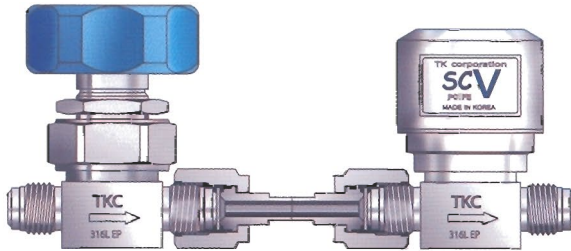


FPDV SERIES

ULTRA - HIGH PURITY HYBRID DIAPHRAGM VALVE



Hybrid Valve Truth Table		
Manual State	Auto State	
	Energized	De-energized
Enabled	○	×
Disabled(Lockout-able)	×	×

Patent Number :

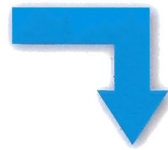
10-2004-0074464
20-2004-0026738

■ Features

- Low internal volume
- Minimal particle generation
- Minimal contributions of moisture, Oxygen and Hydrocarbon
- Permanently heat code laser marked ; material traceable to original mill certificate of test
- Ni-Co Alloy and custom configurations available upon request.

■ Major Specifications

Size	1/4"
Cv Value	0.3
Orifice Size	4.5mm
Max. Working Pressure (G.)	10kgf/cm ² (0.98MPa)
Operating Pressure (G.)	4~7kgf/cm ² (0.4~0.7MPa)
Max. Working Temp.	-10°C ~ 65°C
Internal Leakage Allowance (He)	
Test Pressure ≤ 1 × 10 ⁴ Torr	≤ 1 × 10 ⁻⁹ atm · cc/sec
Holding Time ≥ 30 sec.	
External Leakage Allowance (He)	
Test Pressure ≤ 1 × 10 ⁴ Torr	≤ 1 × 10 ⁻⁹ atm · cc/sec
Holding Time ≥ 1 min.	
Life Cycle (N ₂ charged)	1,000,000 repeats
Particle Inspection (EP only)	
Pressure : 3kgf/cm ² N ₂ Gas	No count
Sample Volume : 1CFM	
0.1μm and Larger	



-57%

Measurement

-56%

Internal Volume

-55%

Area in Contact With The Gas

-24%

Cost Reduction

■ Material

NO.	NAME	MATERIAL
1	Body	SUS316L Single Melt(VOD) SUS316L Double Melt(VIM-VAR)
2	Seat	PCTFE
3	Diaphragm	Ni-Co Alloy
4	Actuator	ALUMINIUM