

# **Barlow**

## **INSULATING JOINTS**

Manufactured By IMAC Systems, Inc.



**Systems Inc.**

International Measurement and Control Systems

90 MAIN ST. • P.O. BOX 1605 • TULLYTOWN, PA 19007



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**Distributed by:**

# Barlow

## INSULATING JOINTS

### Why BARLOW Insulated Joints?

1. Preassembly eliminates kits, saves on site labor
2. Controlled assembly and pretesting eliminates adjustments. Guarantees Performance.
3. Mechanical design resists affects of stress and resulting insulation failure
4. Serviceability and maintenance greatly simplified

### Designed to the highest possible standards including the following:

Thicker dielectric sleeves (1/8") machined to precise, close tolerance dimensions, both length and diameter.

Flange bolt holes line reamed to provide perfect alignment and close tolerance fit to the dielectric sleeves.

Flange studs machined from Alloy Steel and heat treated to ASTM Designation A-193-52T Grade B-7, resulting in superior strength and greater resistance to stress induced elongation.

Coupling nuts machined from Alloy Steel and heat treated to ASTM Designation A-194 Class 2-H.

Precision machined steel washers, flat parallel, and counterbored allowing for square alignment and clearance for the dielectric sleeves. The clearance prevents stress on the sleeves after torquing flange studs.

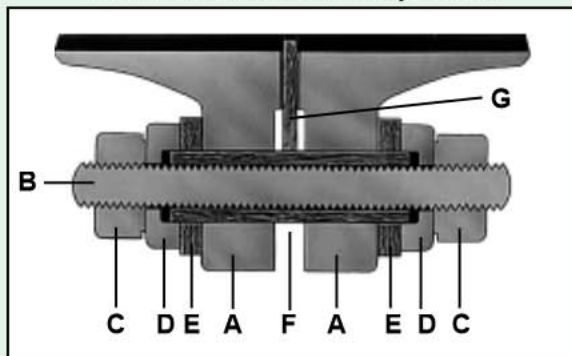
Flange gasket precision cut for ideal fit with small projection into the stream to prevent contamination or bridging of the joint inside the pipe.

Precise assembly with accurate torquing carried out in stages followed by retorquing after 24 hours.

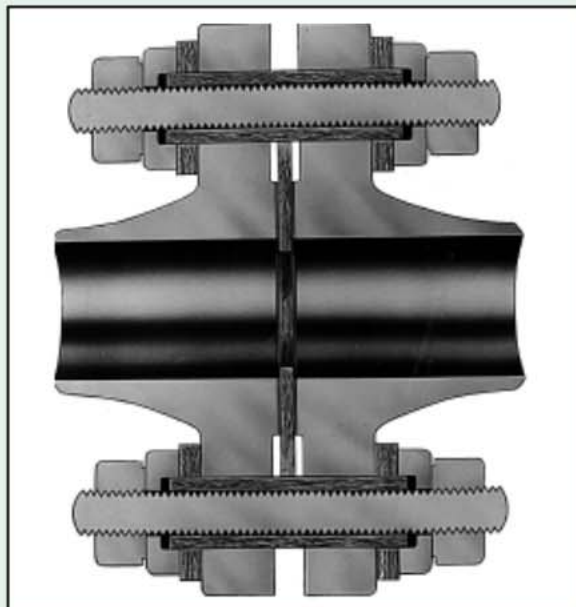
Tested for minimum resistance of 2,000,000 ohms prior to packing in special containers.

Flange gap sealed with epoxy resin to prevent contamination during post assembly handling.

### Precision Machined Components



- |                                 |                             |
|---------------------------------|-----------------------------|
| <b>A</b> Forged Steel Flanges   | <b>E</b> Dielectric Washers |
| <b>B</b> Alloy Steel Studs      | <b>F</b> Dielectric Sleeves |
| <b>C</b> Steel Hex Nuts         | <b>G</b> Dielectric Gaskets |
| <b>D</b> Recessed Steel Washers |                             |



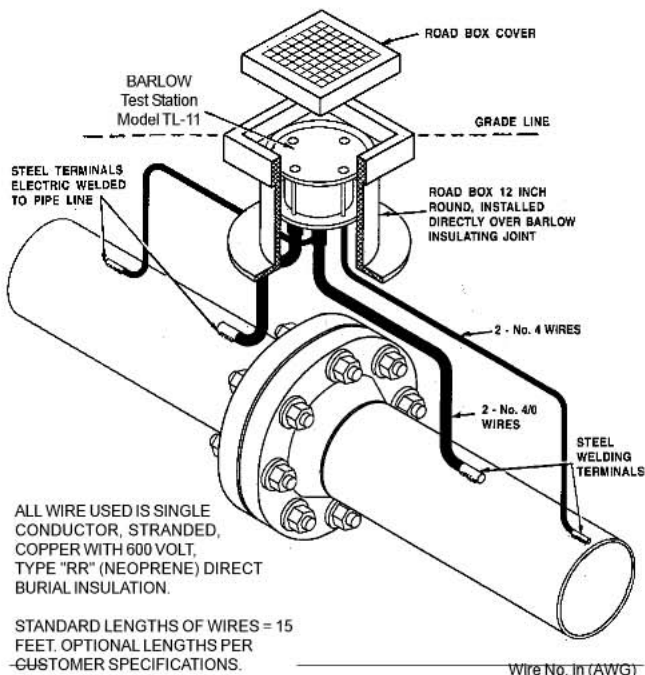
### Precision Assembly and Torquing



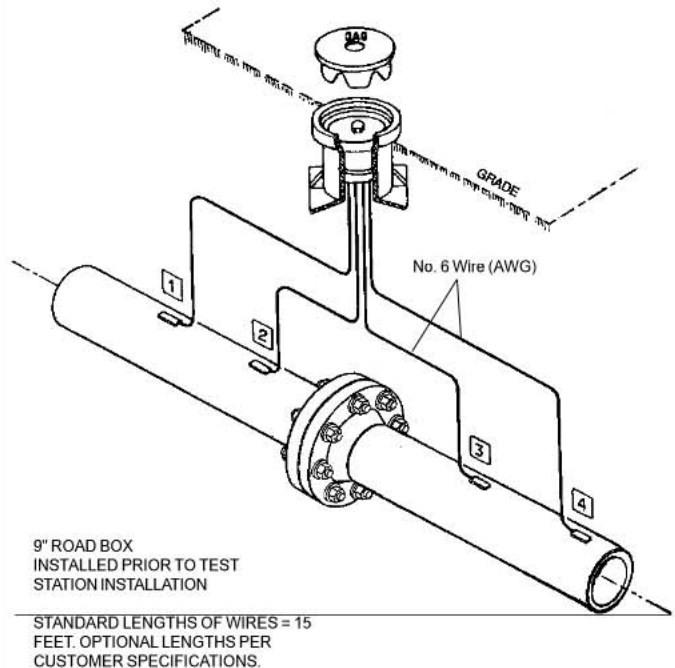
**Fully Tested      Ready For Installation**



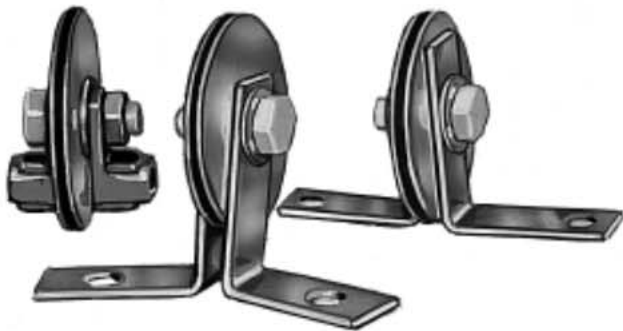
### BARLOW HOUSING BOX - Model TL-11X (Below Ground Installation)



### TESTATION® - INSULATING JOINT (Type "AA" Test Box)



### BARLOW "TMK" SURGE ARRESTORS Curb The Electrical Breakdown of Insulated Flanges



1. Non-linear voltage current characteristics; limits potentially destructive voltage levels but does not interfere with cathodic protection.
2. Nominal values - 50 ohms at 250 volts - 30,000 ohms at 3 volts.
3. Self-healing; able to survive multiple strikes.
4. Your choice of wire size connections.
5. Designed for above or below ground installation.
6. Fiber-glass housings available for above ground installation.
7. Priced competitively with fusible or sacrificial voltage relief devices.

Consult Factory for Details

### TMKE FIBERGLASS SURGE ARRESTOR ENCLOSURES



#### STANDARD SIZES Enclosure Inside Dimensions

Length x Height x Width
6" x 4 x 4 <sup>15</sup> / <sub>16</sub>
8" x 6 x 5 <sup>3</sup> / <sub>16</sub>
10" x 6 x 5 <sup>11</sup> / <sub>16</sub>
12" x 8 x 6 <sup>11</sup> / <sub>16</sub>

1. Ideal housing for Barlow "TMK" Surge Arrestors, Lightning Arrestors, terminal wiring boxes and electrical control enclosures in highly corrosive atmospheres.
2. These enclosures are molded from a special polyester resin material which has excellent resistance and outstanding physical properties. The hinged cover is easily removable, and is attached to the body with internal hinges. Each cover has a neoprene gasket attached with oil-resistant adhesive. Cover screws are monel. All enclosures have a grey finish inside and out.
3. Drill holes, cut outs, floor flanges can be supplied at an extra charge.
4. These enclosures conform to the NEMA 4 standards for: dusttight, raintight, sleet-ice-resistant, rain-proof, water-tight, oil-tight and corrosion-resistant.



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**BARLOW INSULATING JOINTS ANSI 150 LBS.**

Pipe Size Inches	Flange Dimensions			Alloy Steel Studs			Joint end to end	Average weight (lbs.)
	O.D.	I.D.*	Thickness	No.	Diam.	Length		
2	6	2.07	3/4	4	1/2	4 3/8	5 1/4	14
4	9	4.03	1	8	1/2	4 3/4	6 1/4	34
6	11	6.07	1	8	5/8	5 1/4	7 1/4	57
8	13 1/2	7.98	1 1/8	8	5/8	5 1/2	8 1/4	86
10	16	10.02	1 1/4	12	3/4	6	8 1/4	122
12	19	12.00	1 1/4	12	3/4	6 1/8	9 1/4	178
14	21	13.25	1 3/8	12	7/8	6 1/2	10 1/4	226
16	23 1/2	15.25	1 1/2	16	7/8	6 3/4	10 1/4	280
20	27 1/2	19.25	1 3/4	20	1	7 3/4	11 5/8	398
24	32	23.25	1 7/8	20	1 1/8	8 1/2	12 1/4	595
30	38 3/4	29.25	2 1/8	28	1 1/8	9	10 1/2	810

**BARLOW INSULATING JOINTS ANSI 300 LBS.**

Pipe Size Inches	Flange Dimensions			Alloy Steel Studs			Joint end to end	Average weight (lbs.)
	O.D.	I.D.*	Thickness	No.	Diam.	Length		
2	6 1/2	2.07	7/8	8	1/2	4 3/4	5 3/4	21
3	8 1/4	3.07	1 1/8	8	5/8	5 1/2	6 1/2	39
4	10	4.03	1 1/4	8	5/8	5 3/4	7	60
6	12 1/2	6.07	1 1/2	12	5/8	6 1/8	8	95
8	15	7.98	1 5/8	12	3/4	6 3/4	9	154
10	17 1/2	10.02	1 7/8	16	7/8	7 1/2	9 1/2	207
12	20 1/2	12.00	2	16	1	8	10 1/2	331
14	23	13.25	2 1/8	20	1	8 1/4	11 1/2	440
16	25 1/2	15.25	2 1/4	20	1 1/8	9	11 3/4	572
20	30 1/2	19.25	2 1/2	24	1 1/8	9 1/2	13	866
24	36	23.25	2 3/4	24	1 3/8	10 1/2	13 1/2	1290
30	43	29.25	3	28	1 5/8	11 1/2	12 1/4	1770

**BARLOW INSULATING JOINTS ANSI 600 LBS.**

Pipe Size Inches	Flange Dimensions			Alloy Steel Studs			Joint end to end	Average weight (lbs.)
	O.D.	I.D.**	Thickness	No.	Diam.	Length		
2	6 1/2	1.94	1 1/4	8	1/2	5 1/4	6 1/2	27
3	8 1/4	2.90	1 1/2	8	5/8	6	7 1/4	55
4	10 3/4	3.83	1 3/4	8	3/4	6 3/4	8 3/4	98
6	14	5.76	2 1/8	12	7/8	8	10	197
8	16 1/2	7.63	2 7/16	12	1	8 7/8	11 1/4	280
10	20	9.75	2 3/4	16	1 1/8	9 3/4	12 3/4	446
12	22	11.75	2 7/8	20	1 1/8	10	13	568
14	23 3/4	13.00	3	20	1 1/4	10 5/8	13 3/4	804
16	27	15.00	3 1/4	20	1 3/8	11 1/4	14 3/4	1102
20	32	19.00	3 3/4	24	1 1/2	12 1/2	15 3/4	1611
24	37	23.00	4 1/4	24	1 3/4	14	16 3/4	2380

\*ID FOR STANDARD WALL PIPE \*\*ID FOR EXTRA STRONG WALL PIPE (STD WALL AVAILABLE UPON REQUEST)