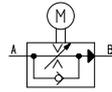


OPERATING DATA

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

Valve: 5 kg; Subplate: 1,9 kg

Any, preferably vertical

A to B controlled; B to A unrestricted return flow

-25°C to +50°C

Qmin to Qmax approx. 8 sec at 24 V

Weight

Mounting position

Volume flow direction

Environmental temperature

Floating time

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°C bis +60°C

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 $\beta_{10-15} \geq 75$)

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

approx. 2 W

Duty cycle

100%

3.2 Potentiometer for position indication

Type

Rotation potentiometer with wire-wrapped resistance element

Permissible load

2 W at 40°C; 0 W at 105°C

Independent linearity

+/- 1,0 %

Resistance value

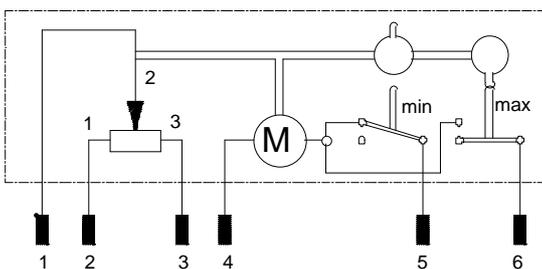
1 K Ohm +/- 10%

Max. operating voltage

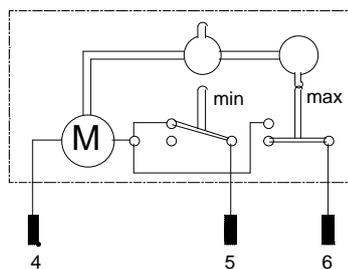
44 V at 40°C

Circuit diagrams

with actual value potentiometer



without actual value potentiometer



Pin	Potentiometer	
1	U outlet	
2	0 V	
3	U supply +	
	valve adjustable	
	Q min	Q max
4	6...24 V DC	0 V
5	0 V	without circuit
6	without circuit	6...24 V DC

3.3 Limit switches

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

Cable diameter

7...9 mm

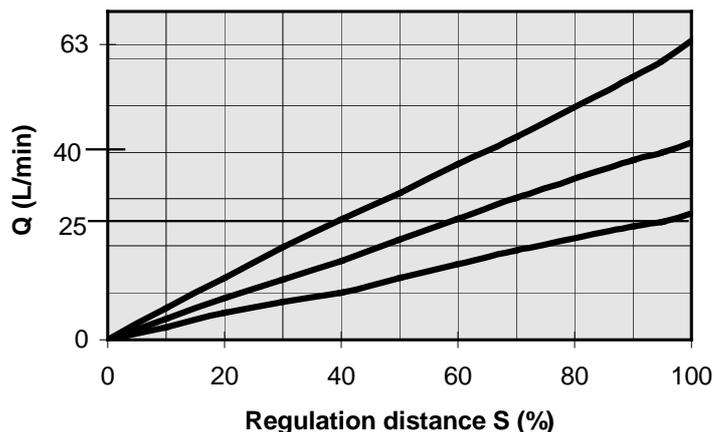
Wire gauge

0,5 mm²

CHARACTERISTICS

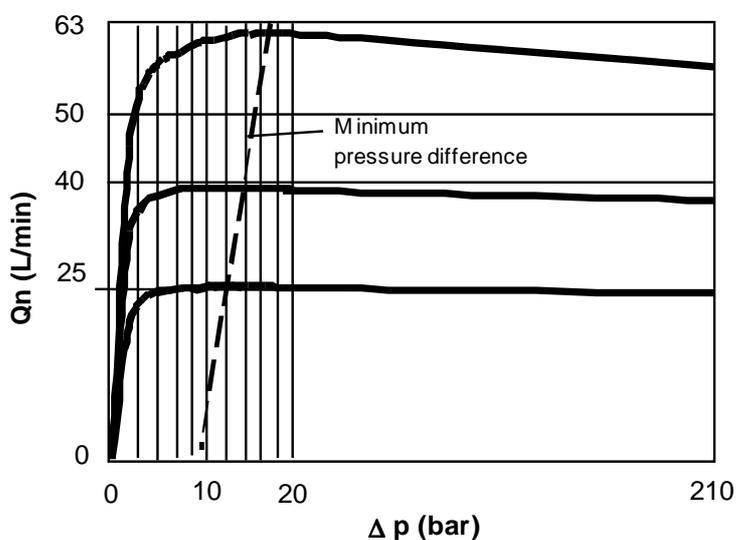
Q-s-characteristic; $Q = f(\text{setting part } s; \%)$

The dependency of the three rated volume flows as a function of the regulation distance.



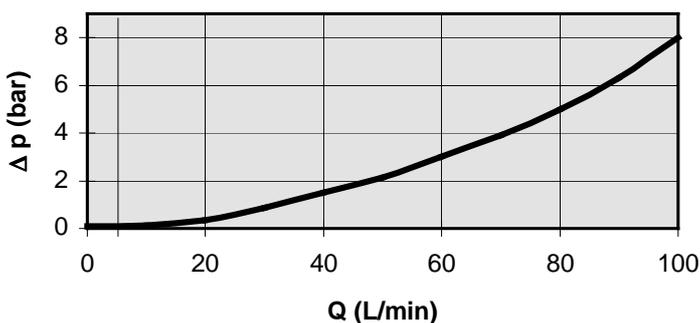
Q- Δp Characteristic; $Q = f(\Delta p)$

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 difference required for the function.



Δp -Q Characteristic; $\Delta p = f(Q)$

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



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 μm . 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.