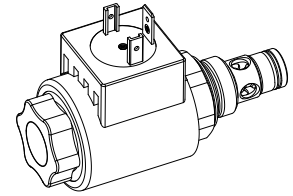


**Solenoid poppet valve cartridge
 2/2-way version**

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

$\frac{3}{4}$ "-16 UNF
 Wandfluh-Norm


DESCRIPTION

Pilot operated 2/2-way poppet valve in screw-in cartridge design with thread $\frac{3}{4}$ "-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 absolutely 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 - <input type="checkbox"/> - <input type="checkbox"/> / <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> # <input type="checkbox"/>	
Poppet valve			
Pilot operated			
Super-solenoid			
Screw-in cartridge $\frac{3}{4}$ " 16UNF			
2/2-way, «normally closed»	<input type="checkbox"/> BC		
2/2-way, «normally open»	<input type="checkbox"/> CB		
Nominal voltage U_N	12 VDC <input type="checkbox"/> G12	115 VAC <input type="checkbox"/> R115	
	24 VDC <input type="checkbox"/> G24	230 VAC <input type="checkbox"/> R230	
	without coil <input type="checkbox"/> X5		
Slip-on coil	Metal housing round <input type="checkbox"/> W		
	Metal housing square <input type="checkbox"/> M*		
Connection version			
Connector socket EN 175301-803 / ISO 4400	<input type="checkbox"/> D		
Connector socket AMP Junior-Timer	<input type="checkbox"/> J		
Connector Deutsch DT04-2P	<input type="checkbox"/> G		
Sealing material: NBR	<input type="checkbox"/>		
FKM (Viton)	<input type="checkbox"/> D1		
Design-Index (Subject to change)			

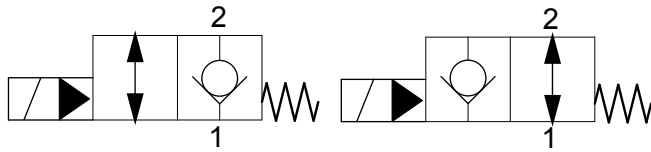
* Only available in conjunction with other nominal voltages and connection versions. (See data sheet 1.1-171)

GENERAL SPECIFICATIONS

Description	Pilot operated 2/2-way solenoid poppet valve
Construction	Screw-in cartridge for cavity acc. to Wandfluh standard
Operation	Solenoid with exchangeable slip-on coil
Mounting	Screw-in thread $\frac{3}{4}$ "-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 $M_{D,max} = 5 \text{ Nm}$ for knurled nut
Weight	$m = 0,42 \text{ kg}$
Volume flow	see symbols

HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination	ISO 4406:1999, classe 20/18/14
Efficiency	(Required filtration grade $\beta_{10...16} \geq 75$) see data sheet 1.0-50/2
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70 °C
Working pressure	$p_{max} = 350 \text{ bar}$
Nominal flow	$Q_N = 50 \text{ l/min}$
Pressure drop	see characteristics

SYMBOLS


SVSPU08-BC...

SVSPU08-CB...

ELECTRICAL CONTROL

Construction Solenoid, wet pin, pull or push type, pressure tight with exchangeable slip-on coil

Standard nominal voltage: $U_N = 12 \text{ VDC}, 24 \text{ VDC}$
 $U_N = 115 \text{ VAC}^*, 230 \text{ VAC}^*$
 $AC = 50 \text{ up to } 60 \text{ Hz}$

- * Rectifier integrated in connector socket
 - Other nominal voltages and wattages on request

Voltage tolerance $\pm 10\%$ of nominal voltage

Protection class Connection version
 acc. EN 60529 D: IP 65
 J: IP 66
 G: IP 67 and 69K

Relative duty cycle (DF) 100% DF ambient temperature to 50°C
 40% DF ambient temperature to 70°C
 (see characteristics)

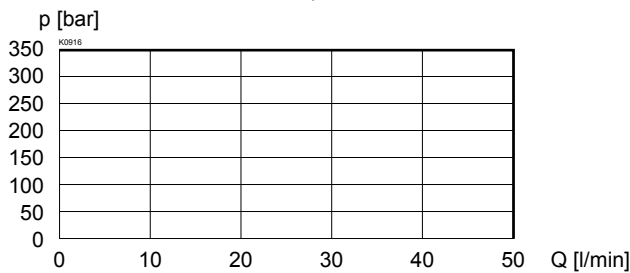
Operating life 10^7 (number of switching cycles, theoretically)

Connections/Power supply Versions see type code

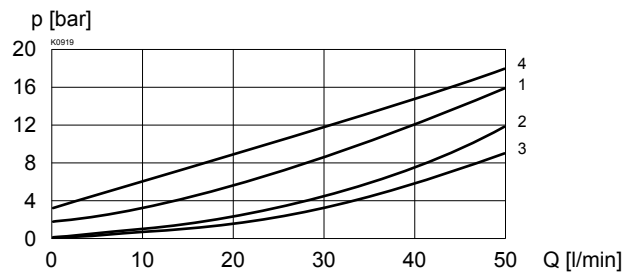
For further electrical specifications see data sheet 1.1-169 (W)
 1.1-171 (M)

CHARACTERISTICS Oil viscosity $\nu = 30 \text{ mm}^2/\text{s}$

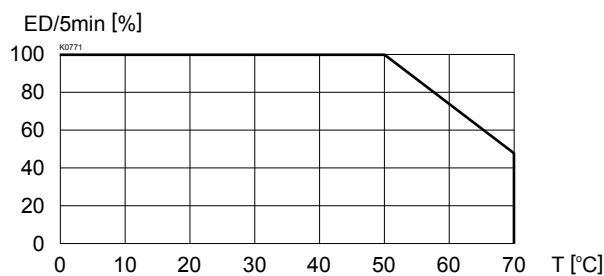
$p = f(Q)$ Performance limits at 10% under voltage and max. ambient temperature



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



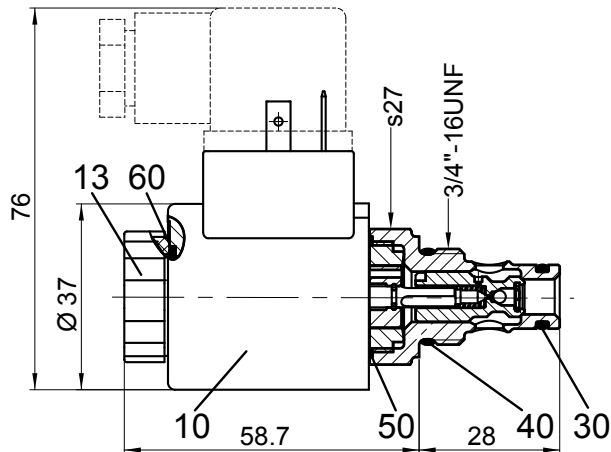
Relative duty factor = f (Ambient temperature)



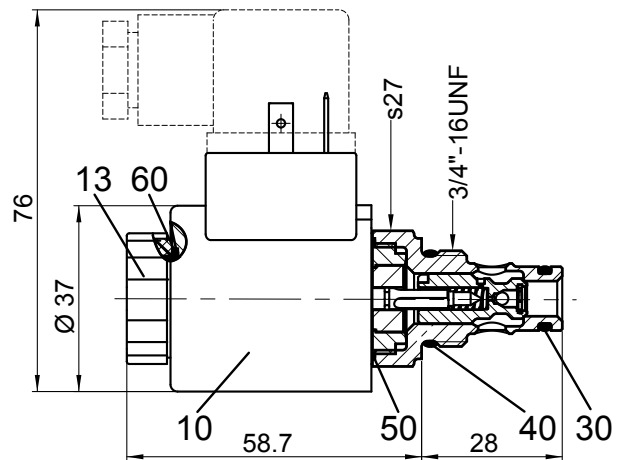
		BC	CB
Current-free	1 → 2	1	2
Current-free	2 → 1	–	3
under current	1 → 2	2	4
under current	2 → 1	3	–

DIMENSIONS/SECTIONAL DRAWING

SVSPU08-BC



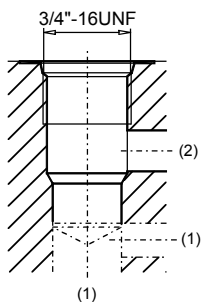
SVSPU08-CB



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
	206.2212	Solenoid coil WDE37/16x40-G12
	206.2218	Junior-Timer Solenoid coil WJE 37/16x40-G24
	206.2217	Solenoid coil WJE 37/16x40-G12
	206.2220	Deutsch Solenoid coil WGE37/16x40-G24
	206.2219	Solenoid coil WGE37/16x40-G12
13	154.2600	Knurled nut M16x1x9
30	160.0091	O-ring polyurethane ID 9,25x1,78
40	160.2156	O-ring ID 15,60x1,78 (NBR)
	160.8156	O-ring ID 15,60x1,78 (NBR)
50	160.1220	O-ring ID 22,00x1,00
60	160.2156	O-ring ID 15,60x1,78

ACCESSORIES

Mating connector EN 175301-803

Article no. 219.2002

Technical explanation see data sheet 1.0-100