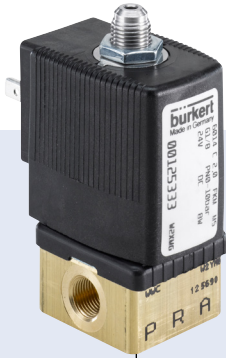


Plunger valve 3/2 way direct-acting



Type 6014 can be combined with...



Type 2513



Type 2511

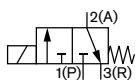


Type 2508

- Direct-acting, compact valve with diameter of up to DN2.5
- Vibration-proof, bolted coil system
- Banjo threaded connection for direct mounting on pneumatic valves
- Service-friendly manual override
- Energy-saving pulse versions

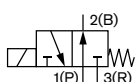
Valve 6014 is a direct-acting plunger valve. The stopper and plunger guide tube are welded together to enhance pressure resistance and leak-tightness. Various seal material combinations are available depending on the application. A Bürkert-specific flange design (SFB) enables space-saving arrangement of valves on a manifold. The coils are moulded with polyamide or with chemically resistant epoxy. Pulse coils are available for the reduction of electrical power consumption during operation. Optional manual actuation enables quick commissioning and easy maintenance. In combination with a plug in accordance with DIN EN 175301-803 Form A, the valves satisfy protection class IP65. Stainless steel valves satisfy NEMA 4X.

Circuit function C



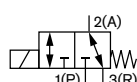
3/2 way direct-acting solenoid valve, normally closed

Circuit function D



3/2 way direct-acting solenoid valve, normally open

Circuit function T



3/2 way direct-acting solenoid valve, flow direction optional

Technical data

| | |
|--|--|
| Body material | Brass or stainless steel, polyamide (sub-base) |
| Seal material | FKM (EPDM on request) |
| Medium | Neutral gases and fluids (e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol). Suitable for technical vacuum |
| Medium temperature Polyamide coil (FKM seal) | -10° to +100 °C (PA coil) to 120 °C Epoxy coil |
| Ambient temperature | Max. +55 °C |
| Viscosity | Max. 21 mm ² /s |
| Port connection | G 1/8, G 1/4, sub-base (SFB) |
| Operating voltage | 24 V DC, 24 V/50 Hz, 230 V/50 Hz (other voltages on request) |
| Voltage tolerance | ± 10 % |
| Duty cycle / single valve Assembly | 100 % continuous rating Intermittent operation 60 % (30 min) or with 5 W coil (on request) |
| Electrical connection | DIN EN 175 301-803 Form A for Cable Plug, Type 2508 (see Ordering chart for accessories) ATEX/IECEx version with 3 m moulded cable |
| Installation | As required, preferably with actuator upright |
| Protection class | IP65 with cable plug, ATEX/IECEx junction box version and cable connection version NEMA 4x with cable plug 2508 or 2509 only for stainless steel versions (other versions on request) |
| Coil insulation class | Polyamide class B (Epoxy class H on request) |
| Coil material | Polyamide (Epoxy on request) |
| Orifice | DN1.5 ... 2.5 |

Technical data

Power consumption

| Orifice [mm] | Power consumption | | | |
|-----------------|-------------------|----------------------------|-----|---------------------------|
| | Inrush AC [VA] | Hold AC (hot coil) [VA] | [W] | DC hot / cold coil [W] |
| 1.5...2.5 | 24 | 17 | 8 | 8 / 9 |

Response times

| Orifice [mm] | Response times AC and DC | |
|-----------------|--------------------------|--------------|
| | Opening [ms] | Closing [ms] |
| 1.5 | 10 ... 15 | 15 ... 20 |
| 2.0 | 10 ... 15 | 15 ... 20 |
| 2.5 | 15 ... 20 | 10 ... 22 |

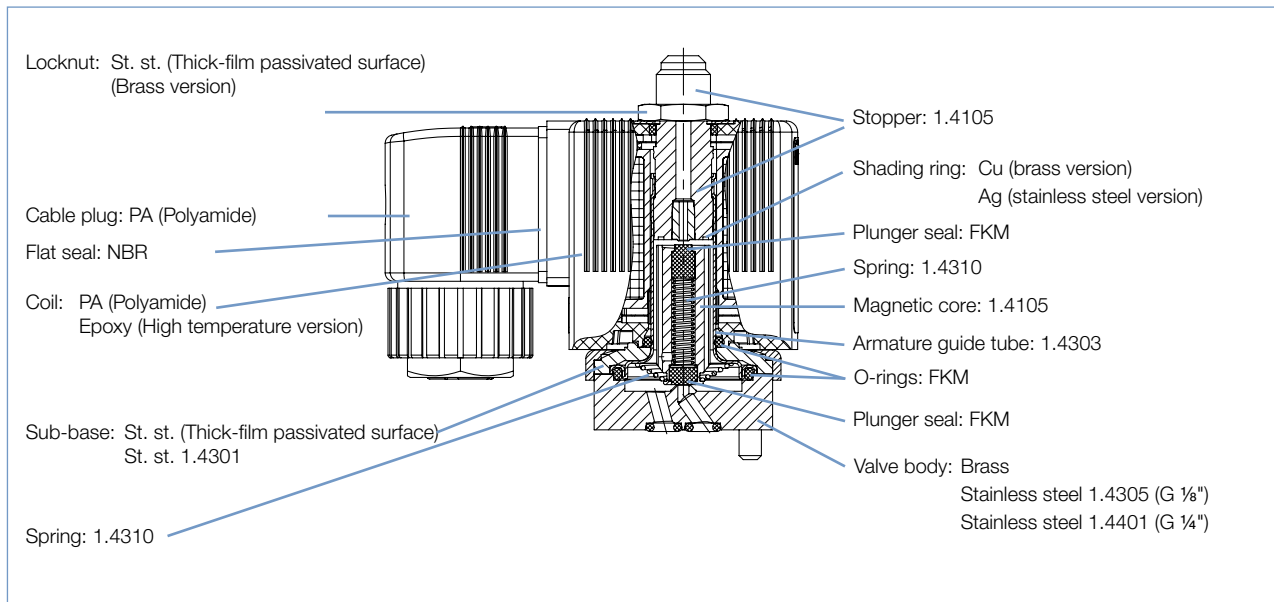
Response times [ms]:

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

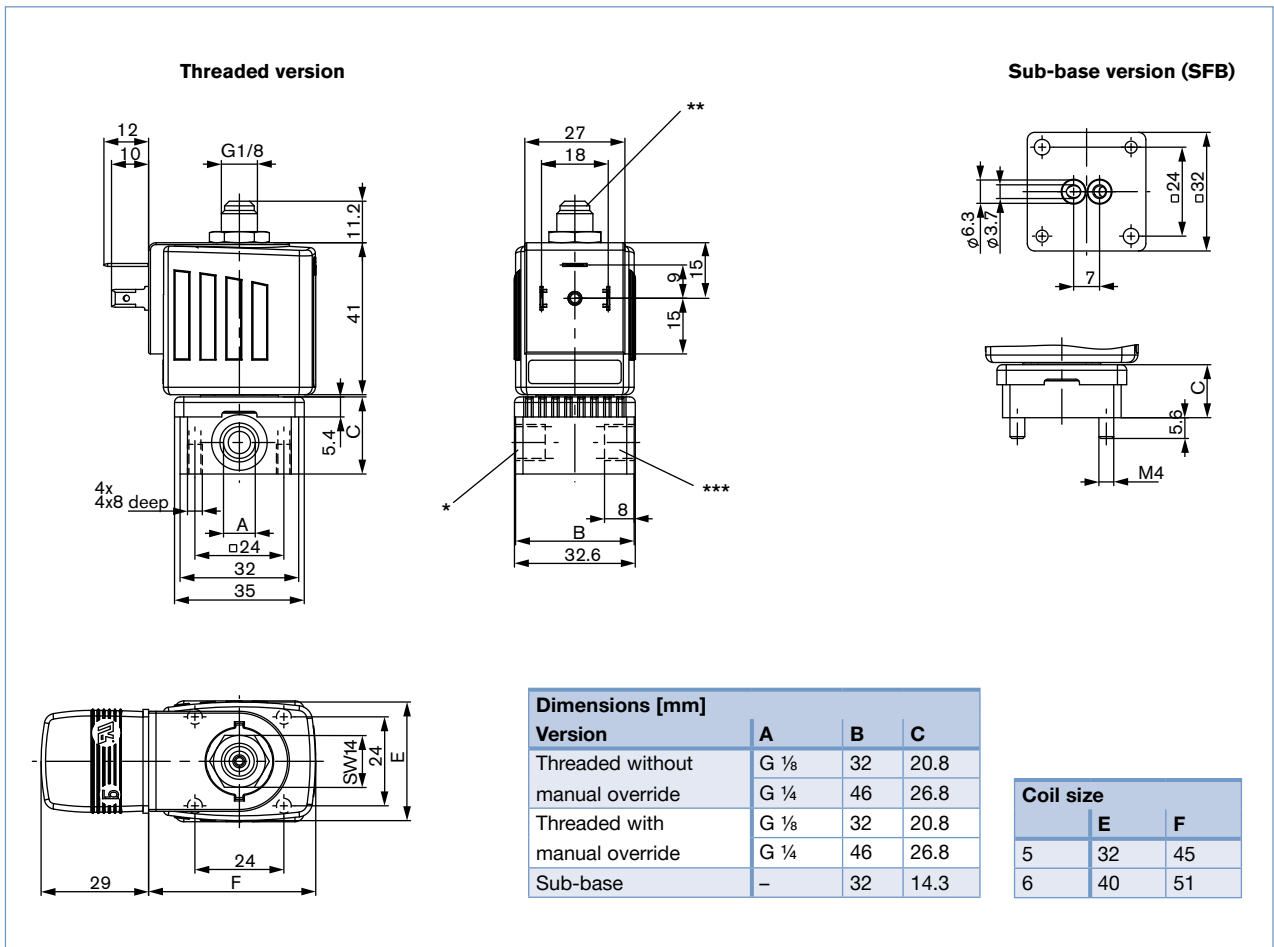
Opening: Pressure build-up 0 ... 90%, to

Closing: Pressure relief 100 ... 10%

Materials



Dimensions [mm]



Utilisation in another circuit function

Valves with circuit functions (WW) C, D and T are fitted with different springs. If used in some other circuit function, the permissible operating pressure may change (see table below).

| Valve Version Basic version | | Max. operating pressure [bar] for valve application in circuit function | | | | |
|-----------------------------|------------------|---|-----|-----|-----|-----|
| DN | Circuit function | A | B | C | D | T |
| 1.5 | C | 16 | 22 | 16 | 2 | 2 |
| | D | 2 | 2.5 | 2 | 16 | 2 |
| | T | 10 | 16 | 10 | 6 | 6 |
| 2.0 | C | 10 | 14 | 10 | 1 | 1 |
| | D | 1 | 1.5 | 1 | 10 | 1 |
| | T | 6 | 10 | 6 | 4 | 4 |
| 2.5 | C | 6 | 9 | 6 | 0.7 | 0.7 |
| | D | 0.7 | 1 | 0.7 | 6 | 0.7 |
| | T | 3.5 | 6 | 3.5 | 2.5 | 2.5 |

Connections

For the positions marked with *, ** or *** in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function. Unused connections in circuit functions A or B will be closed off with a blanking plug or cap nut.

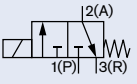
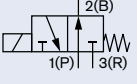
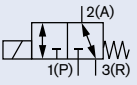
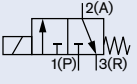
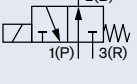
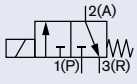
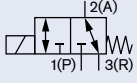









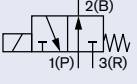















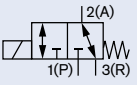



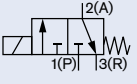






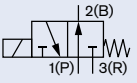






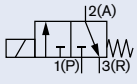









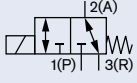



| Circuit function | Connection Type | | |
|------------------|-----------------|-----------|-----|
| | * | ** | *** |
| A | P | blank off | A |
| B | blank off | B | P |
| C | P | R | A |
| D | R | P | B |
| T | P | R | A |

- see drawing on page 7

Ordering chart for valves (other versions on request)

6014 Threaded valves with FKM seal, (class B)

Delivered without cable plug (see accessories)

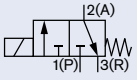






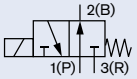



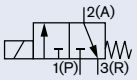












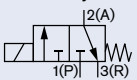



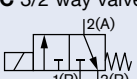



| Circuit function | Orifice [mm] | Port connection | K _v value water [m ³ /h] ¹⁾ | Pressure range [bar] ²⁾ | Effective coil power [W] | Article no. per voltage / frequency | | |
|--|--------------|-----------------|--|------------------------------------|--|--|--|--|
| | | | | | | 024/DC | 024/50 | 230/50 |
| Brass body | | | | | | | | |
| C 3/2 way valve NC  | 1.5 | G 1/8 | 0.07 | 0 ... 16 | 8 | 125329  | 125331  | 125332  |
| | 2.0 | G 1/8 | 0.11 | 0 ... 10 | 8 | 125333  | 125334  | 125336  |
| | | G 1/4 | 0.11 | 0 ... 10 | 8 | 125348  | 126138  | 126140  |
| | 2.5 | G 1/8 | 0.16 | 0 ... 6 | 8 | 125341  | 125340  | 125342  |
| G 1/4 | | 0.16 | 0 ... 6 | 8 | 126142  | 126143  | 126145  | |
| D 3/2 way valve, NO  | 1.5 | G 1/8 | 0.07 | 0 ... 16 | 8 | 126195  | 126196  | 125355  |
| | 2.0 | G 1/8 | 0.11 | 0 ... 10 | 8 | 125357  | 125358  | 125360  |
| | | G 1/4 | 0.11 | 0 ... 10 | 8 | 126198  | 126199  | 126201  |
| | 2.5 | G 1/8 | 0.16 | 0 ... 6 | 8 | 125363  | 126202  | 126204  |
| G 1/4 | | 0.16 | 0 ... 6 | 8 | 126205  | 126206  | 126208  | |
| T 3/2 way Universal valve  | 1.5 | G 1/8 | 0.07 | 0 ... 7 | 8 | 126150  | 126151  | 126153  |
| with manual override | | | | | | | | |
| C 3/2 way valve NC  | 2.0 | G 1/8 | 0.11 | 0 ... 10 | 8 | 125337  | 125338  | 125339  |
| | | G 1/4 | 0.11 | 0 ... 10 | 8 | 125349  | 126147  | 126149  |
| D 3/2 way valve, NO  | 2.0 | G 1/8 | 0.11 | 0 ... 10 | 8 | 126209  | 125361  | 126211  |
| | | G 1/4 | 0.11 | 0 ... 10 | 8 | 126212  | 126213  | 126215  |
| Stainless steel body | | | | | | | | |
| C 3/2 way valve NC  | 1.5 | G 1/8 | 0.07 | 0 ... 16 | 8 | 126216  | 126217  | 126219  |
| | 2.0 | G 1/8 | 0.11 | 0 ... 10 | 8 | 126220  | 126221  | 126223  |
| | | G 1/4 | 0.11 | 0 ... 10 | 8 | 126224  | 126225  | 126227  |
| T 3/2 way, universal valve  | 1.5 | G 1/8 | 0.07 | 0 ... 7 | 8 | 126228  | 126229  | 126231  |

¹⁾ Measured at +20 °C, 1 bar²⁾ pressure difference²⁾ Measured as overpressure to the atmospheric pressure

Ordering chart for valves (other versions on request)

6014 Valves with FKM seal and sub-base body (SFB), (class B)

Delivered without cable plug (see accessories)

| Circuit function | Orifice [mm] | K _v value water [m ³ /h] ¹⁾ | Pressure range [bar] ²⁾ | Effective coil power [W] | Article no. per voltage / frequency | | |
|--|--------------|--|------------------------------------|--------------------------|---|--|--|
| | | | | | 024/DC | 024/50 | 230/50 |
| Brass body | | | | | | | |
| C 3/2 way valve NC  | 1.5 | 0.07 | 0...16 | 8 | 126154  | 126155  | 125366  |
| | 2.0 | 0.11 | 0...10 | 8 | 125367  | 125368  | 125370  |
| D 3/2 way valve, NO  | 2.0 | 0.11 | 0...10 | 8 | 126161  | 126162  | 125383  |
| with manual override | | | | | | | |
| C 3/2 way valve NC  | 1.5 | 0.07 | 0...10 | 5 | 126403  | 126404  | 126406  |
| | 1.5 | 0.07 | 0...16 | 8 | 126157  | 126158  | 126160  |
| | 2.0 | 0.11 | 0...6 | 5 | 126407  | 126408  | 126410  |
| | 2.0 | 0.11 | 0...10 | 8 | 125371  | 125372  | 125374  |
| Polyamide body material | | | | | | | |
| C 3/2 way valve NC  | 1.5 | 0.07 | 0...10 | 5 | 126390  | 126391  | 126393  |
| with manual override | | | | | | | |
| C 3/2 way valve NC  | 1.5 | 0.07 | 0...10 | 5 | 126396  | 126397  | 126399  |

¹⁾ Measured at +20 °C, 1 bar²⁾ pressure difference²⁾ Measured as overpressure to the atmospheric pressure

Ordering chart for valves, impulse version (other versions on request)

6014 impulse valve with FKM seal material and brass body (class H)

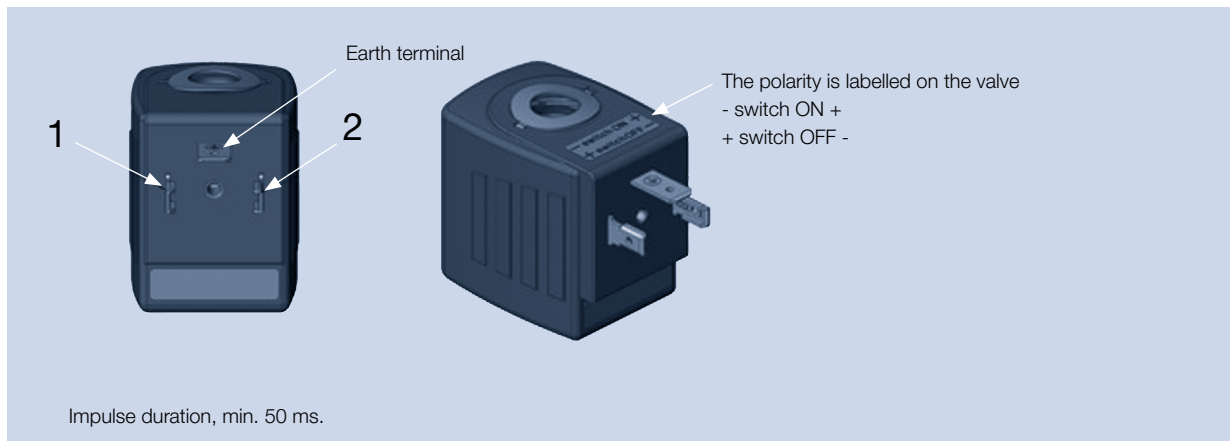
| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] ¹⁾ | Pressure range [bar] ²⁾ | Power consumption DC (hot/cold coil) [W] | Article no. per voltage [V/] | |
|--|---------------------|--------------|--|------------------------------------|--|------------------------------|--------|
| | | | | | | 012/DC | 024/DC |
| C 3/2 way valve, output 2 exhausted | Brass body | | | | | | |
| | Threaded port G 1/8 | 1.5 | 0.07 | 0 ... 16 | 7 | 209280 | 209284 |
| | | 2.0 | 0.11 | 0 ... 10 | 7 | 209281 | 209285 |
| | Sub-base {SFB} | 1.5 | 0.07 | 0 ... 16 | 7 | 209278 | 209282 |
| 2.0 | | 0.11 | 0 ... 10 | 7 | 209279 | 209283 | |

¹⁾ Measured at +20 °C, 1 bar²⁾ pressure difference

²⁾ Measured as overpressure to the atmospheric pressure

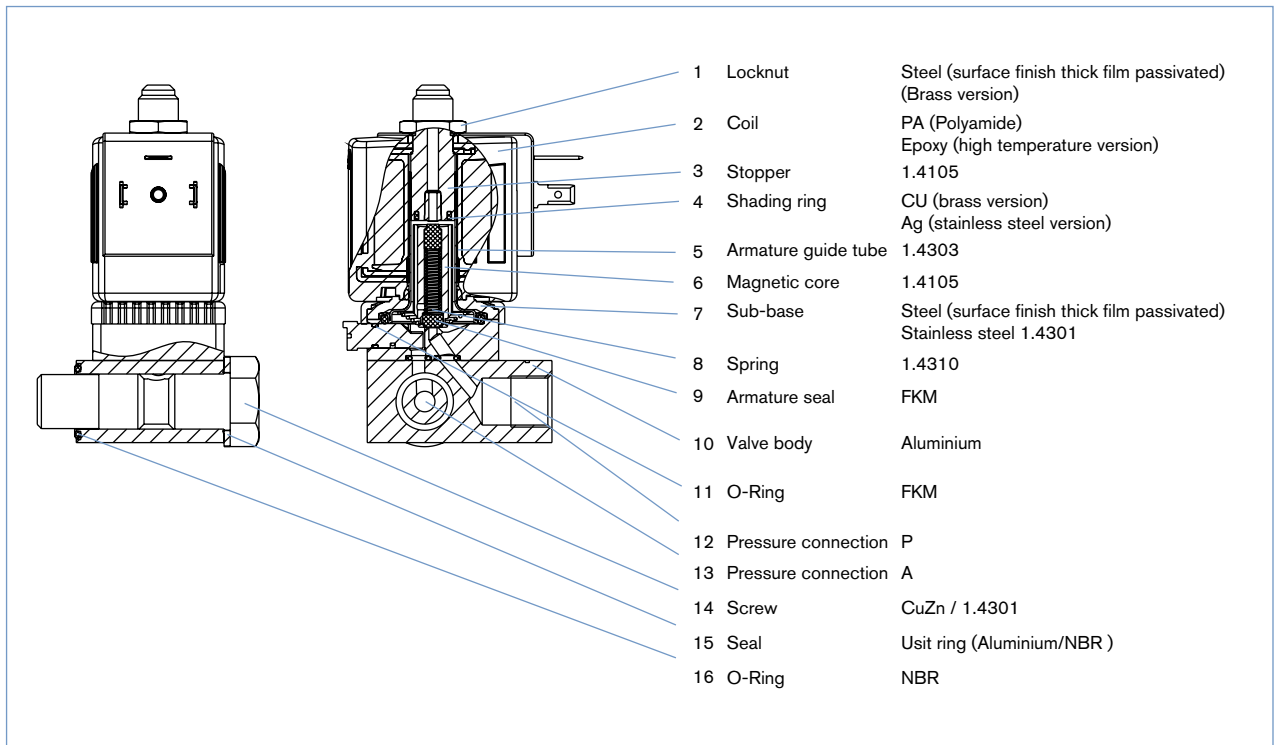
Activation of the impulse version with inverse polarity operation

| The polarity is labelled on the valve | Specifications | Terminal connections |
|---------------------------------------|----------------------|---|
| - switch ON + | valve will be opened | (+) on terminal 2 and (-) on terminal 1 (see below) |
| + switch OFF - | valve will be closed | (+) on terminal 1 and (-) on terminal 2 (see below) |

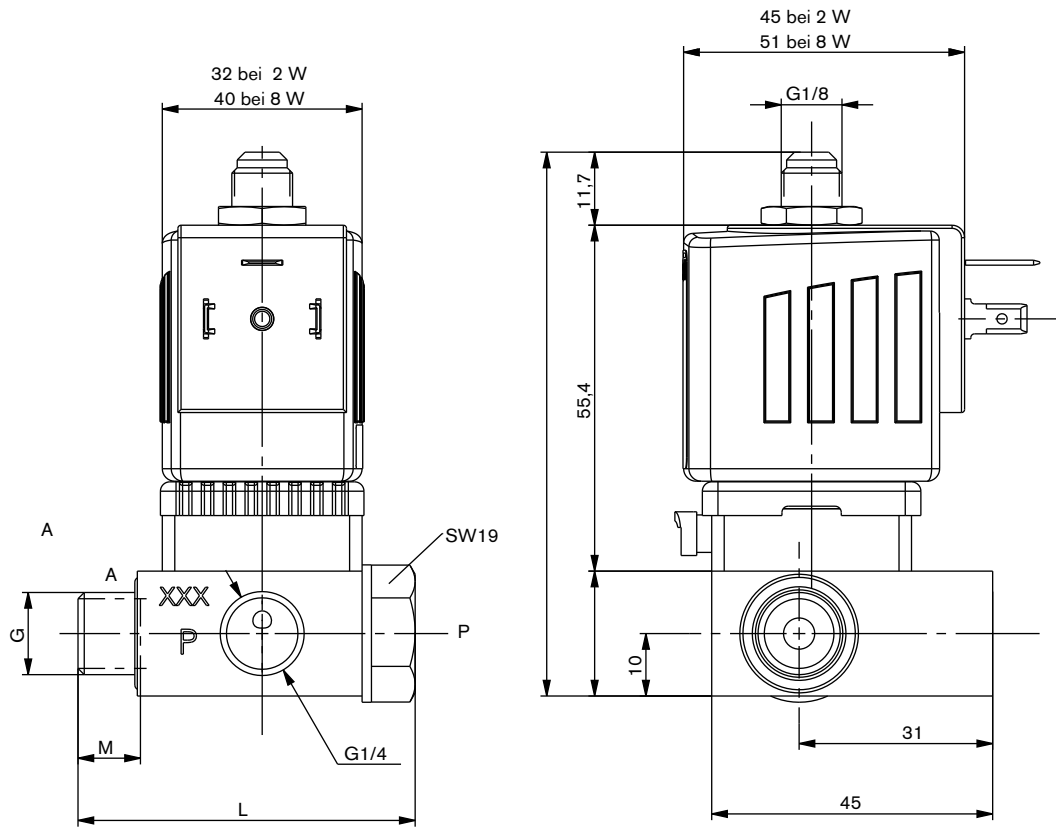


Note: Only cable plug without circuitry should be used together with impulse version!

Materials for banjo version

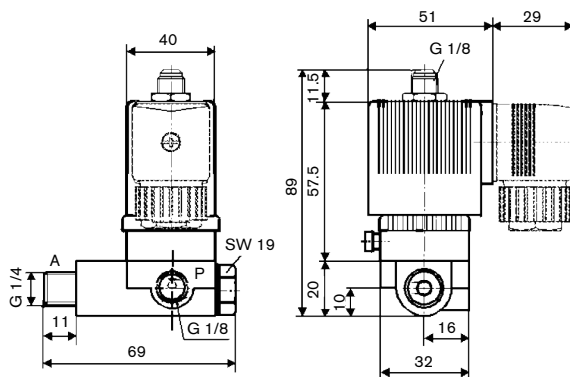


Dimensions for banjo version



| G | M | L |
|-------|----|----|
| G 1/8 | 10 | 51 |
| G 1/4 | 12 | 54 |

IXEF® Banjo coupler, anodised aluminium banjo bolt



Ordering chart for banjo version (other versions on requests)

All valves with FKM seal and manual override, delivered without cable plug
Anodised aluminium banjo coupler, nickel-plated brass banjo bolt

| Circuit function | Pressure inlet P (banjo coupler) | Service port A (banjo bolt) | Orifice [mm] | Q _{Nn} value air [l/min] | Material flange body | Pressure range [bar] | Power consumption [W] | Article no. per voltage/frequency [V/Hz] | | |
|-------------------------------|----------------------------------|-----------------------------|--------------|-----------------------------------|----------------------|----------------------|-----------------------|--|--------|--------|
| | | | | | | | | 024/DC | 024/50 | 230/50 |
| C 3/2 way valve NC | G ¼ | G ⅛ | 1.5 | 75 | PA | 0...6 | 2 | 424123 | 424124 | 424127 |
| | | G ¼ | 1.5 | 75 | PA | 0...6 | 2 | 424118 | 424119 | 424122 |
| | | G ⅛ | 2.0 | 120 | Brass | 0...10 | 8 | 424113 | 424114 | 424117 |
| | | G ¼ | 2.0 | 120 | Brass | 0...10 | 8 | 424103 | 424104 | 424107 |

Please note that the cable plug has to be ordered separately, see separate datasheet for Type 2508.

Ordering chart for banjo version IXEF (other versions on requests)

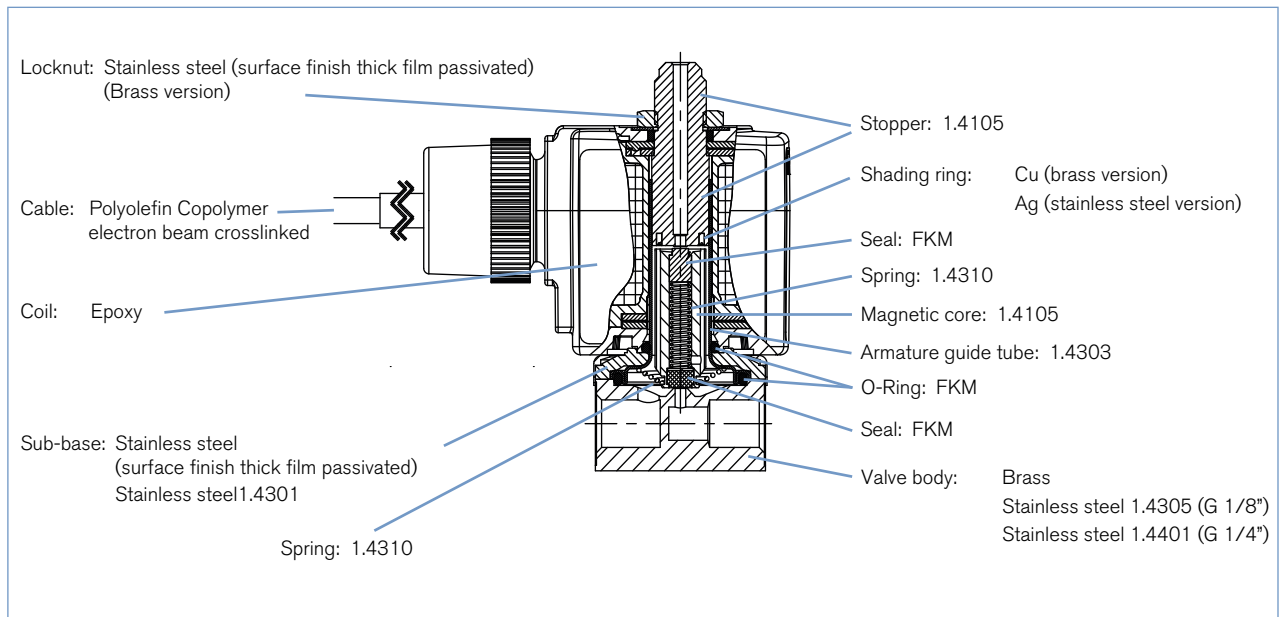
All valves with PA body, FKM seal and manual override, delivered without cable plug
IXEF® banjo coupler, anodised aluminium banjo bolt

| Circuit function | Pressure inlet P (banjo coupler) | Service port A (banjo bolt) | Orifice [mm] | Q _{Nn} value air [l/min] | Material flange body | Pressure range [bar] | Power consumption [W] | Article no. per voltage/frequency [V/Hz] | | |
|-------------------------------|----------------------------------|-----------------------------|--------------|-----------------------------------|----------------------|----------------------|-----------------------|--|--------|--------|
| | | | | | | | | 024/DC | 024/50 | 230/50 |
| C 3/2 way valve NC | G ⅛ | G ¼ | 1.5 | 75 | PA | 0...10 | 5 | 784710 | x | x |
| | | G ¼ | 2.0 | 120 | PA | 0...10 | 8 | 784706 | 784707 | 784709 |
| | | G ¼ | 2.5 | 174 | PA | 0...6 | 8 | 786014 | x | 786015 |

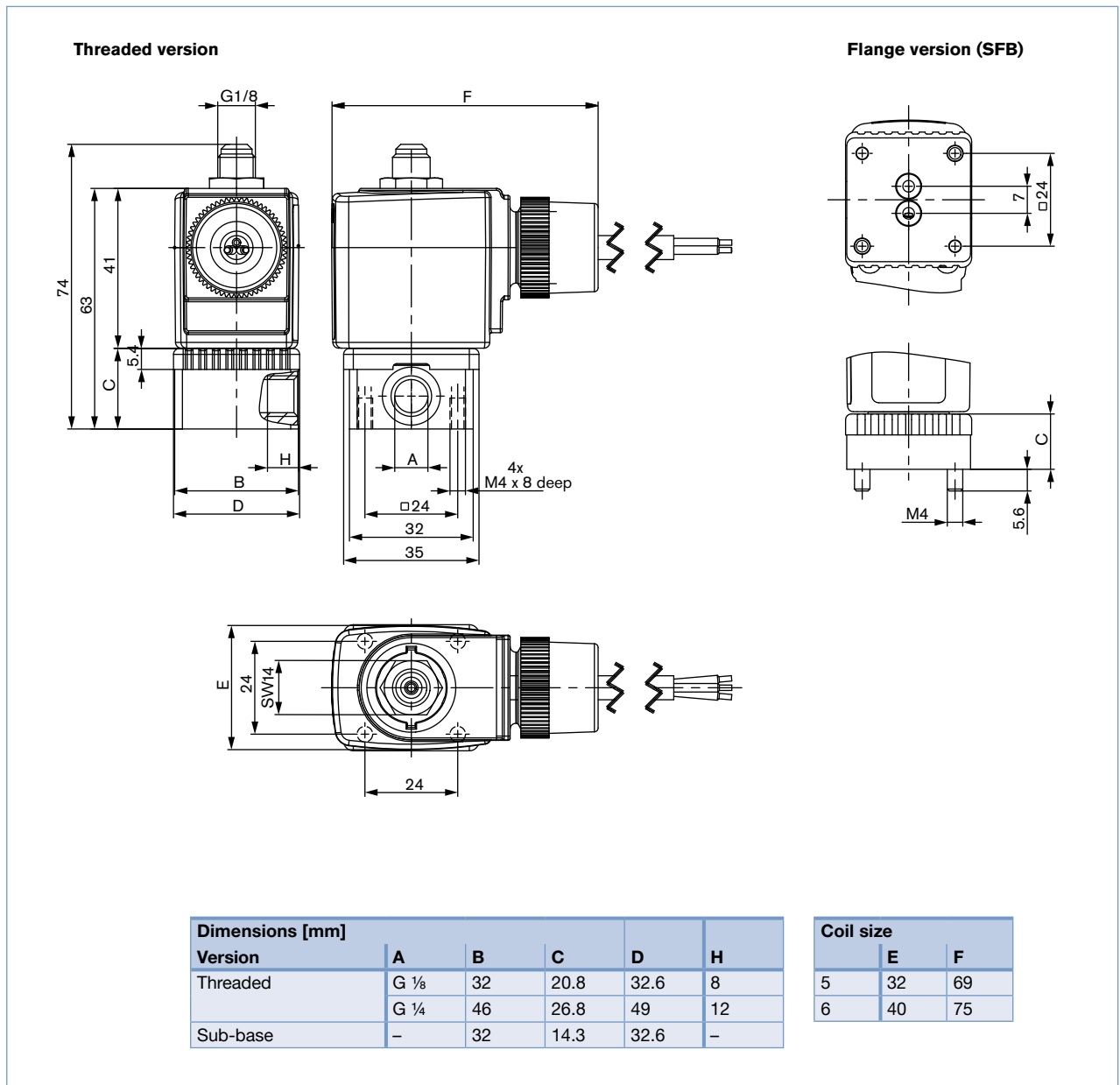
Please note that the cable plug has to be ordered separately, see separate datasheet for Type 2508.

x on request

Materials for ATEX/IECEX m cable version

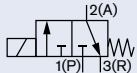


Dimensions for ATEX/IECEx m cable version

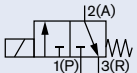
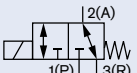


Ordering chart for Ex m valves cable version

6014 valve, Ex m II T4, with FKM seal material and sub-base (SFB) connection with 3 m moulded cable approved for block mounting, ambient temperature from -10 °C to +40 °C

| Circuit function | Orifice [mm] | Port connection | K _v value water [m ³ /h] | Pressure range [bar] | Body material | Effective coil power [W] | Voltage/frequency [V/Hz] | Article no. with manual override |
|--|--------------|-----------------|--|----------------------|---------------|--------------------------|--------------------------|----------------------------------|
| C 3/2 way valve NC  | 1.5 | sub-base (SFB) | 0.07 | 0...10 | PA | 7 | 024/UC | 278651 |
| | | | | | | | 230/UC | 278653 |
| | 2.0 | sub-base (SFB) | 0.11 | 0...6 | Brass | 7 | 024/UC | 278655 |
| | | | | | | | 230/UC | 278656 |
| | | | | | Brass | 7 | 024/UC | 278658 |
| | | | | | | 230/UC | 278659 | |

6014 valve, Ex m II T4, with FKM seal material and threaded connection with 3 m moulded cable approved for single mounting, ambient temperature from -10 °C to +55 °C

| Circuit function | Orifice [mm] | Port connection | K _v value water [m ³ /h] | Pressure range [bar] | Body material | Effective coil power [W] | Voltage/frequency [V/Hz] | Article no. without manual override | Article no. with manual override | |
|---|-----------------|-----------------|--|----------------------|---------------|--------------------------|--------------------------|-------------------------------------|----------------------------------|---|
| C 3/2 way valve NC  | 2.0 | G 1/8 | 0.11 | 0...10 | Brass | 9 | 024/UC | 278637 | 278645 | |
| | | | | | | | 230/UC | 278638 | 278646 | |
| | | Stainless steel | | | | | 9 | 024/UC | 278660 | x |
| | | | | | | | 9 | 230/UC | 278661 | x |
| | | G 1/4 | 0.11 | 0...10 | Brass | 9 | 024/UC | 278639 | 278647 | |
| | | | | | | | 230/UC | 278641 | 278649 | |
| | Stainless steel | | | | | 9 | 024/UC | 278662 | x | |
| | | | | | | 9 | 230/UC | 278663 | x | |
| | 2.5 | G 1/8 | 0.16 | 0...6 | Brass | 9 | 024/UC | x | x | |
| | | | | | | | 230/UC | x | x | |
| G 1/4 | | 0.16 | 0...6 | Brass | 9 | 024/UC | 278643 | 278673 | | |
| | | | | | | 230/UC | 278644 | x | | |
| T 3/2 way Universal valve  | 1.5 | G 1/8 | 0.07 | 0...7 | Brass | 9 | 024/UC | 278650 | x | |
| | | | | | | | 230/UC | x | x | |
| | | Stainless steel | | | | | 9 | 024/UC | 278664 | x |
| | | | | | | | 9 | 230/UC | 278665 | x |
| | G 1/4 | 0.07 | 0...7 | Brass | 9 | 024/UC | x | x | | |
| | | | | | | 230/UC | x | x | | |
| | | Stainless steel | | | | | 9 | 024/UC | 278666 | x |
| | | | | | | | 9 | 230/UC | x | x |

x on request

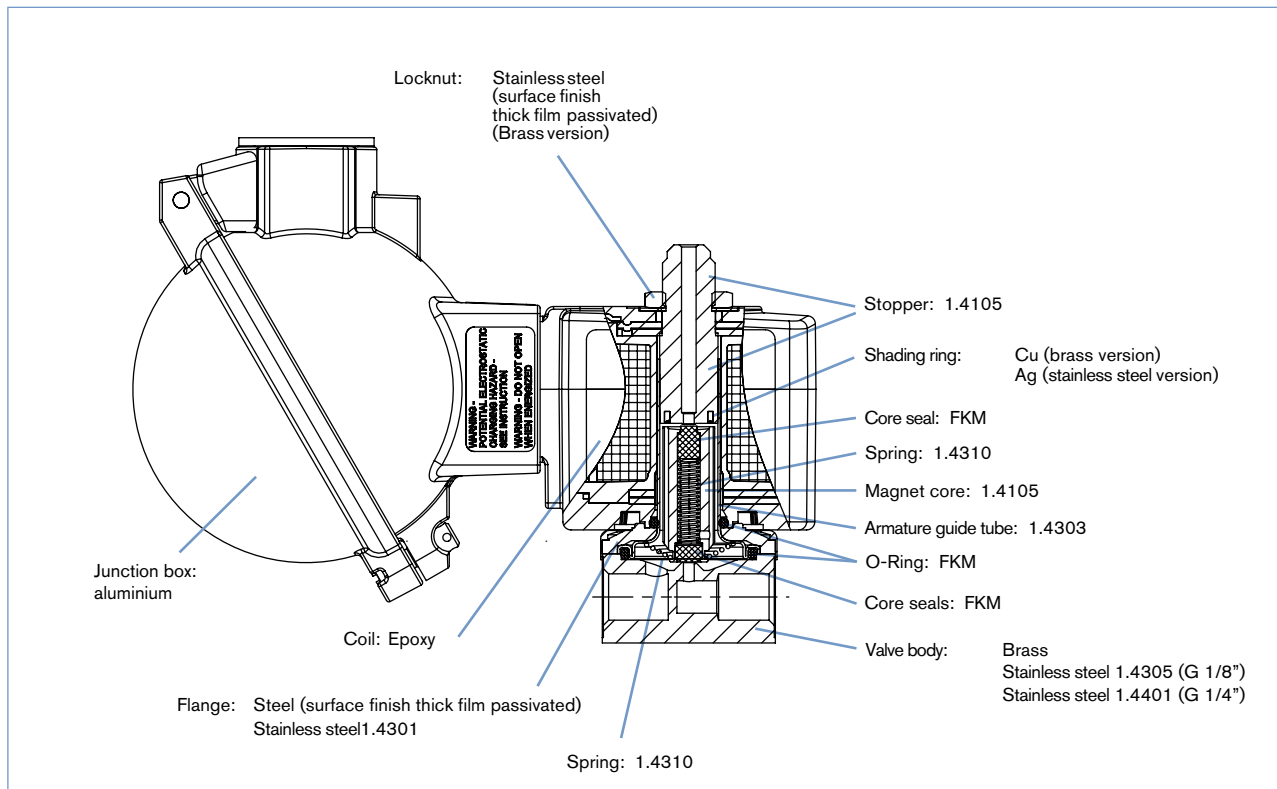
The maximum fluid temperature must not in any case exceed the permissible temperature class (T4 135 °C, 100 °C T5, T6 85 °C), minus 5 K.

ATEX and IECEx approval for coils with fixed cable outlet

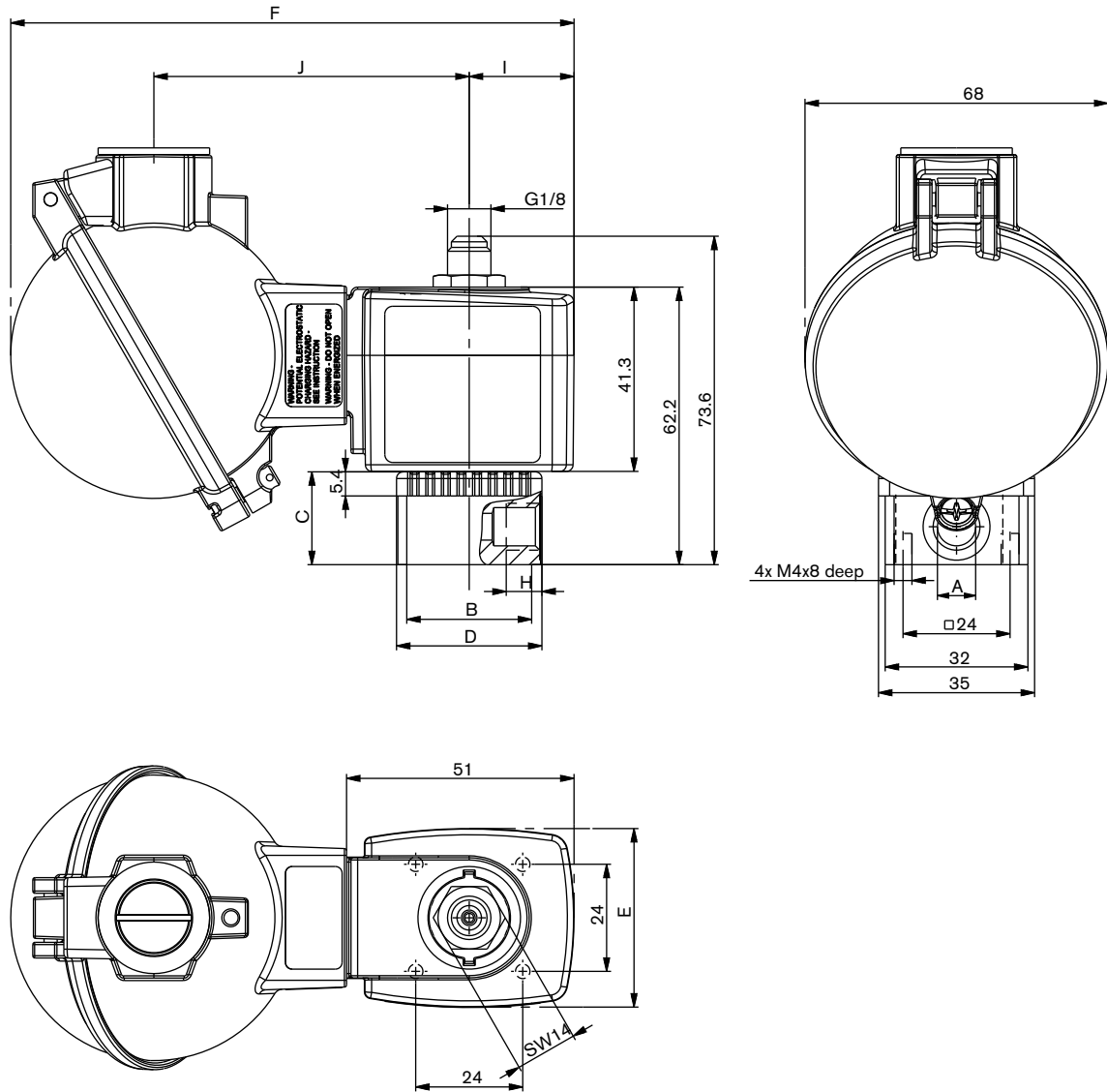
ATEX: PTB 14 ATEX 2023 X
 II 2G Ex mb IIC T4 Gb
 II 2D Ex mb IIIC T135 °C Db

IECEx: IECEx PTB 14.0049 X
 Ex mb IIC T4 Gb
 Ex mb IIIC T135 °C Db

Materials for ATEX/IECEX m junction box version



Dimensions for ATEX/IECEX m junction box version

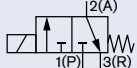


| Dimensions [mm] | | | | | |
|-----------------|-------|----|------|------|----|
| Version | A | B | C | D | H |
| Threaded | G 1/8 | 32 | 20.8 | 32.6 | 8 |
| | G 1/4 | 46 | 26.8 | 49 | 12 |
| Flange | - | 32 | 14.3 | 32.6 | - |

| Coil size | E [mm] | F | I | J |
|-----------|--------|-------|------|------|
| 5 | 32 | 120.3 | 20.5 | 69 |
| 6 | 40 | 126.3 | 23.5 | 70.7 |

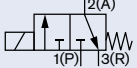
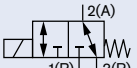
Ordering chart for Ex m valves junction box version

6014 valve , Ex m II T4, with seal material FKM and flange connection (SFB) Junction box for block mounting available, ambient temperature from - 10 °C to +40 °C

| Circuit function | Orifice [mm] | Port connection | K _v value water [m ³ /h] | Pressure range [bar] | Body material | Coil effective power | Voltage/Frequency [V/Hz] | Article no. with manual override |
|--|--------------|-----------------|--|----------------------|---------------|----------------------|--------------------------|----------------------------------|
| C 3/2 way valve NC  | 1.5 | sub-base (SFB) | 0.07 | 0 ... 10 | PA | 7 | 024/UC | 288562 |
| | | | | | | | 230/UC | 288563 |
| | 2.0 | sub-base (SFB) | 0.11 | 0 ... 6 | Brass | 7 | 024/UC | x |
| | | | | | | | 230/UC | x |

x on request

6014 valve, Ex m II T4, with seal material FKM and threaded connection with junction box only for single mounting available, ambient temperature form - 10 °C to +55 °C

| Circuit function | Orifice [mm] | Port connection | K _v value water [m ³ /h] | Pressure range [bar] | Body material | Coil effective power | Voltage/Frequency [V/Hz] | Article no. without manual override | Article no. with manual override | |
|---|--------------|-----------------|--|----------------------|-----------------|----------------------|--------------------------|-------------------------------------|----------------------------------|---|
| C 3/2 way valve NC  | 2.0 | G 1/8 | 0.11 | 0 ... 10 | Brass | 9 | 024/UC | 288470 | 288491 | |
| | | | | | | | 230/UC | 288490 | 288566 | |
| | | | G 1/4 | 0.11 | 0 ... 10 | Stainless steel | 9 | 024/UC | 288488 | x |
| | | | | | | 230/UC | | 288497 | x | |
| | 2.5 | G 1/8 | 0.16 | 0 ... 6 | Brass | 9 | 024/UC | 288572 | x | |
| | | | | | | | 230/UC | 288505 | x | |
| | | G 1/4 | 0.16 | 0 ... 6 | Brass | 9 | 024/UC | 288498 | 288476 | |
| | | | | | | | 230/UC | 288575 | 288479 | |
| T 3/2 way Universal valve  | 1.5 | G 1/8 | 0.07 | 0 ... 7 | Brass | 9 | 024/UC | 288511 | x | |
| | | | | | | | 230/UC | x | x | |
| | | | G 1/4 | 0.07 | 0 ... 7 | Stainless steel | 9 | 024/UC | x | x |
| | | | | | | 230/UC | | x | x | |
| | 2.0 | G 1/8 | 0.11 | 0 ... 6 | Brass | 9 | 024/UC | x | x | |
| | | | | | | | 230/UC | x | x | |
| | | G 1/4 | 0.11 | 0 ... 6 | Stainless steel | 9 | 024/UC | 288489 | x | |
| | | | | | | | 230/UC | 288506 | x | |

x on request

The maximum fluid temperature must not in any case exceed the permissible temperature class (T4 135 °C, 100 °C T5, T6 85 °C), minus 5 K.

ATEX and IECEx approval for the assembly of the coil and the junction box

ATEX: EPS 16 ATEX 1046 X

IECEX: IECEX EPS 16.0021 X

II 2G Ex eb mb IIC T4 Gb



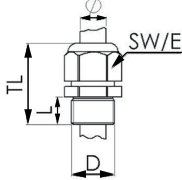


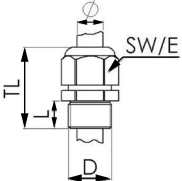
Ex eb mb IIC T4 Gb

II 2D Ex mb tb IIIC T130 °C Db

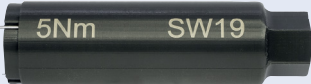

Ex mb tb IIIC T130 °C Db

Ex-Cable glands

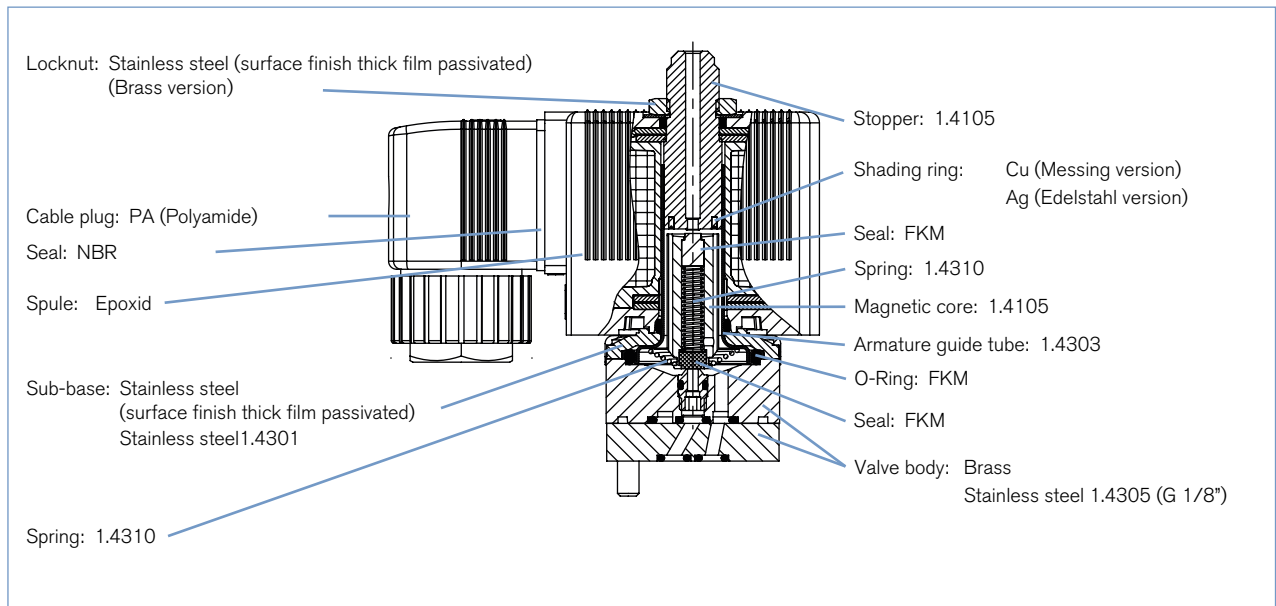
(polyamide version included in delivery / surcharge applied for brass nickel plated version)

| Photo | Description | Ex Approvals | | Article no | Drawing | | | | | | | | | | |
|---|----------------------------------|--|--|---|--|----|-------------|---|-------|---|----|----|-------|---|-------|
| | | Certification | Identification | | | | | | | | | | | | |
|  | Brass, nickel-plated, 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, | 773278  |  <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 | 773277  |  <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 | | | | | | | | | | | | | | |

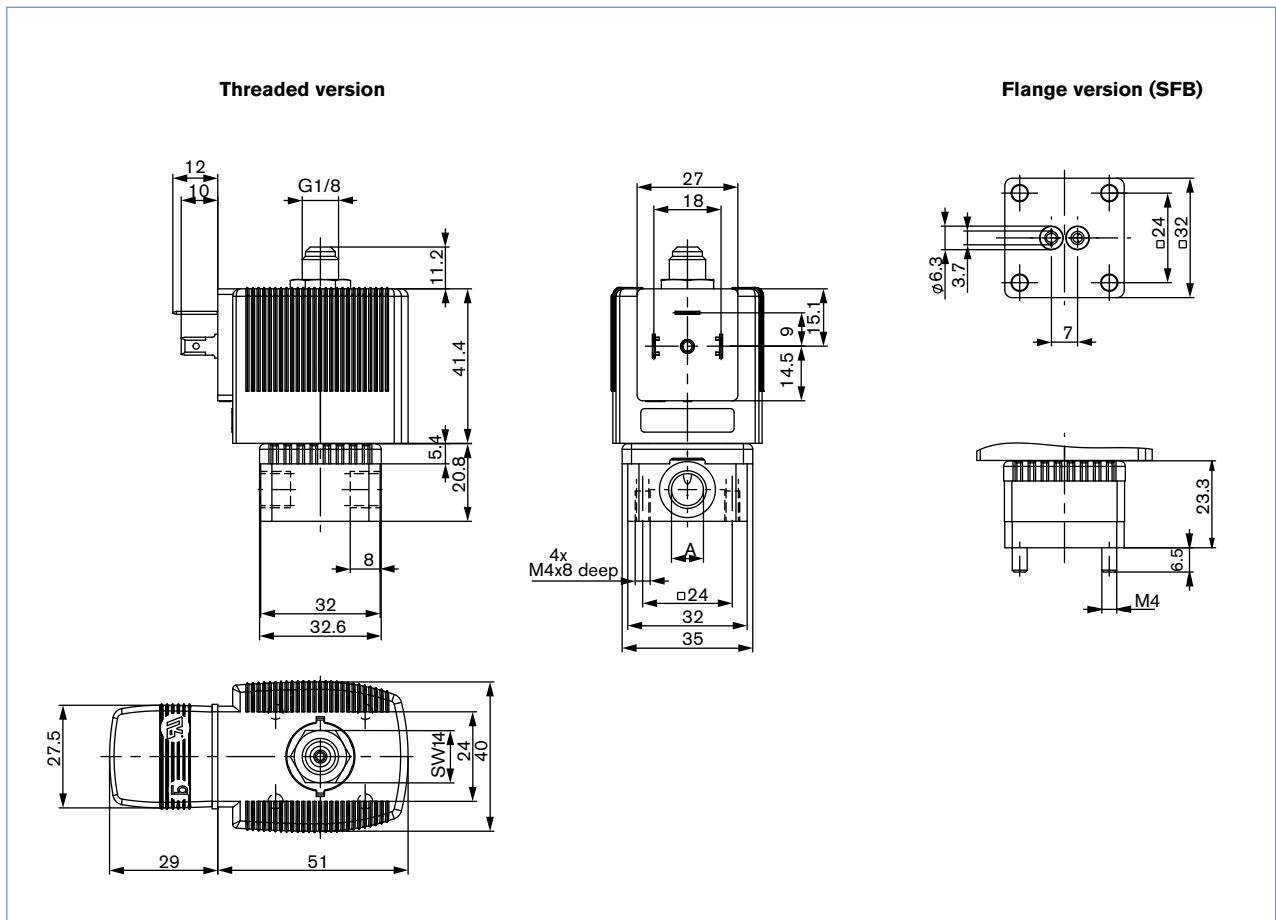
Special tool to turn the junction box (not included in delivery)

| Photo | Description | Article no. |
|--|---|--|
|  | Set SC02-AC10 Special wrench Service Manual | 293488  |

Materials for ATEX/IECEX ia

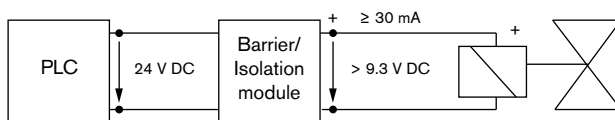


Dimensions for ATEX/IECEX ia [mm]



Electrical data

Type of protection EEx ia IIC T6 acc. to PTB-No. Ex-96.D.2010



Note: The valve is designed to operate on **24 V DC** outputs through an intermediary intrinsically safe apparatus (isolating block or barrier)..

| Function values for switching valve | Max. allowable values acc. to the certificate of conformity | |
|-------------------------------------|---|--------------|
| | at +20 °C | at +55 °C |
| Minimum switching current | 30 mA | 30 mA |
| Nominal resistance coil | 310 Ω | 360 Ω |
| Minimum terminal voltage | 9.3 V | 10.8 V |

| Function values for switching valve | | Max. allowable values acc. to the certificate of conformity | |
|-------------------------------------|--|---|--------------|
| | | at +20 °C | at +55 °C |
| Ui | | 28 V | |
| li | | 120 mA | |
| Pi | | 1.1 W | |
| Ambient temperature | | +60 °C at T6 | +75 °C at T5 |

Technical data - ATEX/IECEEx -ia

Response times

| Response times | |
|----------------|--------------|
| Opening [ms] | Closing [ms] |
| 20 | 22 |

Response times [ms]:

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

Opening: Pressure build-up 0...90 %,

Closing: Pressure drop 100...10 %

Ordering chart - ATEX/IECEEx -ia

6014 valve; Ex ia II T6 with FKM seal material only for approved single mounting, cable plug acc. to DIN EN 175 301 - 803 Form A, ambient temperature from -10 °C to 60 °C for T6, -10... -75 °C for T5

| Circuit function | Orifice [mm] | Q _{Nn} -value air [l/min] | Pressure range [bar] | Body material | Port connection | Article no. |
|----------------------------------|--------------|------------------------------------|----------------------|-----------------|------------------------|-------------|
| C 3/2 way valve NC | 0.9 | 30 | Vac. to 10 | Stainless steel | Bürkert sub-base (SFB) | 144540 |
| | | | | | G 1/8 | 147226 |
| | | | | Brass | Bürkert sub-base (SFB) | 147227 |
| | | | | | G 1/8 | 146214 |

The maximum fluid temperature must not in any case exceed the permissible temperature class (T4 135 °C, 100 °C T5, T6 85 °C), minus 5 K.

Explosion-proof approvals

ATEX: PTB 01 ATEX 2101 0102

II 2G Ex i IIC T6 Gb

II 2D Ex i IIIC T85 °C Db

PTB IECEX12.0040

Ex ia IIC T6 Gb










Ex ia IIC T80 °C Db

Ordering chart for accessories

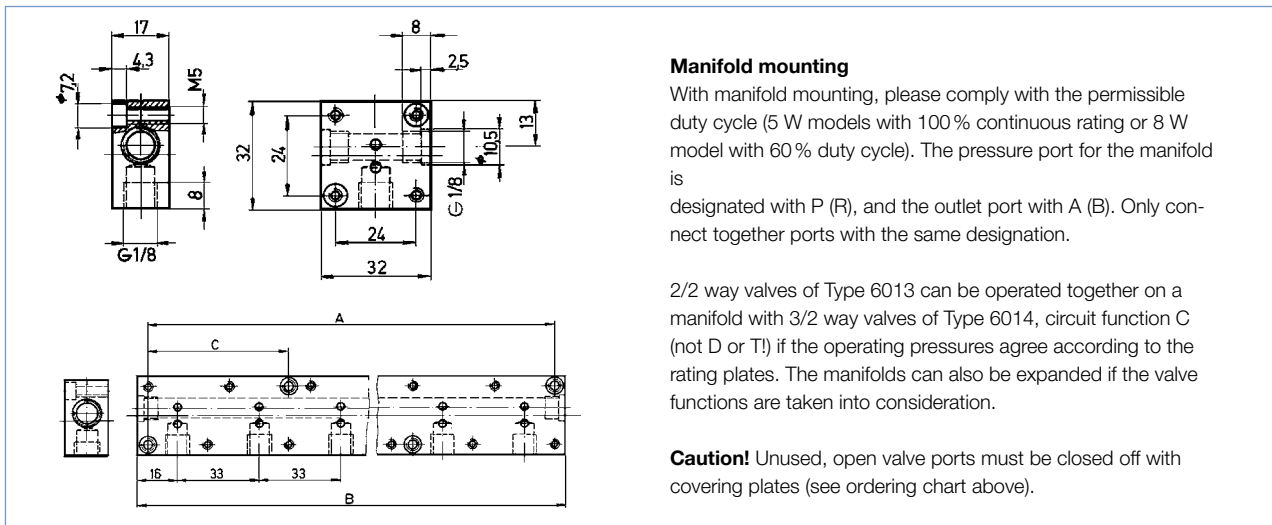
Cable plug Type 2508 acc. to DIN EN 175 301 - 803 Form A

| | Circuit | Voltage / frequency | Article no. |
|--|-------------------|---------------------|-------------|
| | without circuitry | 0...250 V | 438574 |

Ordering chart for Manifolds

| Accessory parts | Features | | | | Article no. |
|-------------------|---|---------------------|---------------------|---------------------|--|
| Single manifold | in aluminium black anodized | | | | 005020  |
| Multiple manifold | in aluminium | Hole spacing A [mm] | Total length B [mm] | Hole spacing C [mm] | |
| | 2 valves | 57 | 65 | – | 005023  |
| | 3 valves | 90 | 98 | – | 005286  |
| | 4 valves | 123 | 131 | – | 005287  |
| | 5 valves | 156 | 164 | 57 | 005035  |
| | 6 valves | 189 | 197 | 57 | 005038  |
| | 8 valves | 255 | 263 | 90 | 005386  |
| | 10 valves | 321 | 329 | 90 | 005764  |
| Covering plate | with plugs and O-ring, for closing off unused valve positions | | | | 005630  |

Manifolds in Brass or stainless steel on request

**Manifold mounting**


With manifold mounting, please comply with the permissible duty cycle (5 W models with 100 % continuous rating or 8 W model with 60 % duty cycle). The pressure port for the manifold is designated with P (R), and the outlet port with A (B). Only connect together ports with the same designation.

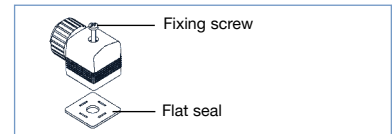
2/2 way valves of Type 6013 can be operated together on a manifold with 3/2 way valves of Type 6014, circuit function C (not D or T!) if the operating pressures agree according to the rating plates. The manifolds can also be expanded if the valve functions are taken into consideration.

Caution! Unused, open valve ports must be closed off with covering plates (see ordering chart above).

Ordering chart for accessory

Cable plug Type 2508 according to DIN EN 175 301 - 803 Form A

|  | Circuitry | Voltage/ Frequency | Article no. |
|---|-----------------------------|-----------------------|-------------|
| | None (standard) | 0 ... 250 V AC/DC | 008376 |
| | with LED | 12 ... 24 V AC/DC | 008360 |
| | with LED and varistor | 12 ... 24 V AC/DC | 008367 |
| | with LED and varistor | 200 ... 240 V | 008369 |
| | with inverter ¹⁾ | 24 V DC | on request |
| further versions see datasheet Type 2508 | | | |



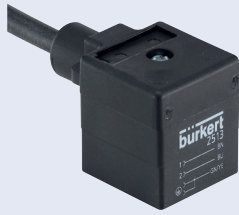
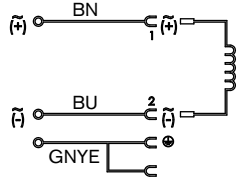
The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions, see separate datasheet Type 2508. Click on the box "More info." and you will come to our website for this product where you can download the datasheet.

More info.

¹⁾ The inverter plug includes an electronic which is specially adapted for an electrical control with 3 wires
Input 3 wire technology, common "-" polarity, two split "+" polarity.
Output suitable for impulse model for Type 6013/6014

Cable plug Type 2513 acc. to DIN EN 175 301 - 803, Form A

Meets the requirements of ATEX category 3 GD

|  |  | Cable length [mm] | Article no. [in mm] |
|--|--|----------------------|------------------------|
| | | 12000 | 260893 |
| | | 5000 | 260892 |
| | | 3000 | 260891 |
| | | 300 | 260890 |

i Further versions on request



Materials

Epoxy coil according to Form A
Seal material EPDM



Voltage

Non-standard voltages



Port connection

With banjo nut



Approvals

ATEX, UL, CSA



Additional

Orifice: 1.2 mm, 3.0 mm

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www.burkert.com

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

Subject to alterations
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