

## DV100 Low-pressure pneumatic diaphragm valves

### TECHNICAL DATA

- Elgiloy diaphragms offer high strength and corrosion resistance, ensuring long service life
- Suitable for ultra-high purity applications, meeting the control requirements of large-scale integrated circuit processes.
- Designed and manufactured in strict accordance with SEMI UHP standards.

### TECHNICAL DATA

NAME	PRAMETERS
Port Size	1/4", 1/2", 3/8"
Flow Coefficient (Cv)	1/2" Cv 0.7; 1/4" Cv 0.3; 3/8" Cv 0.65
Diaphragm	Elgiloy
Body Material	SS 316L/SS 316L VIM-VAR/SEMI F20 UHP
Valve Seat	PCTFE:-10~80°C/ 14~176°F PI: -10~150°C/ 14~302°F
Max. Pressure	300psi
Leakage Rate (Ammonia)	Internal: ≤1x10 <sup>-9</sup> atm.cc/Sec He External : ≤1x10 <sup>-9</sup> atm.cc/Sec He
Cleaning	Continuous monitoring with deionized water, using an ultrasonic cleaning system for ultra-high purity cleaning
Assembly Environment	In ISO Class 6 or 5 / GB1000 Class or 100 Class cleanroom
Packaging Material	Vacuum packaging in PE clean bags

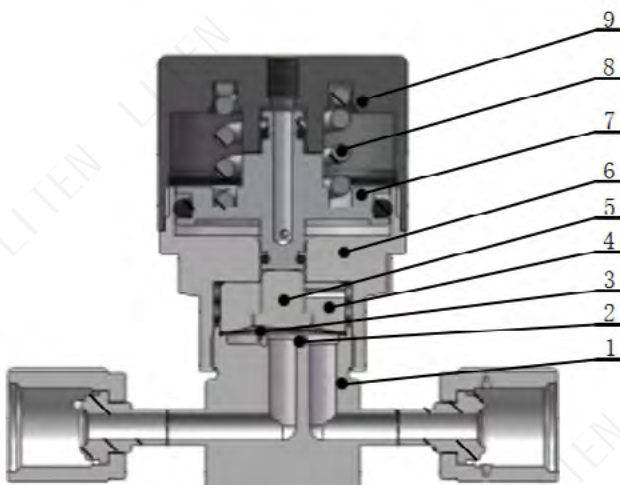


### MAX. WORKING PRESSURE

Size/ Pressure	145psi	300psi	3000psi
1/4" - N.O	●		
1/4" - N.C		●	
3/8" - N.O	●		
3/8" - N.C	●		
1/2" - N.O	●		
1/2" - N.C	●		

"N.C" : "Normally Closed"  
"N.O" : "Normally Open"

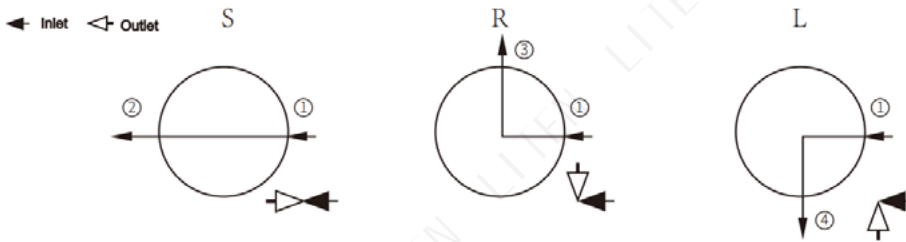
### PART MATERAIL



No.	NAME	MATERIAL
1	Main body	SS 316L/SS 316L VIM-VAR/SEMI F20 UHP
2	Limit block	PCTFE/PI
3	Diaphragm	Elgiloy
4	Slider base	SS 316L
5	Slider	SS 316L
6	Upper cover	ESS 304
7	Piston	Aluminum alloy
8	Sealing gasket	FKM Fluoroelastomer
9	Chamber cap	Aluminum alloy

## DV100 Low-pressure Pneumatic Diaphragm Valves

### FLOW PATH SCHEMATIC



### ORDERING INFORMATION

Series	Valve structure	Valve structure	Connection	Size	Valve seat	Body Material	Installation method
<b>DW100</b>	<b>C</b>	<b>S</b>	<b>TF</b>	<b>-00</b>	<b>N</b>	<b>6L</b>	<b>-C</b>
DW100	<b>C:</b> Pneumatic normally open <b>D:</b> Pneumatic normally closed	<b>S:</b> Union <b>R:</b> R type <b>L:</b> L type	<b>TF:</b> Tube OD <b>MCR:</b> Male VCR <b>FCR:</b> Female VCR <b>TW:</b> Welding <b>SW:</b> Butt & socket weld	<b>04:</b> 1/4" <b>06:</b> 3/8" <b>08:</b> 1/2" <b>12:</b> 3/4"	<b>N:</b> PCTFE <b>PI:</b> PI	<b>6L:</b> SS316L <b>SV:</b> 316 VIM-VAR or SEMI <b>F20 UPH</b>	<b>E:</b> EP grade <b>B:</b> BA grade

### PRODUCT DIMENSIONS

PICTURE	MODEL	CONNECTOR	SIZE (mm/inch)							
			A	B	C	D	E	M		
	DV100CS-JCR04	1/4" Male VCR	11	57	76	44	18			
	DV100OS-JCR04		0.43	2.24	2.99	1.73	0.70			
	DV100CS-JCR08	1/2" Male VCR	16	77	81	55.5	19.8			
	DV100OS-JCR08		0.63	3.03	3.19	2.18	0.78			
	DV100CS-FJCR04	1/4" Female VCR	11	70.6	76	44	18			
	DV100OS-FJCR04		0.43	2.78	2.99	1.73	0.70			
	DV100CS-FJCR08	1/2" Female VCR	16	83	81	55.5	19.8			
	DV100OS-FJCR08		0.63	3.27	3.19	2.18	0.78			
	DV100CS-TW04	1/4" Butt-weld	11	54	76	44	18			
	DV100OS-TW04		0.43	2.23	2.99	1.73	0.70			
	DV100CS-TW06	3/8" Butt-weld	16	69	77	40	19.8			
	DV100OS-TW06		0.63	2.71	3.19	1.57	0.78			
	DV100CS-TW08	1/2" Butt-weld	16	69	81	55.5	19.8			
	DV100OS-TW08		0.63	2.72	3.19	2.18	0.78			
		DV100CS-TF04	1/4" Tube OD	11	48	76	44		18	2*M5 (depth 5/0.19")
		DV100OS-TF04		0.43	1.89	2.99	1.73		0.70	
DV100CS-TF06		3/8" Tube OD	16	64	81	55.5	19.8			
DV100OS-TF06			0.63	2.52	3.19	2.18	0.78			
	DV100CS-TF08	1/2" Tube OD	16	64	81	55.5	19.8			
	DV100OS-TF08		0.63	2.52	3.19	2.18	0.78			
		DV100CR-TW04	1/4" Butt-weld	11	27	76	44		18	
		DV100OR-TW04		0.43	1.06	2.99	1.73		0.70	
DV100CR-TW06		3/8" Butt-weld	16	34.5	81	55.5	19.8			
DV100OR-TW06			0.63	1.36	3.19	2.18	0.78			
	DV100CR-TW08	1/2" Butt-weld	16	34.5	81	55.5	19.8			
	DV100OR-TW08		0.63	1.36	3.19	2.18	0.78			
		DV100CL-TW04	1/4" Butt-weld	11	27	76	44		18	
		DV100OL-TW04		0.43	1.06	2.99	1.73		0.70	
DV100CL-TW06		3/8" Butt-weld	16	34.5	81	55.5	19.8			
DV100OL-TW06			0.63	1.36	3.19	2.18	0.78			
	DV100CL-TW08	1/2" Butt-weld	16	34.5	81	55.5	19.8			
	DV100OL-TW08		0.63	1.36	3.19	2.18	0.78			
		DV100CS-SW04	1/4" socket welding and 3/8" butt-weld	11	44.5	76	44		18	
		DV100OS-SW04		0.43	1.75	2.99	1.73		0.70	
	DV100OS-SW04	1/4" socket welding and 3/8" butt-weld	16	44.5	76	44	18			
	DV100OS-SW04		0.63	1.75	2.99	1.73	0.70			