



HAM-LET FULLY IMMERSIBLE HIGH-TEMPERATURE



- ✓ Cv of 0.8
- ✓ Up to 250°C fully immersible
- ✓ Available in Inline and Surface-Mount configurations



FULLY IMMERSIBLE HIGH-TEMPERATURE STABLE FLOW UCV

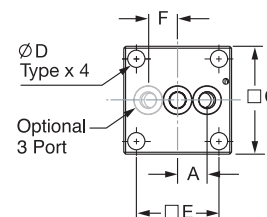
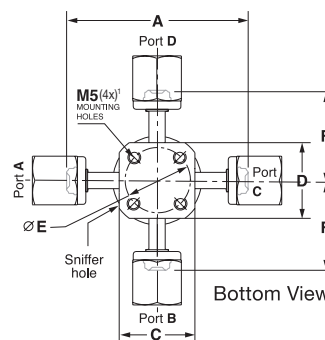
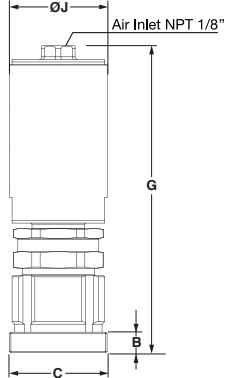
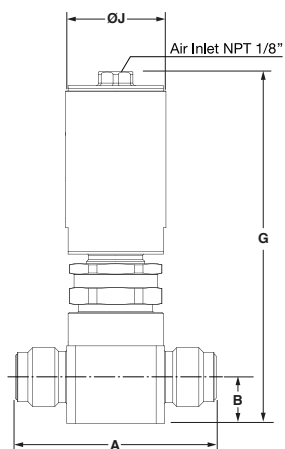
METAL DIAPHRAGM VALVES

An ultra-high purity valve delivers a consistent flow performance across a wide temperature range and boasts a long cycle life. The TF series is specifically designed to be fully immersed in an environment temperature of up to 250°C, making it the best solution for a wide variety of demanding applications.



STANDARD CONFIGURATION DIMENSIONS

| Body Size | Series | End Connections | A | | B | | C | | D | | E | | F | | G | | J | |
|-----------|--------|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|
| | | | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm |
| 1/2" | TF | Male Face-Seal | 2.99 | 76.0 | 0.69 | 17.5 | 1.46 | 37.0 | 1.46 | 37.0 | 1.10 | 28.0 | 1.5 | 38.0 | 5.24 | 133.0 | 1.50 | 38.0 |
| | | Swivel male Face-Seal | 3.45 | 87.6 | | | | | | | | | 1.72 | 43.8 | | | | |
| | | Swivel female Face-Seal | 3.45 | 87.6 | | | | | | | | | 1.72 | 43.8 | | | | |
| | | Buttweld | 2.25 | 57.2 | | | | | | | | | 1.13 | 28.6 | | | | |
| | TFS | Surface-Mount 1.5" C-Seal | 0.46 | 11.6 | 0.31 | 8.0 | 1.49 | 37.9 | 0.20 | 5.2 | 1.19 | 30.2 | 0.46 | 11.6 | 4.7 | 119.4 | 1.50 | 38.0 |



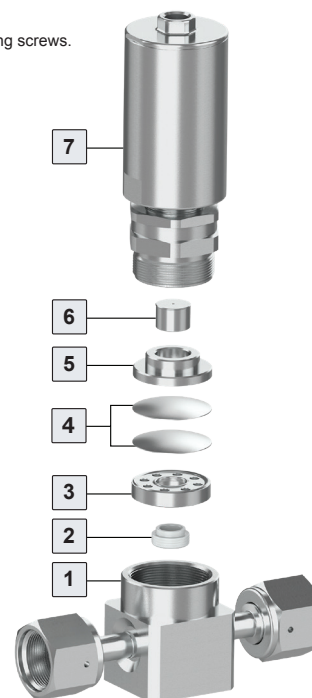
*M5 holes are compatible with 10-32 mounting screws.

SPECIFICATIONS

| Size | Design Pressure | Burst Pressure | Proof Pressure | Temp. | Cv | Leak Rates | |
|------|-----------------|------------------|------------------|--------------|-----|-----------------------------------|----------------------------------|
| | | | | | | Inboard | Across Seat |
| 1/2" | 1MPa (150 psi) | 31MPa (4500 psi) | 1.5MPa (225 psi) | -10 to 250°C | 0.8 | 3X10 ⁻¹¹ atm cc He/sec | 1X10 ⁻⁹ atm cc He/sec |

MATERIALS OF CONSTRUCTION

| Item No. | Part No. | Material |
|----------|--------------------|---------------------|
| 1 | Body | SS 316L VAR |
| 2 | Seat | Polyimide |
| 3 | Seat holder | SS 316L VAR |
| 4 | Diaphragm | Co-Cr-Ni Alloy |
| 5 | Act. button holder | SS ASTM 630 H900 |
| 6 | Act. button | Carbon steel + PTFE |
| 7 | Actuator assembly | SS 316L |



ORDERING INFORMATION - TF SERIES

VALVE DESCRIPTION EXAMPLE

TF

Valve Series

| | |
|-----|---------------|
| TF | Inline |
| TFS | Surface-Mount |

2

Valve Type

| | |
|----------------|--------------|
| 2 | 2-Port valve |
| 3 | 3-Port valve |
| 4 ¹ | 4-Port valve |

¹For inline valves only

1

Port Designator

| |
|-------------|
| 0,1,2,3,4,5 |
|-------------|

8

Body Size

| | |
|---|--------|
| 8 | - 1/2" |
|---|--------|

V

Body Material

| | |
|---|-------------|
| V | SS 316L VAR |
|---|-------------|

S

Seat Material

| | |
|---|-----------|
| S | Polyimide |
|---|-----------|

LC

Actuation Device

| | |
|----|-------------------|
| LC | Air operated N.C. |
|----|-------------------|

LC - BW 4 BW 4

End Connection

| | |
|----|-------------------------|
| BW | Butt weld |
| GF | Swivel female Face-Seal |
| GM | Swivel male Face-Seal |
| M | Male Face-Seal |

Port A

Port B

End Size

| | |
|----------------|------|
| 6 ² | 3/8" |
| 8 | 1/2" |

²For Butt weld only

PORT DESIGNATOR - (TOP VIEW)

Valve Configuration

Port Designator

Schematic Flow Chart

Two Port Valve

TF2

| | |
|----------|--|
| 0 | |
| 1 L-Port | |
| 2 L-Port | |

Valve Configuration

Port Designator

Schematic Flow Chart

Three Port Valve

TF3

| | |
|---|--|
| 0 | |
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

Valve Configuration

Port Designator

Schematic Flow Chart

Four Port Valve

TF4

| | |
|---|--|
| 0 | |
| 1 | |
| 2 | |
| 3 | |

Warning!

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.

