



Diaphragm valve 2/2 way servo-assisted

- Push-over solenoid system AC07
- Energy-saving AC07 coil, max. DN 20
- Body in brass
- Pressure range 0.5 up to 10 bar

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 6211 is a servo-assisted normally closed 2/2-way solenoid valve with a servo diaphragm for use especially with neutral fluids and gaseous media. The valve has a low power consumption, low weight and a compact body. The valve is normally closed by spring force. Energized, the solenoid opens the pilot valve first. Then the medium pressure opens the main valve due to the pressure drop above the diaphragm. The valve opens. The special design and geometry of the inner parts of the valve result in a soft closing function and cause almost no water hammer.

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1. General Technical Data

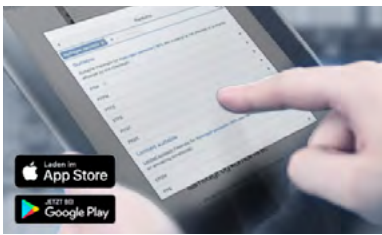
Product properties	
Dimensions	Detailed information can be found in chapter “4. Dimensions” on page 5.
Material	
Seal	NBR, EPDM, FKM
Body	Brass acc. to DIN 50930 - 6
Cover	PPE/PA
Weight	Detailed information can be found in chapter “5.1. Power consumption” on page 6.
Switching function	Detailed information can be found in chapter “2. Circuit functions” on page 3.
Thermal insulation class of solenoid coil	
Polyamide coil	Cable plug Form C - class B
Epoxy coil	Cable plug Form B - class H, flying leads
Electrical data	
Operating voltage	24 V DC 24 / 110 / 230 V / 50...60 Hz
Voltage tolerance	± 10%
Duty cycle	100 % continuous rating
Power consumption	
Inrush	4 W 9 VA AC, 4 W DC (warm), 5 W (kalt)
Hold	6 VA AC, 4 W DC
Medium data	
Medium temperature	
With NBR	0 °C...+70 °C
With EPDM	-10 °C...+70 °C
With FKM	0 °C...+70 °C
Operating medium	
With NBR	Neutral gases and fluids (e.g. compressed air, water, hydraulic oil, oil, fat without additives)
With EPDM	Oil and fat-free medium (e.g. alkaline washing and bleaching lyes)
With FKM	Per-solutions, oils with additives
Process/Port connection & communication	
Port connection	G 3/8 ... G 1 (NPT or RC on request)
Electrical connection	Tag connector sideways: <ul style="list-style-type: none"> • acc. to DIN EN 175301-803 Form C for cable plug Type 2516 (on request, see “6.4. Ordering chart accessories” on page 8) • acc. to DIN 43650 Form B (industrial standard) for cable plug Type 2507 (see “6.4. Ordering chart accessories” on page 8)
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	Max. +55 °C
Degree of protection	IP65 with cable plug

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

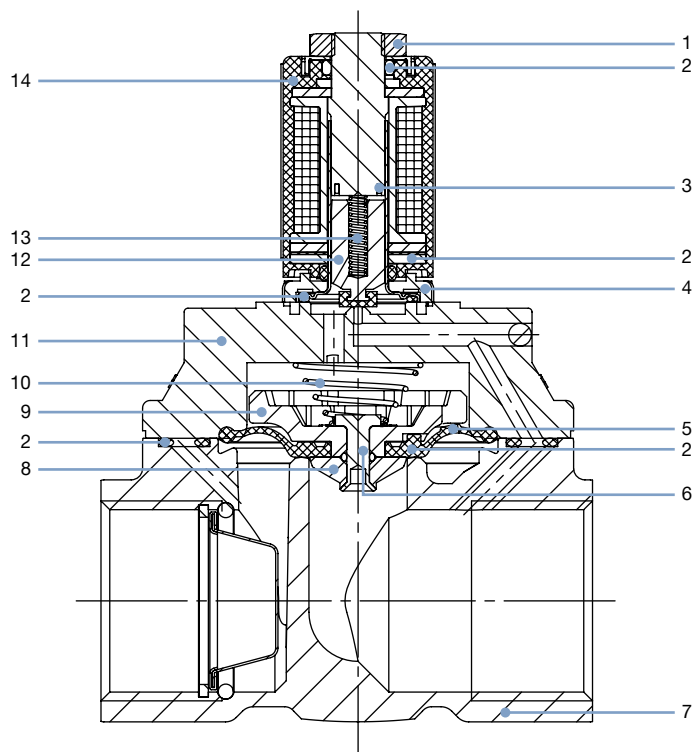


Bürkert resistApp – Chemical Resistance Chart

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



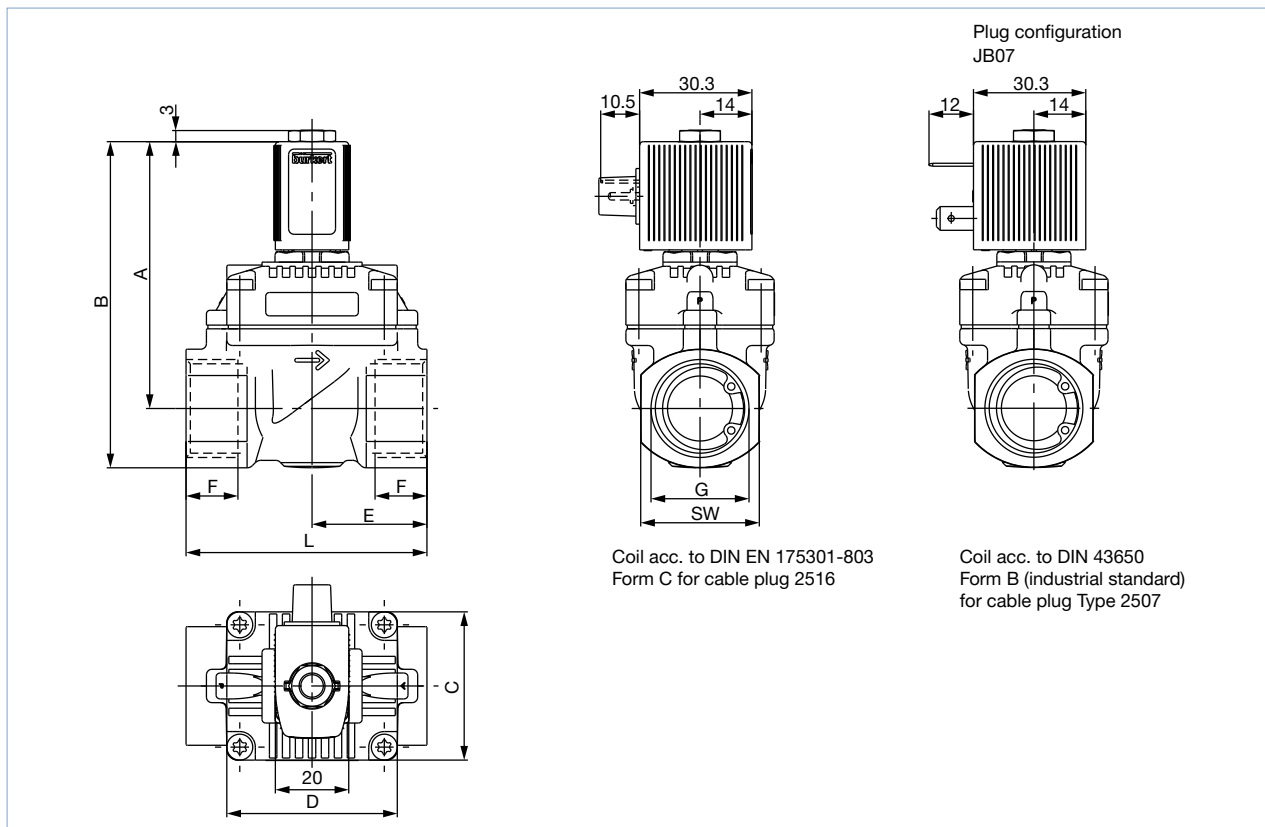
No	Element	Material
1	Locknut	Steel (thick-film passivated acc. to Rohs)
2	O-Ring	NBR, FKM, EPDM
3	Shading ring	Cu
4	Flange	Steel (thick-film passivated acc. to Rohs)
5	Diaphragm	NBR, FKM, EPDM
6	Bolt	Brass
7	Body	Brass
8	Diaphragm holder	Brass, PPS
9	Diaphragm support	PPS
10	Spring	Stainless steel 1.4310
11	Body cover	PPE/PA
12	Plunger	Stainless steel 1.4105
13	Spring	Stainless steel 1.4310
14	Coil DIN EN 175301 - 803 Form C DIN 43650 (industrial standard) Form B	PA (on request) Epoxy

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4. Dimensions

Note:

- Dimensions in mm
- The dimensions F1 and G 1 apply to G-threads
- The dimensions F2 and G 2 apply to NPT-threads
- The dimensions F3 and G 3 apply to RC-threads



DN	A	B	C	D	E	F1	G1	F2	G2	F3	G3	L	SW
10	67.5	81.5	32	32	25	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2	55	27
10	67.5	81.5	32	32	25	12	G 3/8	10.3	NPT 3/8	10.1	Rc 3/8	55	27
13	72	88	40	46	31	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4	65	32
13	72	88	40	46	31	14	G 1/2	13.7	NPT 1/2	13.2	Rc 1/2	65	32
20	81	101.5	60	60	50	18	G 1	16.8	NPT 1	16.8	Rc 1	100	41
20	81	101.5	60	60	50	16	G 3/4	14	NPT 3/4	14.5	Rc 3/4	100	41

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5. Performance specifications

5.1. Power consumption

Orifice [mm]	K _v value water [m ³ /h] ^{1.)}	Port connection [mm]	Pressure range ^{3.)} [bar] ^{2.)}	Response times ^{4.)}		Weight [kg]
				Opening [ms]	Closing [ms]	
10	1.9	G 3/8. G 1/2	0.5...10	20...25	100...120	0.31
13	3.6	G 1/2. G 3/4	0.5...10	100...200	200...250	0.44
20	8.3	G 3/4. G 1	0.5...10	400	500...700	1.03

1.) K_v value: Flow rate value for water, measured at +20 °C and 1 bar^{2.)} pressure differential over a fully opened valve

2.) Pressure data: Overpressure with respect to atmospheric pressure

3.) For opening the full cross-section, a pressure difference of 0.5 bar is required.

4.) Response times [ms]: measured at valve outlet at 6 bar^{2.)} and +20 °C

Opening: pressure build-up 0...90 %, Closing: pressure relief 100...10 %

6. Ordering information

6.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and fast delivery

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6.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

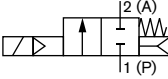
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6.3. Ordering chart

Note:

- Complete with coil, plug connection Form B (industrial standard) for cable plug Type 2507 (cable plug not supplied)
- Please note that the cable plug has to be ordered separately, see “6.4. Ordering chart accessories” on page 8 or separate datasheet **Type 2507** ▶.

Circuit function	Orifice	Port connection	K _v value water [m³/h]	Pressure range [bar]	Article no. per voltage/frequency [V/Hz]			
	[mm]				24/DC	24/50...60	110/50...60	230/50...60
A, solenoid valve 2/2 way Servo-controlled Normally closed 	Seal material NBR							
	10	G 3/8	1,9	0,5...10	163358	163359	163360	163361
		G 1/2	1,9	0,5...10	161944	163362	163363	163364
	13	G 1/2	3,6	0,5...10	163384	163385	163386	163387
		G 3/4	3,6	0,5...10	163388	163389	163390	163391
	20	G 3/4	8,3	0,5...10	163408	163409	163410	163411
		G 1	8,3	0,5...10	163412	163413	163414	161469
	Seal material FKM							
	10	G 3/8	1,9	0,5...10	163369	163370	163371	163372
		G 1/2	1,9	0,5...10	161946	163373	163374	163375
	13	G 1/2	3,6	0,5...10	163392	163393	163394	163395
		G 3/4	3,6	0,5...10	163396	163397	163398	163399
	20	G 3/4	8,3	0,5...10	163415	163416	163417	163418
		G 1	8,3	0,5...10	163419	163420	163421	163422
	Seal material EPDM							
	10	G 3/8	1,9	0,5...10	163336	163337	163338	163339
		G 1/2	1,9	0,5...10	163340	163351	163352	163353
	13	G 1/2	3,6	0,5...10	163376	163377	163378	163379
		G 3/4	3,6	0,5...10	163380	163381	163382	163383
	20	G 3/4	8,3	0,5...10	163400	163401	163402	163403
		G 1	8,3	0,5...10	163404	163405	163406	163407

Further versions on request


Electrical connection

- Coil with cable plug acc. to DIN EN 175301-803 Form C
- Coil with flying leads


Process connection

Threaded port NPT, Rc


Approval






UR/CSA

6.4. Ordering chart accessories

Cable plug Type 2507 acc. to DIN EN 175301 -803 Form B (Industrial standard)

Note:






- Delivery of cable plug includes a flat seal and a fixing screw.
- Further versions of cable plug with circuitry acc. to DIN EN 175 301 -803 Form C 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 

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 versions of cable plug 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	Article no.
	Without circuitry (standard)	0...250 V AC/DC	303141 
	With LED	12...24 V AC/DC	303145 
	With LED and varistor	12...24 V AC/DC	303148 
	With rectifier, LED and varistor	12...24 V AC/DC	303142 

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