

# JONES<sup>®</sup>

## INSULATED PRODUCTS

Insulated Water Service  
Line Products



**Mueller Co.**

Reliable Connections<sup>®</sup>

# Jones® Insulated Products

## Stray electrical currents

In recent years, stray electrical currents—particularly their causes and effects—have caused increasing concern. The American Water Works Association, among other organizations, has sponsored a number of case studies on the stray current issue which point to certain problems that may result from the presence of stray currents in metallic piping systems, including:

- Accelerated corrosion of water distribution system components.
- Shock hazards for field personnel.

Some of the more common situations that can create stray electrical currents and, in their wake, significant problems in water distribution systems are:

- Use of domestic plumbing as a ground for the electrical system.
- The proliferation of electronic and speed control appliances.
- Operation of an electrical mass transit system on rails.
- Proximity of cathodic-protected systems to water distribution mains.

## AWWA policy

Current AWWA policy\* on the grounding of electrical circuits on water pipe states:

*“AWWA opposes the grounding of electric systems to pipe systems conveying drinking water to a customer’s premises ... a water utility should reserve the right to use nonmetallic pipe or pipe-jointing materials for mains or services, to use electrically insulating fittings or coatings on mains or services, and to disconnect any grounding connection that has been installed on its mains or services without its consent.” \*As reaffirmed January 25, 1987.*

## Insulating features

Jones Insulated Products provide the quality, dependability and extended service life you have come to expect. The insulating feature is offered in Jones 300 Corporation, Curb and Meter Ball Valves in various inlet and outlet configurations. These valves offer a 300 psig working pressure rating. The nylon insulator is also available in straight service fittings in a number of inlet and outlet configurations. Insulated water meter couplings are also available. The chart on the back cover gives information about sizes, styles and end configurations of Jones Insulated Products.

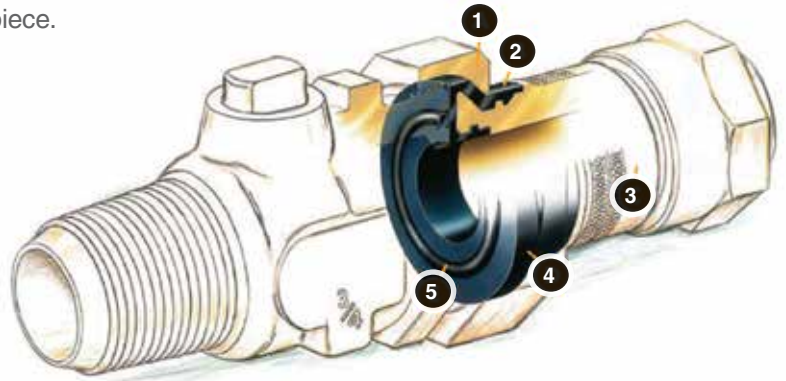


## An effective way to fight stray currents

Jones® insulated products are a simple, cost effective way to fight stray currents and the problems associated with them in metallic service lines and mains — either in new installations, or to retrofit existing lines. They help utilities to insulate their systems with a minimum of change to existing service line materials, specifications and installation procedures, saving both time and money. The technology is proven effective in controlling stray currents and in resisting pipe stresses. Jones® incorporates nylon with specially shaped low-lead brass parts in a union that effectively stops the flow of electrical current without compromising the strength of the service line. The nylon insulating material is inert, stable and recommended for water service. The strong, beveled-flange design takes advantage of the nylon material's strength in compression and allows tensile and bending forces to be absorbed by the metallic parts of the union.

Note that the Jones design uses an O-ring seal and does not depend upon threaded plastic components, which are notoriously weak and difficult to seal against leakage.

- 1 Beveled flange**  
Increases bearing surface for added strength. Configuration reduces creep and assures seal between nylon and brass tailpiece.
- 2 Extra long insulator skirt**  
Resists bridging or shorting.
- 3 Low-lead brass parts**  
Designed to absorb tensile and bending forces from piping.
- 4 Nylon insulator**  
Has high bearing and impact strength. Design capitalizes on nylon's strength under compression.
- 5 Self-activating O-ring**  
Assures positive seal. Retained in groove if tailpiece is removed.



## Wrapping: A key to dependable performance

### Wrapping: a key to dependable performance

For buried installations, the insulator and the adjacent piping must be wrapped at least 3 feet in both directions from the insulator to avoid the possibility of stray currents traveling through the soil around the insulator. Polyken primer and #932 Hi-Tack Joint Wrap Tape or equal is recommended for wrapping the insulator and service line pipe. The main pipe must be tape-wrapped or encased with 8 mil polyethylene. All wrapping should be in accordance with the wrapping manufacturer's instructions; ANSI/AWWA C209 Standard for Cold-Applied Tape Coatings for the exterior of special sections, connections and fittings for steel water pipelines; and ANSI/AWWA C105/A21.5 American National Standard for Polyethylene Encasement for Ductile Iron Pipe Systems. There must be no breaks in the wrapping. Care should be taken to assure that the wrapping is not damaged during backfill.



## Configurations and styles (in 3/4" and 1")



### Jones 300 Corporation Ball Valves

- CC thread x Jones 110 Compression Connection (Super Grip)
- IP thread x Jones 110 Compression Connection (Super Grip)
- CC thread x Jones Pack Joint Connection (CTS)
- IP thread x Jones Pack Joint Connection (CTS)
- CC thread x Copper Flare Connection
- IP thread x Copper Flare Connection
- CC thread x FIP
- IP thread x FIP



### Jones 300 Curb Ball Valves

- Jones 110 Compression Connection (Super Grip) both ends
- Jones Pack Joint Connection (CTS) both ends
- Copper Flare Connection both ends
- FIP x Jones 110 Compression Connection (Super Grip)\*
- FIP x Jones Pack Joint Connection (CTS)\*
- FIP x Copper Flare Connection\*
- FIP both ends



### Jones 300 Meter Ball Valves

- Jones 110 Compression Connection (Super Grip) x Meter Swivel Nut (with lockwing)
- Jones 110 Compression Connection (CTS) x Meter
- Flange (with lockwing)
- FIP x Meter Swivel Nut (with lockwing)\*
- FIP x Meter Flange (with lockwing)\*



### Jones 300 Straight Service Fittings

- Jones 110 Compression Connection (Super Grip) both ends
- Jones Pack Joint Connection (CTS) both ends
- FIP both ends
- FIP x Jones 110 Compression Connection (Super Grip)\*\*
- MIP x Jones 110 Compression Connection (Super Grip)\*\*
- Iron Meter Bar Lock Nut x Jones 110 Compression Connection (Super Grip)\*\*
- FIP x Jones Pack Joint Connection (CTS)\*\*
- MIP x Jones Pack Joint Connection (CTS)\*\*
- Iron Meter Bar Lock Nut x Jones® Pack Joint Connection (CTS)\*\*
- Female Copper Flare Thread x Jones® 110 Compression Connection (Super Grip)\*\*
- Female Copper Flare Thread x Copper Flare Connection\*\*



### Water Meter Couplings†

- MIP x Meter Swivel Nut (various lengths available)

\*FIP is on insulator end.

\*\*FIP, MIP, iron meter bar lock nut, or copper flare thread is on end opposite of insulator.

†Design of this product differs from that of other products featured in this brochure.

For more information about Jones® or to view our full line of water products, please visit [joneswaterproducts.com](http://joneswaterproducts.com) or call Jones customer service at **1.800.523.8618**.

Follow Us on:



### James Jones Company, LLC

1470 S.Vintage Ave.  
Ontario, CA 91761  
[www.joneswaterproducts.com](http://www.joneswaterproducts.com)

[moreinfo@muellercompany.com](mailto:moreinfo@muellercompany.com)  
P: 800.523.8618  
F: 800.246.5663