

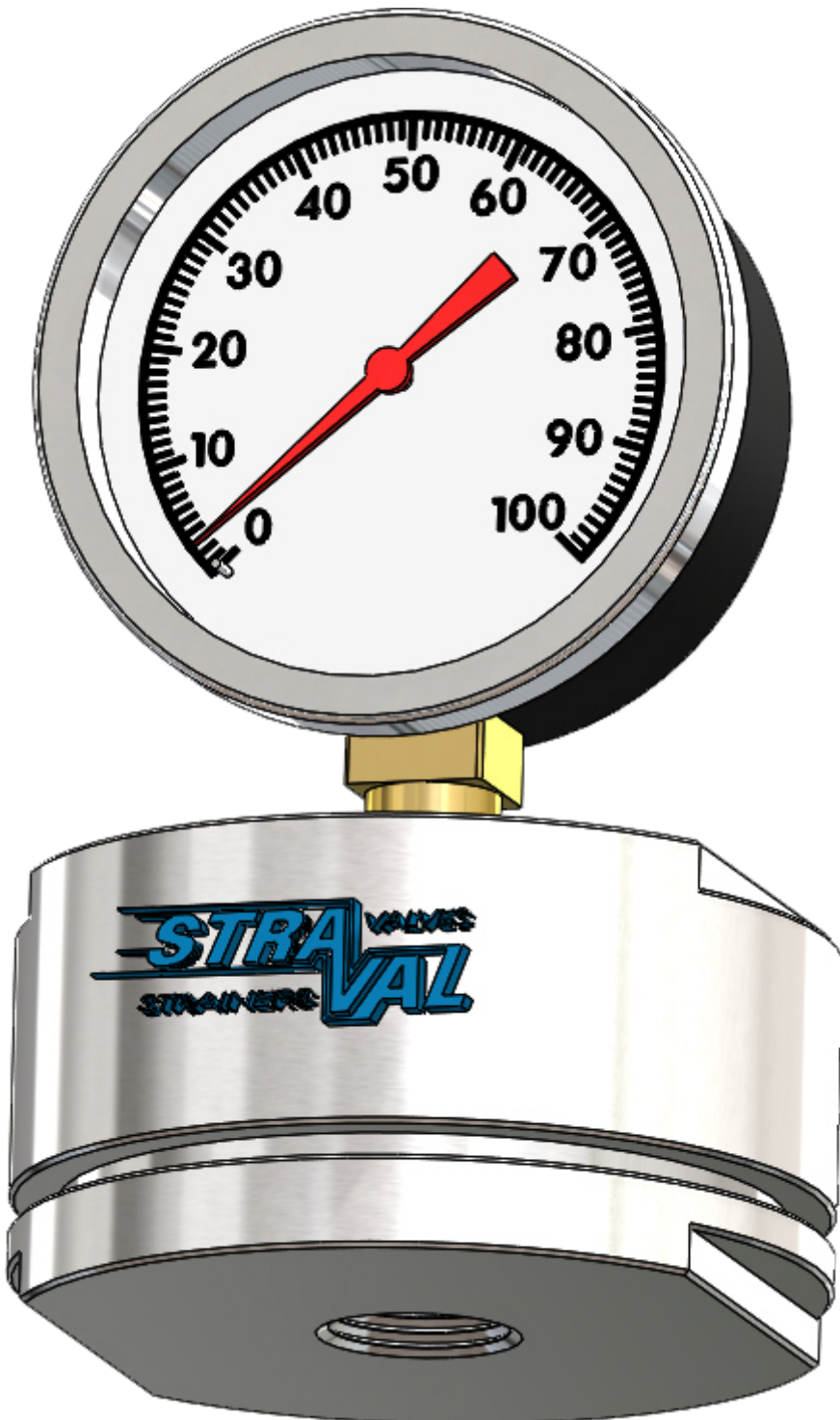


Phone (toll-free): (888) 380-9660  
Phone (local): (973) 340-9955  
Fax: (973) 340-9933  
Web: [www.straval.com](http://www.straval.com)

20 Bushes Lane  
Elmwood Park, NJ 07407

## Model GIS20

### Isolator / Guard



- Isolator / Guard: **Straval** Isolators protect your process from instrument contamination, and allow your instrument to function properly while eliminating chemical attack of the pressure gauge or instruments as you monitor application process conditions.
- **Pressure Gauge is NOT INCLUDED (customer must supply/utilize a 3-1/2" diameter or smaller gauge with 1/4" male NPT flat bottom connector)**

## Features

- Straval Isolator / Guard utilizes a molded diaphragm which offers maximum volumetric displacement and accuracy! Will transfer reading within 1% of full scale.
- The threaded design allows for easy field maintenance or material changes as needed.
- The use of an O-ring seal under the instrument eliminates the need for a bleed screw when installing the instrument on the isolator.
- Seal: Non-wetted used for sealing the monitoring instrument (Gauge/Switch): Viton
- Instrument side connection: 1/4" Female NPT
- Process side: 1/2" Female NPT

## Applications

Isolator / guard is designed to protect delicate instruments from process fluids. It can be utilized with pressure gauges (up to 3.5" diameter Max), sensors, switches or any other instrument you would like to protect under pressure from the process fluid. (Instruments used should not require more than .2 cubic inches of displacement to operate properly through their entire range!)

With a variety of construction material options we can cater to most applications, while not contaminating the process fluid, and protecting the monitoring instruments.

## Options

Housing: Non-wetted used to hold the monitoring instrument: 303SS, 316SS, Duplex 2205, Alloy20, Monel 400, Titanium GRD2, HASTC276

Body (Wetted and in contact with the process fluid) material: 316SS, Duplex 2205, Alloy20, Monel 400, Titanium GRD2, HASTC276

Diaphragm (Wetted and in contact with the process fluid) material: Viton or Buna

## Principle of Operation

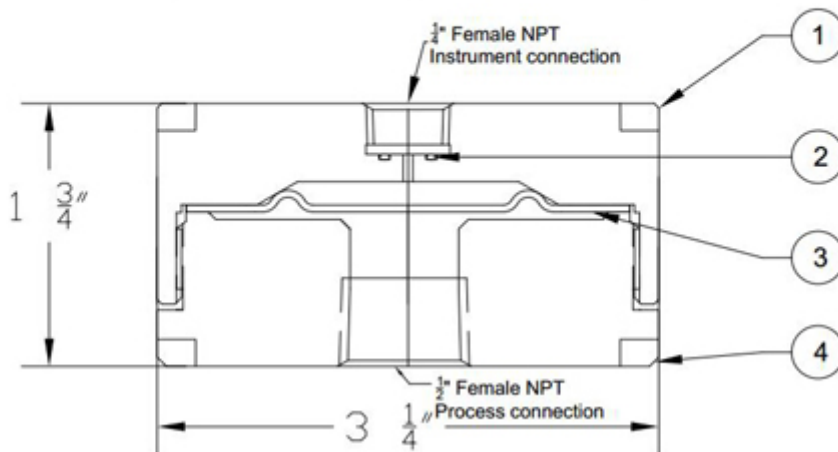
The isolator must be filled with a temperature stable transfer fluid in the cavity between the diaphragm and instrument you are trying to protect. (Glycerin or mineral oil are typically used for most applications)

The process fluid acts on the diaphragm's and the transfer fluid will trigger the instrument installed on the opposite side for proper monitoring.

Note: The isolator instrument side must be properly filled with transfer fluid and free of air pockets. (See instructions sheet for additional details.)

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| Isolator / Guard Specifications |             |                                                         |     |
|---------------------------------|-------------|---------------------------------------------------------|-----|
| Item #                          | Description | Material                                                | Qty |
| 1                               | Housing     | 303, 316, HastC276, Monel 400, or Titanium as specified | 1   |
| 2                               | Seal        | Viton                                                   | 1   |
| 3                               | Diaphragm   | Viton or BUNA as Specified                              | 1   |
| 4                               | Body        | 303, 316, HastC276, Monel 400, or Titanium as specified | 1   |



## GIS20

### Material List and Specification

Volumetric Displacement: 0.22 Cubic Inches (3,605 mm<sup>3</sup>)

Maximum Pressure: 300 Psig (20.7 Barg)

Maximum Temp: 350°F (177°C) when specified with a Viton Diaphragm, and 200°F (93°C) if specified with Buna Diaphragm.

Accuracy: 1% of full scale

Process connection: 1/2" Female NPT

Instrument connection: 1/2" Female NPT

Dimensions: 3 1/4" Diameter X 1 3/4" height

B.O.M. Details see chart below:

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## GIS20 1/2 Proc x 1/4 Gau

### **Spring Range does not apply**

Multiple Spring Ranges from:0- psig (0- barg) Select spring from pricing page

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The spring ranges listed above are not achievable with one spring, but are compressed to show overall product capability. Select a specific spring range in the pricing pages or specify a set pressure when ordering.