

METAL SEAT



- 3LE** - COMPACT MODEL METAL SEAT
- 3LD** - STANDARD METAL SEAT MODEL
- 3LT** - HIGH TEMPERATURE METAL SEAT



3LE SERIES COMPACT METAL SEAT MODEL

Metal Diaphragm Valves

The highest-ranking grade of compact models from the Ultra-Clean Valve Series are made according to UHP specifications. It is the ultimate in metallic diaphragm-operated valves with resins completely removed from their gas-contact areas. Their minimized valve internal volumes also best recommended them for use in liquid source supply applications.

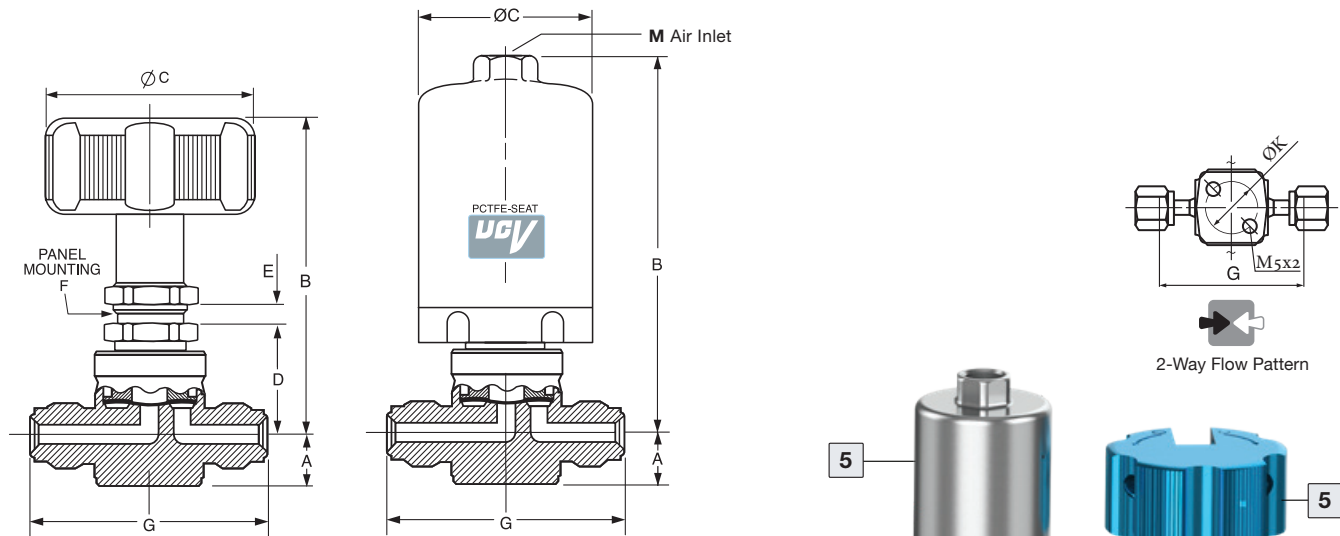
- Compact designs for minimum footprint.
- High-speed replacement of fluids in a gas or liquid state.
- Electropolished surfaces.

For details, please contact one of our field representatives.



STANDARD CONFIGURATION DIMENSIONS - mm

Part Number/ep	Size	End Connection	A	B	C	D	E	F	G	K	M
3LES2R-BV-U	1/8	Male HTC®	8	(51)	30	23	(4)	15	41	15	
3LES4R-W-U	1/4	Extended Butt Weld	11	(52)	30	24.5	(4)	17	47	17	
3LES4C-BW-U	1/4	Short ButtWeld	11	(86.2)	32	24.5	(4)	17	44.4	17	1/8"
3LES4C-FV-U	1/4	Swivel Female HTC®	11	(86.2)	32				66	17	1/8"



SPECIFICATIONS

Size	Design Pressure	Burst pressure	Proof pressure	Temp.	Cv	Leak Rates	
						Inboard	Across Seat
1/8	1MPa (150 psi)	31MPa (4500 psi)	1.5MPa (225 psi)	-10 to 150°C	0.05	3X10 ⁻¹² pa•m ³ /sec Helium	1X10 ⁻⁹ pa•m ³ /sec Helium
1/4					0.1		

STRUCTURE

Item No.	Parts	Material
1	Body	Stainless steel, 316L Var or Vim/Var ⁽¹⁾
2	Diaphragm	Co-Cr-Ni Alloy
3	Act. Button Set	304 Stainless Steel
4	Act. Button Holder	Stainless Steel, ASTM 630 H900
5	Actuation Device	Aluminum

⁽¹⁾ Per SEMI F20-0305

3LD STANDARD METAL SEAT MODEL

Metal Diaphragm Valves

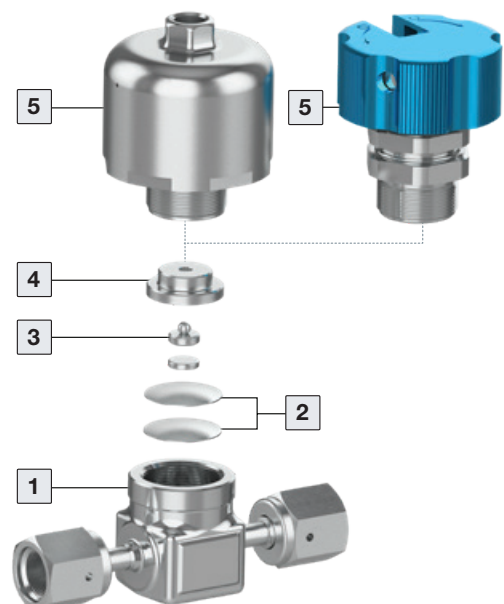
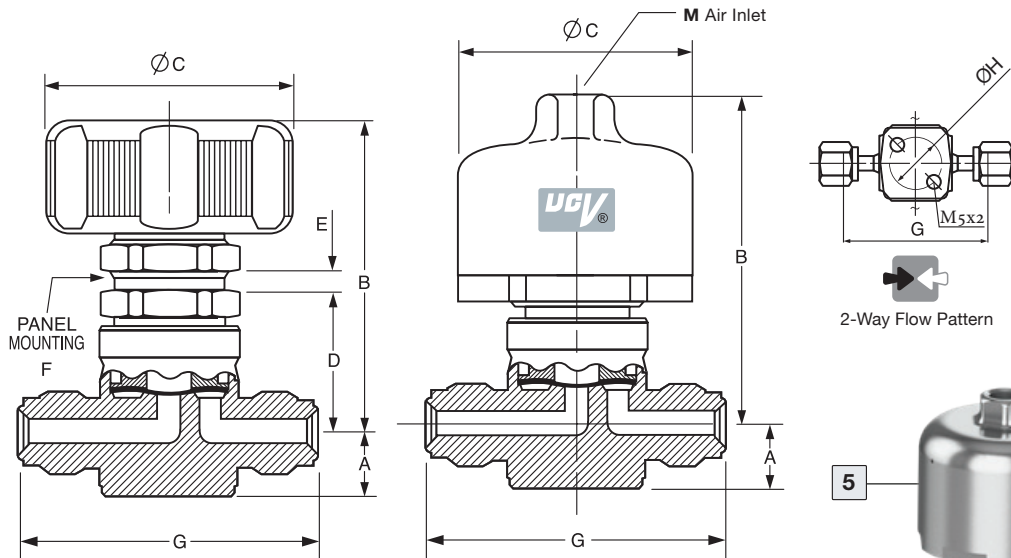
Standard models from the Ultra-Clean Valve Series are made according to UHP specifications. They are the ultimate in metallic diaphragm-operated valves with resins completely removed from their gas contact areas. Available in connection joint sizes of 1/4", 3/8" and 1/2", as a standard.

- High-speed replacement of media in a gas or liquid state.
- Extensive records of proven performance on corrosive gases (such as HCl and F2).
- Designs can be customized to meet specific needs.
- Electropolished surfaces



STANDARD CONFIGURATION DIMENSIONS - mm

Part Number/ep	Size	End Connection	A	B	C	D	E	F	G	H	k
3LDS4R-BV	1/4	Male HTC®	11	(63)	45	29	(4)	23	58	25	
3LDS4C-W	1/4	Extended Butt Weld	11	(89)	34				89	25	1/8"
3LDS4C-BW	1/4	Short Butt Weld	11	(89)	34				44.4	25	1/8"
3LDS6R-W	3/8	Extended Butt Weld	17.5	(67.5)	45	32.5	(4)	23	105	28	
3LDS8C-FV	1/2	Swivel Female HTC®	17.5	(92.5)	40				100	28	1/8"
3LDS8C-W	1/2	Extended Butt Weld	17.5	(92.5)	40				105	28	1/8"



SPECIFICATIONS

Size	Design Pressure	Burst pressure	Proof pressure	Temp.	Cv	Leak Rates	
						Inboard	Across Seat
1/4	1MPa (150 psi)	31MPa (4500 psi)	1.5MPa (225 psi)	-10 to 150°C	0.3	3X10 ⁻¹²	2X10 ⁻⁸
0.7					pa•m ³ /sec Helium	pa•m ³ /sec Helium	
0.7							

STRUCTURE

Item No.	Parts	Material
1	Body	Stainless steel, 316L Var or Vim/Var ⁽¹⁾
2	Diaphragm	Co-Cr-Ni Alloy
3	Act. Button	304 Stainless Steel
4	Act. Button Holder	Stainless Steel, ASTM 630 H900
5	Actuation Device	Aluminum

⁽¹⁾ Per SEMI F20-0305

3LT SERIES HIGH-TEMPERATURE METAL SEAT

Metal Diaphragm Valves

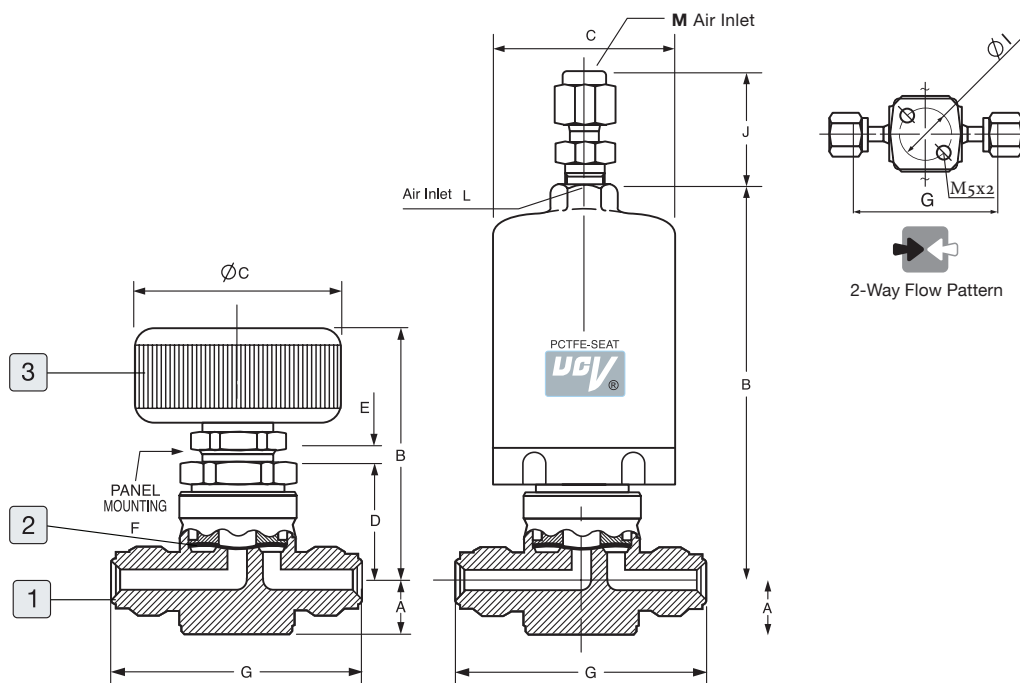
The highest-ranking grade of high-temperature models from the Ultra-Clean Valve Series are made according to UHP specifications. It is the ultimate in metallic diaphragm-operated valves with resins completely removed from their gas-contact areas. These valves can be used at temperatures of up to 250°C.

- Best suited for use as MOCVD changeover valves.



STANDARD CONFIGURATION DIMENSIONS - mm

Part Number/ep	Size	End Connection	A	B	C	D	E	F	G	I	J	L
3LTS8D-BV	1/2	Male HTC®	17.5	(67.5)	45	32.5	(4)	23	76	28		
3LTS8C-W	1/2	Extended Butt Weld	17.5	(92.3)	40				105	28	29.2	1/8"
3LTS8C-BW	1/2	Short Butt Weld	17.5	(92.3)	40				55	28	29.2	1/8"



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	0.7	3X10 ⁻¹² pa•m ³ /sec Helium	2X10 ⁻⁶ pa•m ³ /sec Helium

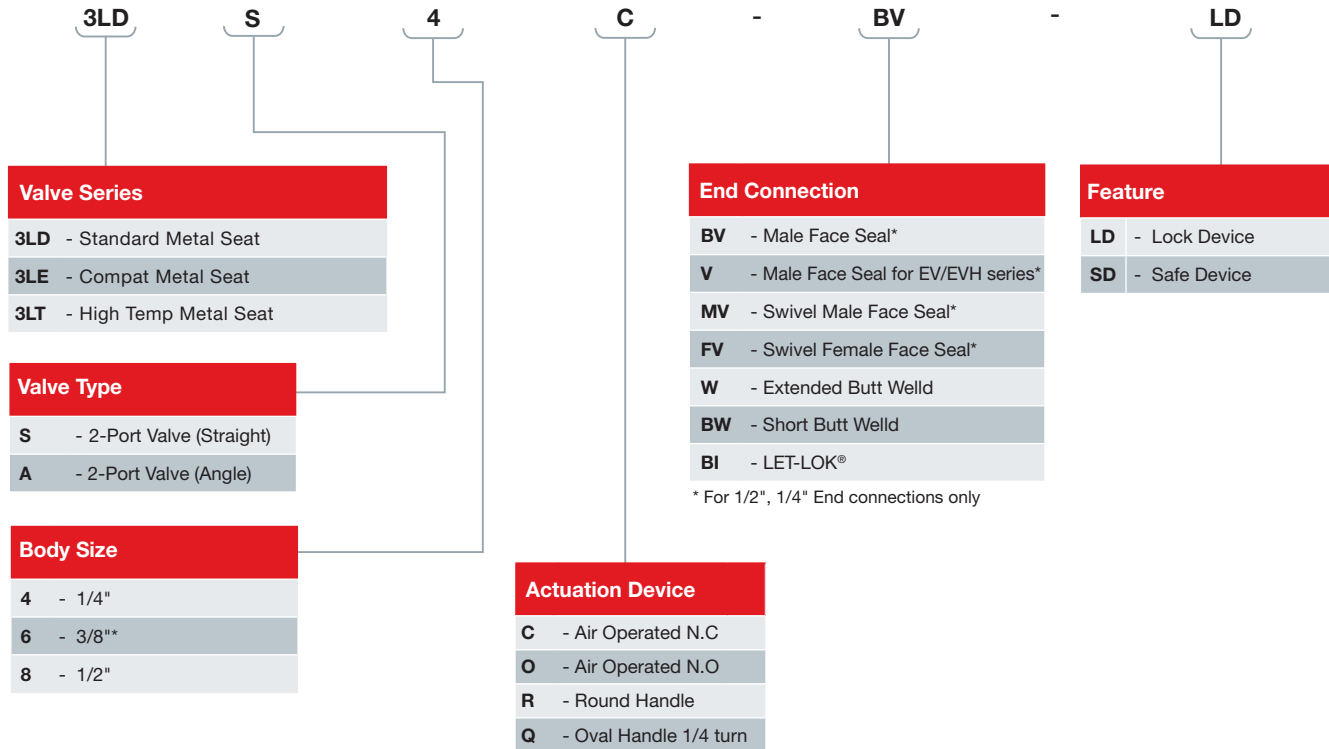
STRUCTURE

Item No.	Parts	Material
1	Body	316L Stainless Steel
2	Seat	Co-Cr-Ni Alloy
3	Handle/Act	Aluminum

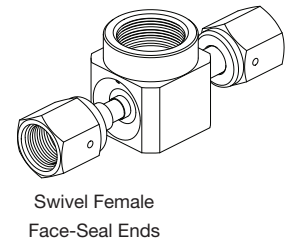
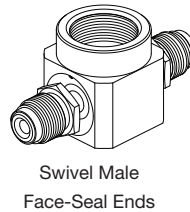
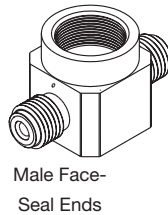
(1) Per SEMI F20-0305

ORDERING INFORMATION - METAL SEAT

Valve Description Example:



Blue Handle is standard.
For other colors contact your local HAM-LET representative.



- Standard seat: PCTFE.
- For valves that are made of bar stock

For your convenience, port conversion of old HMJ valves to current HM series:
A = 30 | B = 35 | C = 34 | D = 31 | E = 32 | F = 33

Warning! For your safety

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.

