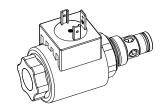


Solenoid poppet valve cartridge 2/2-way version

- Pilot operated
- Q_{max} = 50 l/min
- p_{max} = 350 bar

³/₄"-16 UNF Wandfluh standard



DESCRIPTION

Pilot operated 2/2-way poppet valve in screwin cartridge design with thread 3 /₄"-16 UNF for cavity according to Wandfluh standard. The valve functions «normally open-CB» and «normally closed-BC» are available. There are two versions of the slip-on coil. The coils may be exchanged without opening the hydraulic circuit. The outside of the armature tube and the valve body are zinc coated for surface protection.

FUNCTION

· «Current-free open -CB»

In case of a current-free solenoid, it is possible for the flow to pass through the valve in both directions. In case of a solenoid under current, the valve is blocked from connection 2 to 1. If, however, the pressure in connection 1 rises above the solenoid power, the valve opens.

• «Current-free closed -BC»

In case of a current-free solenoid, the valve is blocked from connection 2 to 1. If, however, the pressure in connection 1 is higher than in connection 2, the valve opens. In case of a solenoid under current, it is possible for the flow to pass through the valve in both directions.

APPLICATION

Wandfluh solenoid operated poppet valves are applied where an absolutly leak free closing of the valve is essential like in load holding, clamping or gripping functions. The solenoid operated screw-in cartridges are mainly used in mobile or stationary integrated blocks.

TYPE CODE

	S V S PU08 / #
Poppet valve	
Pilot operated	
Super-solenoid	
Screw-in cartridge 3/4" 16UNF	
2/2-way, «normally closed» 2/2-way, «normally open» BC CB	
Nominal voltage U _N 12 VDC G12 115 VAC R115 24 VDC G24 230 VAC R230 without coil X5	
Slip-on coil Metal housing round W Metal housing square M*	
Connection version Connector socket EN 175301-803/ISO 4400 Connector socket AMP Junior-Timer Connector Deutsch DT04-2P G	
Sealing material: NBR FKM (Viton)	
Design-Index (Subject to change)	

GENERAL SPECIFICATIONS

Description Pilot operated 2/2-way solenoid poppet valve

Construction Screw-in cartridge for cavity acc. to

Wandfluh standard

Operation Solenoid with exchangable slip-on coil

Mounting Screw-in thread 3/4"-16 UNF
Ambient temperature -20...+50 °C 100% DF
-20...+70 °C 40% DF/5 min

(see characteristics)

Mounting position any

Fastening torque $M_D = 30 \text{ Nm for cartridge}$

 $M_{D \text{ max}} = 5 \text{ Nm for knurled nut}$

Weight m = 0.42 kgVolume flow see symbols

HYDRAULIC SPECIFICATIONS

Fluid Mineral oil, other fluid on request
Contamination ISO 4406:1999, classe 20/18/14
Efficiency (Required filtration grade ß10...16≥75)

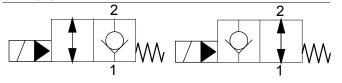
see data sheet 1.0-50/2 Viscosity range 12 mm²/s...320 mm²/s

 $\begin{array}{lll} \mbox{Fluid temperature} & -20...+70\,^{\circ}\mbox{C} \\ \mbox{Working pressure} & p_{max} = 350\mbox{ bar} \\ \mbox{Nominal flow} & Q_N^{} = 50\mbox{ l/min} \\ \mbox{Pressure drop} & \mbox{see characteristics} \end{array}$

^{*} Only available in conjunction with other nominal voltages and connection versions. (See data sheet 1.1-171)



SYMBOLS



SVSPU08-BC...

SVSPU08-CB...

ELECTRICAL CONTROL

Construction Solenoid, wet pin, pull or push type,

pressure tight with exchangable

slip-on coil

Standard nominal voltage: $U_N = 12 \text{ VDC}$, 24 VDC

U_N = 115 VAC*, 230 VAC*

AC = 50 up to 60 Hz

- * Rectifier integrated in connector socket

- Other nominal voltages and wattages on request Voltage tolerance ±10% of nominal voltage Protection class Connection version

Protection class Connection vacc. EN 60 529 D:IP 65

J: IP 66

G:IP 67 and 69 K
Relative duty cycle (DF) 100% DF ambient temperature to 50 °C

40% DF ambient temperature to 70 °C

(see characteristics)

Operating life 10⁷ (number of switching cycles, theoretically)

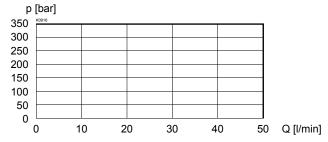
Connections/Power supply Versions see type code

For further electrical specifications see data sheet 1.1-169 (W)

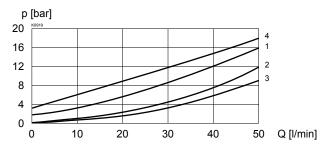
1.1-171 (M)

CHARACTERISTICS Oil viscosity υ = 30 mm²/s

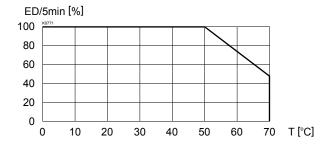
p = f (Q) Performance limits at 10% under voltage and max. ambient temperature



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



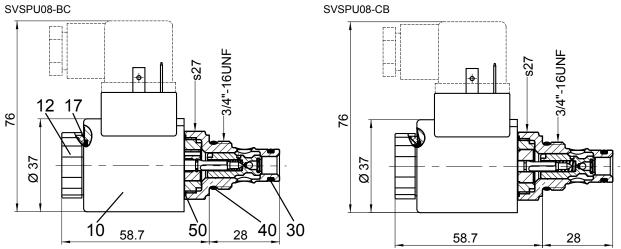
Relative duty factor = f (Ambient temperature)



		ВС	СВ
Current-free	1 → 2	1	2
Current-free	$2 \rightarrow 1$	_	3
under current	1 → 2	2	4
under current	2 → 1	3	_



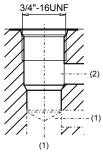
DIMENSIONS/SECTIONAL DRAWING



Dimensions of the other connection versions see data sheet 1.1.169 and 1.1-171

CAVITY

Cavity drawing acc. to Wandfluh standard



For detailed cavity drawing and cavity tools see data sheet 2.13-1043

PARTS LIST

Position	Article	Description
10	206.2213	EN 175301 Solenoid coil WDE37/16x40-G24
10	206.2212	Solenoid coil WDE37/16x40-G24 Solenoid coil WDE37/16x40-G12 Junior-Timer
	206.2218	Solenoid coil WJE 37/16x40-G24
	206.2217	Solenoid coil WJE 37/16x40-G12 Deutsch
	206.2220	Solenoid coil WGE37/16x40-G24
	206.2219	Solenoid coil WGE37/16x40-G12
12	154.2600	Knurled nut M16x1x9
17	160.2156	O-ring ID 15,60x1,78 (NBR)
30	160.0091	O-ring ID 9,25 x 1,78 (Polyurethane)
40	160.2156 160.8156	O-ring ID 15,60x1,78 (NBR) O-ring ID 15,60x1,78 (NBR)
50	160.1220	O-ring ID 22,00x1,00 (NBR)

ACCESSORIES

Mating connector EN 175301-803 Article no. 219.2002

Technical explanation see data sheet 1.0-100