## Saddle-Welded <br> Diaphragm Seals



M545 shown

Clean-out Design<br>Saddle-WeIded Process Connection

The Trerice Saddle-Welded Diaphragm
Seal is furnished with a Clean-out design, for use on pipe sizes of 1" through 8". The diaphragm seal is installed by welding the process housing directly onto the pipe. 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 <br> Diaphragm Types* | Diaphragm <br> Size | Process <br> Connection | Clean-out <br> Design | 1/4 NPT <br> Flushing Connection |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 545 | M, T, V, W | Standard | Welded | Yes | No |
| 645 | M, T, W | Large | Welded | Yes | No |

* $M$ = 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

| Diaphragm Type | Diaphragm Size | Style |  | Connection Size | Diaphragm Material | Process Housing Material | Instrument Housing \& Bolt Material |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M Metal <br> T Teflon <br> V Viton** <br> W Welded | 5 Standard <br> 6 Large | 45 | Saddle-Welded | See <br> Connection Sizes | See <br> Diaphragm <br> Materials | See <br> Process <br> Housing <br> Materials | CC Carbon Steel SS 316 Stainless Steel |
| **Diaphragm Type V available only with Diaphragm Size 5. |  |  |  |  |  |  |  |

See Sizes and Materials Table

# Saddle-Welded Diaphragm Seals 



| Diaphragm Type and Size | A | B | U | C | D | Hole Diameter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M, T, W 5 Series | 1/4, 1/2 NPT as specified | 1 | 0.88 [22] | 2.13 [55] | 3.50 [89] | 1.00 [25] |
|  |  | 11/2 | 0.88 [22] | 2.38 [60] | 3.50 [89] | 1.50 [38] |
|  |  | 2 | 0.88 [22] | 2.63 [67] | 3.50 [89] | 1.50 [38] |
|  |  | 3 | 0.88 [22] | 3.25 [83] | 3.50 [89] | 1.50 [38] |
|  |  | 4 | 0.88 [22] | 3.81 [97] | 3.50 [89] | 1.50 [38] |
|  |  | 6 | 0.88 [22] | 4.94 [125] | 3.50 [89] | 1.50 [38] |
|  |  | 8 | 0.88 [22] | 5.94 [151] | 3.50 [89] | 1.50 [38] |
| V 5 Series | 1/4, 1/2 NPT as specified | 1 | 1.00 [25] | 2.13 [55] | 3.50 [89] | 1.00 [25] |
|  |  | 11/2 | 1.00 [25] | 2.38 [60] | 3.50 [89] | 1.50 [38] |
|  |  | 2 | 1.00 [25] | 2.63 [67] | 3.50 [89] | 1.50 [38] |
|  |  | 3 | 1.00 [25] | 3.25 [83] | $3.50 \text { [89] }$ | $1.50 \text { [38] }$ |
|  |  | 6 | $1.00 \text { [25] }$ | $4.94 \text { [125] }$ | 3.50 [89] | 1.50 [38] |
|  |  | 8 | 1.00 [25] | 5.94 [151] | 3.50 [89] | 1.50 [38] |
| M, T, W 6 Series | 1/4, 1/2 NPT as specified | 1 | 0.88 [22] | 2.13 [55] | 4.25 [108] | 1.00 [25] |
|  |  | 11/2 | 0.88 [22] | 2.38 [60] | 4.25 [108] | 1.50 [38] |
|  |  | 2 | 0.88 [22] | 2.63 [67] | 4.25 [108] | 1.50 [38] |
|  |  | 3 | 0.88 [22] | 3.25 [83] | 4.25 [108] | $1.50 \text { [38] }$ |
|  |  | 4 | 0.88 [22] | 3.81 [97] | 4.25 [108] | 1.50 [38] |
|  |  | 6 | 0.88 [22] | 4.94 [125] | 4.25 [108] | 1.50 [38] |
|  |  | 8 | 0.88 [22] | 5.94 [151] | 4.25 [108] | 1.50 [38] |

Sizes and Materials

| Connection Sizes |  |  | Diaphragm Materials |  | Process Housing Materials |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | $\begin{gathered} \text { Instrument } \\ \text { Connection (NPT) } \end{gathered}$ | Process Connection | Code | Material | Code | Material |
| 01 | 1/4 | 1" Pipe | D | Carpenter 20 | C | Steel |
| 02 | 1/2 | 1" Pipe | F | 304 Stainless Steel* | D | Carpenter 20 |
| 05 | 1/4 | 11/2" Pipe | G | Hastelloy B | F | 304 Stainless Steel |
| 06 | 1/2 | 11/2" Pipe | H | Hastelloy C-276 | G | Hastelloy B |
| 07 | 1/4 | 2" Pipe | M | Monel | H | Hastelloy C-276 |
| 08 | 1/2 | 2" Pipe | N | Nickel | M | Monel |
| 09 | 1/4 | 3" Pipe | S | 316L Stainless Steel | N | Nickel |
| 10 | 1/2 | 3" Pipe | T | Teflon | S | 316L Stainless Steel |
| 11 | 1/4 | 4" Pipe | U | Tantalum |  |  |
| 12 | 1/2 | 4" Pipe | V | Viton** |  |  |
| 13 | 1/4 | 6" Pipe |  |  |  |  |
| 14 | 1/2 | 6" Pipe |  |  |  |  |
| 15 | 1/4 | 8" Pipe |  |  |  |  |
| 16 | 1/2 | 8" Pipe |  |  |  |  |

* 304 Stainless Steel diaphragm not available with Diaphragm Size 6.
** Viton Diaphragm available only with Diaphragm Size 5.

