

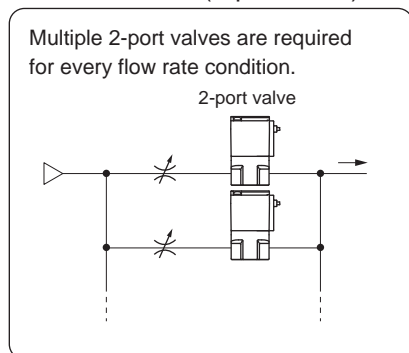
Step-less Control of Flow Rate in Proportion to Current

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".

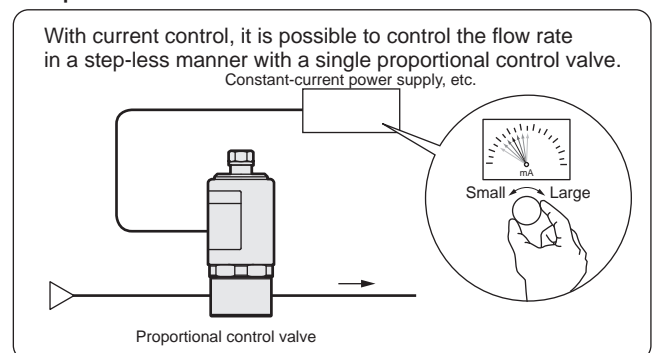


Applications

Conventional (2-port valve)



Proportional control valve



Proportional control valve [A2-6500 Series]

Proportional control valve

Main specifications

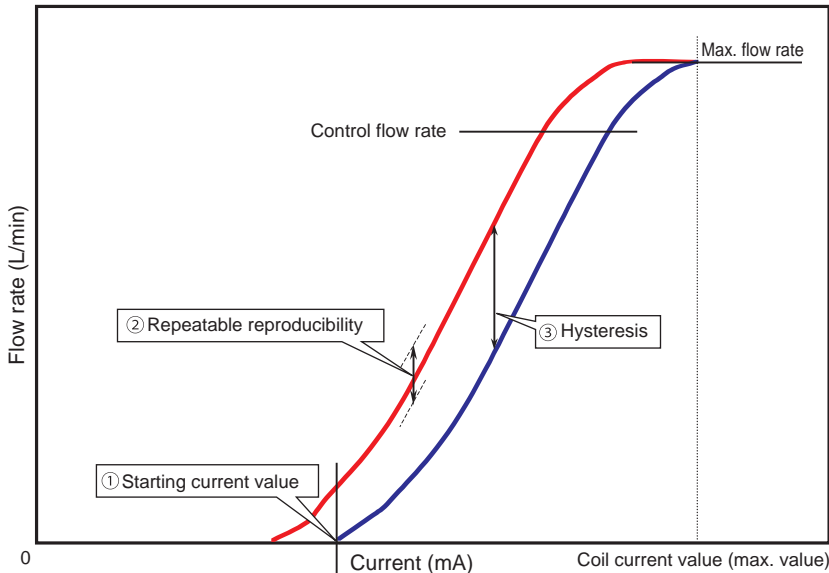
Standard specifications	Working fluid	Compressed air/inert gas		
	Fluid temperature	0 to 50°C		
	Ambient temperature	0 to 50°C		
	Actuation	NC (normally closed)		
	Mounting orientation	Limited to vertical mounting with the coil on top.		
	Internal leakage when valve is closed (current value: 0)	1 cm ³ /min or less		
	Port size	Rc1/8		
Property specifications	Model No.	A2-6501	A2-6502	A2-6503
	Orifice size (mm)	1.6	2.3	3.2
	Max. working pressure differential (MPa)	0.7	0.35	0.15
	Min. working pressure differential (MPa)	0.2	0.1	0.05
	Control flow rate (L/min, with air under max. working pressure differential)	0 to 100		0 to 80
	Hysteresis (under max. working pressure differential)	10% or less (*1)		13% or less (*1)
	Start current value (under max. working pressure differential)	50% or less (12 VDC:165mA or less, 24 VDC:82.5mA or less)		65% or less (12 VDC:214mA or less, 24 VDC:107mA or less)
	Repeatable reproducibility	3% or less (*1)		
Coil specifications	Used power supply voltage	12 VDC/24 VDC		
	Control current	0 to 330mA (12 VDC) / 0 to 165mA (24 VDC)		
	Power consumption	0 to 4W		

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

*1: Indicated as a percentage of the max. flow rate.

Details of the various values of the specifications

Flow characteristics



① Starting current value

Upon increasing the 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 coil current value of the max. value.)

② Repeatable reproducibility

The variance of flow rates which are output when applying identical currents. (Indicated as a percentage of the max. flow rate.)

③ Hysteresis

Indicates 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.)

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