

ULTRA-MINIATURE DIAPHRAGM ISOLATION SOLENOID VALVES

2/2-way NC, 2/2-way latching
Orifice diameter 0.4 mm (DN)

FV / FLV Series



2/2-way diaphragm isolation solenoid valve
- Available in a latching version too.

NV / NLV Series



2/2-way diaphragm isolation solenoid valve
- Available in a latching version too.

With an orifice diameter of 0.4 mm and exterior dimensions of only 4.2 x 4.2 x 23.1 mm (FV / FLV series) or Ø5.7 x 32.5 mm (NL / NLV series) these valves are ideally suited for microfluidic applications with the highest demands. The latching design results in low power consumption and low heat generation.

Internal volume: 1.1 µl | 1.5 µl | 4.3 µl (depending on the valve body type).

SPECIFICATIONS

	FV Series	FLV Series	NV Series	NLV Series
Type	2/2-way NC	2/2-way latching	2/2-way NC	2/2-way latching
Orifice diameter	0.4 mm (DN)			
Port connection	Hose Barbs Flange			
Rated voltage	5 VDC 12 VDC	5 VDC 12 VDC 24 VDC		
Operating pressure range	Inlet: 0 - 1000 mbar Outlet: 0 - 500 mbar		Inlet: 0 - 1000 mbar Outlet: 0 - 500 mbar (higher operating pressure on request)	
Diaphragm material	Perfluoroelastomer (FFKM) FPM			
Body material	PEEK PPS			
Seal material	Perfluoroelastomer (FFKM) FPM			
Fluid temperature range	10 - 50°C			
Ambient temperature range	10 - 50°C			
Power consumption	1 W (5 VDC) 1.2 W (12 VDC)	2.4 W - 3 W (when switching)	1 W	1.5 W (when switching)
Operating duration	40% ED	20% ED	40% ED	20% ED
Outer dimensions (depending on the model)	4.2 x 4.2 x 23.1 mm Height depends on fluidic port connection		Ø5.7 x 32.5 mm Height depends on fluidic port connection	

Customisable to specific requirements (e.g. higher pressure range, different operating mode, higher temperature range, different operating voltage, different port connections,...)