

## Servo-assisted 2/2 way diaphragm valve



Type 6213EV can be combined with...



**Type 2508**  
Cable plug

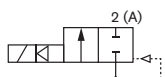


**Type 2513**  
Cable plug  
(ATEX Cat. 3 GD)

- Servo-assisted diaphragm with diameter of up to DN 40
- Spring coupled diaphragm opens without differential pressure
- Vibration-proof, screwed coil system
- Damped design for quiet closing
- Press mould housing with high surface quality

The 6213 EV valve is a servo-assisted solenoid valve of the S.EV series. The spring coupling of the diaphragm supports the opening process of the valve. In its standard version, the valve is suitable for use in liquids. A minimum differential pressure is required for complete opening. A special version (HP00) which opens the valve without differential pressure is available for gas and vacuum applications. Various diaphragm material combinations are available depending on the application. The standard brass housing satisfies all European drinking water requirements. Lead-free or dezincification-resistant brass types are available for other markets. The housing offering is rounded out by a stainless steel version. The solenoid coils are moulded with a chemically resistant epoxy. For reduced energy requirement, all coils can be delivered with electronic power reduction. In combination with a plug in accordance with DIN EN 17301-803 Form A, the valves satisfy protection class IP65 – in combination with a stainless steel housing NEMA 4X.

### Circuit function A



Servo-assisted 2/2 way valve; normally closed, with 2 way pilot control

| Technical data                     |   |
|------------------------------------|---|
| <b>Orifice</b>                     | Standard DN 10 - 40 mm<br>HP00: DN13-20   |
| <b>Body material</b>               | Brass acc. to DIN EN 50930-6, stainless steel 1.4408 (316), nickel-plated brass (5µm)                                 |
| <b>Inner part of valve</b>         |   |
| Brass body                         | Brass, stainless steel and PPS  |
| Stainless steel body               | Stainless steel and PPS   |
| <b>Seal material</b>               | NBR, FKM, EPDM  |
| <b>Medium</b>                      |   |
| NBR                                | Neutral fluids, water, hydraulic oil, oil without additives   |
| FKM                                | Per-solutions, hot oils with additives  |
| EPDM                               | Oil and fat-free fluids and gases   |
| <b>Ambient temperature</b>         | Max. +55 °C   |
| <b>Medium viscosity</b>            | Max. 21 mm <sup>2</sup> /s  |
| <b>Medium temperature</b>          |   |
| NBR                                | -10 to +80 °C   |
| FKM                                | 0 to +90 °C with polyamide coil / 0 - 120 °C with epoxy coil  |
| EPDM                               | -30 to +90 °C with polyamide coil<br>-30 to +100 °C with epoxy coil   |
| <b>Voltages</b>                    | Standard 024/DC, 024/50, 230/50, 110/50, 120/60<br>HP00: 24V (50-60Hz), 230V (50-60Hz)                                |
| <b>Voltage tolerance</b>           | ±10%  |
| <b>Duty cycle</b>                  | 100% continuous rating  |
| <b>Electrical connection</b>       | Tag connector acc. to DIN EN 175301-803 Form A (previously DIN 43650)<br>(see ordering chart for accessories, page 7) |
| <b>Protection class</b>            | IP 65 with cable plug   |
| <b>Installation</b>                | As required, preferably with actuator upright   |
| <b>Response times<sup>1)</sup></b> | 0.1 - 4 seconds<br>(depending on orifice and differential pressure)   |

<sup>1)</sup> Measured at valve outlet at 6 bar and +20°C  
 Opening: pressure build-up 0 to 90%  
 Closing: Pressure drop 100 to 10%

## Technical data

## Power consumption

| Orifice DN | Port Connection | Coil size width [mm] |    | Power consumption <sup>1)</sup> |                           |         | Insulation class coil <sup>2)</sup> |                            | Weight [kg]   |               |
|------------|-----------------|----------------------|----|---------------------------------|---------------------------|---------|-------------------------------------|----------------------------|---------------|---------------|
|            |                 | AC                   | DC | Inrush AC [VA]                  | Hold (hot coil) AC [VA/W] | DC [W]  | Seal material FKM                   | Seal material NBR and EPDM | Brass Coil AC | Brass Coil DC |
| 10         | G1/4, G3/8      | 32                   | 40 | 34                              | 14/8                      | 10 (11) | H                                   | B                          | 0.33          | 0.41          |
| 10         | G1/2            | 32                   | 40 | 34                              | 14/8                      | 10 (11) | H                                   | B                          | 0.37          | 0.44          |
| 13         | G1/2            | 32                   | 40 | 36                              | 14/8                      | 10 (11) | H                                   | B                          | 0.46          | 0.54          |
| 13         | G3/4            | 32                   | 40 | 36                              | 14/8                      | 10 (11) | H                                   | B                          | 0.49          | 0.57          |
| 20         | G3/4            | 32                   | 40 | 38                              | 14/8                      | 10 (11) | H                                   | B                          | 0.74          | 0.82          |
| 20         | G1              | 32                   | 40 | 38                              | 14/8                      | 10 (11) | H                                   | B                          | 0.95          | 1.03          |
| 25         | G1              | 42                   | 65 | 150                             | 37/16                     | 28 (29) | H                                   | H                          | 1.6           | 2.2           |
| 25         | G11/4           | 42                   | 65 | 150                             | 37/16                     | 28 (29) | H                                   | H                          | 1.7           | 2.3           |
| 40         | G11/4           | 42                   | 65 | 190                             | 37/16                     | 28 (29) | H                                   | H                          | 3.2           | 3.7           |
| 40         | G11/2           | 42                   | 65 | 190                             | 37/16                     | 28 (29) | H                                   | H                          | 3.2           | 3.7           |
| 40         | G2              | 42                   | 65 | 190                             | 37/16                     | 28 (29) | H                                   | H                          | 3.38          | 3.9           |

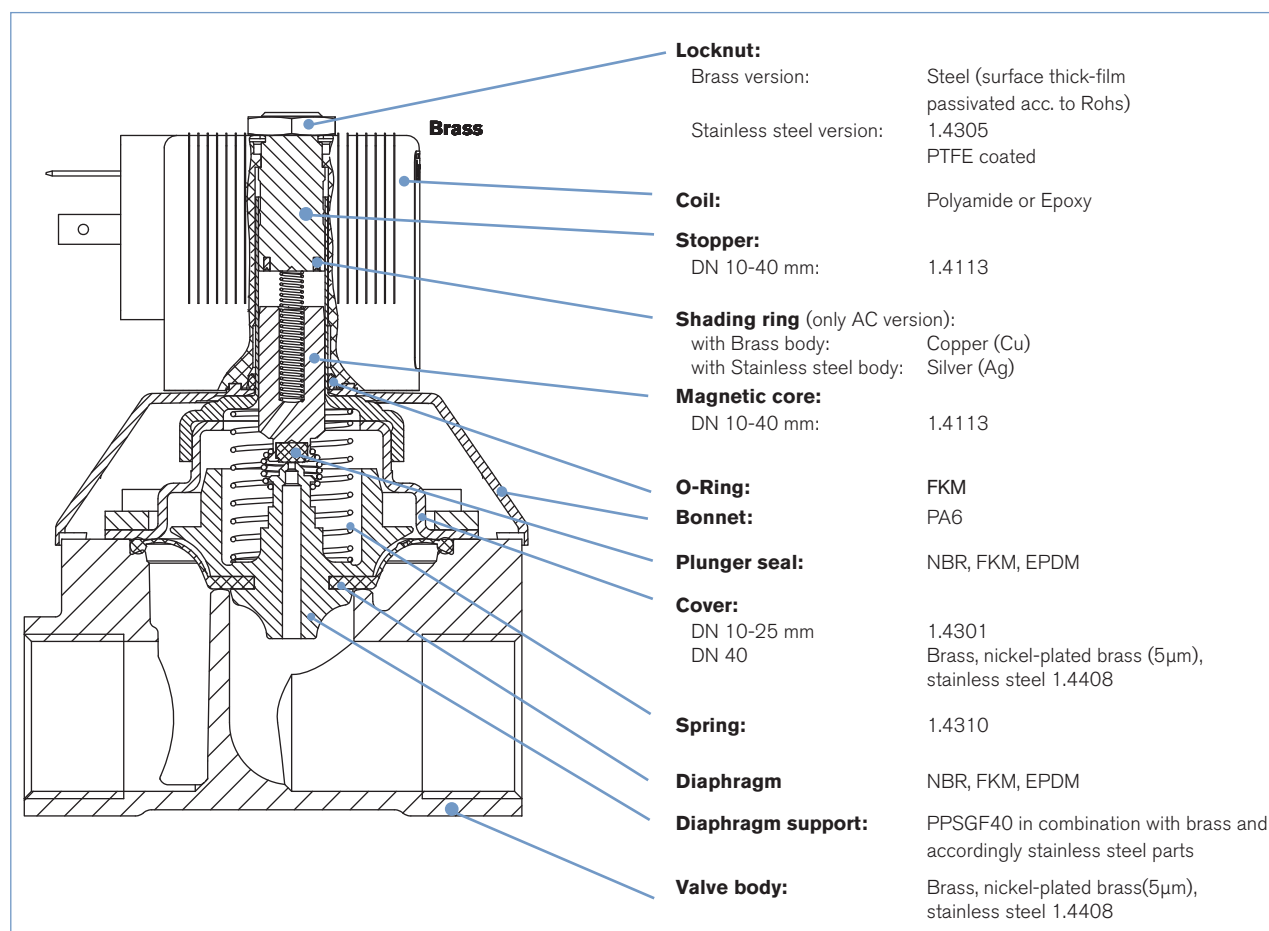
## HP00 Power consumption

| Orifice DN | Port Connection | Coil size width [mm] AC/DC | Power consumption <sup>1)</sup> |                           |         | Insulation class coil <sup>2)</sup> |                            | Weight [kg]   |               |
|------------|-----------------|----------------------------|---------------------------------|---------------------------|---------|-------------------------------------|----------------------------|---------------|---------------|
|            |                 |                            | Inrush AC [VA]                  | Hold (hot coil) AC [VA/W] | DC [W]  | Seal material FKM                   | Seal material NBR and EPDM | Brass Coil AC | Brass Coil DC |
| 13         | G1/2            | 42                         | 125                             | 37/16                     | 16 (21) | H                                   | H                          | 0.80          | 0.81          |
| 13         | G3/4            | 42                         | 125                             | 37/16                     | 16 (21) | H                                   | H                          | 0.86          | 0.87          |
| 20         | G3/4            | 42                         | 140                             | 37/16                     | 16 (21) | H                                   | H                          | 1.13          | 1.14          |
| 20         | G1              | 42                         | 140                             | 37/16                     | 16 (21) | H                                   | H                          | 1.30          | 1.31          |

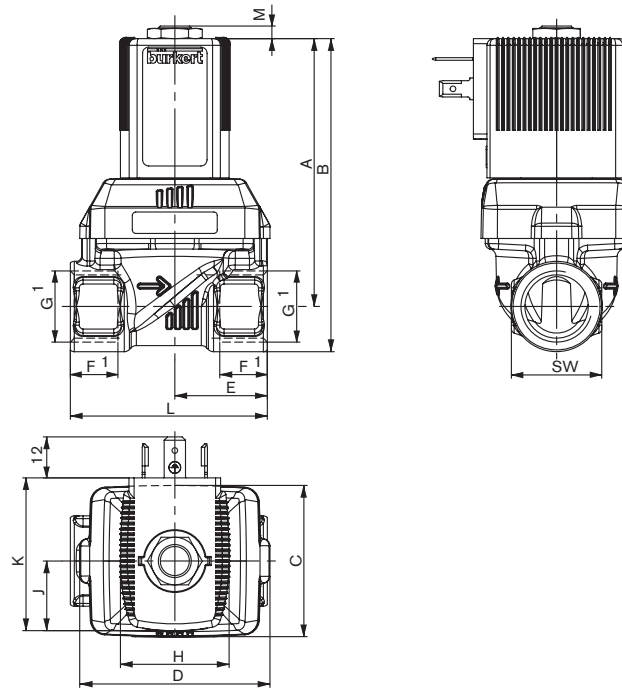
<sup>1)</sup> Values in brackets applies at coil temperature 20 °C

<sup>2)</sup> H Epoxy coil, B Polyamide coil

## Materials



Dimensions [mm]



Dimensions (AC-coil, 32mm)

| DN | A    | B     | C    | D    | E<br>(MS/VA) | * G<br>F1 G1 | * NPT<br>F2 G2 | * Rc<br>F3 G3 | H  | J    | K  | L<br>(MS/VA) | SW | M   |       |    |
|----|------|-------|------|------|--------------|--------------|----------------|---------------|----|------|----|--------------|----|-----|-------|----|
| 10 | 67.4 | 78.4  | 36   | 46   | 22           | 12 G 1/4     | 10 NPT 1/4     | 9.7 Rc 1/4    | 32 | 20.5 | 45 | 50           | 22 | 3.7 |       |    |
|    | 67.4 | 78.4  |      |      | 22           | 12 G 3/8     | 10.3 NPT 3/8   | 10.1 Rc 3/8   |    |      |    |              |    |     | 50/55 | 27 |
|    | 69.4 | 82.9  |      |      | 24.5         | 14 G 1/2     | 13.7 NPT 1/2   | 13.2 Rc 1/2   |    |      |    |              |    |     | 58/65 | 27 |
| 13 | 78.9 | 92.4  | 44.5 | 56   | 27.2/32.5    | 14 G 1/2     | 13.7 NPT 1/2   | 13.2 Rc 1/2   | 32 | 20.5 | 45 | 65           | 32 | 3.7 |       |    |
|    | 80.9 | 96.9  |      |      | 32.5         | 16 G 3/4     | 14 NPT 3/4     | 14.5 Rc 3/4   |    |      |    |              |    |     | 80    | 32 |
| 20 | 93.4 | 109.4 | 65   | 76.6 | 37           | 16 G 3/4     | 14 NPT 3/4     | 14.5 Rc 3/4   | 32 | 20.5 | 45 | 80           | 32 | 3.7 |       |    |
|    | 95.9 | 116.4 |      |      | 37.5         | 18 G 1       | 16.8 NPT 1     | 16.8 Rc 1     |    |      |    |              |    |     | 80    | 41 |

Dimensions (DC-coil, 40mm)

| DN | A    | B     | C    | D    | E<br>(MS/VA) | * G<br>F1 G1 | * NPT<br>F2 G2 | * Rc<br>F3 G3 | H  | J    | K  | L<br>(MS/VA) | SW | M   |       |    |
|----|------|-------|------|------|--------------|--------------|----------------|---------------|----|------|----|--------------|----|-----|-------|----|
| 10 | 67.4 | 78.4  | 36   | 46   | 22           | 12 G 1/4     | 10 NPT 1/4     | 9.7 Rc 1/4    | 40 | 23.5 | 51 | 50           | 22 | 3.7 |       |    |
|    | 67.4 | 78.4  |      |      | 22           | 12 G 3/8     | 10.3 NPT 3/8   | 10.1 Rc 3/8   |    |      |    |              |    |     | 50/55 | 27 |
|    | 69.4 | 82.9  |      |      | 24.5         | 14 G 1/2     | 13.7 NPT 1/2   | 13.2 Rc 1/2   |    |      |    |              |    |     | 58/65 | 27 |
| 13 | 79.3 | 92.8  | 44.5 | 56   | 27.2/32.5    | 14 G 1/2     | 13.7 NPT 1/2   | 13.2 Rc 1/2   | 40 | 23.5 | 51 | 65           | 32 | 3.7 |       |    |
|    | 81.3 | 97.3  |      |      | 32.5         | 16 G 3/4     | 14 NPT 3/4     | 14.5 Rc 3/4   |    |      |    |              |    |     | 80    | 32 |
| 20 | 93.8 | 109.8 | 65   | 76.6 | 37           | 16 G 3/4     | 14 NPT 3/4     | 14.5 Rc 3/4   | 40 | 23.5 | 51 | 80           | 32 | 3.7 |       |    |
|    | 96.3 | 116.8 |      |      | 37.5         | 18 G 1       | 16.8 NPT 1     | 16.8 Rc 1     |    |      |    |              |    |     | 80    | 41 |

Dimensions (AC-coil, 42mm / DC-coil 65mm)

| DN | A     | B     | C     | D   | E<br>(MS/VA) | * G<br>F1 G1 | * NPT<br>F2 G2 | * Rc<br>F3 G3 | H  | J    | K    | L<br>(MS/VA) | SW | M |     |    |
|----|-------|-------|-------|-----|--------------|--------------|----------------|---------------|----|------|------|--------------|----|---|-----|----|
| 40 | 158.3 | 193.3 | 104.5 | 117 | 64           | 24 G 2       | 17.6 NPT 2     | 23.4 Rc 2     | 65 | 37.5 | 72   | 132          | 70 | 7 |     |    |
|    | 152.3 | 182.3 |       |     | 61           | 22 G1 1/2    | 17.3 NPT 1 1/2 | 19.1 Rc 1 1/2 |    |      |      |              |    |   | 126 | 60 |
|    | 146.8 | 171.8 |       |     | 61           | 20 G1 1/4    | 17.3 NPT 1 1/4 | 19.1 Rc 1 1/4 |    |      |      |              |    |   | 126 | 50 |
| 25 | 141.3 | 166.3 | 77    | 88  | 46           | 20 G1 1/4    | 17.3 NPT 1 1/4 | 19.1 Rc 1 1/4 | 65 | 37.5 | 72   | 95           | 50 | 7 |     |    |
|    | 136.3 | 156.8 |       |     | 46           | 18 G 1       | 16.8 NPT 1     | 16.8 Rc 1     |    |      |      |              |    |   | 95  | 41 |
| 40 | 158.3 | 193.3 | 104.5 | 117 | 64           | 24 G 2       | 17.6 NPT 2     | 23.4 Rc 2     | 42 | 27   | 55.5 | 132          | 70 | 7 |     |    |
|    | 152.3 | 182.3 |       |     | 61           | 22 G1 1/2    | 17.3 NPT 1 1/2 | 19.1 Rc 1 1/2 |    |      |      |              |    |   | 126 | 60 |
|    | 146.8 | 171.8 |       |     | 61           | 20 G1 1/4    | 17.3 NPT 1 1/4 | 19.1 Rc 1 1/4 |    |      |      |              |    |   | 126 | 50 |
| 25 | 141.3 | 166.3 | 77    | 88  | 46           | 20 G1 1/4    | 17.3 NPT 1 1/4 | 19.1 Rc 1 1/4 | 42 | 27   | 55.5 | 95           | 50 | 7 |     |    |
|    | 136.3 | 156.8 |       |     | 46           | 18 G 1       | 16.8 NPT 1     | 16.0 Rc 1     |    |      |      |              |    |   | 95  | 41 |

Dimensions [mm] (cont.)

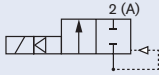
HP00 Version  
Dimensions (coil, 42mm)

| DN | A     | B     | C    | D    | 2E        | * G |       | * NPT |         | * Rc |        | H  | J  | K    | L       |       | M |    |
|----|-------|-------|------|------|-----------|-----|-------|-------|---------|------|--------|----|----|------|---------|-------|---|----|
|    |       |       |      |      | (MS/VA)   | F1  | G1    | F2    | G2      | F3   | G3     |    |    |      | (MS/VA) | SW    |   |    |
| 20 | 119.3 | 139.8 | 65   | 76.6 | 37.5      | 18  | G 1   | 16.8  | NPT 1   | 16.8 | Rc 1   |    |    |      | 80      | 41    |   |    |
|    | 116.8 | 132.8 |      |      | 37        | 16  | G 3/4 | 14    | NPT 3/4 | 14.5 | Rc 3/4 |    |    |      |         | 32    |   |    |
| 13 | 104.3 | 120.3 | 44.5 | 56   | 32.5      | 16  | G 3/4 | 14    | NPT 3/4 | 14.5 | Rc 3/4 | 42 | 27 | 55.5 | 65      | 32    | 7 |    |
|    | 102.6 | 115.6 |      |      | 27.2/32.5 | 14  | G 1/2 | 13.7  | NPT 1/2 | 13.2 | Rc 1/2 |    |    |      |         | 58/65 |   | 27 |
|    |       |       |      |      | 27.2/32.5 |     |       |       |         |      |        |    |    |      |         | 58/65 |   | 27 |

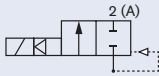
## Ordering chart for valves (other versions on request)

## Valves with brass body

## DN 10 -40 mm

| Circuit function   | Port connection   | Orifice [mm] | Kv value water [m <sup>3</sup> /h] <sup>1,4)</sup> | Pressure range [bar] <sup>2)</sup> | Weight [kg] (DC) <sup>3)</sup> | Item no. per voltage/frequency [V/Hz] |         |         |  |
|--|---|--------------|--|------------------------------------|--------------------------------|---------------------------------------|---------|---------|--|
|  |   |              |  |                                    |                                | 024/DC                                | 024/50  | 230/50  |  |
| <b>A 2/2 way valve NC</b><br> | <b>Brass-body, NBR Diaphragm, polyamide coil, medium temperature -10...+80°C</b>  |              |  |                                    |                                |                                       |         |         |  |
|  | G 1/4   | 10           | 1.3  | 0 - 10                             | 0.3 (0.5)                      | 221 674                               | 221 675 | 221 677 |  |
|  | G 3/8   | 10           | 1.9  | 0 - 10                             | 0.3 (0.5)                      | 221 598                               | 221 599 | 221 601 |  |
|  | G 1/2   | 10           | 1.9  | 0 - 10                             | 0.4 (0.5)                      | 221 606                               | 221 607 | 221 609 |  |
|  | G 1/2   | 13           | 3.6  | 0 - 10                             | 0.4 (0.5)                      | 221 602                               | 221 603 | 221 605 |  |
|  | G 3/4   | 13           | 3.6  | 0 - 10                             | 0.5 (0.6)                      | 221 618                               | 221 619 | 221 621 |  |
|  | G 3/4   | 20           | 8.3  | 0 - 10                             | 0.7 (0.8)                      | 221 630                               | 221 631 | 221 633 |  |
|  | G 1   | 20           | 8.3  | 0 - 10                             | 0.9 (1.0)                      | 221 634                               | 221 635 | 221 637 |  |
|  | <b>Brass-body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C</b>      |              |  |                                    |                                |                                       |         |         |  |
|  | G 1   | 25           | 11   | 0 - 10                             | 1.6 (2.2)                      | 227 533                               | 221 725 | 221 728 |  |
|  | G 1 1/4   | 25           | 11   | 0 - 10                             | 1.7 (2.3)                      | 227 534                               | 221 729 | 221 732 |  |
|  | G 1 1/4   | 40           | 23   | 0 - 10                             | 2.9 (3.4)                      | 270 903                               | 270 895 | 270 899 |  |
|  | G 1 1/2   | 40           | 30   | 0 - 10                             | 3.2 (3.7)                      | 227 539                               | 221 750 | 221 753 |  |
|  | G 2   | 40           | 30   | 0 - 10                             | 3.4 (3.9)                      | 227 541                               | 221 754 | 221 757 |  |
|  | <b>Brass-body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C</b>        |              |  |                                    |                                |                                       |         |         |  |
|  | G 1/4   | 10           | 1.3  | 0 - 10                             | 0.3 (0.5)                      | 221 678                               | 221 679 | 221 681 |  |
|  | G 3/8   | 10           | 1.9  | 0 - 10                             | 0.3 (0.5)                      | 221 610                               | 221 611 | 221 613 |  |
|  | G 1/2   | 10           | 1.9  | 0 - 10                             | 0.4 (0.5)                      | 221 614                               | 221 615 | 221 617 |  |
|  | G 1/2   | 13           | 3.6  | 0 - 10                             | 0.4 (0.5)                      | 221 622                               | 221 623 | 221 625 |  |
|  | G 3/4   | 13           | 3.6  | 0 - 10                             | 0.5 (0.6)                      | 221 626                               | 221 627 | 221 629 |  |
|  | G 3/4   | 20           | 8.3  | 0 - 10                             | 0.7 (0.8)                      | 221 638                               | 221 639 | 221 641 |  |
|  | G 1   | 20           | 8.3  | 0 - 10                             | 0.9 (1.0)                      | 221 642                               | 221 643 | 221 645 |  |
|  | G 1   | 25           | 11   | 0 - 10                             | 1.6 (2.2)                      | 227 537                               | 221 733 | 221 736 |  |
|  | G 1 1/4   | 25           | 11   | 0 - 10                             | 1.7 (2.3)                      | 227 538                               | 221 737 | 221 740 |  |
|  | G 1 1/4   | 40           | 23   | 0 - 10                             | 2.9 (3.4)                      | 270 905                               | 270 906 | 270 908 |  |
|  | G 1 1/2   | 40           | 30   | 0 - 10                             | 3.2 (3.7)                      | 227 544                               | 227 724 | 227 726 |  |
|  | G 2   | 40           | 30   | 0 - 10                             | 3.4 (3.9)                      | 227 545                               | 227 728 | 227 730 |  |
|  | <b>Brass-body, EPDM Diaphragm, polyamide coil, medium temperature -30...+90°C</b> |              |  |                                    |                                |                                       |         |         |  |
|  | G 1/4   | 10           | 1.3  | 0 - 10                             | 0.3 (0.4)                      | 221 670                               | 221 671 | 221 673 |  |
|  | G 3/8   | 10           | 1.9  | 0 - 10                             | 0.3 (0.4)                      | 221 646                               | 221 647 | 221 649 |  |
| G 1/2  | 10  | 1.9          | 0 - 10   | 0.4 (0.5)                          | 221 650                        | 221 651                               | 221 653 |         |  |
| G 1/2  | 13  | 3.6          | 0 - 10   | 0.4 (0.5)                          | 221 654                        | 221 655                               | 221 657 |         |  |
| G 3/4  | 13  | 3.6          | 0 - 10   | 0.5 (0.6)                          | 221 658                        | 221 659                               | 221 661 |         |  |
| G 3/4  | 20  | 8.3          | 0 - 10   | 0.7 (0.8)                          | 221 662                        | 221 663                               | 221 665 |         |  |
| G 1  | 20  | 8.3          | 0 - 10   | 0.9 (1.0)                          | 221 666                        | 221 667                               | 221 669 |         |  |
| <b>Brass-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C</b>                                 |   |              |  |                                    |                                |                                       |         |         |  |
| G 1  | 25  | 11           | 0 - 10   | 1.6 (2.2)                          | 227 535                        | 221 717                               | 221 720 |         |  |
| G 1 1/4  | 25  | 11           | 0 - 10   | 1.7 (2.3)                          | 227 536                        | 221 721                               | 221 724 |         |  |
| G 1 1/4  | 40  | 23           | 0 - 10   | 2.9 (3.4)                          | 270 904                        | 270 890                               | 270 894 |         |  |
| G 1 1/2  | 40  | 30           | 0 - 10   | 3.2 (3.7)                          | 227 542                        | 221 741                               | 221 745 |         |  |
| G 2  | 40  | 30           | 0 - 10   | 3.4 (3.9)                          | 227 543                        | 221 746                               | 221 749 |         |  |

## DN 13-20 mm HPOO version

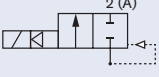
| Circuit function   | Port connection  | Orifice [mm] | Kv value water [m <sup>3</sup> /h] <sup>1)</sup> | Pressure range [bar] <sup>2)</sup> | Weight [kg] (DC) | Item no. per voltage/frequency [V/Hz] |           |           |  |
|--|--|--------------|--|------------------------------------|------------------|---------------------------------------|-----------|-----------|--|
|  |  |              |  |                                    |                  | 024/DC                                | 024/50-60 | 230/50-60 |  |
| <b>A 2/2 way valve NC</b><br> | <b>Brass-body, FKM Diaphragm, epoxy coil, medium temperature 0...+120°C</b>    |              |  |                                    |                  |                                       |           |           |  |
|  | G 1/2  | 13           | 3.6  | 0 - 10                             | 0.8              | 221 706                               | 221 705   | 231 574   |  |
|  | G 3/4  | 20           | 8.3  | 0 - 10                             | 1.3              | 221 712                               | 221 711   | 221 713   |  |
|  | G 1  | 20           | 8.3  | 0 - 10                             | 1.4              | 221 715                               | 221 714   | 221 716   |  |
|  | <b>Brass-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C</b> |              |  |                                    |                  |                                       |           |           |  |
|  | G 1/2  | 13           | 3.6  | 0 - 10                             | 0.8              | 221 694                               | 221 693   | 221 695   |  |
| G 3/4  | 20   | 8.3          | 0 - 10   | 1.3                                | 208 422          | 221 699                               | 189 592   |           |  |
| G 1  | 20   | 8.3          | 0 - 10   | 1.4                                | 221 703          | 221 702                               | 221 704   |           |  |

<sup>1)</sup> Measured at +20°C, 1 bar<sup>2)</sup> pressure at valve inlet and free outlet.<sup>2)</sup> Pressure data [bar]: Overpressure with respect to atmospheric pressure.<sup>3)</sup> The values in brackets regarding the weight apply to the DC version.<sup>4)</sup> A minimum differential pressure of 0.5 bar is required for full (100%) opening.

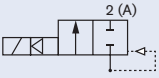
## Ordering chart for valves (other versions on request)

## Valves with Stainless steel body;

## DN 10 -40 mm

| Circuit function   | Port connection  | Orifice [mm] | Kv value water [m <sup>3</sup> /h] <sup>1)</sup> | Pressure range [bar] <sup>2)</sup> | Weight [kg] (DC) <sup>3)</sup> | Item no. per voltage/frequency [V/Hz] |         |         |  |
|--|--|--------------|--|------------------------------------|--------------------------------|---------------------------------------|---------|---------|--|
|  |  |              |  |                                    |                                | 024/DC                                | 024/50  | 230/50  |  |
| <b>A</b> 2/2 way valve NC<br> | <b>Stainless steel-body, NBR Diaphragm, polyamide coil, medium temperature -10...80°C</b>  |              |  |                                    |                                |                                       |         |         |  |
|  | G 3/8  | 10           | 1.9  | 0 - 10                             | 0.3 (0.4)                      | 222 150                               | 222 151 | 222 152 |  |
|  | G 1/2  | 13           | 3.6  | 0 - 10                             | 0.4 (0.5)                      | 222 156                               | 222 157 | 222 158 |  |
|  | G 3/4  | 20           | 8.3  | 0 - 10                             | 0.7 (0.8)                      | 222 168                               | 222 169 | 222 170 |  |
|  | G 1  | 20           | 8.3  | 0 - 10                             | 0.9 (1.0)                      | 222 171                               | 222 172 | 222 173 |  |
|  | <b>Stainless steel body, NBR Diaphragm, epoxy coil, medium temperature -10...+80°C</b>     |              |  |                                    |                                |                                       |         |         |  |
|  | G 1  | 25           | 11   | 0 - 10                             | 1.6 (2.2)                      | 227 546                               | 228 429 | 222 193 |  |
|  | G 1 1/4  | 25           | 11   | 0 - 10                             | 1.7 (2.3)                      | 227 547                               | 228 432 | 222 197 |  |
|  | G 1 1/2  | 40           | 30   | 0 - 10                             | 3.2 (3.7)                      | 227 552                               | 228 435 | 222 201 |  |
|  | G 2  | 40           | 30   | 0 - 10                             | 3.4 (3.9)                      | 227 554                               | 228 438 | 222 205 |  |
|  | <b>Stainless steel body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C</b>       |              |  |                                    |                                |                                       |         |         |  |
|  | G 3/8  | 10           | 1.9  | 0 - 10                             | 0.3 (0.4)                      | 221 758                               | 221 759 | 221 761 |  |
|  | G 1/2  | 13           | 3.6  | 0 - 10                             | 0.4 (0.5)                      | 221 762                               | 221 763 | 221 765 |  |
|  | G 3/4  | 20           | 8.3  | 0 - 10                             | 0.7 (0.8)                      | 222 122                               | 222 123 | 222 125 |  |
|  | G 1  | 20           | 8.3  | 0 - 10                             | 0.9 (1.0)                      | 222 126                               | 222 127 | 222 129 |  |
|  | G 1  | 25           | 11   | 0 - 10                             | 1.6 (2.2)                      | 227 550                               | 228 430 | 222 143 |  |
|  | G 1 1/4  | 25           | 11   | 0 - 10                             | 1.7 (2.3)                      | 227 551                               | 228 433 | 222 145 |  |
|  | G 1 1/2  | 40           | 30   | 0 - 10                             | 3.2 (3.7)                      | 227 557                               | 228 436 | 222 147 |  |
|  | G 2  | 40           | 30   | 0 - 10                             | 3.4 (3.9)                      | 227 558                               | 228 439 | 222 149 |  |
|  | <b>Stainless steel-body, EPDM Diaphragm, polyamide coil, medium temperature -30...90°C</b> |              |  |                                    |                                |                                       |         |         |  |
|  | G 3/8  | 10           | 1.9  | 0 - 10                             | 0.3 (0.4)                      | 222 153                               | 222 154 | 222 155 |  |
|  | G 1/2  | 13           | 3.6  | 0 - 10                             | 0.4 (0.5)                      | 222 159                               | 222 160 | 222 161 |  |
|  | G 3/4  | 20           | 8.3  | 0 - 10                             | 0.7 (0.8)                      | 222 174                               | 222 175 | 222 176 |  |
|  | G 1  | 20           | 8.3  | 0 - 10                             | 0.9 (1.0)                      | 222 177                               | 222 178 | 222 179 |  |
|  | <b>Stainless steel-body, EPDM Diaphragm, epoxy coil, medium temperature -30...+100°C</b>   |              |  |                                    |                                |                                       |         |         |  |
|  | G 1  | 25           | 11   | 0 - 10                             | 1.6 (2.2)                      | 227 548                               | 228 431 | 222 195 |  |
|  | G 1 1/4  | 25           | 11   | 0 - 10                             | 1.7 (2.3)                      | 227 549                               | 228 434 | 222 199 |  |
|  | G 1 1/2  | 40           | 30   | 0 - 10                             | 3.2 (3.7)                      | 227 555                               | 228 437 | 222 203 |  |
| G 2  | 40   | 30           | 0 - 10   | 3.4 (3.9)                          | 227 556                        | 228 440                               | 222 207 |         |  |

## DN 13-20 mm HPOO version

| Circuit function   | Port connection   | Orifice [mm] | Kv value water [m <sup>3</sup> /h] <sup>1)</sup> | Pressure range [bar] <sup>2)</sup> | Weight [kg] (DC) | Item no. per voltage/frequency [V/Hz] |           |           |  |
|--|---|--------------|--|------------------------------------|------------------|---------------------------------------|-----------|-----------|--|
|  |   |              |  |                                    |                  | 024/DC                                | 024/50-60 | 230/50-60 |  |
| <b>A</b> 2/2 way valve NC<br> | <b>Stainless steel body, FKM Diaphragm, epoxy coil, medium temperature 0...120°C</b>    |              |  |                                    |                  |                                       |           |           |  |
|  | G 1/2   | 13           | 3.6  | 0 - 10                             | 0.8              | 208 694                               | 220 585   | 205 351   |  |
|  | G 3/4   | 20           | 8.3  | 0 - 10                             | 1.3              | 222 137                               | 222 136   | 222 138   |  |
|  | G 1   | 20           | 8.3  | 0 - 10                             | 1.4              | 222 140                               | 222 139   | 222 141   |  |
|  | <b>Stainless steel-body, EPDM Diaphragm, epoxy coil, medium temperature -30...100°C</b> |              |  |                                    |                  |                                       |           |           |  |
|  | G 1/2   | 13           | 3.6  | 0 - 10                             | 0.8              | 213 132                               | 222 166   | 220 584   |  |
|  | G 3/4   | 20           | 8.3  | 0 - 10                             | 1.3              | 222 186                               | 222 187   | 222 188   |  |
|  | G 1   | 20           | 8.3  | 0 - 10                             | 1.4              | 222 189                               | 222 190   | 222 191   |  |

<sup>1)</sup> Measured at +20°C, 1 bar <sup>2)</sup> pressure at valve inlet and free outlet.

<sup>2)</sup> Pressure data [bar]: Overpressure with respect to atmospheric pressure.

<sup>3)</sup> The values in brackets regarding the weight apply to the DC version.

<sup>4)</sup> A minimum differential pressure of 0.5 bar is required for full (100%) opening.

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

**i Further versions on request**

- Port connection**  
NPT, Rc
- Temperature**  
Special temperature ranges
- Voltages**  
further Voltages available
- Body material**  
Brass dezincification resistant  
nickel-plated brass (5µm)

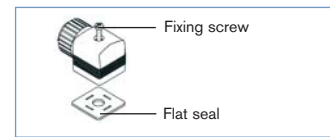
- Approvals**  
drinking water approval acc. to KTW/W270  
VDE Approval acc. to DIN EN 60730 (VDE0631)  
Watermark Licence  
UL(UL-listed) approval (MH10753)  
UR(UL-recognized) approval  
NEMA 250 Type 4X

**Orifice DN10 in brass and stainless steel is also available in explosion proof version**  
**Explosion protected approvals**  
 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

**Ordering chart for accessories**

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

|  | Circuitry                                | Voltage / frequency | Item no. |
|--|--|---------------------|----------|
|  | None (standard)                          | 0 - 250 V AC/DC     | 008 376  |
|  | further versions see datasheet Type 2508 |                     |          |



The delivery of a cable plug includes the flat seal and the fixing screw.  
 For further versions see datasheet Type 2508

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

Meets the requirements of ATEX category 3 GD

|  |  | Cable length [mm] | Item no. [in mm] |
|--|--|-------------------|------------------|
|  |  | 12000             | 260 893          |
|  |  | 5000              | 260 892          |
|  |  | 3000              | 260 891          |
|  |  | 300               | 260 890          |

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