



# HAM-LET FULLY IMMERSIBLE HIGH-TEMPERATURE

TF  SERIES



## FULLY IMMERSIBLE HIGH-TEMPERATURE STABLE FLOW UCV

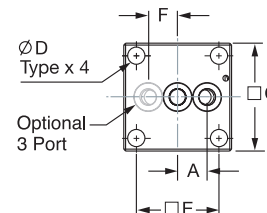
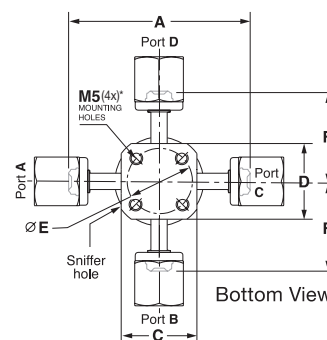
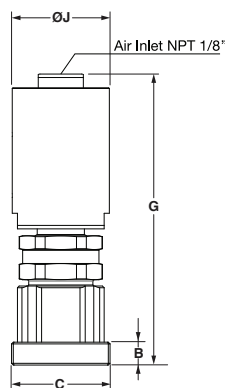
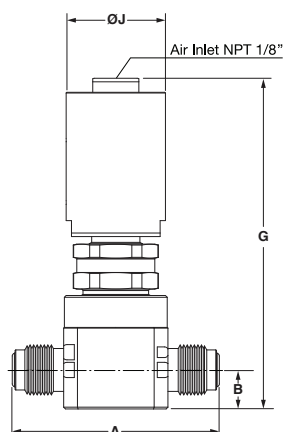
### METAL DIAPHRAGM VALVES

A ultra-high purity valve provides constant steady flow performance, through a wide range of temperatures, with a long-life cycle. The TF series was specially designed to be fully immersible up to 200°C making it the best solution for a wide variety of applications.



### STANDARD CONFIGURATION DIMENSIONS

Body Size	Series	End Connection	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				
		Butt Weld	2.25	57.2									1.13	28.6				
	TFS	Surface Mount	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.

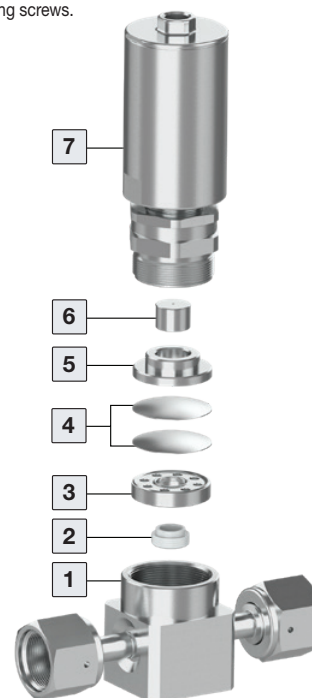
### SPECIFICATIONS

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 200°C	0.8	1X10 <sup>-9</sup>	3X10 <sup>-11</sup>

### STRUCTURE

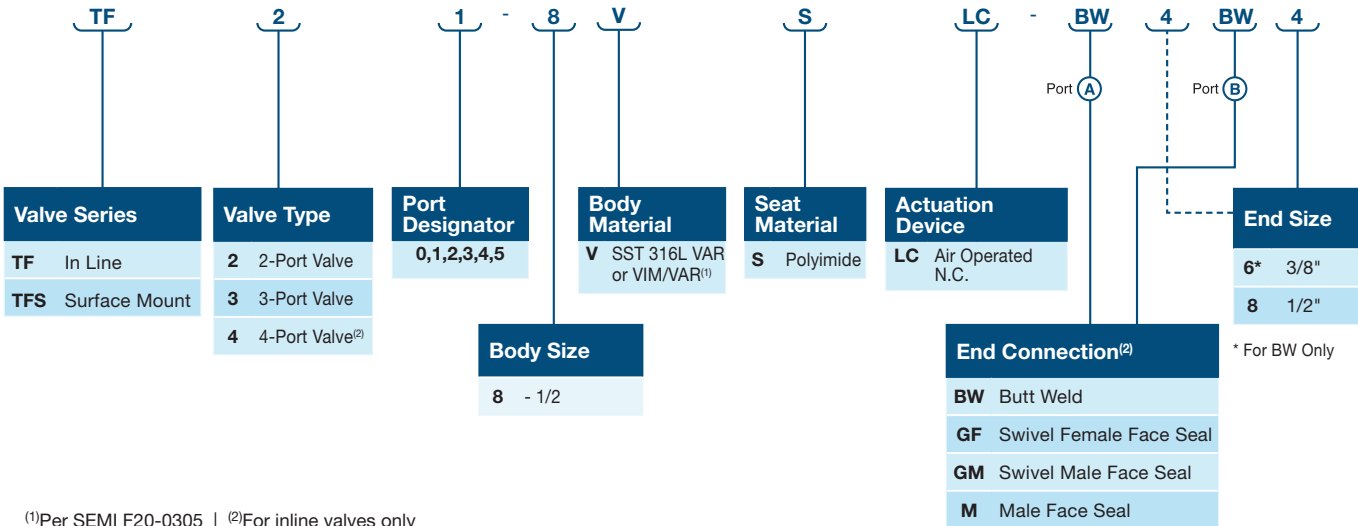
Item No.	Part No.	Material
1	Body	Stainless steel, 316L VAR or VIM/VAR <sup>1</sup>
2	Seat	Polyimide
3	Seat Holder	Stainless steel, 316L VAR or VIM/VAR <sup>1</sup>
4	Diaphragm	Co-Cr-Ni Alloy
5	Act. Button Holder	Stainless steel, ASTM 630 H900
6	Bushing	Carbon steel + PTFE
7	Actuator Assembly	Stainless steel, 316L

<sup>(1)</sup>Per SEMI F20-0305



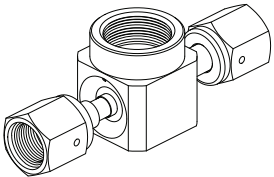
# ORDERING INFORMATION TF SERIES

Valve Description Example:

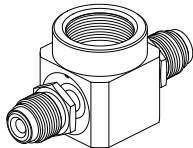


## PORT DESIGNATOR - (TOP VIEW)

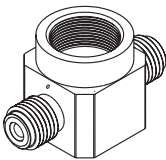
Valve Configuration	Port Designator	Schematic Flow Chart	Valve Configuration	Port Designator	Schematic Flow Chart	Valve Configuration	Port Designator	Schematic Flow Chart
2 Port Valve <b>TF2_</b>	0		3 Port Valve <b>TF3_</b>	0		4 Port Valve <b>UF4_</b>	0	
	1 <b>L-Port</b>			1			1	
	2 <b>L-Port</b>			2			2	
				3			3	
				4				
				5				



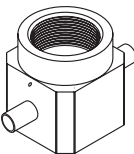
Swivel Female Face-Seal Ends



Swivel Male Face-Seal Ends



Male Face-Seal Ends



Butt Weld Ends

### 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.

