



Proportional Valve with Control Electronics

- Control valve for continuous control of liquids
- Low hysteresis and high repeatability
- Control with PWM signal
- Servo-assisted, tight closing valve

Type 6223 can be combined with...



Type 8605

Control electronics
Cable plug version



Type 8605

Digital control electronics
DIN-rail version



Type 2508

Cable plug



Type 8611

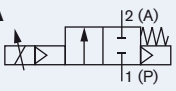






Universal controller

The valve, Type 6223, can be used to control the flow of large amounts of liquids. Low hysteresis, high repeatability and good response sensitivity guarantee good positioning behaviour. The valve closes tight. The push-over coil is easy to replace.

| Technical data | |
|-------------------------------|-----------------------------------------------------------|
| Orifice | DN10, 13 and 20 mm |
| Body material | Brass, stainless steel on request |
| Seal material | FKM, others on request |
| Media | Neutral liquids |
| Media temperature | - 10 to +90 °C |
| Ambient temperature | Max. +55 °C |
| Port connection | G 3/8, G 1/2, G 3/4, G 1 |
| Viscosity | Max. 21 mm ² /s |
| Operating voltage | 24 V DC |
| Power consumption | See ordering chart |
| Duty cycle | Continuous rating 100% |
| Electrical connection | Cable plug Type 2508 acc. to DIN EN 175301-803 Form A |
| Protection class valve | IP65 with plug-on module or with cable plug on the valve |
| Installation | As required, preferably with actuator in upright position |
| Hysteresis | < 5 % |
| Repeatability | < 1 % FS |
| Sensitivity | < 1 % FS |
| Settling time (90 %) | < 200 ms |
| Span | 1:10 |

Ordering chart for valves (other versions on request)

All valves with FKM sealing

| Circuit function | Port connection | Orifice [mm] | K _{vs} value water [m ³ /h] ¹⁾ | Q _{nv} value [l/min] ²⁾ | Pressure range [bar] ³⁾ | Max. coil current [mA] | Power consumption [W] | Article no. |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------------------------------------------------------------|---------------------------------------------|------------------------------------|------------------------|-----------------------|--------------------------------------------------------------------------------------------|
|  2/2 way servo-controlled, solenoid proportional control valve | G 3/8 | 10 | 1.4 | 1510 | 0.5-10 | 300 | 8 | 134229  |
| | G 1/2 | | 1.4 | 1510 | 0.5-10 | 300 | 8 | 134230  |
| | G 1/2 | 13 | 2.5 | 2700 | 0.5-10 | 330 | 10 | 132202  |
| | G 3/4 | | 2.5 | 2700 | 0.5-10 | 330 | 10 | 282985  |
| | G 3/4 | 20 | 5.0 | 5400 | 0.5-10 | 530 | 15 | 222478  |
| | G 1 | | 5.0 | 5400 | 0.5-10 | 530 | 15 | 222477  |

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

2) Q_{nv} value: Flow rate value for air with inlet pressure of 6 bar¹⁾, 1 bar pressure differential and +20 °C



3) Pressure data [bar]: Overpressure with respect to atmospheric pressure; if the differential pressure over the valve exceeds 5 bar the characteristics may change.

Please note that the valves are delivered without control electronics unit and cable plug (see accessories below).

Ordering chart for accessories

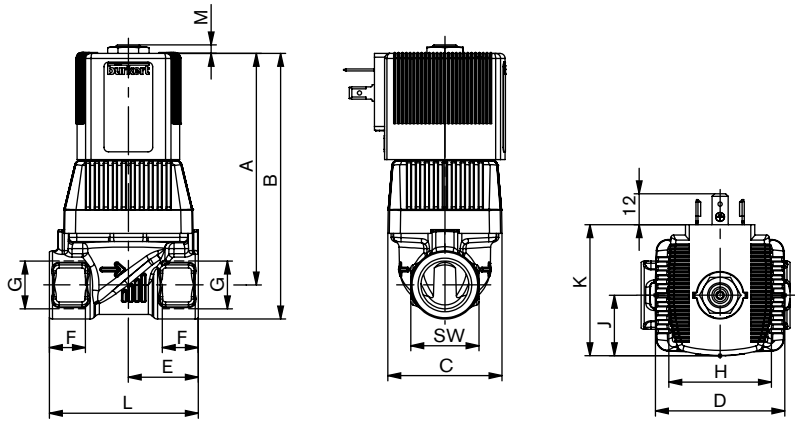
Cable plug Type 2508 according to DIN EN 175301-803 Form A

The delivery of a cable plug includes the flat seal and fixing screw

| Circuitry | Voltage / frequency | Article no. |
|----------------------|---------------------|--------------------------------------------------------------------------------------------|
| None | 0-250 V AC/DC | 008376  |
| None, with 3 m cable | 0-250 V AC/DC | 783573  |

Electronic Control Type 8605 - please see separate datasheet

Dimensions [mm]



| Orifice | A | B | C | D | E (MS/VA) | F1 | G 1 | F2 | G 2 | F3 | G 3 | H | J | K | L (MS/VA) | SW | M |
|---------|-------|-------|------|------|------------|----|-------|------|---------|------|--------|----|------|------|-----------|----|-----|
| DN10 | 71.4 | 85.4 | 37.5 | 38 | 20 | 12 | G 3/8 | 10.3 | NPT 3/8 | 10.1 | Rc 3/8 | 32 | 20.5 | 45 | 50 | 27 | 3.7 |
| | | | | | | 14 | G 1/2 | 13.7 | NPT 1/2 | 13.2 | Rc 1/2 | | | | | | |
| DN13 | 90.3 | 103.8 | 44.5 | 50.5 | 27.25/32.5 | 14 | G 1/2 | 13.7 | NPT 1/2 | 13.2 | Rc 1/2 | 40 | 23.5 | 51 | 58/65 | 27 | 3.3 |
| | | | | | | 16 | G 3/4 | 14 | NPT 3/4 | 14.5 | Rc 3/4 | | | | | | |
| DN20 | 126.1 | 142.1 | 66 | 66 | 37 | 16 | G 3/4 | 14 | NPT 3/4 | 14.5 | Rc 3/4 | 42 | 27 | 55.5 | 80 | 32 | 7.0 |
| | | | | | | 18 | G 1 | 16.8 | NPT 1/2 | 16.8 | Rc 1 | | | | | | |

Note

You can fill out the fields directly in the PDF file before printing out the form.

Design data for solenoid control valves

▶ Please fill out this form and send to your local Bürkert Sales Centre* with your inquiry or order

| | |
|-----------------|----------------|
| Company | Contact person |
| Customer no. | Dept. |
| Address | Tel./Fax |
| Town / Postcode | E-Mail |

| | | |
|---------------------------------------------------------------|-----------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> = Mandatory fields | <input type="text"/> Quantity | <input type="text"/> Requested delivery date |
| Process data | | |
| <input type="checkbox"/> Fluid | <input type="text"/> | |
| <input type="checkbox"/> State of fluid | <input type="checkbox"/> liquid | <input type="checkbox"/> gaseous |
| <input type="checkbox"/> Fluid temperature | <input type="text"/> °C | |
| <input type="checkbox"/> Maximum flow rate | $Q_{nom} =$ <input type="text"/> | Unit: <input type="text"/> |
| <input type="checkbox"/> Minimum flow rate | $Q_{min} =$ <input type="text"/> | Unit: <input type="text"/> |
| <input type="checkbox"/> Inlet pressure at nominal operation | $p_1 =$ <input type="text"/> | barg |
| <input type="checkbox"/> Outlet pressure at nominal operation | $p_2 =$ <input type="text"/> | barg |
| <input type="checkbox"/> Maximum inlet pressure | $p_{1max} =$ <input type="text"/> | barg |
| <input type="checkbox"/> Ambient temperature | <input type="text"/> °C | |
| Additional specifications | | |
| <input type="checkbox"/> Body material | <input type="checkbox"/> Brass | <input type="checkbox"/> Stainless steel |
| <input type="checkbox"/> Seal material | <input type="checkbox"/> FKM | <input type="checkbox"/> other <input type="text"/> |

Note Please state all pressure values as **overpressures with** respect to atmospheric [barg].

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In case of special application conditions,
please consult for advice.

Subject to alteration.
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