



Proportional solenoid valve

A2-6500 Series

- NC
- Working fluid: Compressed air
- Port size: Rc1/8

Custom order product

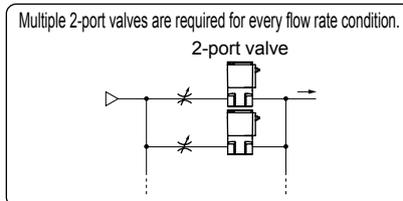


Step-less control of the flow rate in proportion to the current.

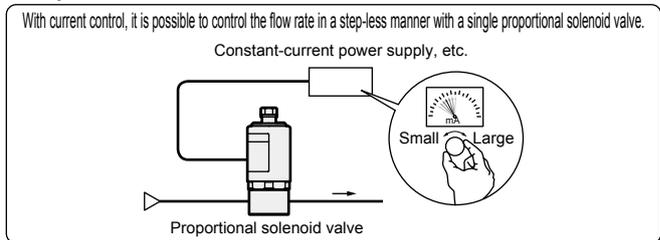
Thanks to step-less control of the flow rate with current control, fine flow rate control, such as “multiple-step flow rate control” and “optimal flow rate control”, which was difficult with conventional solenoid valves has been made possible. Proportional control contributes to “energy conservation of devices” and “elimination of waste”.

Applications

Conventional (2-port valve)



Proportional solenoid valve



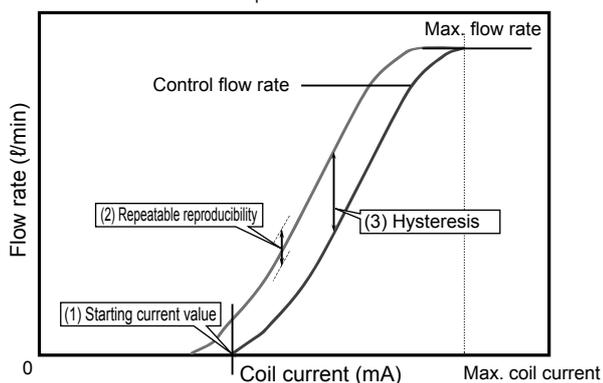
Specifications

Standard specifications		Compressed air		
Working fluid		Compressed air		
Fluid temperature	°C	0 (32°F) to 50 (122°F)		
Ambient temperature	°C	0 (32°F) to 50 (122°F)		
Actuation		NC		
Mounting orientation		Limited to vertical mounting with the coil on top.		
When valve is closed (current value: 0)		1 or less		
Valve seat leakage	cm ³ /min	1 or less		
Port size		Rc1/8		
1 MPa = 10 bar				
Characteristic specifications		A2-6501	A2-6502	A2-6503
Model No.		A2-6501	A2-6502	A2-6503
Orifice size	mm	1.6	2.3	3.2
Max. working pressure differential	MPa	0.7 (≈100 psi)	0.35 (≈51 psi)	0.15 (≈22 psi, 1.5 bar)
Min. working pressure differential	MPa	0.2 (≈29 psi)	0.1 (≈15 psi)	0.05 (≈7.3 psi, 0.5 bar)
Max. working pressure	MPa	0.7 (≈100 psi)	0.35 (≈51 psi)	0.15 (≈22 psi, 1.5 bar)
Control flow rate	ℓ/min (under max. working pressure differential)	0 to 100		0 to 80
Hysteresis	(under max. working pressure differential)	10% F.S. or less		13% F.S. or less
Starting current value	(under max. working pressure differential)	50% or less		65% or less
Repeatability		12 VDC: 165 mA or less, 24 VDC: 82.5 mA or less		12 VDC: 214 mA or less, 24 VDC: 107 mA or less
Used power supply voltage		3% F.S. or less		
Coil current	mA	12 VDC, 24 VDC		
Power consumption	W	0 to 330(12 VDC), 0 to 165(24 VDC)		
		0 to 4		

- Body material: Copper alloy
- Sealant material: FKM
- Valve closed with power supply OFF (current value: 0)
- Valve seat leakage when valve is closed: 1 cm³/min or less

Details of the various values of the specifications

Flow characteristics



- (1) Starting current value
Upon increasing the coil current from a state where the flow rate is 0, the current value of when the fluid starts to flow. (Indicated as a percentage of the max. coil current.)
- (2) Repeatability
The variance of flow rates which are output when applying identical currents. (Indicated as a percentage of the max. flow rate.)
- (3) Hysteresis
The max. flow rate difference with an identical current value when increasing and decreasing the current. (Indicated as a percentage of the max. flow rate.)