Compact Solenoid Valve - General Purpose

Sub-base Connection

2/2-Way; sub-base connection; PN up to 10 bar



Design/Function

The valves are based on a modular concept comprising three basic elements; Valve assembly, pushover coil and standard cable plug. The valve assembly consists of a body to which the armature guide tube containing the plunger, seals and springs is attached. The coil is pushed over the guide

tube and thus isolated from the medium.

The medium is only in contact with the valve internals and body.

A wide selection of pipe and orifice sizes is offered. Valves are available in brass. All valves have high quality viton (FPM) seals as standard. To simplify ordering, a wide selection of standard combinations of valve body, push over coil and standard cable plug can be ordered with one order number.

Cable plug options of Type 2508 are available to suit special electrical application requirements.

- The modular concept provides flexibility to meet applications requirements.
- The valve are interchangeable with Type 212.

Advantages/Benefits

- Coil can be changed easy with valve in place
- Coil can be locked in 4x 90° positions or move freely between, as required
- Medium is only in contact with the valve internals and body
- High-quality seal material FPM (Viton) standard
- Wide range of cable plug options Type 2508

Applications

Fluids

Neutral gases and liquids, e.g.compressed air, town gas, natural gas, water, hydraulic oil, petrol.

Suitable for technical vacuum

Applications

- Pneumatic control
- Shut-off, dosing, filling and ventilating
- Small-scale instruments, laboratory and measuring technology
- Welding technology



bürkert

Compact Solenoid Valve - General Purpose

Sub-base Connection

Technical Data Type 6013

Circuit function

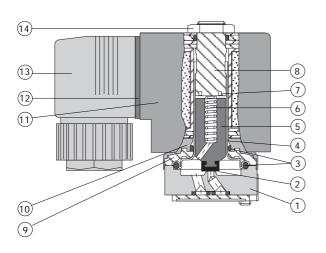
Schaltsymbol

A 2/2-way valve, normally closed



| Operating Data (Valve) | | Operating Data (Actuator) | | | |
|--------------------------|--|--------------------------------------|--|--|--|
| Pressure range | 0-10 bar (see specifications) | Operating voltages | AC 24, 110, 230 V/50 Hz, DC 12, 24 V/= | | |
| Port connection | Sub-base connection | | 10.07 | | |
| Orifice | DN 2,0 mm | Voltages tolerance | ±10 % | | |
| Fluid | Neutral gases and liquids, e.g. compressed air, town | Power consumption 32 mm-coil | AC inrush AC hold DC 24 VA 17 VA/8 W 8 W | | |
| | gas, natural gas, water, hydraulic oil, petrol. | Duty cycle | 100% continously rated | | |
| | Suitable for techn. vacuum. | Duty cycle for multiple manifolds | 60% for manifold mounting (30 min) or use 5W-version | | |
| Medium temperature | -10 bis +100 °C | | (on request) | | |
| Max. ambient temperature | +55 °C | Cycling rate | up to 1 000 c.p.m. | | |
| Max. viscosity | 21 mm²/s | Rating with cable plug | IP 65 | | |
| Response times | | | | | |
| opening closing | AC, DC 20 ms AC, DC 30 ms | Electr. connection | Delivery standard: Cable plug DIN 43 650 A, | | |
| Installation | as required, but preferably with solenoid system upright | | 0-250 V (Other versions see accessories) | | |

Materials



| 1 | Valve body: |
|----|----------------------|
| 2 | Plunger seal: |
| 3 | O-rings: |
| 4 | Armature guide tube: |
| 5 | Plunger: |
| 6 | Spring: |
| 7 | Shading ring: |
| 8 | Stopper: |
| 9 | Flange: |
| 10 | Bonnet: |
| 11 | Coil: |
| 12 | Flat seal: |
| 13 | Cable plug: |
| 14 | Locknut: |
| | |

Brass FPM (Viton) FPM (Viton) 1.4303 1.4105 1.4310 Cu (copper) 1.4105 Zn3 gl cC (surface) Durethan BKV30H PA (Polyamide) NBR PA (Polyamide) 9SMnPb28K (surface Zn5glcA)

Compact Solenoid Valve - General Purpose

Sub-base Connection

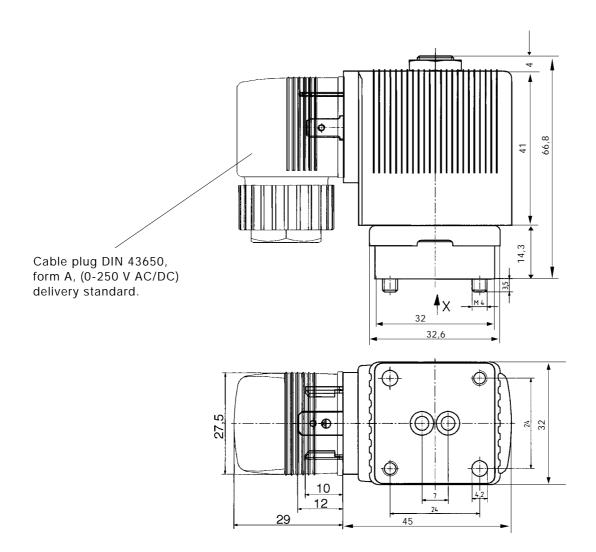
Specifications - Ordering Chart (Other Versions on Request)

| Type 6013: brass body (MS); coil 8W; | | | | with standard | -cable plug 0- | 250 V AC/DC) | | |
|--------------------------------------|-----------------|--|--|--------------------|------------------|---------------------------------|---------------|-----------|
| Circuit finction | Orifice [mm] | Kv-value water ¹⁾ [m ³ /h] | Pressure range ²⁾ [bar] | Port connection | Seal material | Voltage/ frequency [V/Hz] | Weight [g] | Order-No. |
| А | 2,0 | 0,12 | 0–10 | Sub-base | FPM | 24/= | 320 | 126 423 G |
| | | | 0–10 | | | 24/50 | | 126 424 H |
| | | | 0–10 | | | 110/50 | | 126 425 A |
| | | | 0–10 | | | 230/50 | | 126 426 B |

 $^{1)}$ Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C. $^{2)}$ All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.

Dimensions (in mm)

Solenoid coil, 8W power consumption

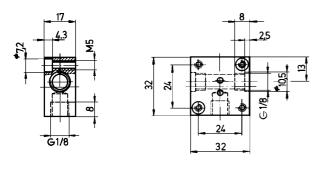


Type 6013

Sub-base Connection

Dimensions Accessories (in mm)

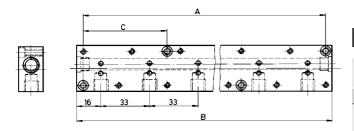
Single manifold



Multiple manifold

Manifolds mounted 5W-versions should be 100% continously rated. 8W-versions should be limited to 60% duty cycle, 30 min switch-on time. The pressure port of the manifold is marked with P (R), the outlet port with A (B). Only similar ports can be coupled together. A 3/2-way valve Type 6014 in circuit function C can also be mounted to the manifold, if the applied pressure corresponds to the valve. Unused connections to be plugged (see accessories). Manifolds may be coupled together using special push-fit O-ring connection nipples for linking the pressure inlets P (R). Manifolds joined together in this way should be securely mounted.

Multiple manifold



Ordering Chart for Manifolds/Accessories

| Device/Accessory | Features | | Order-No. | |
|-------------------|-----------------------|----------|-----------|-----------|
| Single manifold | Aluminium | | | 005 020 W |
| Multiple manifold | Hole | Overall | Hole | |
| (aluminium) | spacing A | length B | spacing C | |
| 2 valves | 57 | 65 | - | 005 023 M |
| 3 valves | 90 | 98 | - | 005 286 S |
| 4 valves | 123 | 131 | - | 005 287 T |
| 5 valves | 156 | 164 | 57 | 005 035 R |
| 6 valves | 189 | 197 | 57 | 005 038 U |
| 8 valves | 255 | 263 | 57 | 005 386 W |
| 10 valves | 321 | 329 | 90 | 005 764 G |
| Connector nipples | with O-rings | | | 005 040 A |
| Blanking screw | with seal ring, G 1/8 | | | 005 041 X |
| Blanking plug | with screws + 0-ring | | | 005 630 E |

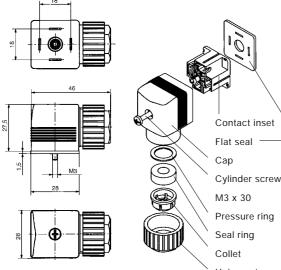
Ordering Chart for Accessories

| Device/ Accessory | Features | Order-No. |
|----------------------|---|-----------|
| Cable- | Standard cable plug, 0-250 V AC/DC | 008 376 N |
| plugs ¹⁾ | (standard-delivery) ¹⁾ | |
| Туре 2508 | with LED, 12-24 V AC/DC | 008 360 S |
| | with LED, 100-120 V AC/DC | 008 361 P |
| | with LED + varistor, 12-24 V AC/DC | 008 367 M |
| | with LED + varistor, 100-120 V AC/DC | 008 368 W |
| | with LED + varistor, 200-240 V AC/DC | 008 369 X |
| | | |
| | (optional wirings and connection speci- | |
| | fications see data sheet Type 2508) | |

¹⁾ The standard cable plug (0-250 V AC/DC) Order-No. 008 376 N is part of the standard delivery. Ordering of optional cable plugs with separate ordering number.

A wide selection of further cable plugs is available (see special data sheet Type 2508)

Standard Cable plug



Transparent cap, when wired with LED.

Seal ring Collet Union nut