



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

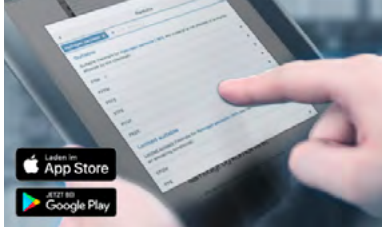
| | |
|--|--|
| Product properties | |
| Dimensions | Detailed information can be found in chapter “4. Dimensions” on page 5. |
| Material | |
| Seal | NBR, EPDM, FKM |
| Body | Brass acc. to DIN 50930 - 6 |
| Housing cover | PPE/PA |
| Weight | Detailed information can be found in chapter “5.1. Power consumption” on page 6. |
| Circuit 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 |
| 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 |
| Voltage tolerance | ±10% |
| Medium data | |
| 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 |
| Medium temperature | |
| With NBR | 0 °C...+70 °C |
| With EPDM | -10 °C...+70 °C |
| With FKM | 0 °C...+70 °C |
| Process/Port connection & communication | |
| 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) |
| Port connection | G ½ ... G 1 (NPT or RC on request) |
| Approvals and certificates | |
| Degree of protection | IP65 with cable plug |
| Environment and installation | |
| Installation position | As required, preferably with actuator upright |
| Ambient temperature | Max. +55 °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

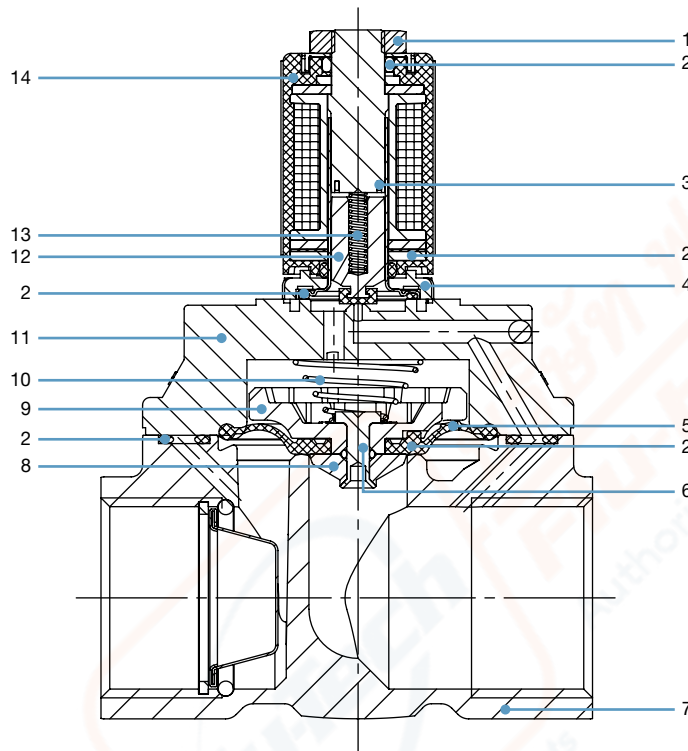


Bürkert resistApp – Chemical Resistance Chart

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



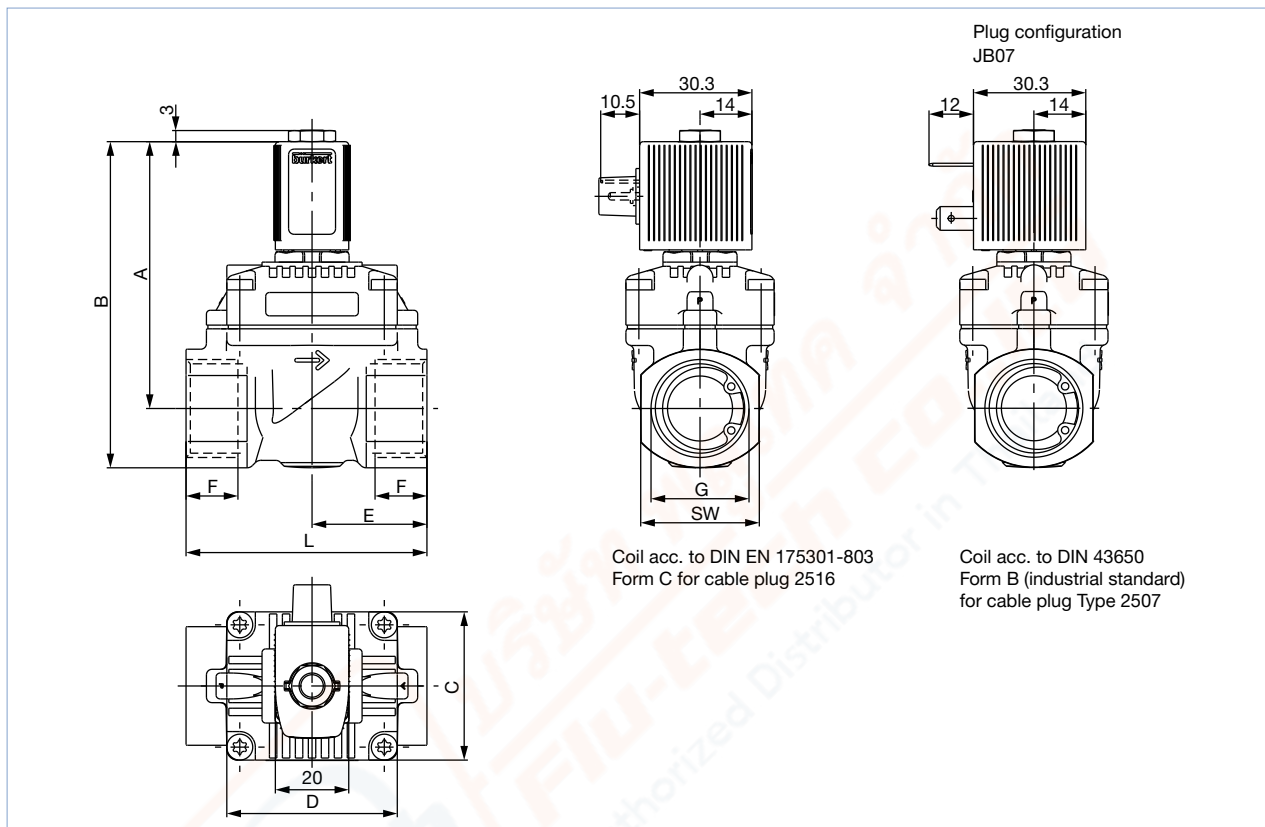
| No | Element | Material |
|----|---|--|
| 1 | Locknut | Steel (thick-film passivated acc. to Rohs) |
| 2 | O-Ring | NBR, FKM, EPDM |
| 3 | Shading ring | Cu |
| 4 | Flange | Steel (thick-film passivated acc. to Rohs) |
| 5 | Diaphragm | NBR, FKM, EPDM |
| 6 | Bolt | Brass |
| 7 | Body | Brass |
| 8 | 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 ¾. G ½ | 0.5...10 | 20...25 | 100...120 | 0.31 |
| 13 | 3.6 | G ½. G ¾ | 0.5...10 | 100...200 | 200...250 | 0.44 |
| 20 | 8.3 | G ¾. 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 bar²⁾ 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 bar²⁾ 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

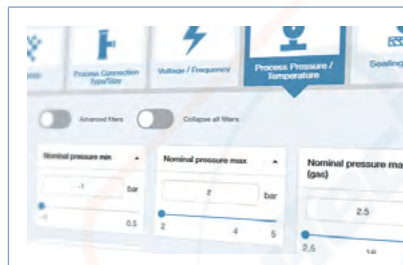


Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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6.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

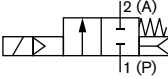
You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

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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 [m ³ /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

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  |