

2-WAY FLOW CONTROL VALVE

motor-controlled with DC motor for remote control Subplate mounting NG 15 - 210 bar up to 63 l/min



2-way flow control valves are flow valves (throttle valves) with integrated pressure regulator. The valves automatically control an adjustable volume flow independently of pressure variations in the supply or discharge line to make it constant. They may be mounted on the supply or discharge side of the consumer. Due to the orifice-type design of the adjustment restrictor; the valve operation is largely independent of the viscosity.

FEATURES

- Remote-controllable
- Connecting voltage 12V / 24 V -
- Stroke limits by means of limit switches
- Adjustable control cams
- Optional potentiometer of electrical position display
- Failsafe behaviour: valve keeps the last position in case of a power failure
- No electrical temperature drift
- Floating time approx. 16 sec at 12 V; approx. 8 sec. at 24 V
- Volume flow signal function: linear
- 3 setting volume flow ranges
- Mounting surface according to Schiedrum internal standard
- Assembly on subplates with pipe connections or control block
- With by-pass check valve
- Standard sealing material Buna N / NBR

• For volume flow control in both flow directions, volume flow rectifier plates typ 71 are available



ORDER INFORMATION

The scope of delivery of the flow control valve includes the O-rings for sealing the connecting holes and connecting plugs plus two fixing screws M 8 x 45 DIN 912 - 10.9. Tightening torque 30 Nm.

Name ———	2-way- flow control	valve 266 C	DC	25	1	M15
Туре						
Series (ID)						
Valve activation wit	h DC					
Rated adjustment v	olume flow: 25; 40; 63	l/min				
Actuator variant: wi	th potentiometer	= 1				
w	vithout potentiometer	= 2				
Supplementary data e. g. special sealing	a for special models gs from Viton (FKM) = I	M 15				
Subplates		Order no.:	44-	200-00	114 for (G 1/2

ACCESSORY

		44-200-00115 for G 3/4
Flow rectifier plates	see dimensior	n sheet 71 - 5 (9-74-071-1005)
Control device		
(with or without position indicator)	see dimensior (9-74-002-000	ns sheet StS - 02 03 and 9-74-002-0004)



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OPERATING DATA	
1.General	
Symbol	
Construction	Adjustment restrictor: rotary valve with radial slit, orifice-type Differential pressure valve: switched in series with the adjustment restrictor Check valve: spring loaded ball valves
Weight	Valve: 5 kg: Subplate: 1.9 kg
Mounting position	Any, preferably vertical
Volume flow direction	A to B controlled: B to A unrestricted return flow
Environmental temperature	-25℃ to +50℃
Floating time	Qmin to Qmax approx. 8 sec at 24 V
2. Hydraulic operating data	
Nominal pressure / max. pressure	210 bar for all ports
Pressure medium	Hydraulic oil according to DIN 51 524 (1,2)
Pressure fluid temperature range	-20℃ bis +60℃
Viscosity range	5 - 350 mm²/s
Rated variable volume flow	25; 40; 63 L/min
Min. variable and controllable volume flow	approx. 200 cm³/min
Contamination degree / filtering	Class 18/15 according to ISO 4406 or 9 according to NAS 1638 (recommended filter: minimum retention rate $\beta_{10-15} \ge 75$)
Max. permissible volume flow via the check valve	100 L/min
3. Operating principle	Electric-motor controllable
3.1 Motor	
Type	DC motor
Rated voltage	24 V - / operating voltage range approx. 6 - 24 V
Current consumption	approx. 0, 1 A / starting current 0,25 A
Power consumption	appiox. 2 W
	100%
3.2 Potentiometer for position indication	
Туре	Rotation potentiometer with wire-wrapped resistance element
Permissible load	2 W at 40℃; 0 W at 105℃
Independent linearity	+/- 1,0 %
Resistance value	1 K Ohm +/- 10%
Max. operating voltage	44 V at 40℃

Circuit diagrams



Contact system	single-pole change-over switch
Switching system	Surge circuit
Switching capacity	4 A; 250 V
3.4 Protective system (according to DIN EN 60 529)	IP 54
3.5 Connection type	Plug connection according to DIN 43 651
3.5 Connection type Cable diameter	Plug connection according to DIN 43 651 79 mm
3.5 Connection type Cable diameter Wire gauge	Plug connection according to DIN 43 651 79 mm 0,5 mm ²



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CHARACTERISTICS

Q-s-characteristic; Q = f (setting part s; %) The dependency of the three rated volume flows as a function of the regulation distance.



 Δ p-Q Characteristic; Δ p=f (Q)

with the orifice closed.

the pressure loss the valve for the volume flow direction B to A through the by-pass check valve

Q- Δp Characteristic; Q = f (Δp)

difference required for the function.

the control behaviour of the valve for the volume flow direction A to B for the various rated variable

volume flows, as well as the minimum pressure

For applications in excess of the given specifications, please contact Schiedrum.

All other parameters specified are based on long years of experience and laboratory-type measurements. The data are typical and may slightly deviate depending on the valve series. All measurements were carried out on a test stand with an oil viscosity of 36 mm²/s and with a filter mesh of < 25 μ m.All data given should be used as description for the product only and they are not to understand as warranty (zugesicherte Eigenschaften) in the sense of law.



Subject to changes for further

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