	50	1-3/8 (35)	3-1/2 (89)	5/16
RLA350-16	3-1/8	2	50	1 (25)	5-3/16 (132)	3/8
RLA450-16	4-1/16	4	50	1-3/4 (44)	6-3/16 (157)	3/8
RLA650-16	6-1/8	3	50	1-5/8 (41)	8-1/8 (206)	3/8
RLA675-16	6-1/8	4	75	1-5/8 (41)	8-1/8 (206)	3/8
RLA775-16	7-3/16	4	75	1-5/8 (41)	9-1/2 (241)	3/8
RLA875-16	8-3/16	4	75	1-5/8 (41)	11 (279)	3/8

Table 2.

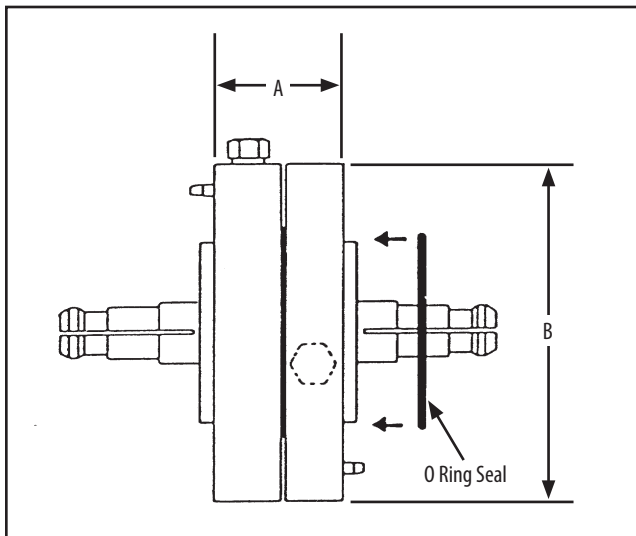


Figure 1.

NOTICE

The installation, maintenance, or removal of antenna systems requires qualified, experienced personnel. Antenna systems should be inspected once per year by qualified personnel to verify proper installation, maintenance, and condition of equipment. ERI DISCLAIMS LIABILITY OR RESPONSIBILITY FOR THE RESULTS OF IMPROPER OR UNSAFE INSTALLATION PRACTICES.

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