

# Flange-Mounted Diaphragm Seals

DIAPHRAGM SEALS



M530 shown

- ▶ Clean-out Design
- ▶ Flushing Connection Available
- ▶ ANSI Raised Face Flanged Process Connection

The **Trerice Flange-Mounted Diaphragm Seal** is furnished with a Clean-out design in ANSI Raised Face Flange (RFF) sizes of 1/2" through 3". Process housing flanges mate with the piping flange, which is supplied by the user. Available diaphragm choices include: Teflon (T), Viton (V), Removable Metal (M) and Welded Metal (W).

Selection of the proper diaphragm seal is the sole responsibility of the user. Temperature and pressure limitations must be considered. Please refer to the Diaphragm Seal Design & Operation Section of this catalog. Improper application may cause failure of the seal, resulting in possible personal injury or property damage.

For correct use and application of all diaphragm seals, please refer to Diaphragm Seal Standard ASME B40.2.

## SPECIFICATIONS

| Style | Available Diaphragm Types* | Diaphragm Size | Process Connection    | Clean-out Design | 1/4 NPT Flushing Connection |
|-------|----------------------------|----------------|-----------------------|------------------|-----------------------------|
| 525   | M, T, V, W                 | Standard       | 1/2" ANSI RFF         | Yes              | No                          |
| 526   | M, T, V, W                 | Standard       | 1/2" ANSI RFF         | Yes              | Yes                         |
| 530   | M, T, V, W                 | Standard       | 1" to 3" ANSI RFF     | Yes              | No                          |
| 531   | M, T, V, W                 | Standard       | 1" to 3" ANSI RFF     | Yes              | Yes                         |
| 625   | M, T, W                    | Large          | 1/2" and 1" ANSI RFF  | Yes              | No                          |
| 626   | M, T, W                    | Large          | 1/2" and 1" ANSI RFF  | Yes              | Yes                         |
| 630   | M, T, W                    | Large          | 1 1/2" to 3" ANSI RFF | Yes              | No                          |
| 631   | M, T, W                    | Large          | 1 1/2" to 3" ANSI RFF | Yes              | Yes                         |

\*M = Removable Metal, T = Teflon, V = Viton, W = Welded Metal

Note: Due to the variety of available diaphragm seal configurations and materials, it is not possible to list each weight in this catalog. Please consult factory.

## HOW TO ORDER

Sample Order Number: **M 5 25 04 S S CC**

| Diaphragm Type | Diaphragm Size | Style                         | Connection Size      | Diaphragm Material      | Process Housing Material      | Instrument Housing & Bolt Material        |
|----------------|----------------|-------------------------------|----------------------|-------------------------|-------------------------------|---|
| M Metal        | 5 Standard     | 25 Small Flange, Non-Flushing | See Connection Sizes | See Diaphragm Materials | See Process Housing Materials | CC Carbon Steel<br>SS 316 Stainless Steel |
| T Teflon       | 6 Large        | 26 Small Flange, Flushing     |                      |                         |                               |   |
| V Viton**      |                | 30 Large Flange, Non-Flushing |                      |                         |                               |   |
| W Welded       |                | 31 Large Flange, Flushing     |                      |                         |                               |   |

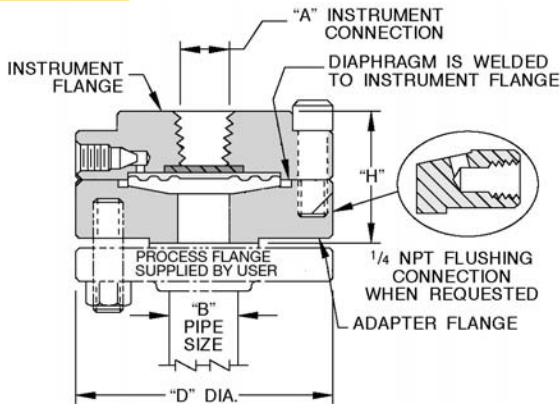
\*\*Diaphragm Type V available only with Diaphragm Size 5.

See Sizes and Materials Table

# Flange-Mounted Diaphragm Seals

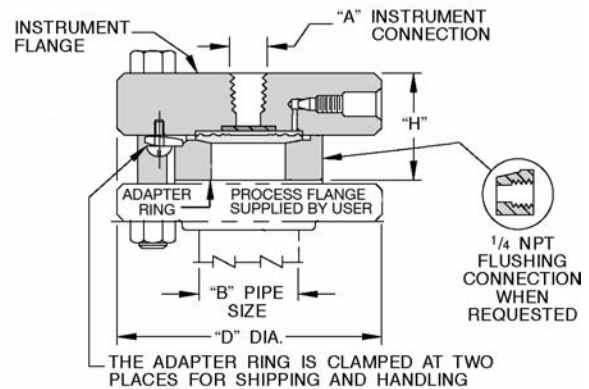
All dimensions are nominal. Dimensions in [ ] are in millimeters.

## Styles 25 & 26



| Diaphragm Type and Size | A                            | B        | Flange Rating                | H  | D  |
|-------------------------|------------------------------|----------|------------------------------|--|--|
| M, T, V, W<br>5 Series  | 1/4, 1/2 NPT<br>as specified | 1/2      | 150#<br>300#                 | 1.69 [43]<br>1.69 [43]                           | 3.25 [83]<br>3.50 [89]                               |
| M, T, W<br>6 Series     | 1/4, 1/2 NPT<br>as specified | 1/2<br>1 | 150#<br>300#<br>150#<br>300# | 1.69 [43]<br>1.69 [43]<br>1.69 [43]<br>1.81 [46] | 4.00 [102]<br>4.00 [102]<br>4.00 [102]<br>4.50 [114] |

## Styles 30 & 31



| Diaphragm Type and Size  | A                            | B          | Flange Rating                                | H  | D  |
|--------------------------|------------------------------|------------|--|--|--|
| M, T, V, W<br>All Series | 1/4, 1/2 NPT<br>as specified | 1<br>1 1/2 | 150#<br>300#<br>150#<br>300#<br>150#<br>300# | 1.69 [43]<br>1.69 [43]<br>1.63 [41]<br>1.63 [41]<br>1.63 [41]<br>1.63 [41] | 4.25 [108]<br>4.75 [121]<br>5.00 [127]<br>6.00 [152]<br>6.00 [152]<br>6.50 [165]<br>7.50 [191]<br>8.00 [203] |

## Sizes and Materials

| Connection Sizes                                      |                             |                    | Diaphragm Materials |                                  | Process Housing Materials |                            |
|---|-----------------------------|--------------------|---------------------|----------------------------------|---------------------------|----------------------------|
| Code  | Instrument Connection (NPT) | Process Connection | Code                | Material                         | Code                      | Material                   |
| The following are available only on Styles 25 and 26. |                             |                    |                     |                                  |                           |                            |
| 01  | 1/4                         | 1/2" 150# RFF      | D                   | Carpenter 20                     | C                         | Steel                      |
| 02  | 1/2                         | 1/2" 150# RFF      | F                   | 304 Stainless Steel <sup>1</sup> | D                         | Carpenter 20               |
| 03  | 1/4                         | 1/2" 300# RFF      | G                   | Hastelloy B                      | F                         | 304 Stainless Steel        |
| 04  | 1/2                         | 1/2" 300# RFF      | H                   | Hastelloy C-276                  | G                         | Hastelloy B                |
| The following are available only on Styles 30 and 31. |                             |                    |                     |                                  |                           |                            |
| 21  | 1/4                         | 1" 150# RFF        | M                   | Monel                            | H                         | Hastelloy C-276            |
| 22  | 1/2                         | 1" 150# RFF        | N                   | Nickel                           | L                         | Teflon-lined <sup>3</sup>  |
| 23  | 1/4                         | 1" 300# RFF        | S                   | 316 Stainless Steel              | M                         | Monel                      |
| 24  | 1/2                         | 1" 300# RFF        | T                   | Teflon                           | N                         | Nickel                     |
| 41  | 1/4                         | 1 1/2" 150# RFF    | U                   | Tantalum                         | P                         | Polypropylene <sup>4</sup> |
| 42  | 1/2                         | 1 1/2" 150# RFF    | V                   | Viton <sup>2</sup>               | S                         | 316 Stainless Steel        |
| 43  | 1/4                         | 1 1/2" 300# RFF    |                     |                                  | T                         | Teflon <sup>4</sup>        |
| 44  | 1/2                         | 1 1/2" 300# RFF    |                     |                                  | Z                         | PVC <sup>4</sup>           |
| 51  | 1/4                         | 2" 150# RFF        |                     |                                  |                           |                            |
| 52  | 1/2                         | 2" 150# RFF        |                     |                                  |                           |                            |
| 53  | 1/4                         | 2" 300# RFF        |                     |                                  |                           |                            |
| 54  | 1/2                         | 2" 300# RFF        |                     |                                  |                           |                            |
| 61  | 1/4                         | 3" 150# RFF        |                     |                                  |                           |                            |
| 62  | 1/2                         | 3" 150# RFF        |                     |                                  |                           |                            |
| 63  | 1/4                         | 3" 300# RFF        |                     |                                  |                           |                            |
| 64  | 1/2                         | 3" 300# RFF        |                     |                                  |                           |                            |

<sup>1</sup> 304 Stainless Steel diaphragm not available with Diaphragm Size 6.

<sup>2</sup> Viton Diaphragm available only with Diaphragm Size 5.

<sup>3</sup> Teflon-lined Process Housing available only with Style 30.

<sup>4</sup> Polypropylene, PVC and Teflon Process Housings available only with Styles 30 and 31.

DIAPHRAGM SEALS