

## Flange Insulation Kits

For Water, Natural Gas, Petroleum and other Pipe Lines

### TYPE E Full Face Gasket

1/2" Thru 96"

### TYPE F Ring Gasket

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**TYPICAL STANDARD KITS includes:**

- \* Type E (full face) gasket 1/8" thick
- or-
- \* Type F (ring) gasket 1/8" thick
- \* High-density polyethylene sleeves 1/32"
- \* Laminated phenolic washers 1/8"
- \* Steel backup washers 1/8"

Two sets of phenolic & steel washers are required when two sides are insulated.

**AVAILABLE AS FOLLOWS:**

- \* A.S.A Series 15 -  
150# Class through 2,500#
- \* A.S.A Standard Gasket B16.21(4)
- \* Special I.D.'s and Special O.D.'s

NOTE: When using plain phenolic flange kits, we recommend using a 1/32" or 1/16" back-up gasket on each side of the phenolic gasket for better sealing.

**GASKET MATERIAL: (FF or Ring)**

**OPTION #1:** 1/8" Phenolic manufactured from laminated phenolic sheet.

Temperature: up to 225° F.  
 Dielectric strength: 500 volts per mil.  
 Compression strength: 24,000 psi.  
 Water absorbance: 1.6% ASTM D-229.

**OPTION #2:** 1/8" Neoprene-faced phenolic.

Temperature: up to 175° F.  
 Dielectric strength: same as phenolic above.  
 Compression strength: same as phenolic above.  
 Water absorbance: same as phenolic above.

**OPTION #3:** 1/8" Fiberglas epoxy.

Temperature: up to 280° F.  
 Dielectric strength: 550 volts per mil.  
 Compression strength: 50,000 psi.  
 Water absorbance: 0.10%  
 Tensile strength: 45,000 psi.  
 Meets MIL-P-18177 & NEMA Grade G-10.

**OPTION #4:** Non-Asbestos Klinger #C4401.

Temperature: up to 400° F constant  
 Tensile strength: 2,000 psi ASTM F152.

**OPTION #5:** Non-Asbestos Garlock #3000.

Temperature: up to 400° F constant  
 Max pressure: 1000 psi

**OPTION #6:** G-10 with O-ring.

(see Option #3 for specifications.)

**OPTION #7:** Phenolic with O-ring.

(see Option #1 for specification.)

\*\* Higher operating pressure will lower maximum temperature rating.

\*\*PLEASE CONSULT FACTORY FOR APPLICATIONS INVOLVING STEAM, OR PETROLEUM.

**SLEEVE MATERIAL:**

**Option #1:** 1/32" wall high density polyethylene.

Temperature: up to 175° F.  
 Compression: 80,000 psi  
 Tensile strength: 150,000 psi  
 Water absorbance: 0.01%

**Option #2:** 1/32" wall spiral-wound Mylar.

Temperature: up to 300°F.  
 Dielectric strength: 4,000 volts per mil.  
 Water absorption: 0.8%.

**Option #3:** 1/32" wall phenolic tubing. Specs same as gasket material.

**Option #4:** One-piece sleeve and washer combination. 1/32" sleeve wall and 5/32" thickness washer portion.

**Option #5:** 1/32" wall Fiberglas epoxy tubing. Same specs as gasket material.

**Option #6:** High temperature Nomex and other special sleeve material available on request.

**INSULATING WASHERS:**

**Option #1:** 1/8" phenolic, specs same as gasket material.

**Option #2:** 1/8" dielectric asbestos, specs same as gasket material.

**Option #3:** Fiberglas epoxy, specs same as gasket material.

**Option #4:** High temperature and special material available on request.

**STEEL WASHERS:**

**Option #1:** 1/8" thick steel made to fit within bolt facing on ASA standard flanges.

**Option #2:** Stainless steel available on request.