**IDK-LOK**<sup>®</sup> UHP Fittings & Valves

# Low Pressure Manual 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

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)				
Internal Leakage Allowance - He Holding Time ≥ 30 sec	$\leq 1 \times 10^{-9} $ atm.cc/s				
External Leakage Allowance - He Holding Time ≥ 1 min	$\leq 1 \times 10^{-9}$ atm.cc/s				
Particle Inspection (EP Only) Pressure : 60~80 psi N2 Gas Sample Volume : 1CFM 0.1µm and Larger	No c	ount			

#### **Product Grade**

Level	AP	ВА	EP				
Inner Surface Roughness	$Ry \le 25  \mu m$	$Ry \le 3.0  \mu m$ / Ra 10 $\mu in$	$Ry \le 0.7 \mu m$ / 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
-		316L Stainless Steel
I	Body	316L Stainless Steel VAR
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Handle	Aluminum

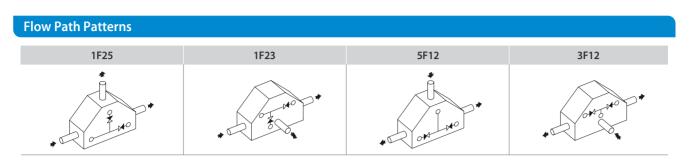
\* Wetted Components are listed in blue.



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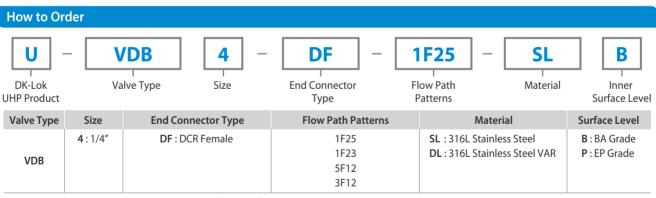
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### **Ordering Information and Dimensions**

Model	Basic Ordering Number	End Connections	Flow	Dimensions (mm)							
Model				ł	h	Н	А	В	L	D	С
	U-VDB4-DF-	1/4″ DCR Female	1F25	21.8	11.0	70.0	53.8	117.6	64.0	15.0	40.0
	U-VDB4-DF-	1/4″ DCR Female	1F23	21.8	11.0	70.0	34.8	117.6	64.0	15.0	40.0



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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VDK-LOK Corporation Mailing Address 7, Golden root-ro 129beon-gil, Juchon-myeon, Gimhae-si, Gyeongsangnam-do, South Korea 621-842

DK-Lok contact information Tel. (82) 55-338-0114 Fax. (82) 55-901-0143 E-mail : sales@dklok.com

For International customers Tel. (82) 55-338-0031/2 Fax. (82) 55-901-0142 E-mail : dklok@dklok.com