

Diaphragm Valves



Features

- Seat design is PCTFE
- Low internal volume.
- Improved helium leak test performance
- Body is 316L(Single Melting) & Primet VIM/VAR(Double Melting)
- Diaphragm is Elgiloy material for corrosion resistance
- Size : 1/4" ~ 1/2"
- End Connection : Face Seal, Tube Butt Weld, Uni-Lok

Testing

- Every valve helium leak tested to a rate of 1×10^{-9} std cm^3/s at the all sealings.

Cleaning

- Ultrahigh-purity cleaning with state of arts DI water(18 M Ω) Automatic Cleaning Machines.

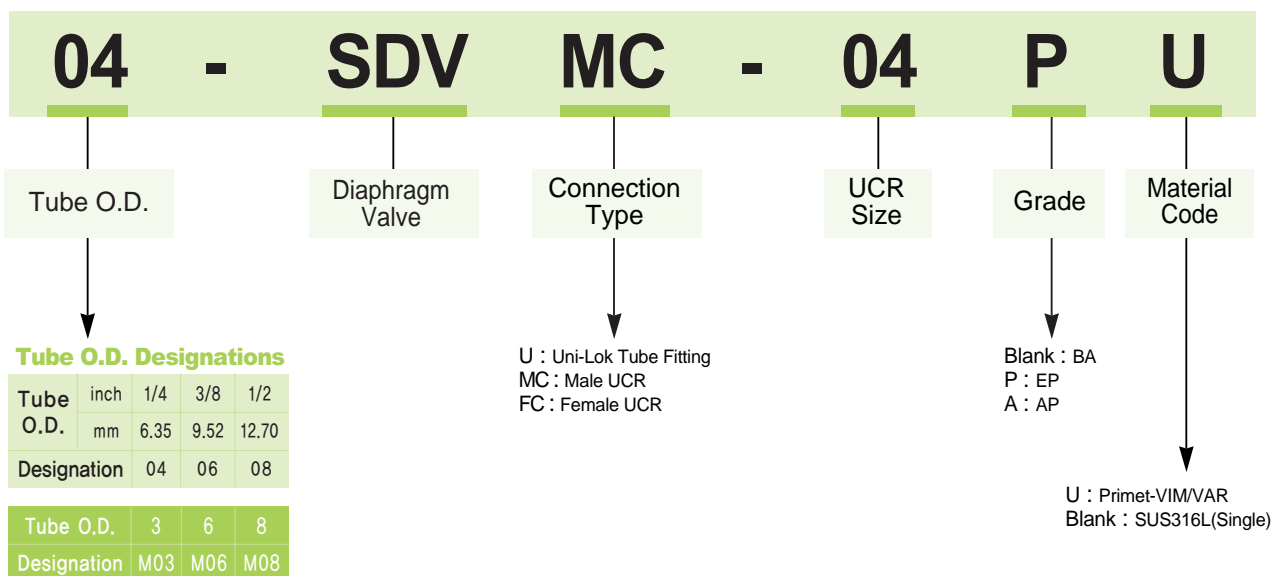
Packing

- All product are double bagged and vacuum sealed in clean room bags.

Safe Valve Selection

- When selecting a valve, the total system design must be considered to ensure safe, trouble-free performance.
- Vable function, materials compatibility adequate ratings, proper installation, and maintenance are the responsibility of the designer or user.

How to Order





Product Grade

Grade	AP	BA	EP
		Ry : Max.3.0 μ m	Ry : Max.0.7 μ m
Inner	Ry : Max.25 μ m	Avg. : 10 μ inch Ra	Avg. : 5 μ inch Ra
Surface	Cut Off Length : 2.5mm	Cut Off Length : 0.8mm	Cut Off Length : 0.25mm
Roughness	Measuring Length : 12.5mm	Measuring Length : 4mm	Measuring Length : 1.25mm
Polishing	Machining Fishing	Machining Fishing	Electro Polishing Fishing

Specifications

Size	1/4"	3/8", 1/2"	3/4"
Cv Value	0.3	0.7	0.7
Office Size	4.5mm	7.8mm	7.8mm
Max.Working Pressure (G.)	17kgf / cm ² (1.66MPa)		
Max.Working Temp	-10°C ~ 80°C		
Internal Leakage Allowance (He) Test Pressure : Max. 1*0.1 ² Torr Holding Time : Min 30sec.	Min. 1*10 ⁻⁹ atm.cc/sec (1*10 ⁻⁹ Pa. m ³ /s)		
External Leakage Allowance (He) Test Pressure : Max. 1*0.1 ² Torr Holding Time : Min 1min.	Min. 1*10 ⁻⁹ atm.cc/sec (1*10 ⁻⁹ Pa. m ³ /s)		

Material

No.	Description	Material
1	Body	SUS316L Single Melt SUS316L Double Melt(Primet)
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Handle	ALUMINUM

SDVU Series (Uni-Lok TUBE Fitting)



Specification

End Connection : Uni-Lok TUBE Fitting
 Max. Operating Temperature : -23°C(-10°F) ~ 65°C(151°F)
 Working Pressure : 250psi (18bar)

Materials of Construction

No.	Description	Material
1	Body	SUS316L Single Melt(VOD)
		SUS316L Double Melt(VIM-VAR)
		SUS304
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Handle	ALUMINUM

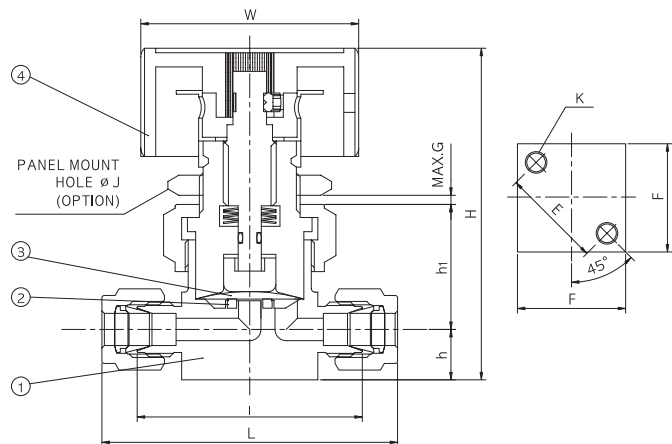


Table of Dimension

Unit : mm

Part No.	Applicable Tube		H	h1	h	L	I	W	F	K	MAX G	E
	Nom. Size	O. D.										
04-SDVU-P	1/4	6.35	67.0	25.0	11.0	66.7	52.0	44.0	28.0	M5	4.0	17.0
06-SDVU-P	3/8	9.53	81.0	31.0	16.0	75.7	61.0	44.0	37.0	M5	4.0	30.0
08-SDVU-P	1/2	12.70	81.0	31.0	16.0	87.3	67.0	44.0	37.0	M5	4.0	30.0

Note : Dimensions are reference only, subject to change without prior notice.

SDVMC Series (Male UCR Fitting)



Specification

End Connection : Male UCR Fitting
 Max. Operating Temperature : -23°C(-10°F) ~ 65°C(151°F)
 Working Pressure : 250psi (18bar)

Materials of Construction

No.	Description	Material
1	Body	SUS316L Single Melt(VOD)
		SUS316L Double Melt(VIM-VAR)
		SUS304
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Handle	ALUMINUM

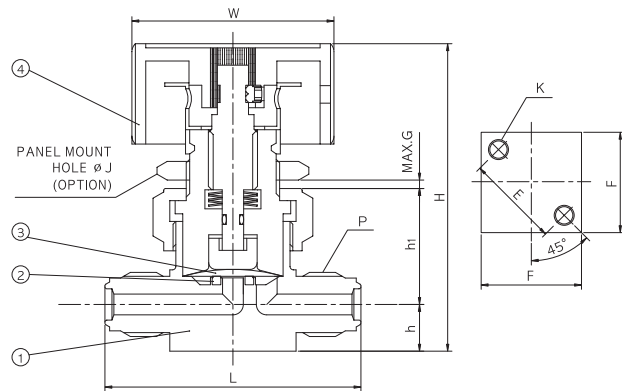


Table of Dimension

Unit : mm

Part No.	Applicable Tube		H	h1	h	L	W	F	K	MAX G	E	P
	Nom. Size	O.D.										
SDVMC-04P	1/4	6.35	67.0	25.0	11.0	58.0	44.0	28.0	M5	4.0	17.0	9/16-18UNF
SDVMC-06P	3/8	9.53	81.0	31.0	16.0	76.0	44.0	37.0	M5	4.0	30.0	7/8-14UNF
SDVMC-08P	1/2	12.70	81.0	31.0	16.0	76.0	44.0	37.0	M5	4.0	30.0	7/8-14UNF

Note : Dimensions are reference only, subject to change without prior notice.

SDVFC Series (Female UCR Fitting)



Specification

End Connection : Female UCR Fitting
 Max. Operating Temperature : -23°C(-10°F) ~ 65°C(151°F)
 Working Pressure : 250psi (18bar)

Materials of Construction

No.	Description	Material
1	Body	SUS316L Single Melt(VOD)
		SUS316L Double Melt(VIM-VAR)
		SUS304
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Handle	ALUMINUM

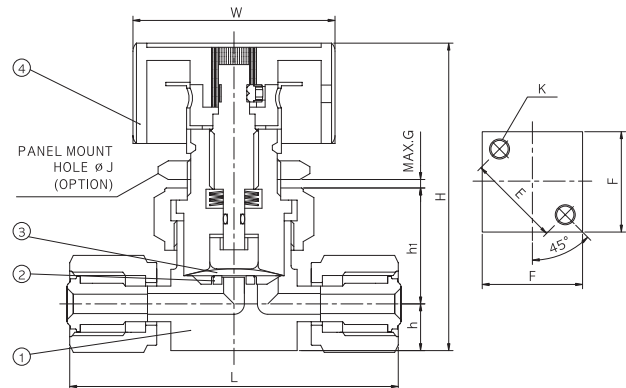


Table of Dimension

Unit : mm

Part No.	Applicable Tube		H	h1	h	L	W	F	K	MAX G	E
	Nom. Size	O.D.									
SDVFC-04P	1/4	6.35	67.0	25.0	11.0	78.0	44.0	28.0	M5	4.0	17.0
SDVFC-06P	3/8	9.53	81.0	31.0	16.0	104	44.0	37	M5	4.0	30.0
SDVFC-08P	1/2	12.70	81.0	31.0	16.0	104	44.0	37	M5	4.0	30.0

Note : Dimensions are reference only, subject to change without prior notice.

LINE UP

Tube Fittings



Uni-primet Weld & Face Seal Fittings



PTFE Fittings



Diaphragm / Bellows Valve



Needle Valves



Ball Valves



Hex Ball Valves



Check Valves



Manifold Valves



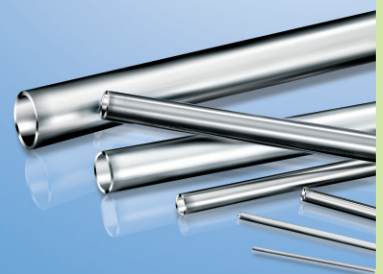
Filters



TUBE/PIPE Clean BEND Fittings



Tubes AP/BA/EP





유니온금속공업(주)
UNION METAL INDUSTRIAL CO.,LTD.

본사 및 공장

인천광역시 남동구 고잔동 725-13번지
남동공단 152블럭 12롯트
TEL:(032)822-6600(대) FAX:(032)821-6604
<http://www.unilok.com>
E-mail : unilok@unilok.com

서울직매장

서울특별시 구로구 구로동 604-1
구로기계공구상가 D-31-110호
TEL:(02)2676-6673(대) FAX:(02)2679-6673

Head Office and Factory

152 Block-12Lot, Namdong Industrial Complex,
725-13, Gojan-Dong, Namdong-Gu, Incheon,
KOREA,
TEL:+82-32-822-6600 FAX:+82-32-821-6604
<http://www.unilok.com>
E-mail:unilok@unilok.com

Seoul Office

D-31-110, Guro Tools Center,
604-1, Guro-Dong, Guro-Gu, Seoul, KOREA,
TEL:+82-2-2676-6673 FAX:+82-2-2679-6673