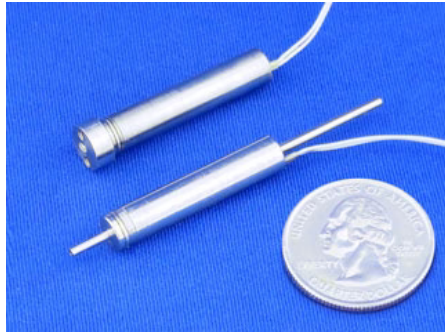


High Pressure Ultra-Small Solenoid Valve - HVA/HVAL Series

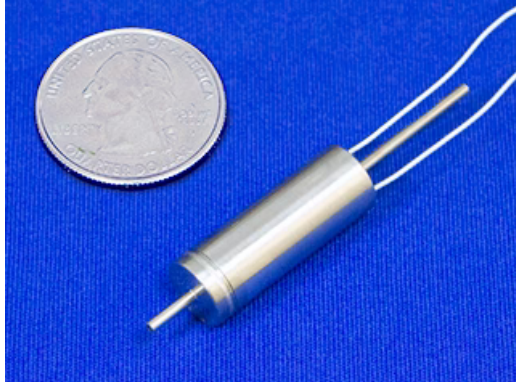


FEATURES / CHARACTERISTICS

- Ideal for Satellite Propulsion Systems/Thrusters
- 2 MPa pressure rating. (20 bar)
- Compact and lightweight.
- ISO19683 vibration and shock requirements met (HVA-2-MFF).
- Latching type (HVAL series) provides an option with low power consumption for a longer open state.

Model Number	HVA-2-MFF / HVA-2-N1F / HVAL-2-N1F			
Outer Dimensions	Diameter 6.2-8 x L34-58 mm			
Type	2-way (NC) or Latching			
Port Connection	Gasket (Manifold Mount) or Pipe			
Orifice (mm)	0.4 mm			
Fluid Temperature Range	0~70°C*			
Rated Voltage	12 VDC			
Operating Pressure	0~2 MPa (Inlet Port)			
Seal Material	FKM (Optionally FFKM, PTFE)			
Weight	8 g			
Notes	Model Number	HVA-2-MFF	HVA-2-N1F / HVAL-2-N1F	
	Solenoid Type	2-way (Normally Closed) / Latching		
	CV Value	0.0035	0.0040	
	Port Connection	Gasket (Manifold Mount)	Pipe	
	Holding Voltage	3 VDC	N/A	
	Power Consumption	Rated Voltage	6.5 W	7 W
		Holding Voltage	0.4 W	N/A
	Duty Cycle	Rated Voltage	Intermittent ED: 30% Maximum On Time: 1.0 s	Intermittent ED: 20% On Time: 0.05 ~ 0.1 s
		Holding Voltage	Continuous	N/A
	Outer Dimensions	Diameter 8 x L34 mm	Diameter 6.2 x L58 mm	
Note: Details such as specifications, etc., may be changed without notice.				
*: The temperature range may change depending on the sealing material.				

High Pressure Ultra-Small Solenoid Valve - HVD/HVDL Series



Max 10MPa (100 bar)

Model Number	HVD-2-N1F / HVDL-2-N1F			
Outer Dimensions	10 (Diameter) x 55 (Length) mm			
Type	Normally Closed / Latching			
Port Connection	Pipe			
Orifice (mm)	0.4 mm (Diameter)			
Ambient Temperature Range	0 ~ 70°C*			
Rated Voltage	12 VDC			
Operating Pressure	0 ~ 10 MPa (Inlet Port)			
Seal Material	FKM (Optionally FFKM)			
Weight	14 g			
Notes	Model Number	HVD-2-N1F	HVDL-2-N1F	
	Solenoid Type	Normally Closed	Latching	
	CV Value	0.0045		
	Holding Voltage	3 VDC	N/A	
	Power Consumption	Rated Voltage	11 W	10 W
		Holding Voltage	0.7 W	N/A
	Duty Cycle	Rated Voltage	Intermittent ED: 15% Maximum On Time: 1.0 s	Intermittent ED: 20% On Time: 0.05 ~ 0.1 s
		Holding Voltage	Continuous	N/A
	Note: Details such as specifications, etc., may be changed without notice.			
	*: The temperature range may change depending on the sealing material.			