

Servo-assisted 2/2 way diaphragm valve



Type 6281 can be combined with...



Type 2508

- Servo-assisted diaphragm with diameter of up to DN50
- Vibration-proof, central screwed coil system
- Damped design for quiet closing
- Service-friendly manual override
- Explosion-proof versions

The 6281 valve is a servo-assisted solenoid valve of the S.EV series. A minimum differential pressure is always required for the function of the 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. Dezincification-resistant brass is available for other markets. The housing offering is rounded out by a stainless steel version. For reduced energy requirement, all coils can be delivered with electronic power reduction. The valve can be equipped with manual override for easy maintenance and commissioning. In combination with a plug in accordance with DIN EN 175301 - 803 Form A, the valves satisfy protection class IP65 – in combination with a stainless steel housing NEMA 4X.

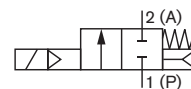
| Technical data | |
|------------------------------|---|
| Orifice | DN10 - 50 mm |
| Body material | Brass acc. to DIN EN 50930 - 6 (Stainless steel, dezincification resistant on request) |
| Inner part of valve | Stainless steel, Brass, Plastic (PPS) |
| Seal material | NBR, EPDM, FKM |
| Media | NBR EPDM FKM |
| | Neutral fluids, e.g. compressed air, water Oil and fat-free fluids, hot water, acetone, aqueous alkali solution Hot air, per-solution |
| Ambient temperature | max. +55 °C |
| Media temperature | NBR EPDM FKM |
| | -10° to +80 °C -30° to +90 °C (with epoxy coil to +100 °C) 0° to +90 °C (with epoxy coil to +120 °C) |
| Voltages | 024/DC, 024/50 - 60, 230/50 - 60 |
| Voltage tolerance | ± 10 % |
| Duty cycle | 100 % continuous rating |
| Electrical connection | Tag connector acc. to DIN EN 175301 - 803 Form A (previously DIN 43650) for cable plug Type 2508 (see Ordering chart for accessory, p. 12) |
| Protection class | IP65 with cable plug and cable connection IP65 with junction box |
| Installation | As required, preferably with actuator upright |
| Response times ²⁾ | 0.1 - 4 sec.ds (depending on orifice and differential pressure) |
| Coil isolation class | Polyamide class B Epoxy class H |

²⁾ Measured at valve outlet at 6 bar and +20 °C. Opening: pressure build-up 0 to 90 %, Closing: pressure decay 100 to 10 %

Content:

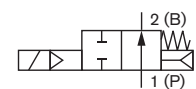
| | |
|----------------------------------|------------|
| Technical data | p. 1 - 2 |
| Standard version | |
| Dimensions | p. 3 |
| Ordering chart | p. 4 - 7 |
| Explosion-proof version | |
| Dimensions | p. 8 - 9 |
| Ordering chart | p. 10 |
| Compressor relief version | |
| Ordering chart & Dimensions | p. 11 |
| Further versions | p. 12 |
| Accessory | p. 12 - 13 |

Circuit function A



2/2-way solenoid valve
servo-assisted,
normally closed

Circuit function B

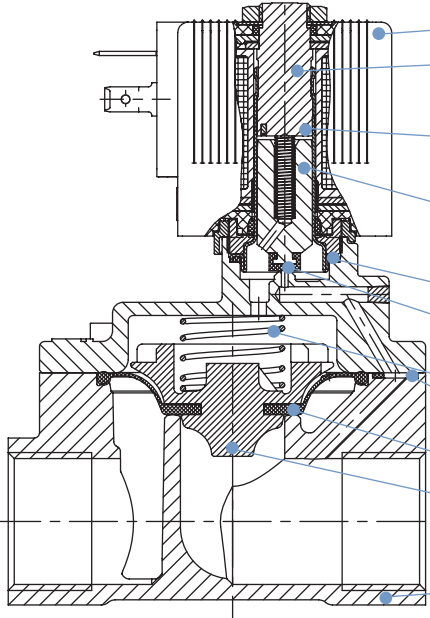


2/2-way solenoid
servo assisted,
normally open

Power consumption

| Power consumption | | | | | | | |
|-------------------|----------------|-------------------|--------------------|-----|----------------|----------------|------------------------------|
| Orifice [mm] | coil size [mm] | AC | | | DC | | ATEX AC/DC nominal power [W] |
| | | inrush power [VA] | holding power [VA] | [W] | cold power [W] | warm power [W] | |
| 10-50 WWA | 32 | 24 | 14 | 8 | 9.5 | 8 | - |
| 10-50 WWB | 32 | 24 | 16 | 7 | 9.5 | 8 | - |
| 10-50 WWA/B | 40 | - | - | - | - | - | 7 |
| 10 WWA | 32 | - | - | - | - | - | 7 |
| 10 WWB | 40 | - | - | - | - | - | 9 |
| 10 WWB & CF05 | 32 | 18 | 11 | 5 | 6 | 5 | - |

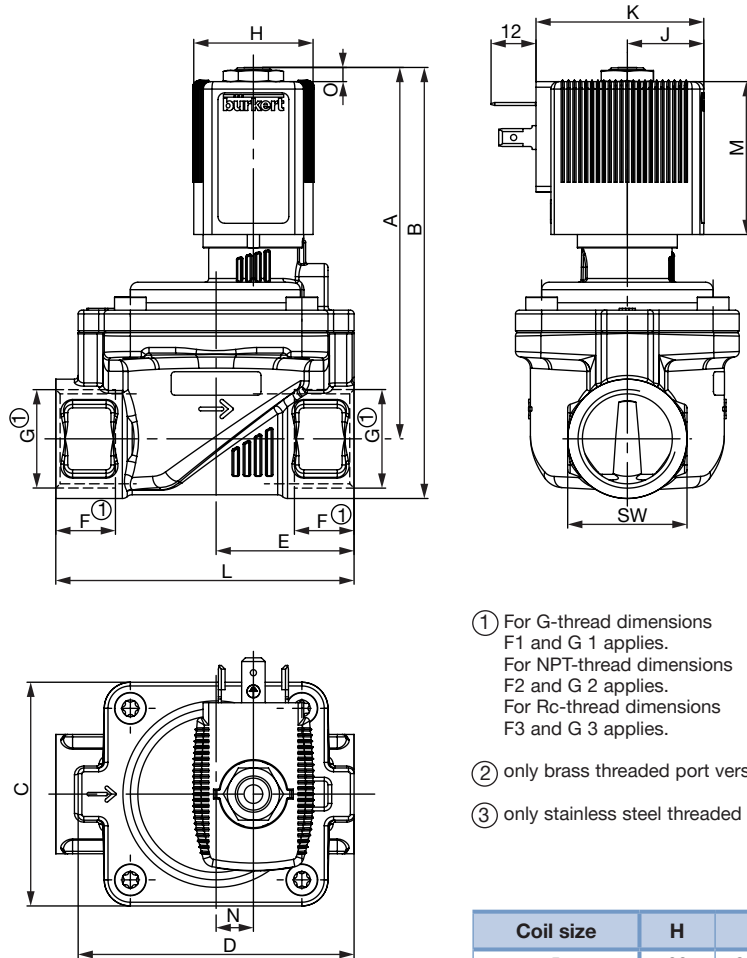
Materials



| | |
|--|--|
| Coil: | Polyamide ¹⁾ or epoxy ²⁾ |
| Stopper: | 1.4113 |
| Short circuit ring: with Brass body: with Stainless steel body: | Copper (Cu) Silver (Ag) |
| Magnetic core: | 1.4113 |
| O-rings: | NBR, FKM, EPDM |
| Armature seal: | NBR, FKM, EPDM |
| Spring: | 1.4310 |
| O-rings: | NBR, FKM, EPDM |
| Diaphragm: | NBR, FKM, EPDM |
| Diaphragmholder: | PPSGF40, DN50: Brass and Stainless steel |
| Valve body: | Brass or Stainless steel 1.4408 (316) |

¹⁾ with NBR, EPDM seal
²⁾ with FKM seal

Dimensions [mm]



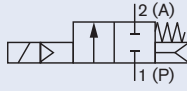
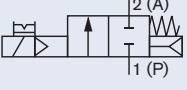
- ① For G-thread dimensions F1 and G 1 applies.
For NPT-thread dimensions F2 and G 2 applies.
For Rc-thread dimensions F3 and G 3 applies.
- ② only brass threaded port version
- ③ only stainless steel threaded port version

| Coil size | H | J | K | M | O |
|-----------|----|------|----|------|-----|
| 5 | 32 | 20.5 | 45 | 41 | 3.4 |
| 6 | 40 | 23.5 | 51 | 41.4 | 3.8 |

| | DN | A | B | C | D | E | * G | | * NPT | | * Rc | | L | SW | N | |
|---|----|-------|-------|-----|------|-------|------|-------|-------|--------|--------|-------|-----|-----|----|---|
| | | | | | | | F1 ① | G 1 ① | F2 ① | G 2 ① | F3 ① | G 3 ① | | | | |
| ② | 10 | 83.1 | 94.1 | 32 | 44 | 22 | 12 | G ¼ | 10 | NPT ¼ | - | - | 50 | 22 | - | |
| | | | | | | | 12 | G ⅜ | 10.3 | NPT ⅜ | 10.1 | Rc ⅜ | | | | |
| ② | 10 | 85.1 | 98.6 | 32 | 44 | 24.5 | 14 | G ½ | 13.7 | NPT ½ | - | - | 50 | 27 | - | |
| | | | | | | | 12 | G ¼ | 10 | NPT ¼ | - | - | | | | |
| ③ | 10 | 83.6 | 94.6 | 32 | 44 | 22 | 12 | G ¼ | 10 | NPT ¼ | - | - | 50 | 22 | - | |
| | | | | | | | 12 | G ⅜ | 10.3 | NPT ⅜ | 10.1 | Rc ⅜ | | | | |
| ③ | 10 | 85.6 | 99.1 | 32 | 44 | 24.5 | 14 | G ½ | 13.7 | NPT ½ | - | - | 55 | 27 | - | |
| | | | | | | | 12 | G ¼ | 10 | NPT ¼ | - | - | | | | |
| ② | 13 | 91.1 | 104.6 | 42 | 54.5 | 27.25 | 12 | G ⅜ | - | - | - | - | 58 | 27 | - | |
| | | | | | | | 14 | G ½ | 13.7 | NPT ½ | 13.2 | Rc ½ | | | | |
| ② | 13 | 93.1 | 109.1 | 42 | 54.5 | 32.5 | 16 | G ¾ | 14 | NPT ¾ | - | - | 65 | 32 | - | |
| | | | | | | | 16 | G ¾ | 14 | NPT ¾ | - | - | | | | |
| | 20 | 99.6 | 115.6 | 60 | 74 | 37 | 16 | G ¾ | 14 | NPT ¾ | 14.5 | Rc ¾ | 80 | 32 | 10 | |
| | | | | | | | 18 | G 1 | 16.8 | NPT 1 | - | - | | | | |
| | 25 | 106.6 | 127.1 | 70 | 85 | 46 | 18 | G 1 | 16.8 | NPT 1 | 16.8 | Rc 1 | 95 | 41 | 15 | |
| | | | | | | | 20 | G 1¼ | 17.3 | NPT 1¼ | 19.1 | Rc 1¼ | | | | |
| ② | 40 | 120.1 | 145.1 | 99 | 114 | 61 | 20 | G 1¼ | 17.3 | NPT 1¼ | 19.1 | Rc 1¼ | 126 | 50 | 23 | |
| | | | | | | | 22 | G 1½ | | NPT 1½ | | Rc 1½ | | | | |
| | 40 | 125.6 | 155.6 | 99 | 114 | 64 | 24 | G 2 | 17.6 | NPT 2 | 23.4 | Rc 2 | 132 | 70 | - | |
| | | | | | | | 24 | G 2 | 17.6 | NPT 2 | 23.4 | Rc 2 | | | | |
| ② | 50 | 119.9 | 154.9 | 115 | 132 | 82 | 24 | G 2 | 17.6 | NPT 2 | 23.4 | Rc 2 | 164 | 70 | 37 | |
| | | | | | | | 27 | G 2½ | 23.6 | NPT 2½ | - | - | | | | |
| | | | | | | | 89.5 | 27 | G 2½ | 23.6 | NPT 2½ | - | - | 179 | 85 | - |

Ordering chart for valves, (other versions on request)

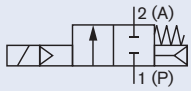
Circuit function A (NC, normally closed), Brass body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | |
|--|---|--------------|--|----------------------|-------------|--|-------------|-------------|
| | | | | | | 024/DC | 024/50 - 60 | 230/50 - 60 |
| A 2/2 way valve NC  | Seal material NBR, Polyamide coil, Medium temperature -10...+80 °C | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.43 | 322499 | 322500 | 322501 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.40 | 322502 | 322503 | 322504 |
| | G ⅝ | 13 | 3.8 | 0.2-16 | 0.58 | 221841 | 221842 | 221843 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.54 | 221844 | 221845 | 221846 |
| | G ¾ | 13 | 3.8 | 0.2-16 | 0.59 | 221847 | 221848 | 221849 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 0.89 | 221850 | 221851 | 221852 |
| | G 1 | 20 | 8.5 | 0.2-16 | 1.0 | 221853 | 221854 | 221855 |
| | G 1 | 25 | 12 | 0.2-16 | 1.3 | 221856 | 221857 | 221858 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.5 | 221859 | 221860 | 221861 |
| | G 1¼ | 40 | 23 | 0.2-16 | 2.7 | 270131 | 268550 | 270132 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.0 | 221862 | 221863 | 221864 |
| | G 2 | 40 | 30 | 0.2-16 | 3.2 | 221865 | 221866 | 221867 |
| | G 2 | 50 | 40 | 0.2-16 | 4.5 | 253156 | 253157 | 253158 |
| | G 2½ | 50 | 40 | 0.2-16 | 5.2 | 253159 | 253160 | 253161 |
| A 2/2 way valve NC, manual override  | Seal material NBR, Polyamide coil, Medium temperature -10...+80 °C, with manual override | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.43 | 322505 | 322506 | 322507 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.40 | 322508 | 322509 | 322510 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.54 | 221952 | - | 221953 |
| | G ¾ | 13 | 3.8 | 0.2-16 | 0.59 | 221954 | - | 221955 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 0.89 | 221956 | - | 221957 |
| | G 1 | 20 | 8.5 | 0.2-16 | 1.0 | 221958 | - | 221959 |
| | G 1 | 25 | 12 | 0.2-16 | 1.3 | 221960 | - | 221961 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.5 | 221962 | - | 221963 |
| | G 1¼ | 40 | 23 | 0.2-16 | 2.7 | 270142 | - | 270143 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.0 | 221964 | - | 221965 |
| | G 2 | 40 | 30 | 0.2-16 | 3.2 | 221966 | - | 221967 |

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

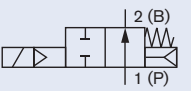
Ordering chart for valves, continued

Circuit function A (NC, normally closed), Brass body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | | |
|--|--|--------------|--|----------------------|-------------|--|-------------|-------------|--|
| | | | | | | 024/DC | 024/50 - 60 | 230/50 - 60 | |
| A 2/2-Wege-Ventil NC  | Seal material FKM, Epoxy coil, Medium temperature 0 ... +120 °C | | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322511 | 322512 | 322513 | |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322514 | 322515 | 322516 | |
| | G ⅜ | 13 | 3.8 | 0.2 - 16 | 0.58 | 221868 | 221869 | 221870 | |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 221871 | 221872 | 221873 | |
| | G ¾ | 13 | 3.8 | 0.2 - 16 | 0.59 | 221874 | 221875 | 221876 | |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.89 | 221877 | 221878 | 221879 | |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 1.0 | 221880 | 221881 | 221882 | |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 221883 | 221884 | 221885 | |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.5 | 221886 | 221887 | 221888 | |
| | G 1¼ | 40 | 23 | 0.2 - 16 | 2.7 | 270133 | 270134 | 270135 | |
| | G 1½ | 40 | 30 | 0.2 - 16 | 3.0 | 221889 | 221890 | 221891 | |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.2 | 221892 | 221893 | 221894 | |
| | G 2 | 50 | 40 | 0.2 - 16 | 4.5 | 253168 | 253169 | 253170 | |
| | G 2½ | 50 | 40 | 0.2 - 16 | 5.2 | 253171 | 253172 | 253173 | |
| | Seal material EPDM, Polyamide coil, Medium temperature -30 ... +90 °C | | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322517 | 322518 | 322519 | |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322520 | 322521 | 322522 | |
| | G ⅜ | 13 | 3.8 | 0.2 - 16 | 0.58 | 221895 | 221896 | 221897 | |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 221898 | 221899 | 221900 | |
| | G ¾ | 13 | 3.8 | 0.2 - 16 | 0.59 | 221901 | 221902 | 221903 | |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.89 | 221904 | 221905 | 221906 | |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 1.0 | 221907 | 221908 | 221909 | |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 221910 | 221911 | 221912 | |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.5 | 221913 | 221914 | 221915 | |
| | G 1¼ | 40 | 23 | 0.2 - 16 | 2.7 | 270136 | 270137 | 270138 | |
| | G 1½ | 40 | 30 | 0.2 - 16 | 3.0 | 221916 | 221917 | 221918 | |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.2 | 221919 | 221920 | 221921 | |
| | G 2 | 50* | 40 | 0.2 - 16 | 4.5 | 253162 | 253163 | 253164 | |
| | G 2½ | 50* | 40 | 0.2 - 16 | 5.2 | 253165 | 253166 | 253167 | |

*Drinking water approved acc. to KTW and W270.

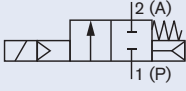
Circuit function B (NO, normally open), Brass body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | | |
|--|---|--------------|--|----------------------|-------------|--|--------|--------|--|
| | | | | | | 024/DC | 024/50 | 230/50 | |
| B 2/2-Wege-Ventil NO  | Seal material NBR, Epoxy coil, Medium temperature -10 ... +80 °C | | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322523 | 322524 | 322525 | |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322526 | 322527 | 322528 | |
| | G ⅜ | 13 | 3.8 | 0.2 - 16 | 0.58 | 221923 | 221924 | 221925 | |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 221926 | 221928 | 221929 | |
| | G ¾ | 13 | 3.8 | 0.2 - 16 | 0.59 | 221930 | 221931 | 221933 | |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.89 | 221934 | 221935 | 221936 | |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 1.0 | 221937 | 221938 | 221939 | |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 221940 | 221941 | 221942 | |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.5 | 221943 | 221944 | 221945 | |
| | G 1¼ | 40 | 23 | 0.2 - 16 | 2.7 | 270139 | 270140 | 270141 | |
| | G 1½ | 40 | 30 | 0.2 - 16 | 3.0 | 221946 | 221947 | 221948 | |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.2 | 221949 | 221950 | 221951 | |
| | G 2 | 50 | 40 | 0.2 - 16 | 4.5 | 253174 | 253175 | 253176 | |
| | G 2½ | 50 | 40 | 0.2 - 16 | 5.2 | 253177 | 253178 | 253179 | |

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

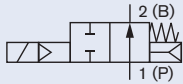
























Ordering chart for valves, continued

Circuit function A (NC, normally closed), Stainless steel body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | |
|--|--|--------------|--|----------------------|-------------|--|-------------|-------------|
| | | | | | | 024/DC | 024/50 - 60 | 230/50 - 60 |
| A 2/2 way valve NC  | Seal material NBR, Polyamide coil, Medium temperature - 10... +80 °C | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322529 | 322530 | 322531 |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322532 | 322533 | 322534 |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 221968 | 221969 | 221970 |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.86 | 221971 | 221972 | 221973 |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 0.97 | 221974 | 221975 | 221976 |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 221977 | 221978 | 221979 |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.4 | 221980 | 221981 | 221982 |
| | G 1½ | 40 | 30 | 0.2 - 16 | 2.8 | 221983 | 221984 | 221985 |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.0 | 221986 | 221987 | 221988 |
| | Seal material FKM, Epoxy coil, Medium temperature 0... + 120 °C | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322535 | 322536 | 322537 |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322538 | 322539 | 322540 |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 221989 | 221990 | 221991 |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.86 | 221992 | 221993 | 221994 |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 0.97 | 221995 | 221996 | 221997 |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 221998 | 221999 | 222000 |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.4 | 222001 | 222002 | 222003 |
| | G 1½ | 40 | 30 | 0.2 - 16 | 2.8 | 222004 | 222005 | 222006 |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.0 | 222007 | 222008 | 222009 |
| | Seal material FKM, Epoxy coil, Medium temperature 0... + 120 °C, with manual override | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 323894 | - | 323968 |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 323971 | - | 323972 |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 323973 | - | 323975 |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.86 | 323977 | - | 323978 |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 323979 | - | 323980 |
| | G 1¼ | 25 | 1.4 | 0.2 - 16 | 1.4 | 323982 | - | 323984 |
| | G 1½ | 40 | 30 | 0.2 - 16 | 2.8 | 323986 | - | 323987 |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.0 | 323988 | - | 323989 |
| | Seal material EPDM, Polyamide coil, Medium temperature - 30... + 90 °C | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322541 | 322542 | 322543 |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322544 | 322545 | 322546 |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 222010 | 222011 | 222012 |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.86 | 222013 | 222014 | 222015 |
| | G 1 | 20 | 8.5 | 0.2 - 16 | 0.97 | 222016 | 222017 | 222018 |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 222019 | 222020 | 222021 |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.4 | 222022 | 222023 | 222024 |
| G 1½ | 40 | 30 | 0.2 - 16 | 2.8 | 222025 | 222026 | 222027 | |
| G 2 | 40 | 30 | 0.2 - 16 | 3.0 | 222028 | 222029 | 222031 | |

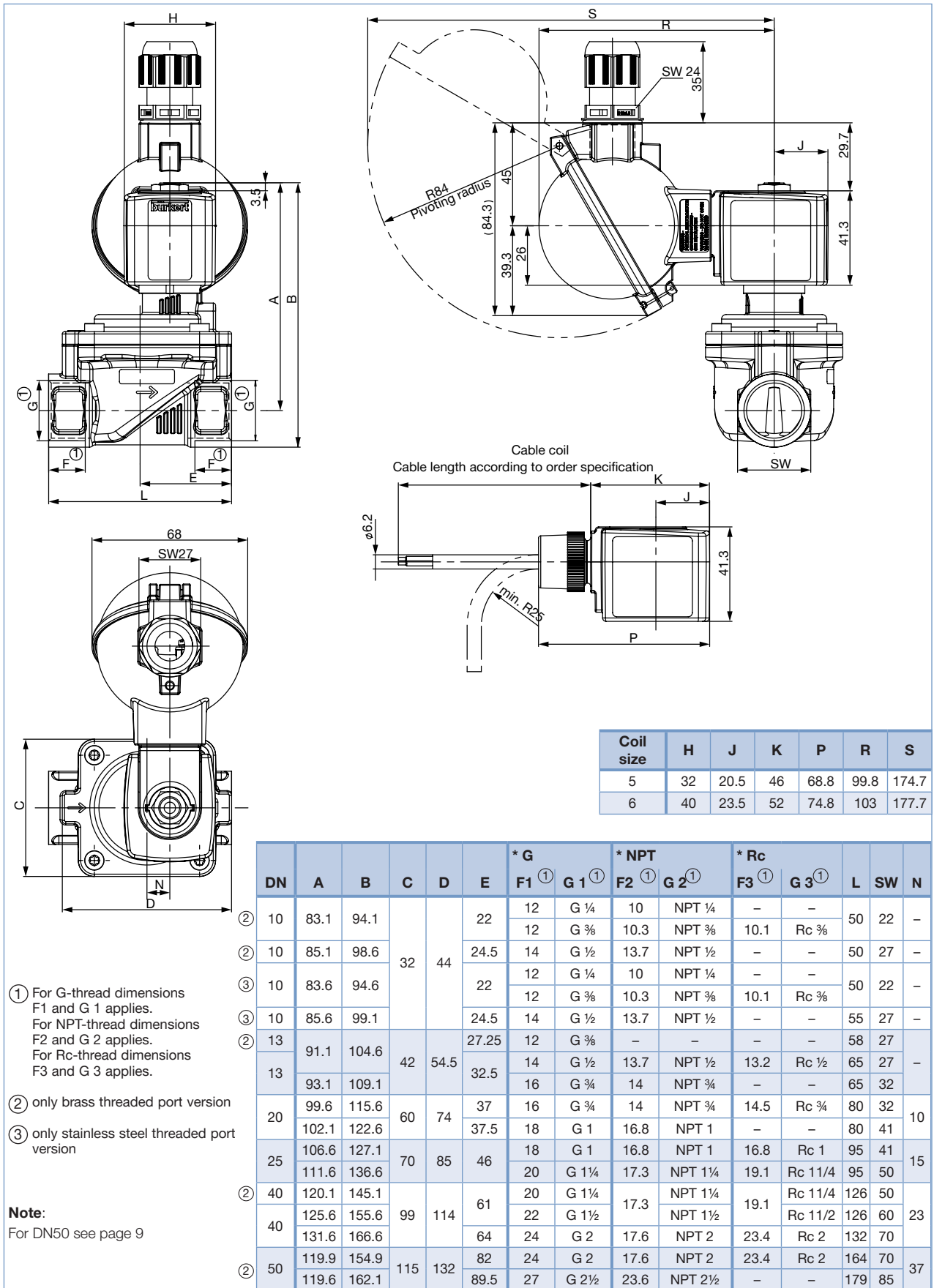
Ordering chart for valves, continued

Circuit function B (NO, normally open), Stainless steel body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | |
|--|---|--------------|--|----------------------|-------------|--|--|--|
| | | | | | | 024/DC | 024/50 | 230/50 |
| B 2/2 way valve NO  | Seal material FKM, Epoxy coil, Medium temperature 0... +120 °C | | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2 - 16 | 0.43 | 322547  | 322548  | 322549  |
| | G ⅜ | 10 | 1.9 | 0.2 - 16 | 0.40 | 322550  | 322551  | 322552  |
| | G ½ | 13 | 3.8 | 0.2 - 16 | 0.54 | 228387  | 228388  | 228389  |
| | G ¾ | 20 | 8.5 | 0.2 - 16 | 0.86 | 228390  | 228391  | 228392  |
| | G 1 | 25 | 12 | 0.2 - 16 | 1.3 | 228393  | 228394  | 228395  |
| | G 1¼ | 25 | 12 | 0.2 - 16 | 1.4 | 228396  | 228397  | 228398  |
| | G 1½ | 40 | 30 | 0.2 - 16 | 2.8 | 228399  | 228400  | 228401  |
| | G 2 | 40 | 30 | 0.2 - 16 | 3.0 | 228402  | 228403  | 228404  |

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

Dimensions [mm] - ATEX



| Coil size | H | J | K | P | R | S |
|-----------|----|------|----|------|------|-------|
| 5 | 32 | 20.5 | 46 | 68.8 | 99.8 | 174.7 |
| 6 | 40 | 23.5 | 52 | 74.8 | 103 | 177.7 |

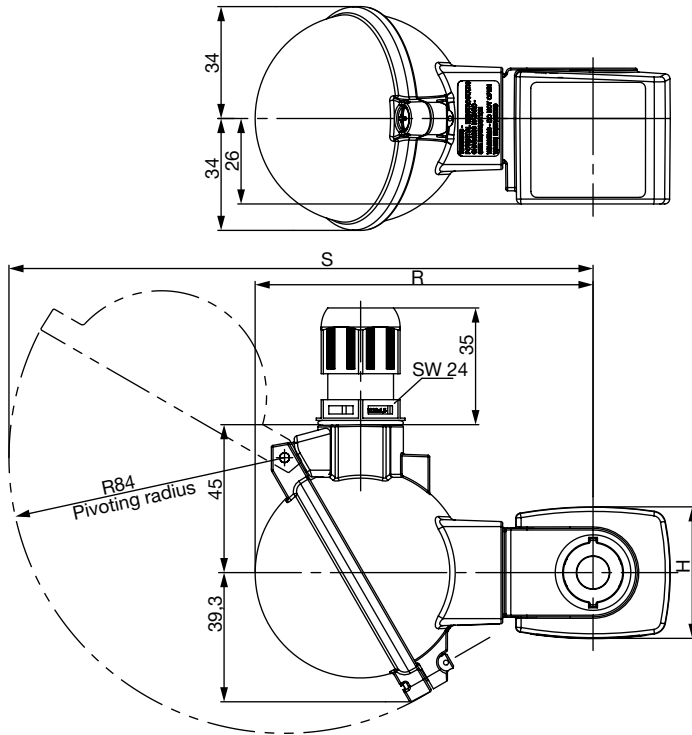
| DN | A | B | C | D | E | * G | | * NPT | | * Rc | | L | SW | N |
|------|-------|-------|------|------|-------|------|-------|-------|--------|------|-------|--------|-------|-----|
| | | | | | | F1 ① | G 1 ① | F2 ① | G 2 ① | F3 ① | G 3 ① | | | |
| ② 10 | 83.1 | 94.1 | 32 | 44 | 22 | 12 | G ¼ | 10 | NPT ¼ | - | - | 50 | 22 | - |
| | | | | | | 12 | G ⅝ | 10.3 | NPT ⅝ | 10.1 | Rc ⅝ | | | |
| ② 10 | 85.1 | 98.6 | | | 24.5 | 14 | G ½ | 13.7 | NPT ½ | - | - | 50 | 27 | - |
| | | | | | | | | 12 | G ¼ | 10 | NPT ¼ | - | - | 50 |
| ③ 10 | 83.6 | 94.6 | 24.5 | 14 | G ⅝ | 10.3 | NPT ⅝ | 10.1 | Rc ⅝ | 50 | 22 | - | | |
| ③ 10 | 85.6 | 99.1 | | | | 13.7 | NPT ½ | - | - | 55 | 27 | - | | |
| ② 13 | 91.1 | 104.6 | 42 | 54.5 | 27.25 | 12 | G ⅝ | - | - | - | - | 58 | 27 | - |
| | | | | | | 14 | G ½ | 13.7 | NPT ½ | 13.2 | Rc ½ | 65 | 27 | - |
| 13 | 93.1 | 109.1 | 60 | 74 | 37 | 16 | G ¾ | 14 | NPT ¾ | 14.5 | Rc ¾ | 80 | 32 | 10 |
| 20 | 99.6 | 115.6 | | | | 18 | G 1 | 16.8 | NPT 1 | - | - | 80 | 41 | |
| 25 | 106.6 | 127.1 | 70 | 85 | 46 | 18 | G 1 | 16.8 | NPT 1 | 16.8 | Rc 1 | 95 | 41 | 15 |
| | | | | | | 20 | G 1¼ | 17.3 | NPT 1¼ | 19.1 | Rc 1¼ | 95 | 50 | |
| ② 40 | 120.1 | 145.1 | 99 | 114 | 61 | 20 | G 1¼ | 17.3 | NPT 1¼ | 19.1 | Rc 1¼ | 126 | 50 | 23 |
| | | | | | | 22 | G 1½ | | | | | NPT 1½ | Rc 1½ | |
| 40 | 125.6 | 155.6 | | | 82 | 24 | G 2 | 17.6 | NPT 2 | 23.4 | Rc 2 | 132 | 70 | |
| | | | | | | | | 24 | G 2 | 17.6 | NPT 2 | 23.4 | Rc 2 | 164 |
| ② 50 | 119.6 | 162.1 | 115 | 132 | 89.5 | 27 | G 2½ | 23.6 | NPT 2½ | - | - | 179 | 85 | 37 |

- ① For G-thread dimensions F1 and G 1 applies. For NPT-thread dimensions F2 and G 2 applies. For Rc-thread dimensions F3 and G 3 applies.
- ② only brass threaded port version
- ③ only stainless steel threaded port version

Note:
For DN50 see page 9

Dimensions [mm] - ATEX

Rotated view of the junction box



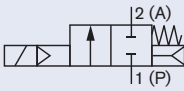
| Coil size | H | J | K | P | R | S |
|-----------|----|------|----|------|------|-------|
| 5 | 32 | 20.5 | 46 | 68.8 | 99.8 | 174.7 |
| 6 | 40 | 23.5 | 52 | 74.8 | 103 | 177.7 |

Note: Standard at DN50

Ordering chart for valves, continued

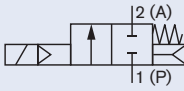
Circuit function A, (NC, normally closed)¹⁾ explosion proofed version ATEX and IECEx
Electrical connection with 3 m cable

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.

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | |
|---|--|--------------|--|----------------------|-------------|--|--------|
| | | | | | | 024/UC | 230/UC |
|  A 2/2 way valve NC | Seal material NBR, Brass body, Medium temperature -10... +80 °C | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.62 | 322553 | 322554 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.59 | 322555 | 322556 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.84 | 277539 | 277535 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 1.2 | 278095 | 278097 |
| | G 1 | 25 | 12 | 0.2-16 | 1.7 | 277543 | 277540 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.8 | 278103 | 278105 |
| | G 1¼ | 40 | 23 | 0.2-16 | 3.0 | 279557 | 279558 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.3 | 278106 | 278107 |
| | G 2 | 40 | 30 | 0.2-16 | 3.5 | 278191 | 278250 |
| | G 2 | 50 | 40 | 0.2-16 | 4.8 | 278109 | 278112 |
| | G 2½ | 50 | 40 | 0.2-16 | 5.5 | 278248 | 278249 |
| | Seal material FKM, Stainless steel body, Medium temperature 0... +90 °C | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.62 | 322557 | 322558 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.59 | 322559 | 322560 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.84 | 277545 | 277544 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 1.2 | 278187 | 278188 |
| | G 1 | 25 | 12 | 0.2-16 | 1.6 | 277547 | 277546 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.7 | 278251 | 278252 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.1 | 278193 | 278194 |
| | G 2 | 40 | 30 | 0.2-16 | 3.3 | 278253 | 278254 |

Circuit function A, (NC, normally closed)¹⁾ explosion proofed version ATEX and IECEx
Electrical connection with junction box

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.

| Circuit function | Port connection | Orifice [mm] | K _v value water [m ³ /h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | |
|---|--|--------------|--|----------------------|-------------|--|--------|
| | | | | | | 024/UC | 230/UC |
|  A 2/2 way valve NC | Seal material NBR, Brass body, Medium temperature -10... +80 °C | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.62 | 322561 | 322562 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.59 | 322563 | 322564 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.84 | 289544 | 289550 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 1.2 | 289560 | 289561 |
| | G 1 | 25 | 12 | 0.2-16 | 1.7 | 289565 | 289568 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.8 | 289571 | 289572 |
| | G 1¼ | 40 | 23 | 0.2-16 | 3.0 | 289575 | 289576 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.3 | 289577 | 289579 |
| | G 2 | 40 | 30 | 0.2-16 | 3.5 | 289583 | 289584 |
| | G 2 | 50 | 40 | 0.2-16 | 4.8 | 289587 | 289591 |
| | Seal material FKM, Stainless steel body, Medium temperature 0... +90 °C | | | | | | |
| | G ¼ | 10 | 1.5 | 0.2-16 | 0.62 | 322565 | 322566 |
| | G ⅜ | 10 | 1.9 | 0.2-16 | 0.59 | 322567 | 322568 |
| | G ½ | 13 | 3.8 | 0.2-16 | 0.84 | 289556 | 289557 |
| | G ¾ | 20 | 8.5 | 0.2-16 | 1.2 | 289562 | 289563 |
| | G 1 | 25 | 12 | 0.2-16 | 1.6 | 289569 | 289570 |
| | G 1¼ | 25 | 12 | 0.2-16 | 1.7 | 289573 | 289574 |
| | G 1½ | 40 | 30 | 0.2-16 | 3.1 | 289580 | 289581 |
| | G 2 | 40 | 30 | 0.2-16 | 3.3 | 289585 | 289586 |

¹⁾ only with Epoxy coil available

Explosion proofed approvals

ATEX: PTB 14 ATEX 2023 X

II 2G Ex mb IIC T4 Gb

II 2D Ex mb IIIC T130 °C Db

IECEX: IECEX PTB 14.0049 X

Ex mb IIC T4 Gb

Ex mb IIIC T130 °C Db

ATEX and IECEx approval for assembling coil and terminal box

ATEX: EPS 16 ATEX 1046 X

II 2G Ex eb mb IIC T4 Gb

II 2D Ex mb tb IIIC T130 °C Db

IECEX: IECEX EPS 16.0021 X

Ex eb mb IIC T4 Gb

Ex mb tb IIIC T130 °C Db

Compressor relief valve

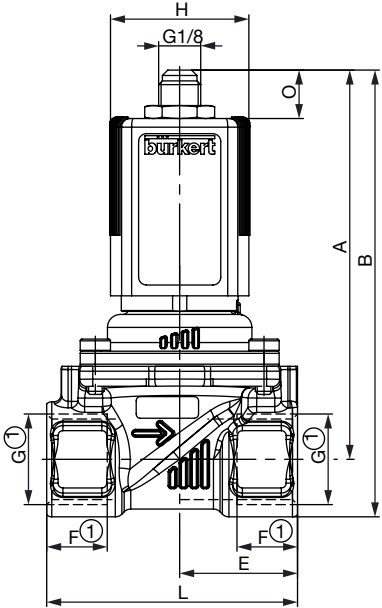
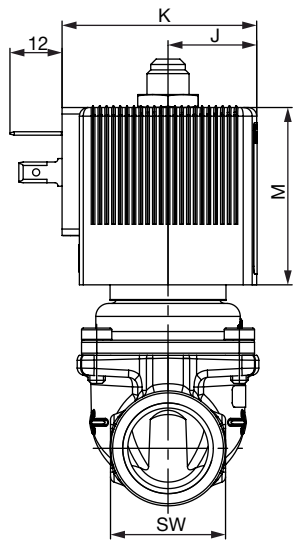
Circuit function B (NO, normally open), brass body

| Circuit function | Port connection | Orifice [mm] | K _v value water [m³/h] | Pressure range [bar] | Weight [kg] | Article no. per voltage/frequency [V/Hz] | | | |
|------------------|--|--------------|-----------------------------------|----------------------|-------------|--|-----------|-----------|-----------|
| | | | | | | 024/DC | 024/50-60 | 110/50-60 | 230/50-60 |
| | Seal material FKM, polyamide coil, medium temperature 0...+90 °C, DN10_CF05 | | | | | | | | |
| | G 3/8 | 10 | 1,9 | 0,2 - 16 | 0,43 | 330985 | 330986 | 330987 | 330988 |
| | G 1/2 | 10 | 1,9 | 0,2 - 16 | 0,40 | 330989 | 331007 | 331008 | 331009 |
| | Seal material FKM, polyamide coil, medium temperature 0...+90 °C, DN13 | | | | | | | | |
| | G 3/8 | 13 | 3,6 | 0,5 - 16 | 0,58 | 310663 | 310662 | 310661 | 310659 |
| | G 1/2 | 13 | 3,6 | 0,5 - 16 | 0,54 | 310667 | 310666 | 310665 | 310664 |

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

Note: In deenergized state the valve is open. The medium also flows off via the vent on the coil.

Dimensions [mm]

① For G-thread dimensions
 F1 and G 1 applies.
 For NPT-thread dimensions
 F2 and G 2 applies.
 For Rc-thread dimensions
 F3 and G 3 applies.

| Coil size | H | J | K | M | O |
|-----------|----|------|----|------|------|
| 5 | 32 | 20.5 | 45 | 41 | 11.2 |
| 6 | 40 | 23.5 | 51 | 41.4 | 10.8 |

| DN | A | B | C | D | E | * G | | * NPT | | * Rc | | L | SW |
|----|------|-------|----|------|-------|------|---------|-------|---------|------|--------|----|----|
| | | | | | | F1 ① | G 1 ① | F2 ① | G 2 ① | F3 ① | G 3 ① | | |
| 10 | 90.5 | 101.5 | 32 | 44 | 22 | 12 | G 1/4 | 10 | NPT 1/4 | - | - | 50 | 22 |
| | | | | | | 12 | G 3/8 | 10.3 | NPT 3/8 | 10.1 | Rc 3/8 | | |
| | 24.5 | 14 | | | G 1/2 | 13.7 | NPT 1/2 | 13.2 | Rc 1/2 | 27 | | | |
| 13 | 90 | 103.5 | 42 | 54.5 | 27.25 | 12 | G 3/8 | - | - | - | - | 58 | 27 |
| | | | | | | 14 | G 1/2 | 13.7 | NPT 1/2 | 13.2 | Rc 1/2 | | |
| | 32.5 | 16 | | | G 3/4 | 14 | NPT 3/4 | 14.5 | Rc 3/4 | 65 | 32 | | |
| 20 | 107 | 123 | 60 | 74 | 37 | 16 | G 3/4 | 14 | NPT 3/4 | 14.5 | Rc 3/4 | 80 | 32 |
| | | | | | | 18 | G 1 | 16.8 | NPT 1 | - | - | | |
| | 37.5 | 18 | | | G 1 | 16.8 | NPT 1 | - | - | 41 | | | |

i Further versions on request



Port connection
NPT, Rc



Temperature
EPDM version up to +100 °C with epoxy coil
FKM version up to +120 °C with epoxy coil



Voltage
Further voltages




Material
Brass dezincification resistant

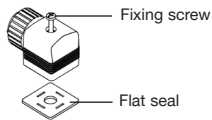


Approvals
European drinking water approval acc. to KTW W270 (Var. code PF23)
VDE sign permission acc. to DIN EN 60730 (Var. code PW01)

Ordering chart for accessory

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

|  | Circuitry | Voltage / frequency | Article no. |
|---|------------------------------------|---------------------|-------------|
| | None (standard) | 0 - 250 V AC/DC | 008376 |
| | None (for Stainless steel version) | 0 - 250 V AC/DC | 132445 |
| further versions see datasheet Type 2508 | | | |



Fixing screw

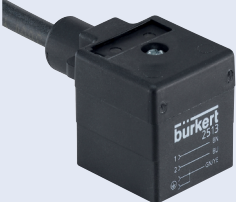
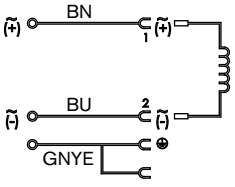
Flat seal

The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions acc. to DIN EN 175301 - 803 Form A (previously DIN 43650), see separate datasheet Type 2508.

Cable plug Type 2513 acc. to DIN EN 175301 - 803, Form A



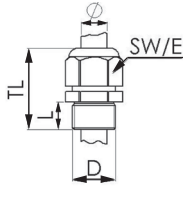


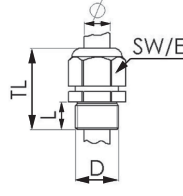
Meets the requirements of ATEX category 3 GD

Should only be used in connection with specially marked devices acc. to ATEX Cat. 3.



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

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  |

To find your nearest Bürkert facility, click on the orange box →

www.burkert.comIn case of special application conditions,
please consult for advice.Subject to alteration.
© Christian Bürkert GmbH & Co. KG

1809/13_EU-en_00895124