



Direct acting 2/2 or 3/2 way Pivoted armature valve

- Direct acting, medium separated valve up to orifice DN 4
- Maintenance-free pivoted armature technology
- Vibration resistant, screwed block coil system
- Suitable for aggressive alkali solutions and acids
- Service friendly, robust manual override
- Explosion proofed version

The 0331 valve is a direct-acting, media-separated pivoted armature valve. It is available in 3/2 and 2/2-way versions. As a 3/2-way version, it can be used as a distributor or mixing valve. Various diaphragm material combinations and methods of operation are available depending on the application. The standard brass housing satisfies all European drinking water requirements. Stainless steel (316L), PVDF, polypropylene and PEEK housing versions complete the offering. The solenoid coils are moulded with a chemically resistant epoxy. The 0331 is equipped with manual override for commissioning and testing. For reduced energy requirements all coils can be delivered with electronic power reduction or as an impulse version. The switching status can be indicated with position feedback as a binary or NAMUR signal. In combination with a plug in accordance with DIN EN 17301-803 Form A, the valves satisfy protection class IP65/67 – in combination with a stainless steel or plastic housing NEMA 250 Kat.4X.

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Standard version

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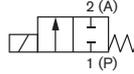
Explosion proofed version

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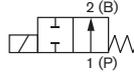
| Technical data | |
|--|--|
| Available body material | Brass Stainless steel (1.4401) PP (Polypropylene) PVDF (Polyvinyl fluoride) PEEK |
| Port connection | Flange interface acc. to Bürkert standard 1000225877 (see also sectional dimensions) |
| Medium | |
| for NBR | Neutral mediums such as compressed air, town gas, water, hydraulic oil, oils and greases without additives, oxygen |
| for EPDM | Alkalis, acids to medium concentrations, alkaline washing and bleaching lyes |
| for FKM | Oxidizing acids and substances, hot oils with additives, salt solutions, waste gases, oxygen |
| for FFKM | Aggressive mediums, hot air, hot oils |
| All materials | For more detailed information please refer to our compatibility chart |
| Medium temperature for body material Brass, Stainless Steel or PEEK | NBR 0 to +80°C EPDM -30 to +90°C FKM 0 to +90°C FFKM +5 to +90°C |
| Medium temperature for body material PP or PVDF | NBR 0 to +80°C EPDM -30 to +80°C FKM 0 to +80°C FFKM +5 to +80°C |
| Viscosity | Max. 37mm ² /s |
| Ambient temperature | Max. +55°C |
| Operating voltage | 24V 50Hz; 110V 50Hz; 230V 50Hz 120V 60Hz; 240V 60Hz 12V DC; 24V DC; (further voltages on request) |
| Voltage tolerance | +/- 10% |
| Duty cycle for brass and stainless steel | 100% |
| Duty cycle for PP PVDF PEEK | 40% ED (60% intermittent operation) in 30min for 8W version 100% ED for 5W version 60% ED (40% intermittent operation) in 30min for 8W version |

Circuit function

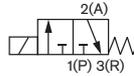
- A** 2/2-way direct acting valve, normally closed



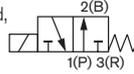
- B** 2/2-way direct acting valve, normally open



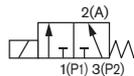
- C** 3/2-way valve, direct acting, when de-energised Port A exhausted



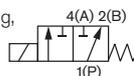
- D** 3/2-way valve, servo-assisted, outlet B normally pressurized



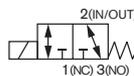
- E** Mixer valve, direct-acting, in de-energized position, P2→A open, P1 closed



- F** Distribution valve, direct-acting, in de-energized position, P→B open, A closed



- T** 3/2 way valve, universal function, flow direction as required



Technical data (continued)

| | |
|-------------------------------------|---|
| Electrical connection | Tag connector acc. to DIN EN 175301-803 Form A for cable plug Type 2508/2509 (on request also with moulded cable or terminal box) |
| Type of protection | IP65 with cable plug |
| Coil thermal isolation class | H |
| Installation | As required, preferably with actuator upright |
| Weight [kg] | |
| with metal body | 0.47 |
| with plastic body | 0.40 |

Standard power consumption

| FrequencyAC | | | FrequencyDC | |
|-------------|-----------|---------------|-------------|----------|
| Inrush [VA] | Hold [VA] | Operation [W] | Cold [W] | Warm [W] |
| 30 | 15 | 8 | 11 | 8 |

Impulse (inrush winding)

| FrequencyAC | | FrequencyDC | |
|-------------|---------------|-------------|----------|
| Hold [VA] | Operation [W] | Cold [W] | Warm [W] |
| 20 | 11 | 11 | 8 |

Response times

| Orifice [mm] | FrequencyAC | | FrequencyDC | |
|--------------|--------------|--------------|--------------|--------------|
| | Opening [ms] | Closing [ms] | Opening [ms] | Closing [ms] |
| 2-4 | 8-15 | 8-15 | 10-20 | 10-20 |

Response times [ms]:

Measured at valve outlet at 6 bar and +20 °C

Opening: Pressure rise 0 to 90%,

Closing: Pressure relief 100 to 10%

Pressure range and flow rate for brass, stainless steel or PEEK body

| Circuit function | DN | Kv value [m ³ /h]: | | Standard ¹⁾ | | Impulse ²⁾ |
|-------------------|-----|-------------------------------|-----------------|------------------------------------|---|-----------------------|
| | | DC | AC [50 or 60hz] | Pressure range ⁴⁾ [bar] | Vaccum ³⁾ Pressure range ⁴⁾ [bar] | |
| A / B / C / D / F | 2.0 | 0.08 | 0.10 | 0 - 16 ⁵⁾ | -0.98 - 10 | 0 - 16 ⁵⁾ |
| | 3.0 | 0.12 | 0.15 | 0 - 10 | -0.98 - 6 | 0 - 10 |
| | 4.0 | 0.15 | 0.18 | 0 - 5 | -0.98 - 3 | 0 - 5 |
| E | 2.0 | 0.08 | 0.10 | 0 - 10 | -0.98 - 8 | 0 - 10 |
| | 3.0 | 0.12 | 0.15 | 0 - 6 | -0.98 - 5 | 0 - 6 |
| | 4.0 | 0.15 | 0.18 | 0 - 3 | -0.98 - 2.5 | 0 - 3 |
| T | 2.0 | 0.08 | 0.10 | 0 - 12 | -0.98 - 8 | - |
| | 3.0 | 0.12 | 0.15 | 0 - 8 | -0.98 - 5 | - |
| | 4.0 | 0.15 | 0.18 | 0 - 4 | -0.98 - 3 | - |

Pressure range and flow rate PVDF or PP body

| Circuit function | DN | Kv value water | | Standard ¹⁾ | | Impulse ²⁾ |
|-------------------|-----|---------------------|--|--|---------------------------------------|-----------------------|
| | | [m ³ /h] | | Pressure range ⁴⁾ [bar] AC [50 or 60hz] | Pressure range ⁴⁾ [bar] DC | |
| A / B / C / D / F | 2.0 | 0.1 | | 0 - 16 ⁵⁾ | 0 - 12 | -0.98 - 10 |
| | 3.0 | 0.15 | | 0 - 10 | 0 - 8 | -0.98 - 6 |
| | 4.0 | 0.18 | | 0 - 5 | 0 - 4 | -0.98 - 3 |
| E / T | 2.0 | 0.1 | | 0 - 10 | 0 - 7 | -0.98 - 7 |
| | 3.0 | 0.15 | | 0 - 6 | 0 - 4 | -0.98 - 5 |
| | 4.0 | 0.18 | | 0 - 3 | 0 - 2.5 | -0.98 - 2.5 |

¹⁾ Heat output 8 W

²⁾ Inrush power 11 W

³⁾ Vacuum possible for all seal materials

⁴⁾ Pressure values [bar] for atmospheric pressure

⁵⁾ For seal material FKM and FFKM the max. medium pressure is 12 bar

Use in other circuit functions

The valves are fitted with different springs for a particular circuit function

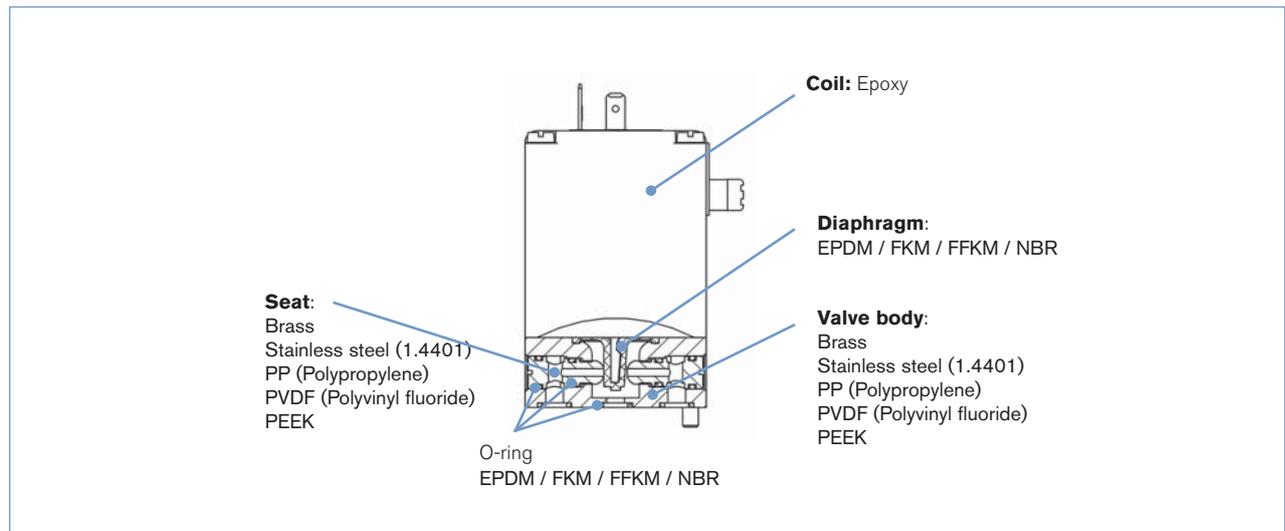
When used in other circuit functions, the maximum operating pressure varies according to the following tables

| Metal body (8W respectively 11W) | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|-----------------|-----|-----|-----|----|--------------|----|-----|----|---|----|--------------|-----|---|-----|-----|---|
| Circuit function | Max. operating pressure [bar] when using the valve in a new circuit function | | | | | | | | | | | | | | | | | |
| | Orifice 2 mm | | | | | | Orifice 3 mm | | | | | | Orifice 4 mm | | | | | |
| | A ¹⁾ | B ¹⁾ | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| C | 16 | 1.5 | 16 | 1.5 | 1.5 | 16 | 10 | 1 | 10 | 1 | 1 | 10 | 5 | 0.8 | 5 | 0.8 | 0.8 | 5 |
| D | 4 | 16 | 4.5 | 16 | 4 | 4 | 2.5 | 10 | 2.5 | 10 | 2 | 3 | 2 | 5 | 2 | 5 | 2 | 2 |
| T | 8 | 8 | 10 | 10 | 10 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 3 | 3 | 3 | 3 | 3 |

| Plastic body (8W respectively 11W) | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|-----------------|-----|-----|-----|----|--------------|----|-----|----|---|----|--------------|-----|---|-----|-----|---|
| Circuit function | Max. operating pressure [bar] when using the valve in a new circuit function | | | | | | | | | | | | | | | | | |
| | Orifice 2 mm | | | | | | Orifice 3 mm | | | | | | Orifice 4 mm | | | | | |
| | A ¹⁾ | B ¹⁾ | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| C | 16 | 1.5 | 16 | 1.5 | 1.5 | 16 | 10 | 1 | 10 | 1 | 1 | 10 | 5 | 0.8 | 5 | 0.8 | 0.8 | 5 |
| D | 4 | 16 | 4.5 | 16 | 4 | 4 | 2.5 | 10 | 2.5 | 10 | 2 | 3 | 2 | 5 | 2 | 5 | 2 | 2 |
| F | 16 | 1.5 | 10 | 1.5 | 1.5 | 16 | 6 | 1 | 6 | 1 | 1 | 10 | 4 | 1 | 4 | 1 | 1 | |

¹⁾ For circuit function A and B the valve must be connected acc. to the pin assignment of 3/2-way valve.

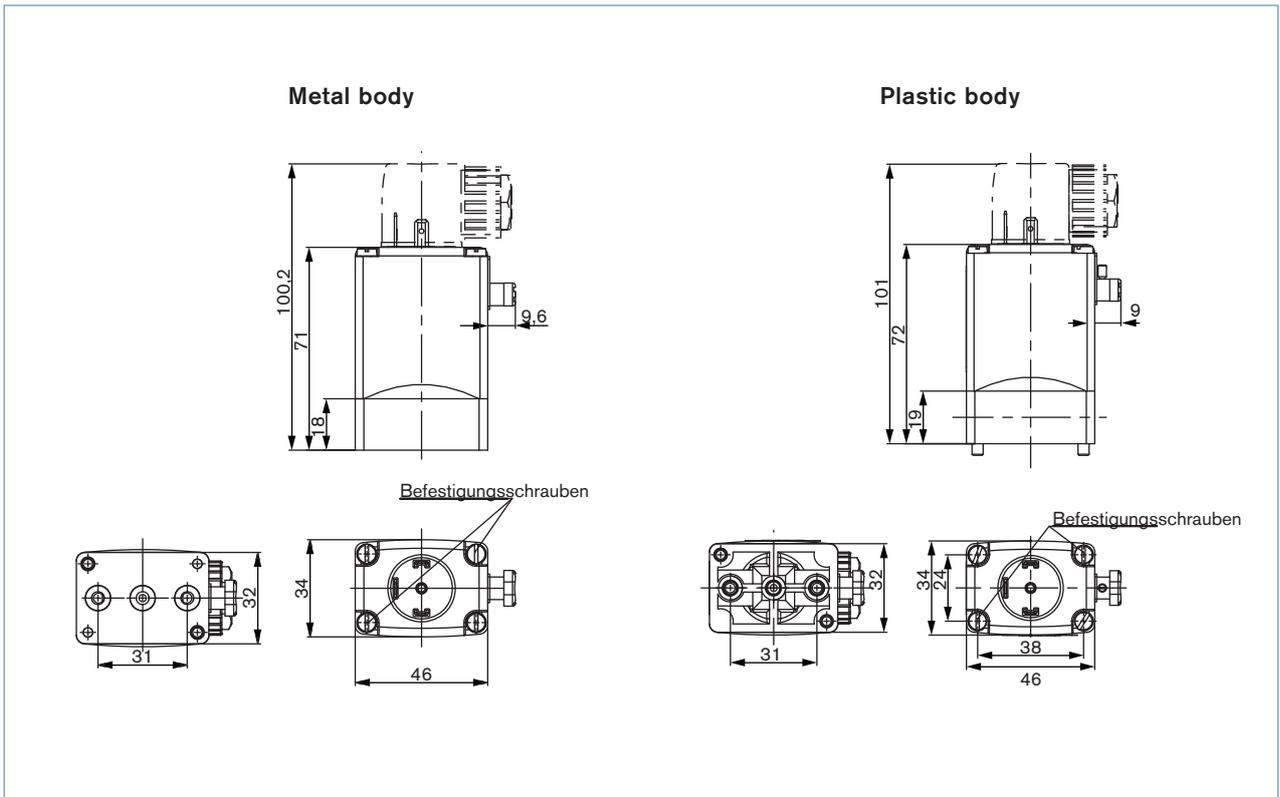
Construction and material specifications



Additional options

| Option | Var. Code | Description |
|--|-------------|--|
| Impulse version | CF02 | Bistable magnetic system with inrush and drop-off coil; Continuous operation or operation with short current pulses (min. 150 ms) possible |
| Oxygen versions | NL02 | Suitable for applications with oxygen (non-metal materials that are in contact with the medium, are tested and approved according to BAM) |
| Increased purity requirements e.g. oil, grease and silicone-free | NL50/NL05 | Wetted parts are specially cleaned and packaged in accordance with the valves |
| Increased tightness requirements | PCxx | Standard units are tested at 10^{-2} mbar x l / sec; feasible up to 10^6 mbar |
| Electrical feedback | LF02 / LF03 | See Type 1060 |
| High-power electronics | CZ05 | Inrush power 60 W, nominal holding current 3 W; with plastic versions 100% ED is now feasible |
| Vacuum version | NA02 | Suitable for vacuums up to -0.98bar |
| Increased purity and tightness requirements | NA03 | Wetted parts are specially cleaned and leak tested to 10^{-4} mbar x l/sec |
| Increased purity and tightness requirements and vacuum version | NA01 | Wetted parts are specially cleaned and leak tested up to 10^{-4} mbar x l/sec and suited for vacuum up to -0.98 bar |
| Coil with reduced power (5W) | | Devices have lower pressure range; with plastic versions 100% ED is now feasible |
| Cable plug | JFxx / JGxx | Cable plug is included in delivery. Cable plug versions (acc. to DIN EN 175301-803 Form A), see datasheet Type 2508 and 2509 |
| Manifold with banjo bolt | LG09 | Due to the banjo bolt a direct attachment is possible (for example, to externally controlled pneumatic drives) |
| Approvals | PD01 | CSA General Purpose valve |
| | PD02 | UL recognized General Purpose valve CSA General Purpose valve |
| | PD45 | FM explosionproof for class I Div. 1 and dust-ignitionproof for class II / III Div. 1 T4 CSA General Purpose valve for hazardous location class I / II Div.2 and class III T4 |
| | PD07 | DNV-GL (formerly Germanischer Lloyd) |
| possible conformities (depending on the assembly) | | EAC ; drinking water; FDA; |

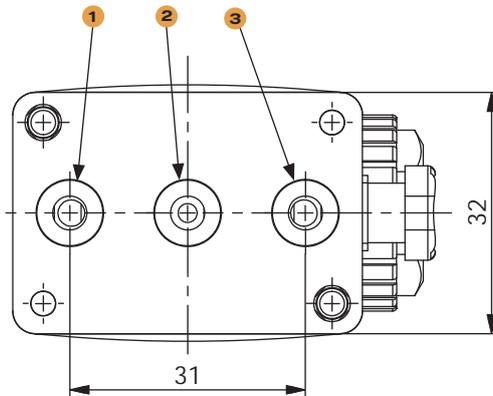
Dimensions [mm]



PIN Assignments

The connections marked with 1, 2 and 3 are labelled in the drawing according to the circuit function table on the left.

| Circuit function | Connection 1 | Connection 2 | Connection 3 |
|------------------|--------------|--------------|--------------|
| A | P | A | |
| B | B | P | |
| C | P | A | R |
| D | R | B | P |
| E | P1 | A | P2 |
| F | A | P | B |



Ordering chart (products with reduced delivery time)

All devices with manual override and cable plug Type 2508

| Circuit function | Orifice [mm] | Seal Material | Body and seat material | Item no. per voltage/frequency [V/Hz] | | | |
|------------------|--------------|---------------|------------------------|---------------------------------------|---------|---------|---------|
| | | | | 024/DC | 024/50 | 110/50 | 230/50 |
| A | 04.0 | FKM | Polypropylene | 088 352 | - | - | 020 278 |
| C | 02.0 | NBR | Brass | 041 183 | 041 184 | 044 989 | 041 188 |
| | 02.0 | FKM | Stainless steel | 048 354 | - | - | - |
| | 02.0 | EPDM | PVDF | - | - | - | 130 301 |
| | 03.0 | NBR | Brass | 041 195 | 041 198 | 041 203 | 041 209 |
| | 03.0 | FKM | Stainless steel | 045 796 | - | - | - |
| D | 02.0 | NBR | Brass | 041 234 | 041 235 | 041 798 | 041 242 |
| | 02.0 | EPDM | PVDF | 079 663 | - | - | - |
| | 02.0 | FKM | PVDF | - | - | - | 078 859 |
| | 03.0 | NBR | Brass | 041 247 | 041 248 | 041 531 | 041 254 |
| E | 02.0 | NBR | Brass | 042 061 | 042 799 | 040 064 | 041 265 |
| | 03.0 | NBR | Brass | 042 980 | 043 104 | 046 843 | 041 270 |
| | 03.0 | EPDM | Polypropylene | 021 892 | - | - | - |
| T | 02.0 | FKM | Brass | 124 953 | 124 954 | 124 955 | 124 956 |
| | 03.0 | FKM | Brass | 124 958 | 124 959 | 124 960 | 124 961 |

Ordering chart (products with reduced delivery time)

All devices with manual override and cable plug Type 2508 and manifold (banjo version)

| Circuit function | Orifice [mm] | Seal Material | Body and seat material | Item no. per voltage/frequency [V/Hz] | | | |
|------------------|--------------|---------------|------------------------|---------------------------------------|---------|---------|---------|
| | | | | 024/DC | 024/50 | 110/50 | 230/50 |
| C | 02.0 | NBR | Brass | 041 191 | - | - | 041 192 |
| | 03.0 | NBR | Brass | 041 217 | 041 219 | 041 223 | 041 228 |
| | 03.0 | FKM | Brass | 041 231 | - | - | 041 233 |
| E | 02.0 | NBR | Brass | 123 092 | - | - | 043 913 |

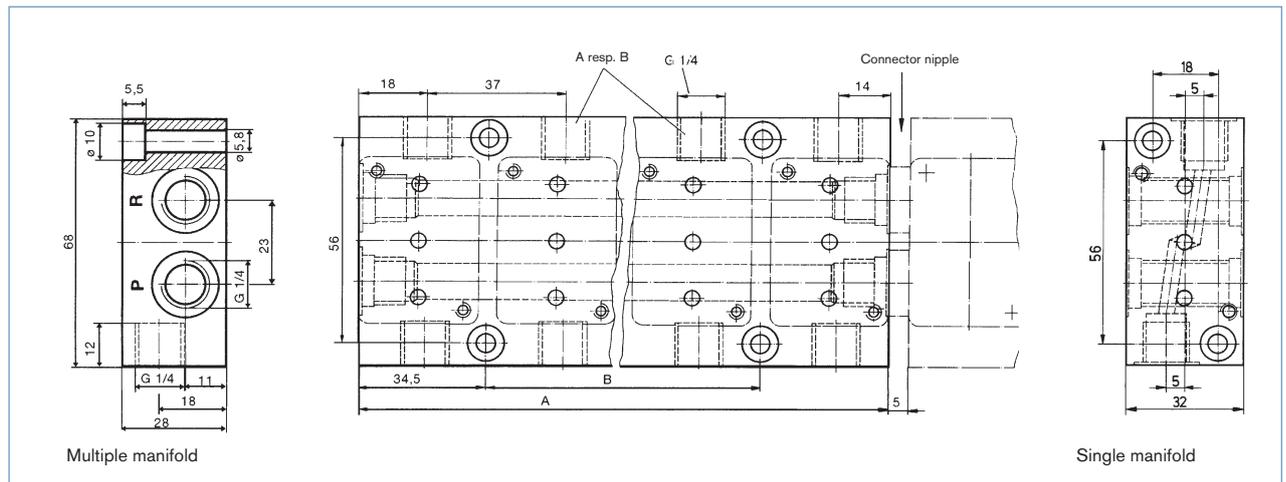
Ordering chart for flange valve manifolds and accessories

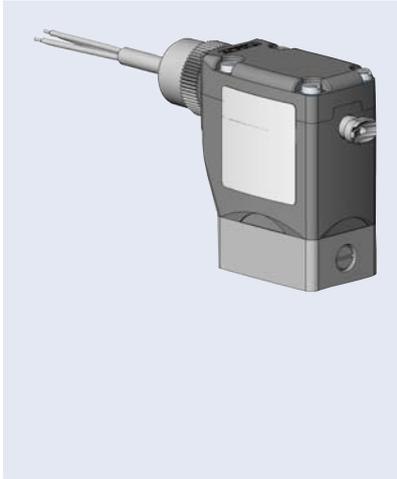
Manifolds (the plates connecting thread is G1/4)

| Number of valve positions [mm] | Length A | Hole spacing B [mm] | Item no. | | |
|--------------------------------|----------|---------------------|-----------------------------|---------------------------|-----------------|
| | | | Material, aluminum anodized | Material, stainless steel | Material, brass |
| 1 | 32 | – | 5043 | 679 211 | 006 014 |
| 2 | 69 | – | 5045 | 679 209 | 612 071 |
| 3 | 106 | 37 | 5366 | 679 266 | 006 323 |
| 4 | 143 | 74 | 5294 | 658 925 | 006 324 |
| 5 | 180 | 111 | 5295 | 679 268 | 006 325 |
| 6 | 217 | 148 | 5296 | 679 269 | 006 326 |
| 7 | 254 | 185 | 5403 | 679 270 | 006 327 |
| 8 | 291 | 222 | 6074 | 679 271 | – |

Accessories for manifolds

| | Material | Seal material | Item No. |
|--|--------------------|---------------|----------|
| Covering plate (for empty valve places) | Stainless steel | FKM | 265 294 |
| Covering plate (for empty valve places) | Aluminium anodized | NBR | 005 625 |
| Nipple (for connecting the collecting ducts of 2 manifolds) | Steel lined | FKM | 005 049 |
| Nipple (for connecting the collecting ducts of 2 manifolds) | Stainless steel | FKM | 007 376 |
| Nipple (for connecting the manifolds; connecting duct is closed) | Steel lined | NBR | 006 049 |



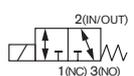
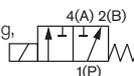
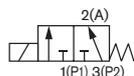
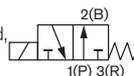
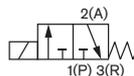
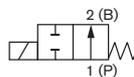
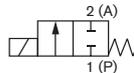


Explosion proofed version

| Technical data | |
|--|--|
| Available body material | Brass, stainless steel (1.4401), PP (Polypropylene) PVDF (Polyvinyl fluoride), PEEK |
| Port connection | Flange interface acc. to Bürkert standard 1000225877 (see also sectional dimensions) |
| Seal material | EPDM / FKM / FFKM / NBR |
| Medium | |
| for NBR | Neutral mediums such as compressed air, town gas, water, hydraulic oil, oils and greases without additives, oxygen |
| for EPDM | Alkalis, acids to medium concentrations, alkaline washing and bleaching lyes |
| for FKM | Oxidizing acids and substances, hot oils with additives, salt solutions, waste gases, oxygen |
| for FFKM | Aggressive mediums, hot air, hot oils |
| All materials | For more detailed information please refer to our compatibility chart |
| Medium temperature for body material | NBR 0 to +80°C |
| Brass, Stainless steel or PEEK | EPDM -30 to +90°C |
| Medium temperature for body material PP or PVDF | FKM 0 to +90°C |
| | FFKM +5 to 90°C |
| Viscosity | Max. 37 mm ² /s |
| Ambient temperature | Max. +55 °C |
| Voltages | 24V; 230V (further voltages on request) |
| Frequency | AC/DC |
| Voltage tolerance | +/- 10% |
| Duty cycle | 100% |
| Electrical connection | Moulded cable (For more detailed information, refer to the instruction manual ACP016, chapter 7.6.1) Terminal box without safety fuse |
| Type of protection | IP65 |
| Coil thermal isolation class | H |
| Ignition protection | II 2 G Ex mb IIC T4 Gb II 2 D EX mb IIIC T130° Db |
| Certificate | EPS 16 ATEX 1 111 X IECEX EPS 16.0049X |
| Installation | As required, preferably with actuator upright |

Circuit function

- A** 2/2-way direct acting valve, normally closed
- B** 2/2-way direct acting valve, normally open
- C** 3/2-way valve, direct acting, when de-energised Port A exhausted
- D** 3/2-way valve, servo-assisted, outlet B normally pressurized
- E** Mixer valve, direct-acting, in de-energized position, P2→A open, P1 closed
- F** Distribution valve, direct-acting, in de-energized position, P→B open, A closed
- T** 3/2 way valve, universal function, flow direction as required



Cycling rate

| | Max. cycling rate | Mediums temp. | Ambient temp. |
|-----------|-------------------|---------------|---------------|
| Variant 1 | 20/min | Up to +70 °C | Up to +40 °C |
| Variant 2 | 5/min | Up to +90 °C | Up to +40 °C |

Power consumption

| Inrush [W] | Operation [W] |
|------------|---------------|
| 40 | 3 |

Response times

| Orifice [mm] | Opening [ms] | Closing [ms] |
|--------------|--------------|--------------|
| 2 - 4 | 30 | 40 |

Response times [ms]:

Measured at valve outlet at 6 bar and +20 °C

Opening: Pressure rise 0 to 90%,

Closing: Pressure relief 100 to 10%

Technical data (continued)

Pressure range and flow rate metal body

| Circuit function | DN | Kv value water [m ³ /h] | Standard Pressure range ²³⁾ [bar] | Vacuum Pressure range [bar] |
|-------------------|-----|------------------------------------|--|-----------------------------|
| A / B / C / D / F | 2.0 | 0.11 | 0 – 16 | -0.98 – 10 |
| | 3.0 | 0.18 | 0 – 10 | -0.98 – 6 |
| | 4.0 | 0.23 | 0 – 5 | -0.98 – 3 |
| | 5.0 | 0.29 | 0 – 4 | -0.98 – 2.5 |
| E | 2.0 | 0.11 | 0 – 10 | -0.98 – 8 |
| | 3.0 | 0.18 | 0 – 6 | -0.98 – 5 |
| | 4.0 | 0.23 | 0 – 3.5 | -0.98 – 2.5 |
| | 5.0 | 0.29 | 0 – 3 | -0.98 – 2 |
| T | 2.0 | 0.11 | 0 – 10 | -0.98 – 8 |
| | 3.0 | 0.18 | 0 – 6 | -0.98 – 5 |

Pressure range and flow rate for plastic body

| Circuit function | DN | Kv value water [m ³ /h] | Standard Pressure range ²³⁾ [bar] | Vacuum Pressure range [bar] |
|-------------------|-----|------------------------------------|--|-----------------------------|
| A / B / C / D / F | 2.0 | 0.13 | 0 – 16 | -0.98 – 10 |
| | 3.0 | 0.25 | 0 – 10 | -0.98 – 6 |
| | 4.0 | 0.30 | 0 – 5 | -0.98 – 3 |
| | 5.0 | 0.40 | 0 – 4.5 | -0.98 – 1 |
| E / T | 2.0 | 0.13 | 0 – 10 | -0.98 – 7 |
| | 3.0 | 0.25 | 0 – 6 | -0.98 – 5 |
| | 4.0 | 0.30 | 0 – 3 | -0.98 – 2.5 |

¹⁾ Measured at +20 °C, 1 bar²⁾ pressure at valve inlet and free outlet.

²⁾ Devices with FKM or FFKM diaphragm are reduced to a max. pressure of 12 bar

³⁾ Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Other circuit functions

The valves are fitted with different springs for a particular circuit function. When used in other circuit functions the permissible operating pressure changes acc. to the following table.

| Metal body | | | | | | | | | | | | | | | | | | |
|------------------|--|-----------------|-----|-----|-----|----|--------------|----|-----|----|---|----|--------------|-----|---|-----|-----|---|
| Circuit function | Max. operating pressure [bar] when using the valve in a new circuit function | | | | | | | | | | | | | | | | | |
| | Orifice 2 mm | | | | | | Orifice 3 mm | | | | | | Orifice 4 mm | | | | | |
| | A ¹⁾ | B ¹⁾ | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| C | 16 | 1.5 | 16 | 1.5 | 1.5 | 16 | 10 | 1 | 10 | 1 | 1 | 10 | 5 | 0.8 | 5 | 0.8 | 0.8 | 5 |
| D | 4 | 16 | 4.5 | 16 | 4 | 4 | 2.5 | 10 | 2.5 | 10 | 2 | 3 | 2 | 5 | 2 | 5 | 2 | 2 |
| T | 8 | 8 | 10 | 10 | 10 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 3 | 3 | 3 | 3 | 3 |

| Plastic body | | | | | | | | | | | | | | | | | | |
|------------------|--|-----------------|-----|-----|-----|----|--------------|----|-----|----|---|----|--------------|-----|---|-----|-----|---|
| Circuit function | Max. operating pressure [bar] when using the valve in a new circuit function | | | | | | | | | | | | | | | | | |
| | Orifice 2 mm | | | | | | Orifice 3 mm | | | | | | Orifice 4 mm | | | | | |
| | A ¹⁾ | B ¹⁾ | C | D | E | F | A | B | C | D | E | F | A | B | C | D | E | F |
| C | 16 | 1.5 | 16 | 1.5 | 1.5 | 16 | 10 | 1 | 10 | 1 | 1 | 10 | 5 | 0.8 | 5 | 0.8 | 0.8 | 5 |
| D | 4 | 16 | 4.5 | 16 | 4 | 4 | 2.5 | 10 | 2.5 | 10 | 2 | 3 | 2 | 5 | 2 | 5 | 2 | 2 |
| F | 16 | 1.5 | 10 | 1.5 | 1.5 | 16 | 6 | 1 | 6 | 1 | 1 | 10 | 4 | 1 | 4 | 1 | 1 | |

¹⁾ For circuit function A and B the valve must be connected acc. to the pin assignment of 3/2-way valve.

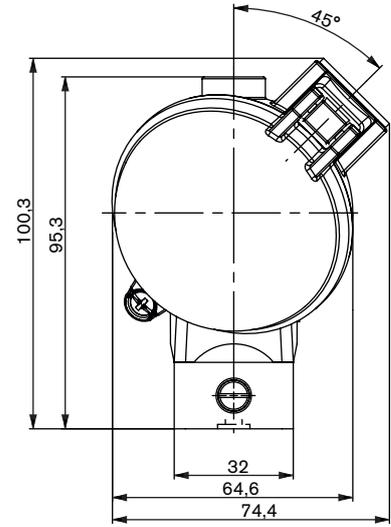
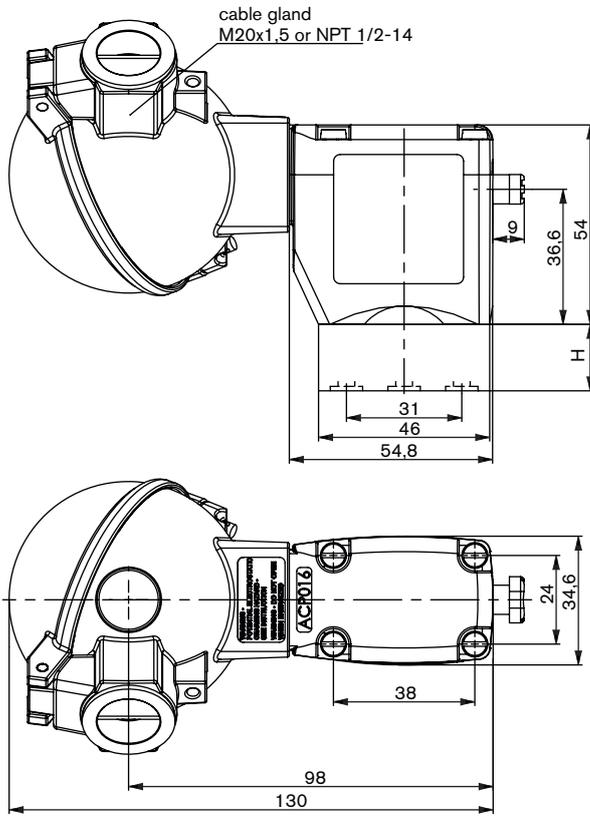
Additional options

| Option | Variable Code | Description |
|--|---------------|---|
| Oxygen versions | NL02 | Suitable for applications with oxygen (non-metal materials that are in contact with the medium, are tested and approved according to BAM) |
| Increased purity requirements e.g. oil, grease and silicone-free | NL50/NL05 | Wetted parts are specially cleaned and packaged in accordance with the valves |
| Increased hermetic requirements | PCxx | Standard units are tested at 10 ⁻² mbar x l / sec; feasible up to 10 ⁻⁶ mbar |
| Vacuum version | NA02 | Suitable for vacuums up to -0.98bar |
| Increased purity and hermetic requirements | NA03 | Wetted parts are specially cleaned and leak tested to 10 ⁻⁴ mbar x l/sec |
| Increased purity and hermetic requirements and vacuum version | NA01 | Wetted parts are specially cleaned and leak tested up to 10 ⁻⁴ mbar x l / sec and suited for vacuum up to -0.98 bar |
| Electrical feedback | CF15 | Coil with intrinsically safe proximity switches (PTB 00 ATEX 2048X) instead of manual override |
| Manifold with banjo bolt | LG09 | Due to the banjo bolt a direct attachment is possible (for example, to externally controlled pneumatic drives) |
| potential conformities (depending on design) | | EAC ; drinking water; FDA; |

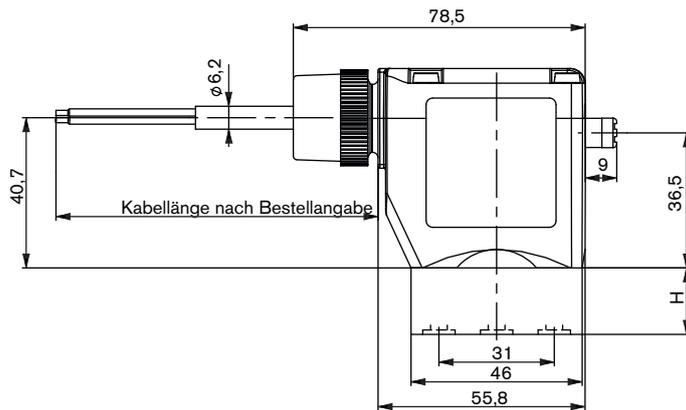
Dimensions [mm]

Swing radius of cover
R84

Terminal connection box version



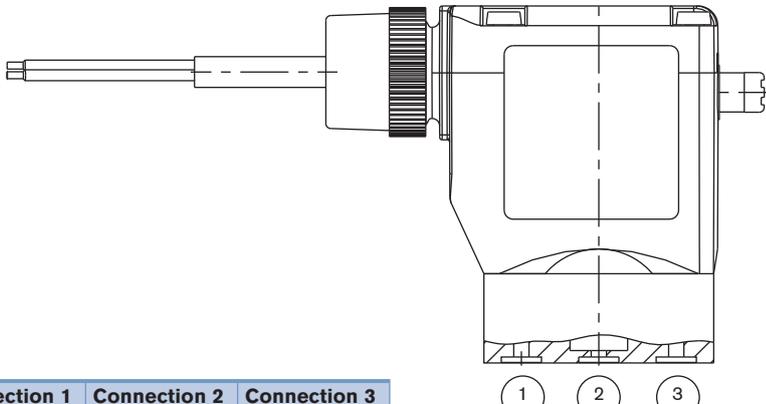
Cable outlet version



| Version | H |
|-----------------------|----|
| Brass/Stainless steel | 18 |
| PP/PD | 19 |

PIN Assignments

The connections marked with 1, 2 and 3 are labelled in the drawing according to the circuit function table on the left.



| Circuit function | Connection 1 | Connection 2 | Connection 3 |
|------------------|--------------|--------------|--------------|
| A | P | A | |
| B | B | P | |
| C | P | A | R |
| D | R | B | P |
| E | P1 | A | P2 |
| F | A | P | B |

Ordering chart

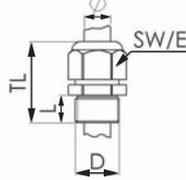
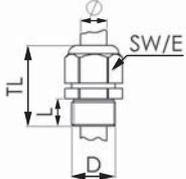
All devices with manual override

| Circuit function | Orifice [mm] | Seal Material | Housing or seat material | Electrical connection | Item no. per voltage/frequency [V/Hz] | | |
|------------------|--------------|---------------|--------------------------|-----------------------|---------------------------------------|---------|-------------------|
| | | | | | 024/UC | 110/UC | 230 resp. 240 /UC |
| A | 03.0 | FKM | Stainless steel | Cable | 305 882 | - | 305 877 |
| C | 02.0 | NBR | Stainless steel | Terminal box | - | 305 795 | - |
| C | 02.0 | FKM | Stainless steel | Terminal box | - | 305 775 | - |
| C | 02.0 | NBR | Stainless steel | Cable | 305 875 | - | - |
| C | 03.0 | NBR | Brass | Cable | 305 857 | - | 305 853 |
| C | 03.0 | FKM | Stainless steel | Cable | 305 883 | 305 880 | 305 881 |
| D | 02.0 | NBR | Brass | Terminal box | - | 305 772 | - |
| D | 02.0 | NBR | Brass | Cable | 305 899 | 305 907 | 305 862 |
| D | 02.0 | NBR | Stainless steel | Cable | 305 872 | - | 305 859 |
| D | 02.0 | NBR | Stainless steel | Terminal box | - | 305 794 | - |
| D | 03.0 | NBR | Brass | Cable | 305 874 | - | - |
| T | 02.0 | FKM | Stainless steel | Cable | 305 871 | 305 886 | 305 861 |
| T | 02.0 | FKM | Stainless steel | Terminal box | - | 305 784 | 305 786 |
| T | 02.0 | NBR | Stainless steel | Cable | 305 869 | - | 305 870 |
| T | 02.0 | EPDM | Stainless steel | Terminal box | - | - | 305 790 |
| T | 02.0 | NBR | Brass | Cable | 305 863 | 305 865 | 305 866 |
| T | 02.0 | NBR | Brass | Terminal box | - | - | 305 777 |
| T | 02.0 | FKM | Brass | Cable | 305 867 | - | 305 868 |
| T | 02.0 | FKM | Brass | Terminal box | - | 305 779 | 305 780 |

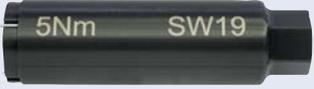
Note: Further versions on request

Ex-Cable glands

(polyamide version included in delivery / surcharge applied for brass nickel plated version)

| Photo | Description | Ex Approvals | | Item no | Drawing | | | | | | | | | | |
|---|------------------------------|--|--|---------|---|----|----------|---|-------|---|----|----|-------|---|-------|
| | | Certification | Identifica-tion | | | | | | | | | | | | |
|  | Brass, nickelplated, 6-13 mm | PTB 04 ATEX 1112 X, IECEx PTB 13.0027X | II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68, | 773 278 |  <table border="1"> <tr><td>TL</td><td>29-37 mm</td></tr> <tr><td>L</td><td>6 mm</td></tr> <tr><td>D</td><td>20</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>27 mm</td></tr> </table> | TL | 29-37 mm | L | 6 mm | D | 20 | SW | 24 mm | E | 27 mm |
| TL | 29-37 mm | | | | | | | | | | | | | | |
| L | 6 mm | | | | | | | | | | | | | | |
| D | 20 | | | | | | | | | | | | | | |
| SW | 24 mm | | | | | | | | | | | | | | |
| E | 27 mm | | | | | | | | | | | | | | |
|  | Polyamide, 7-13 mm | PTB 13 ATEX 1015 X, IECEx PTB 13.0034X | II 2 G Ex e IIC Gb, II 2 D Ex tb IIIC Db IP68 | 773 277 |  <table border="1"> <tr><td>TL</td><td>36-45 mm</td></tr> <tr><td>L</td><td>10 mm</td></tr> <tr><td>D</td><td>20</td></tr> <tr><td>SW</td><td>24 mm</td></tr> <tr><td>E</td><td>28 mm</td></tr> </table> | TL | 36-45 mm | L | 10 mm | D | 20 | SW | 24 mm | E | 28 mm |
| TL | 36-45 mm | | | | | | | | | | | | | | |
| L | 10 mm | | | | | | | | | | | | | | |
| D | 20 | | | | | | | | | | | | | | |
| SW | 24 mm | | | | | | | | | | | | | | |
| E | 28 mm | | | | | | | | | | | | | | |

Special tool to turn the junction box (not included in delivery)

| Photo | Description | Item no. |
|---|---|----------|
|  | Set SC02-AC10 Special wrench Service Manual | 293 488 |

DTS 1000010928 EN Version: I Status: RL (released | freigegeben | valide) printed: 10.05.2017

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