

# **Low Pressure Pneumatic Block Diaphragm Valves**

**Standard Type** 



#### **Features**

- Maximum flow & Compact designed inner capacity.
- Minimal contributions of moisture, Oxygen and Hydrocarbon, Minimal particle generation.
- DK-Lok's own electropolished.
- D.I water cleaned, assembled, tested & packaged in a certified clean room.
- Elgiloy diaphragm material with strong durability as well as corrosion resistance for long cycle life.
- PCTFE seat material with remarkable chemical & thermal resistance.

## **Specification**

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Size	1/4"	3/8" , 1/2"			
Cv Value	0.3	0.7			
Orifice Size	4.5	7.0			
Max. Working Pressure	10 bar (145 psig)				
Max. Working Temperature	-10 ~ 80°C (-23~176°F)				
Actuator Pressure Rating	4~7 bar (58~101 psig)				
Internal Leakage Allowance - He Holding Time ≥ 30 sec	≤ 1x10 <sup>-9</sup> atm.cc/s				
External Leakage Allowance - He Holding Time ≥ 1 min	≤ 1x10 <sup>-9</sup> atm.cc/s				
Particle Inspection (EP Only) Pressure: 60~80 psi N2 Gas Sample Volume: 1CFM 0.1   and Larger	No c	ount			

#### **Product Grade**

Level	AP	ВА	EP				
Inner Surface Roughness	Ry ≤ 25 µm	Ry ≤ 3.0 μm / Ra 10 μin	Ry ≤ 0.7 μm / Ra 5μin				
	Cut off Length : 2.5mm	Cut off Length : 0.8mm	Cut off Length: 0.25mm				
	Measuring Length: 12.5mm	Measuring Length : 4mm	Measuring Length : 1.25mm				
Polishing	Machining Finish	Machining Finish	Electro Polishing Finish				

## **Material of Construction**

No.	Component	Materials
1	Dodu	316L Stainless Steel
I	Body	316L Stainless Steel VAR
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Actuator	Aluminum

<sup>\*</sup> Wetted Components are listed in blue.

















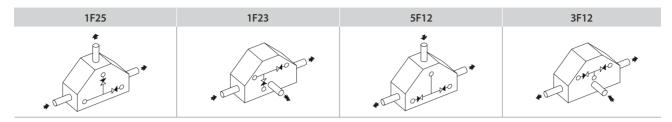








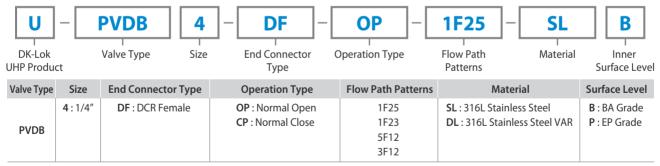
## **Flow Path Patterns**



### **Ordering Information and Dimensions**

Model	Basic Ordering Number	End Connections	Flow	Dimensions (mm)								
Model				Ł	h	Н	Α	В	L	D	C	
B M5x0.8	U-PVDB4-DF-	1/4" DCR Female	1F25	21.8	11.0	73.1	53.8	123.4	64.0	15.0	40.0	
M5x0.8	U-PVDB4-DF-	1/4" DCR Female	1F23	21.8	11.0	73.1	34.8	123.4	64.0	15.0	40.0	

## **How to Order**



Note) DCR: DK-Metal Face Seal

#### **Safe Valve Selection**

The selection of a valve for any application or system design must be considered to ensure safe performance. Valve function, valve rating, material compatibility, proper installation, operation and maintenance remain the sole responsibility of the system designer and the user. DK-Lok accepts no liability for any improper selection, installation, operation or maintenance.

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#### **IDK-LOK**° USA