PSI Model S Metallic Casing Spacers





Model S Stainless Metallic Casing Spacers

Targeted Use - Water

For carrier pipe diameters ranging from 4" (101.6mm) to 120" (304.8cm).

- For carrier pipe insertion lengths up to 5,000 feet.* (1,524M)
- Spacing Recommendation: Max 8' (243.8cm) between spacers, Max 2' (61.0cm) from casing pipe end, Max 2' (61.2cm) on each side of bell or mechanical joint.
- Recommended End Seals: Model C, S, W, R and FW.

* Pipe insertion lengths may vary depending on type of casing pipe, condition of casing pipe, misaligned casing joint or other factors that may cause excessive abrasion to runner materials.

Model Options:

Model S8G2 or S8GN2

Stainless Steel casing isolator with an 8" (203mm) wide steel band and 2" (50.8mm) wide glass reinforced polymer runners.

Model S12G2 or S12GN2

Stainless Steel casing isolator with a 12" (305mm) wide steel band and 2" (50.8mm) wide glass reinforced polymer runners.

Model SL8GN2 (Cost Effective Stainless Option.)

Stainless Steel casing isolator with a 8" (203mm) wide steel band and 2" (50.8mm) wide glass reinforced polymer runners. Designed for carrier pipe O.D's under 13.8" (35.0cm), targeting PVC pipe types for water market. Tough, heavy duty 14 gauge (0.74"/1.88mm) 304 stainless steel isolators/spacers are available for use in highly corrosive environments. They offer maximum corrosion resistance while providing support for large diameter pipe, unusually heavy pipe or for long casing pulls.

The flanges of the spacer are deep embossed and the corners are chamfered.

The runners are attached with 3/8" (9.5mm) diameter studs, which are fusion welded to the band. The studs are recessed far below the wearing surface of the runner and, after the runner is anchored to the band or riser, the stud counter-bore is filled to insure a water tight seal for the stud and the lock fastener.

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Material Specifications

Stainless Steel Casing Spacers/Isolators

Band

14 Gauge (0.074" [1.88mm]) 304 stainless steel. (S8 and S12)12 Gauge (0.105" [2.66mm]) 304 stainless steel. (S12 40" Ø & up.)Engineer/Contractor must specify.16 Gauge (0.061" [1.56mm]) 304 stainless steel. (Model SL8)

Flanges of the spacer are deep embossed and the corners are chamfered.

Configurations - Band

4" (101.6mm) through 36" (914mm) = 2 Piece 36" (914mm) through 48" (1,219mm) = 3 Piece

48" (1,219mm) and over = Consult Factory

Finish

None

Liner - Polyvinyl Chloride Liner (Standard)

| Thickness | 0.090" (2.29mm) minimum | |
|--------------------------|---------------------------|--|
| Hardness | Durometer "A" 85-90 | |
| Dielectric Strength | | |
| 1/8" (3.18mm) Surge Test | 60,000 V min. | |
| Step-by-step Test | 58,000 V min. | |
| Water Absorption | 1% max. | |
| Temperature | -40 to 170°F(-40 to 76°C) | |
| | | |

Liner - T.P.E. Liner (Temperature Extremes) Model S12 Only

| Thickness | | 0.118" (3.0mm) | |
|---------------------|------------|----------------------------|--|
| Hardness | | Shore "A" 73 | |
| Dielectric Strength | | | |
| 1/8" (3.18mm) | Surge Test | 60,000 V min. | |
| Step-by-step Te | est | 58,000 V min. | |
| Water Absorption | | 1% max. | |
| Temperature | | -50 to 270°F(-45 to 132°C) | |

Risers

10 gauge (0.135" [3.43mm]) 304 stainless steel MIG welded to band. (Standard S8 and S12)

7 gauge (0.179" [4.55mm]) steel MIG welded to band. (Contact PSI) 12 gauge (0.105" [2.667mm]) steel MIG welded to band. (Model SL8)

Runners (G and GN) Note: GN Material is the PSI Standard Material

| Sizes and Configurations |
|--|
| 2" (51mm) Wide Glass Reinforced |
| Polyester (G) or Nylon Runners (GN) |
| 4" (101.6mm) thru 12" (305mm) = 2 top & 2 bottom |
| 14" (356mm) thru 36" (914mm) = 2 top & 4 bottom |
| 38" (965.2mm) and over = Consult Factory |
| |

Runner Specifications (G and GN)

| Tensile Strength, (ASTM D638) | 17,600 psi (1,237 kg/cm ²) |
|--|--|
| Flexural Strength, (ASTM D790) | 25,300 psi (1,779 kg/cm ²) |
| Compression Strength, (ASTM D695) | 18,000 psi (1,266 kg/cm ²) |
| | (10% Deformation) |
| Deflection Temp. @ 264 psi - (ASTM D648) | 405°F (205°C) |

Hardware (Threaded Studs, Nuts and Washers)

Threaded Studs = 5/16" - 18 x 2 1/2" 304 stainless steel or plated Hex Nuts = 5/16" Washers = 5/16" SAE 2330

Configurations - Threaded Studs, Nuts and Washers

8" (203.2mm) Band = 6 studs, 12 nuts and washers 12" (305mm) Band = 8 studs, 16 nuts and washers



Effective Runner Heights and Lengths - G and GN

Sizing carrier pipe O.D. and casing I.D. can be misleading at times due to a difference between nominal and effective dimensions. When sizing, make sure to consider effective runner height. Two heights are available/used; custom positioning in the casing can be achieved with riser heights.

Heights - Nominal versus Effective

2" Wide Glass Reinforced Nylon or Polyester Runners Nominal 1.0" (25.4mm) - 1.5" (38.1mm)

Effective 1.07" (27.2mm) - 1.70" (43.2mm)

Lengths - Effective

2" Wide Glass Reinforced Nylon or Polyester Runners 7.0" (177.8mm) - 11.0" (279.4mm)

Glass reinforced polymer runners are standard in 2" (50.8mm) widths for Model S (stainless).

PSI GN glass reinforced nylon runners have 5 times the compressive strength of polyethylene runners. Our Model G polyester 2" wide runners are particularly designed for heavier pipes and longer pulls.



Applications

Rugged, heavy duty steel casing spacers with tough glass reinforced polymer insulating runners are designed for ease of installation on:

Concrete Pipe • Ductile Iron Pipe
Plastic Pipe • Steel Pipe

Spacers Accommodate

- Mechanical Joints Push-on
- Restrained Welded Joint Pipe
- Small or large carrier/casing differentials.
- Electrical isolation of carrier pipe from casing for corrosion protection.