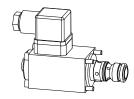


Solenoid poppet valve cartridge

- normally open
- Q_{max} = 15 l/min
- p_{max} = 250 bar

NG4



DESCRIPTION

This 2/2-way poppet valve in slip-in cartridge design is mainly used in blocs for hydraulic integrated circuits. Poppet cartridge and spring will be supplied as separate items, if ordered, together with solenoid (VDE standard 0580) and fastening screws.

Important: at the time the valve is taken into service, the valve must be vented under pressure (max. 2 revolutions of screw E).

FUNCTION

If energised, the pressure proof solenoid presses the poppet auto the seat, acting against a spring. In deenergised state the poppet is lifted off its seat by the spring. One to the pressure balanced design of the poppet-spool no undesired opening as closing forces arise. As a result, oil can flow in both directions through the seating valve. The seat/piston guide is sealed with an O-ring. The seat with a metallic seal closes off the valve so that there is no leakage oil.

APPLICATION

Wandfluh poppet valves can be used anywhere absolutely leak tight closing functions are important. Completely sealed loading, gripping and clamping operations are all important functions which Wandfluh poppet valves can perform. Cartridge typ poppet valves can be neatly accommodated in valve blocks. Cavity tools are available for hire or sale for machining aluminium or steel. See data sheet register no. 2.13.

TYPE CODE

Poppet valve cartridge Poppet valve cartridge with solenoid					2 2 0		1265 1265 - [# [
Medium-solenoid Super-solenoid	M S								
2-way (Connections)									
2 Position									
Nominal size 4									
Normally open									
Nominal voltage U _N		12 VDC 24 VDC	G12 G24	110 VAC 115 VAC 230 VAC		R110 R115 R230			
Design-Index (Subject to change)									

GENERAL SPECIFICATIONS

2/2-way poppet valve Description

Nominal size NG4

Construction Direct operated poppet valve

Operations Solenoid Mounting cartridge form

4 solenoid fixing screws M4

Ambient temperature -20...+50°C

Mounting position any

 $M_D = 2.6 \text{ Nm (quality 8.8)}$ Fastening torque

22040-S1265 m = 0.045 kgWeight: m = 0.5 kg22040-S1265-

Volume flow direction

HYDRAULIC SPECIFICATIONS

Mineral oil, other fluid on request Fluid Contamination efficiency ISO 4406:1999, class 20/18/14

(Required filtration grade ß10...16≥75)

refer to data sheet 1.0-50/2 12 mm²/s...320 mm²/s

Viscosity range Fluid temperature -20...+70°C

Medium: $p_{max} = 160 \text{ bar}$ Super: $p_{max} = 250 \text{ bar}$ $Q_{max} = 15 \text{ l/min}$, see characteristics Working pressure

Max. volume flow

ELECTRICAL CONTROL

Voltage tolerance

Construction Solenoid, wet pin push type, pressure tight $U_N = 12 \, \text{VDC}, 24 \, \text{VDC}$ Standard-nominal flow

U_N = 110 VAC*, 115 VAC*, 230 VAC*

 \overrightarrow{AC} = 50 to 60 Hz

* Rectifier integrated in the plug Other nominal voltages and nominal

performances on request ±10% of nominal voltage

Protection class IP 65 to EN 60529 Relative duty factor 100% DF (see data sheet 1.1-430)

Switching cycles 15000/h

Operating life

 10^7 (number of switching cycles, theoretically) Connections/Power supply Over device plug connection to

ISO 4400/DIN 43 650, (2P+E), other connections on request

Solenoid: - Medium SIN35V (data sheet 1.1-105)

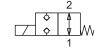
- Super SIS35V (data sheet 1.1-110)

SYMBOLS

22040-S1265

. 22040-S1265- . .

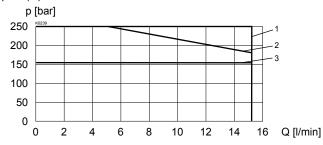






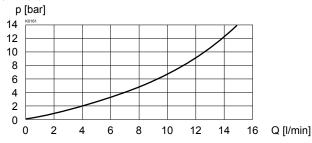
CHARACTERISTICS Oil viscosity υ = 30 mm²/s

p = f (Q) Performance limit at -10%



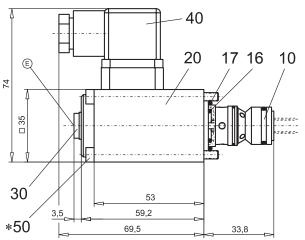
	Flow direction			
Type	1 → 2	2 → 1		
M22040-S1265	3	3		
S22040-S1265	1	2		

 $\Delta p = f(Q)$ Pressure loss / flow characteristics



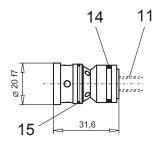
DIMENSIONS

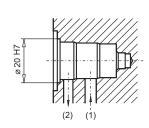
. 22040-S1265- . .



E = air bleed screw

22040-S1265





For detailed cavity drawing and cavity tools see data sheet 2.13-1017

PARTS LIST

Position	Article	Description
10	500.1005	Poppet valve cart. 22040-S1265 Medium
	500.1006	Poppet valve cart. 22040-S1265 Super
11	053.2101	Spring 1x7,4x16,5 Medium
	053.2107	Spring 1x7,4x19,25 Super
14	160.2140	O-ring ID 14,00 x 1,78
15	160.1161	O-ring ID 16,00 x 1,00
16	160.2120	O-ring ID 12,42 x 1,78
17	160.2204	O-ring ID 20,35 x 1,78
20	260.4	Medium-solenoid SIN35V
	260.5	Super-solenoid SIS35V
30	239.2033	Plug
		(incl. seal) HB0
40	219.2002	Plug
50	246.1161	Socket head cap screw M4x60 DIN 912

 Cartridge supplied with fastening screw M4x60 for steel bodies/ blocs. For aluminium bodies/blocs longer screws are recommended (min. 2 screw diameter).

ACCESSORIES

Cartridge built-in sandwich body: Sandwich

Register 1.11

Special tool 983.2006 to poppet valve cartridge 22040-S1265

Technical explanation see data sheet 1.0-100