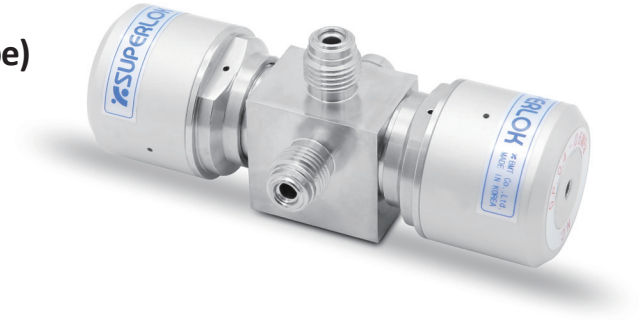


## MNPDV1 Diaphragm Valves

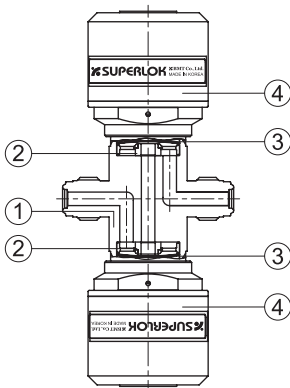
### Low Pressure Pneumatic Diaphragm Valves (Mono Type)



#### Specifications

Size	1/4"
Cv Value	0.3
Orifice Size	4.5 mm
Max. Working Pressure	10 bar (145 psig)
Operating Pressure	0.4 ~ 0.6 MPa (58 ~ 87 psig)
Working Temperature	PCTFE: -10 ~ 80°C (14 ~ 176°F) / PFA, PI: -10 ~ 150°C (14 ~ 302°F)
Internal Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 <sup>-9</sup> atm.cc/s
Inboard Leakage Allowance (He) (Holding Time ≥ 15 sec.)	≤1x10 <sup>-9</sup> atm.cc/s
Particle Inspection (EP Only) (0.1µm and Larger)	No Count
Inner Surface Roughness	MP: Ra ≤ 20 µin, Ry ≤ 6 µm BA: Ra ≤ 10 µin, Ry ≤ 3 µm EP: Ra ≤ 5 µin, Ry ≤ 0.7 µm

#### Material

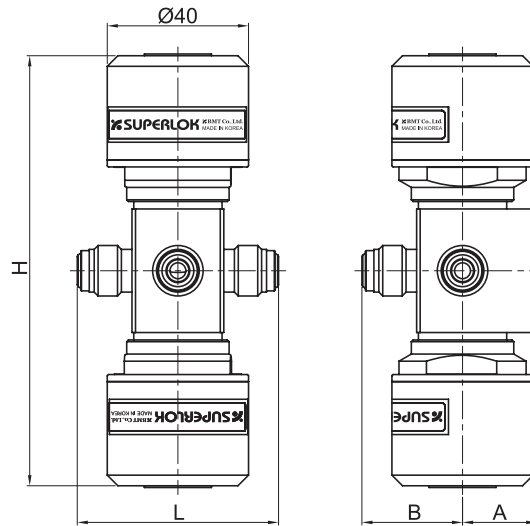


No.	Component	Material
1	Body	316L Stainless Steel 316L Stainless Steel VAR 304 Stainless Steel
2	Seat	PCTFE ( <i>standard</i> ) / PFA / PI
3	Diaphragm	Ni-Co Alloy
4	Actuator	Aluminium

#### NOTE:

·Dimensions and Drawings are for reference only and are subject to change without prior notice.  
·Unless otherwise specified, all dimensions are in millimeters.

Dimensions



Male BVC

End Connection	Part No.	Dimensions (mm)						
		L	H	A	B	E (φ)	F	G
Male BVC	SMMNPDV1C-4-MMM-1F23-P	57	125	21	28.5	25.4	35	26

NOTE:  
 ·Dimensions and Drawings are for reference only and are subject to change without prior notice.  
 ·Unless otherwise specified, all dimensions are in millimeters.

## Ordering Information

Low Pressure Pneumatic Diaphragm Valves (Standard Type)  
\*Additional configurations available upon request.

<b>A</b>	MNPDV1	<b>B</b>	-	<b>C</b>	-	<b>D</b>	-	<b>E</b>	-	<b>F</b>	-	<b>G</b>
SM	MNPDV1	C		4		MMM		1F23				P

  Standard feature  
  Optional

A	Materials	
SM	316L Stainless Steel	
DM	316L Stainless Steel VAR	
4SS	304 Stainless Steel	

B	Operation Method	
Add an operation method designator for <a href="#">Pneumatic Valves</a> .		
C	Normally Closed	
O	Normally Open	

C	Connection Size			
ASTM Tube				
Designator	Nominal Size	Outside Diameter	Wall Thickness	
4	1/4 in.	6.35 mm	1.00 mm	
8	1/2 in.	12.7 mm	1.24 mm	

D	Connection Type	
MMM	Male Only	

E	Flow Direction	
See Flow Path for the figures on Page 4.		
1F23	1 IN FLOW	2,3 OUT
2F13	2 IN FLOW	1.3 OUT
3F12	3 IN FLOW	1.2 OUT

F	Seat Material	
PCTFE is standard. No part designator needed.		
PA	PFA	
PI	PI	

G	Wetted Surface Grade	
BA is standard. No part designator needed.		
P	EP	
MP	MP	

### Part Number Examples

	MMNPDV1C-4-MMM-1F23		DMMNPDV1C-4-MMM-3F12-P	
Material	SM	316L Stainless Steel	DM	316L Stainless Steel VAR
Series	MNPDV1	MNPDV1 series	MNPDV1	MNPDV1 series
Operation Method	C	Normally Closed	C	Normally Closed
Connection Size	4	1/4"	4	1/4"
Connection Type	MMM	Male Only	MMM	Male Only
Flow Path	1F23	1 IN FLOW 2, 3 OUT	3F12	3 IN FLOW 1, 2 OUT
Seat Material		PCTFE (standard)		PCTFE (standard)
Grade		BA grade (standard)	P	EP grade

#### NOTE:

·Dimensions and Drawings are for reference only and are subject to change without prior notice.  
·Unless otherwise specified, all dimensions are in millimeters.

# Appendix

## Flow Paths

For Mono Type Valves

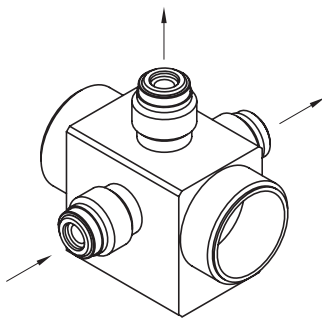
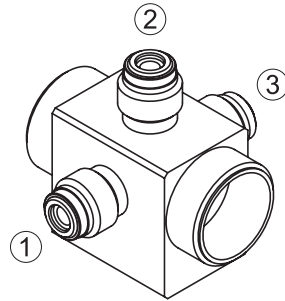


Figure A | **1F23**

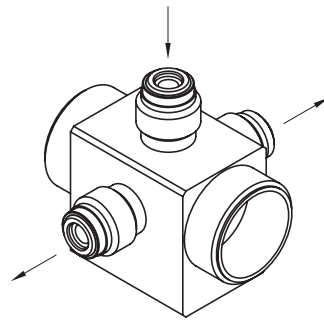


Figure B | **1F35**

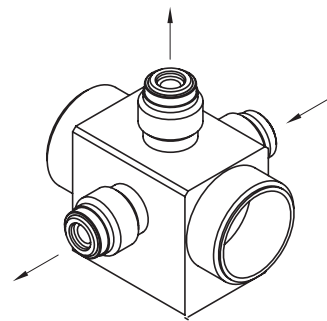


Figure C | **2F13**