



Diaphragm valve 2/2 way servo-assisted

- Push-over solenoid system
- Energy-saving AC07 coil, max. DN 13
- Body in plastic

Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with



Type 2507

Cable plug - industry standard plug Form B



Type 2516

Cable plug DIN EN 175301-803 - form C

Type description

The Type 6228 is a servo-assisted 2/2 way solenoid valve with servo-diaphragm. It is particularly suited for neutral media. Without electrical power, this solenoid valve is closed. Pressure builds up through the servo diaphragm, which pushes the latter downwards and thereby keeps the valve closed. On switching, the space above the servo-diaphragm will be relieved via the pilot valve. As a result, the pressure of the medium lifts the servo-diaphragm, and the main valve opens. A minimum differential pressure of 0.5 bar is required for complete opening and closing. The special design and geometry of the internal parts of the valve produce a soft closing function with very low pressure peaks only. It is very simple to extend the valve radially.

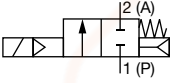
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1. General Technical Data

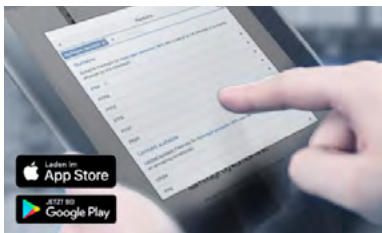
Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 5.
Material	
Seal	NBR, EPDM, FPM
Body	PPE, PA
Cover	PPE, PA
Valve internal parts	PPS, MS
Weight	130 g (DN 10), 180 g (DN 13)
Electrical data	
Operating voltage	24 V DC, 24/110/230 V / 50...60 Hz
Voltage tolerance	± 10 %
Duty cycle	100 % continuous rating
Medium data	
Medium temperature	
NBR	0 °C...+50 °C
EPDM	-10 °C...+50 °C
FPM	0 °C...+50 °C
Operating medium	Neutral media that does not attack the materials (e.g. compressed air, water, hydraulic oil, oils, greases without additives)
Process/Port connection & communication	
Port connection	Threaded ports G 3/8, G 1/2 (see "6.3. Ordering chart accessories" on page 8)
Electrical connection	<ul style="list-style-type: none"> • Tag connectors sideways • To DIN EN 175301 - 803 Form C for cable plug Type 2516 / 2510 (see "6.3. Ordering chart accessories" on page 8)
Environment and installation	
Installation position	As required, preferably with actuator upright
Degree of protection	IP65 with cable plug
Ambient temperature	0...+50 °C

2. Circuit functions

Circuit functions	Description
	Type: A, solenoid valve 2/2 way Servo-controlled Normally closed

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp

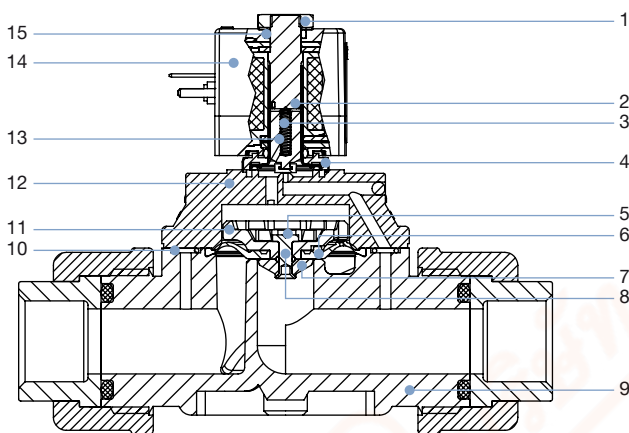


Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

[Start Chemical Resistance Check](#)

3.2. Material specifications



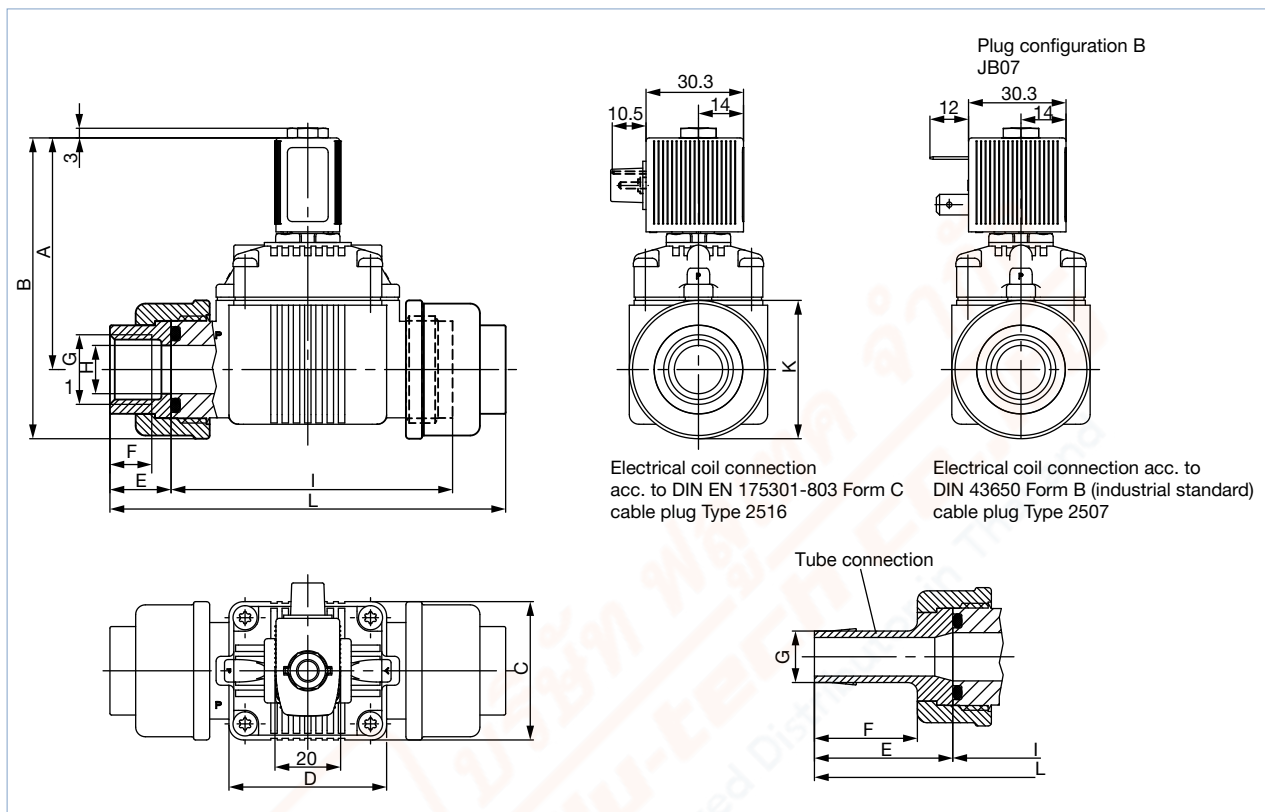
No.	Element	Material
1	Nut	9SMnPb28K (Surface Zn5glcA)
2	Shading ring	Cu
3	Core	1.4105
4	Flange	Zn3glcC (Oberfläche)
5	Feder	1.4310
6	Diaphragm	NBR, FPM, EPDM
7	Diaphragm holder	Brass, PPS
8	Bolt	1.4401
9	Housing	PPE / PA
10	O-ring	NBR, FPM, EPDM
11	Diaphragm support	PPS
12	Housing cover	PPE / PA
13	Spring	1.4310
14	Coil: DIN EN 175301 -803 C DIN 43650 B (industry standard)	PA Epoxy
15	O-ring	NBR, FPM, EPDM

DTS 1000011059 EN Version: J Status: RL (released | freigegeben | validé) printed: 15.04.2021

4. Dimensions

Note:

- For G-thread the values F2 and G2 are valid
- Dimensions in mm



Hose-Ø	DN	A	B	C	D	Threaded connection				Tube connection						
						E	F2	G2	L	E	F	G	L	H	K	I
14	10	65.5	83	32	32	17	13	G 3/8	107	42	32	Ø 14	157	Ø 10	Ø 35	73
16	13	72	93.5	43	49	19	13	G 1/2	123	43	32	Ø 16	171	Ø 15	Ø 43	85

5. Performance specifications

5.1. Power consumption

DN [mm]	K _v value water ^{1.)} [m ³ /h]	Port connection	Pressure range ^{2.)} [bar]	Electrical power consumption				Switching times ^{3.)}	
				Inrush		Operation		Opening	Closing
				AC [VA]	DC [W]	AC [VA]	DC [W]	[ms]	[ms]
10	1.8	G 3/8	0.5...10	9	4	6	4	30	150
13	3.2	G 1/2	0.5...10	9	4	6	4	to 60	to 300


1.) Flow value for water, measured at +20 °C, 1 bar pressure at valve inlet and free outlet

2.) Overpressure to atmospheric pressure

3.) Switching times [ms]: Measurement at valve output at 6 bar^{1.)} and +20 °C. Opening: Pressure build-up 0...90 %, Closing: Pressure reduction 100...10 %.

6. Ordering information

6.1. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

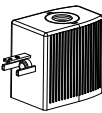
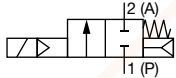
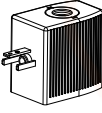
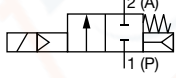
[Try out our product filter](#)

6.2. Ordering chart

Coil with plug configuration according to DIN EN 175301 - 803 Form C for cable plug Type 2516

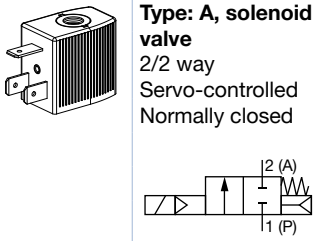
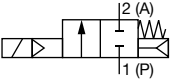
Note:

- All valves are supplied with PPE/PA body, without cable plug and without connection set (see “6.3. Ordering chart accessories” on page 8).
- Other versions on request

Coil	Circuit function	DN	K _v -value water	Pressure range ¹⁾	Seal material	Voltage/ Frequency	Article no.
		[mm]	[m ³ /h]	[bar]		[V/Hz]	
 Type A, solenoid valve 2/2 way Servo-controlled Normally closed 	10	1.8	0.5...10	NBR	24/DC	142220	
					24/50...60	142221	
					110/50...60	142222	
					230/50...60	142223	
					EPDM	24/DC	142224
						24/50...60	142225
						110/50...60	142226
						230/50...60	142227
					FPM	24/DC	142228
						24/50...60	142229
						110/50...60	142230
						230/50...60	142231
 Type A, solenoid valve 2/2 way Servo-controlled Normally closed 	13	3.2	0.5...10	NBR	24/DC	142232	
					24/50...60	142233	
					110/50...60	142234	
					230/50...60	142235	
					EPDM	24/DC	142236
						24/50...60	142237
						110/50...60	142238
						230/50...60	142239
					FPM	24/DC	142240
						24/50...60	142241
						110/50...60	142242
						230/50...60	142243

1.) Overpressure to atmospheric pressure

Coil with plug configuration Form B industrial standard for cable plug Type 2507

Coil	Circuit function	DN	K _v -value water	Pressure range ¹⁾	Seal material	Voltage/ Frequency	Article no.
		[mm]	[m ³ /h]	[bar]		[V/Hz]	
 <p>Type A, solenoid valve 2/2 way Servo-controlled Normally closed</p>		10	1.8	0.5...10	NBR	24/DC	163660
						24/50...60	163671
						110/50...60	163672
						230/50...60	163673
					EPDM	24/DC	163674
						24/50...60	163675
						110/50...60	163676
						230/50...60	163677
		FPM	24/DC	163678			
			24/50...60	163679			
			110/50...60	163680			
			230/50...60	163681			
		13	3.2	0.5...10	NBR	24/DC	163682
						24/50...60	163683
						110/50...60	163684
						230/50...60	163685
EPDM	24/DC				163686		
	24/50...60				163687		
	110/50...60				163688		
	230/50...60				163689		
FPM	24/DC	163690					
	24/50...60	163691					
	110/50...60	163692					
	230/50...60	163693					








1.) Overpressure to atmospheric pressure

6.3. Ordering chart accessories

Three-part connection set made of PPE/PA

Note:






- For one valve you need two connection sets.
- The connection set is not included in the delivery. It must be ordered separately.

Accessories	DN	Port connection	Seal material	Article no.
	[mm]		(O-ring)	
	10	G 3/8	NBR	142425 
			FPM	142426 
			EPDM	142427 
	13	G 1/2	NBR	142428 
			FPM	142429 
			EPDM	142430 

Cable plug Type 2516 acc. to DIN EN 175301 - 803 Form C

Note:





- Delivery of cable plug includes a flat seal and a fixing screw.
- Further cable plug versions with circuitry acc. to DIN EN 175 301 - 803 Form C as well as detailed technical data, see datasheet [Type 2516](#) ▶.

Cable plug	Version	Voltage	Current	Article no.
	Without circuitry	0...250 V AC/DC	Max. 6 A	303141 
	With LED	12...24 V AC/DC	Max. 3 A	303145 
	With LED and varistor	12...24 V AC/DC	Max. 3 A	303148 
	With rectifier, LED and varistor	12...24 V AC/DC	Max. 1 A	303142 

Cable plug Type 2507 acc. to industry standard connector Form B

Note:

- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to industry standard connector Form B as well as detailed technical data, see datasheet [Type 2507](#) ▶.

Cable plug	Version	Voltage	Article no.
	Without circuitry (standard)	2...250 V AC/DC	423845 
	With LED	24 V AC/DC	423849 
	With LED and free-wheeling diode	12...24 V AC/DC	423851 
	With rectifier, LED and varistor	12...24 V AC/DC	423853 