

DIELECTRIC INSULATING JOINTS & FLANGE SPACERS

IJ-2-0214

Prevents Electrolysis Between Dissimilar Metal Piping Systems



• Non-conductive, High Impact Polypropylene Flange Spacer

Spears[®] Dielectric Insulating Joints are designed around a 1" thick, non-conductive Polypropylene (PP) flange spacer to provide high impact resistance and superior compressive strength under high torque flange connection applications. Spacers incorporate a ribbed surface to improve gasket retention over that of smooth-faced flange designs. Bolt patterns conform to ANSI B 16.5, Class 150 or Class 300.

• 2-Piece PVC Bolt Isolators

Insulation of metal flange connecting bolts is essential in preventing electrolysis. Spears[®] 2-Piece Bolt Isolators prevent metal contact within each flange bolt hole and surface.

Pressure Rated to 300 psi

Spears[®] Dielectric Insulating Joints are pressure rated to 300 psi for water at 73° F with a design safety factor of 3.2 x the pressure rating.

Electrolysis between dissimilar metal piping, such as joining cast iron to steel pipe, can result in severe corrosion and deterioration of connections and piping. Spears® thermoplastic Insulating Joints (IJ) are engineered to provide complete dielectric insulation at flanged connections to protect systems from damaging electrolysis. Constructed from nonconductive, corrosion resistant thermoplastics, Insulating Joints consist of a PP 1" flange spacer and 2-piece PVC isolators for each flange bolt. Insulating Joints are available for nominal pipeline sizes of 3" through 36". Larger sizes produced to specifications.

• NSF Certified for Use With Potable Water

Spears[®] Thermoplastic Insulating Joint spacers in sizes 3" through 36" are Certified for use in potable water systems by NSF International under NSF Standard 61.



Sample Engineering Specification

Thermoplastic Insulating Joints for installation between two (2) flat-faced metal flange components shall be an approved design consisting of a Polypropylene flange spacer and a set of PVC bolt isolators for each flange bolt required. Spacer bolt pattern shall conform to ANSI B16.5 for Class 150 or Class 300 flanges as applicable to specified nominal IPS pipe size. Insulating Joint shall be pressure rated (PR) to 300 psi @ 73°F. All Insulating Joints shall be Certified by NSF International for use in potable water service, as manufactured by Spears[®] Manufacturing Company.

Note: Must be installed with user supplied full-face elastomer gasket, nuts, bolts, and washers as applicable.

Custom Produced PVC Flange Spacers

2-Bolt Oval Flange Spacers are available for 1-1/2" and 2" pipeline, custom produced to any thickness 1/8" and larger. ID can be furnished with or without threads.





Round Flange Spacers can be used instead of steel spacers to avoid rust and corrosion. They can be painted with waterbased paints for color-coding and UV protection. Custom produced to virtually any flange size or bolt pattern, these spacers are typically used to accommodate system length changes with equipment replacement and upgrade, such as...

- Replace a large meter with a smaller one.
- Change out a large backflow preventer with a smaller one (RP or DC)
- Remove a large check valve and replace with a more compact one.

Fire Hydrant Spacers facilitate raising hydrants to a new grade level and are custom produced to AWWA Fire Hydrant base flange bolt patterns in 1/2" to 12" thickness.

All PVC Spacers are constructed from NSF Standard 61 Certified material for use in potable water systems.



PROGRESSIVE PRODUCTS FROM SPEARS [°] INNOVATION & TECHNOLOGY



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