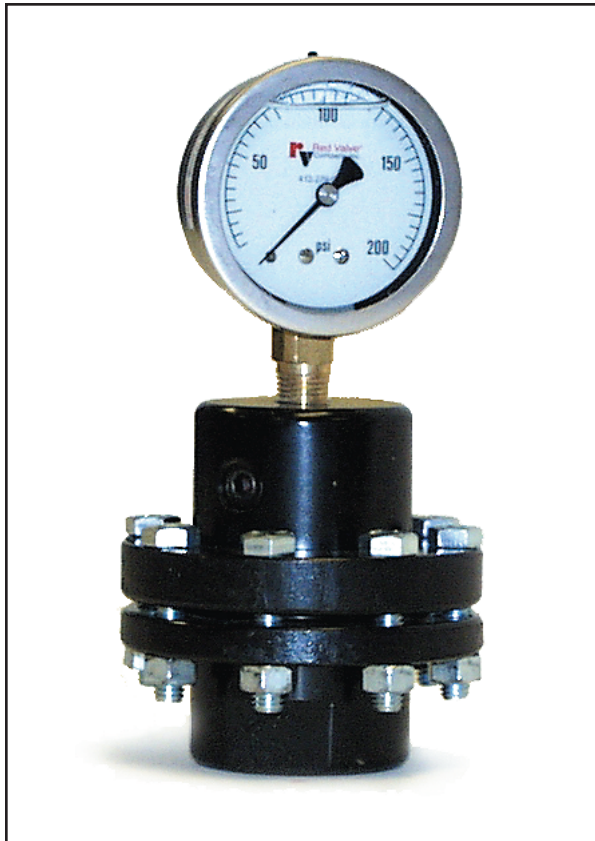


Model 25

Diaphragm Seal



- ▶ Factory tested and calibrated
- ▶ Field Replaceable Diaphragm
- ▶ Protects Instrumentation
- ▶ Modular design allows instrument changes



Model 25 Diaphragm Seals feature a unique, modular approach to facilitate maintenance. When the eight bolts are removed, the top housing and screw-in diaphragm come away as a single unit, along with the gauge which is connected. This allows prefilling and pre-calibrating of a stock of top-housing diaphragm/gauge units to meet the need for a replacement as soon as a problem occurs. All without ever needing to disconnect the lower housing from the line.

Model 25 also features an overlapping collar design at the joint of the upper and lower housings, thus prevented a blowout which could spray or burn an operator.

To simplify fluid filling, all Model 25 diaphragm seals include as standard a fill/bleed port in the top housing, except non-metallic tops.

Model 25 diaphragm seals are available in threaded models for pressures to 720 psi; in flange-mounted models for pressures to 150 or 300/600#. (Larger line sizes and flange ratings on request).

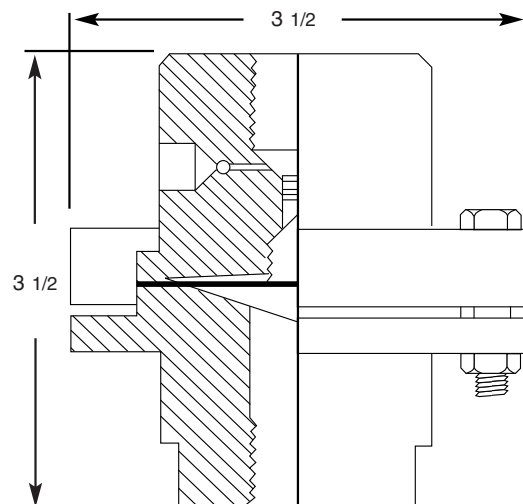
Other standard features are: choice of 1/4" or 1/2" N.P.T. top (instrument) connection; top housing is standard in carbon steel; diaphragm is standard in 316L stainless steel.

**Teflon is a registered trademark of Du Pont.

Materials of Construction

- ▶ Carbon steel top housing, optional 316 SS
- ▶ 316 SS diaphragm
- ▶ Choice of bottom housing:

304 SS	Monel
316 SS	PVC
Hastelloy	Teflon
Nickel	Brass



When Ordering A Diaphragm Seal

Model number.	Material for the diaphragm and the lower housing.
Instrument connection, <input type="checkbox"/> 1/4" or <input type="checkbox"/> 1/2" N.P.T.	
For threaded seals, specify the process connection size. For flange seals, specify pipe size and flange pressure class.	
Select desired filling. <input type="checkbox"/> Silicone <input type="checkbox"/> Glycerin	If capillary is to be used, specify type, plain or armored; and the length.

PRESSURE RATINGS:

Maximum allowable pressures are stated with each model description and must not be exceeded. Teflon, Polypropylene, PVC and other plastics are not designed to withstand pressures as do their metal equivalents and should be used only on low pressure service. All allowable pressures decrease when temperature increases.

SPECIAL DIAPHRAGMS:

The standard diaphragm is 316L stainless steel, to order a diaphragm made of another material you can select one of the materials listed below.

- | | | |
|--|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> 304 Stainless Steel | <input type="checkbox"/> Hastelloy C | <input type="checkbox"/> Teflon** |
| <input type="checkbox"/> Monel | <input type="checkbox"/> Carpenter 20 | <input type="checkbox"/> Titanium |
| <input type="checkbox"/> Tantalum | <input type="checkbox"/> Nickel | <input type="checkbox"/> Viton® |

LOWER HOUSINGS:

All models are available in many corrosion resistant materials and optional features as listed below, selection of material and compatibility of material and process fluid is responsibility of the user.

- | | | | |
|--|---|---------------------------------|--|
| <input type="checkbox"/> Steel | <input type="checkbox"/> Hastelloy B or C | <input type="checkbox"/> Nickel | <input type="checkbox"/> Brass |
| <input type="checkbox"/> 304 Stainless Steel | <input type="checkbox"/> Carpenter 20 | <input type="checkbox"/> PVC | <input type="checkbox"/> Titanium |
| <input type="checkbox"/> 316 Stainless Steel | <input type="checkbox"/> Monel | <input type="checkbox"/> Teflon | <input type="checkbox"/> Polypropylene |

OPTIONAL FEATURES:

316 SS top housing with SS rings, nuts and bolts.
Pipe plugs for flushing connections.
Flange faces - raised face, flat face or ring joint.
5.000# PSI - type 42HP only.

LIQUID FILLINGS:

The selection of the fill depends on the temperature expected in any given application. The standard filling, Instrument Oil, is rated 0-250 degrees F. Other types of fillings available are listed below with their temperature ratings.

CAPILLARY LINES:

If your desired application requires a stainless steel capillary line, specify one of the following and the desired length when ordering.

- | | |
|---|---|
| <input type="checkbox"/> Stainless Steel coated 1/4" N.P.T. conn. | <input type="checkbox"/> Stainless Steel coated 1/2" N.P.T. conn. |
|---|---|

Model 42M, 42MW

Diaphragm Seal



- ▶ **Factory tested and calibrated**
- ▶ **Protects Instruments**
- ▶ **Modular design**
- ▶ **Wide range of materials**

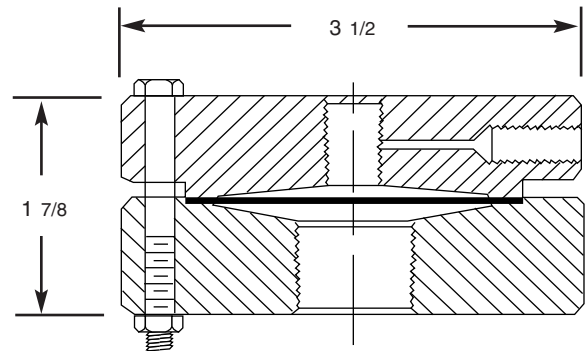


The Model 42M Diaphragm Seal is a clamped metal design seal. It features an interlocking male-female housing construction inside of the bolt circle for proper alignment. Includes as standard a fill/bleed port screw in the top housing. Flushing connections are also available.

Top housing is standard in carbon steel; diaphragm is standard in 316 stainless steel. A variety of materials are available for the bottom housing, as well as the diaphragm. Other standard features are choice of 1/4" or 1/2" NPT top connection,

The Model 42MW has the same dimensions and specifications as the 42M, but features a welded diaphragm designed to give a continuous filled system. This allows removal of the upper housing without loosing fill.

Both models use threaded connections for pressures up to 720 psi.



Materials of Construction

- ▶ **Carbon steel top housing, optional 316 SS**
- ▶ **316 SS diaphragm**
- ▶ **Choice of bottom housing:**
 - 304 SS** **Monel**
 - 316 SS** **PVC**
 - Hastelloy** **Teflon**
 - Nickel** **Brass**

When Ordering A Diaphragm Seal

Model number.	Material for the diaphragm and the lower housing.
Instrument connection, <input type="checkbox"/> 1/4" or <input type="checkbox"/> 1/2" N.P.T.	
For threaded seals, specify the process connection size. For flange seals, specify pipe size and flange pressure class.	
Select desired filling. <input type="checkbox"/> Silicone <input type="checkbox"/> Glycerin	If capillary is to be used, specify type, plain or armored; and the length.

PRESSURE RATINGS:

Maximum allowable pressures are stated with each model description and must not be exceeded. Teflon, Polypropylene, PVC and other plastics are not designed to withstand pressures as do their metal equivalents and should be used only on low pressure service. All allowable pressures decrease when temperature increases.

SPECIAL DIAPHRAGMS:

The standard diaphragm is 316L stainless steel, to order a diaphragm made of another material you can select one of the materials listed below.

- | | | |
|--|---------------------------------------|-----------------------------------|
| <input type="checkbox"/> 304 Stainless Steel | <input type="checkbox"/> Hastelloy C | <input type="checkbox"/> Teflon** |
| <input type="checkbox"/> Monel | <input type="checkbox"/> Carpenter 20 | <input type="checkbox"/> Titanium |
| <input type="checkbox"/> Tantalum | <input type="checkbox"/> Nickel | <input type="checkbox"/> Viton® |

LOWER HOUSINGS:

All models are available in many corrosion resistant materials and optional features as listed below, selection of material and compatibility of material and process fluid is responsibility of the user.

- | | | | |
|--|---|---------------------------------|--|
| <input type="checkbox"/> Steel | <input type="checkbox"/> Hastelloy B or C | <input type="checkbox"/> Nickel | <input type="checkbox"/> Brass |
| <input type="checkbox"/> 304 Stainless Steel | <input type="checkbox"/> Carpenter 20 | <input type="checkbox"/> PVC | <input type="checkbox"/> Titanium |
| <input type="checkbox"/> 316 Stainless Steel | <input type="checkbox"/> Monel | <input type="checkbox"/> Teflon | <input type="checkbox"/> Polypropylene |

OPTIONAL FEATURES:

316 SS top housing with SS rings, nuts and bolts.
Pipe plugs for flushing connections.
Flange faces - raised face, flat face or ring joint.
5.000# PSI - type 42HP only.

LIQUID FILLINGS:

The selection of the fill depends on the temperature expected in any given application. The standard filling, Instrument Oil, is rated 0-250 degrees F. Other types of fillings available are listed below with their temperature ratings.

CAPILLARY LINES:

If your desired application requires a stainless steel capillary line, specify one of the following and the desired length when ordering.

- | | |
|--|--|
| <input type="checkbox"/> Stainless Steel armored 1/4" N.P.T. conn. | <input type="checkbox"/> Stainless Steel armored 1/2" N.P.T. conn. |
|--|--|