



2/2-way solenoid valve

NC - Valve normally closed (as standard)

NO - Valve normally open (as option)



Direct controlled valve.

No differential pressure is necessary for operation. When energized, the valve seat is opened directly.

In standard (NC) the valve closes with spring power.

■ Solenoid valve for high pressure applications

## TECHNICAL SPECIFICATIONS

|                      |                                                                                                                                                                      |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of control      | Direct operated, no pressure difference necessary                                                                                                                    |
| Design               | Piston design                                                                                                                                                        |
| Connection           | Sleeve connection G1/4<br>DIN ISO 228/1 (BSP)<br>Further connections like NPT on request                                                                             |
| Installation         | Preferable with actuator upright                                                                                                                                     |
| Pressure             | 0 - 900 bar (see table on page 2)                                                                                                                                    |
| Medium               | Clean, neutral gaseous and liquid media                                                                                                                              |
| max. viscosity       | 22 mm <sup>2</sup> /s                                                                                                                                                |
| Temperature range    | Medium: -40 °C / +80 °C<br>Environment: -40 °C / +50 °C<br>Taking into account other influencing parameters                                                          |
| Body material        | Brass 2.0401<br>St. steel 1.4301, 1.4404, 1.4571                                                                                                                     |
| Metallic inner parts | Stainless steel                                                                                                                                                      |
| Sealing              | PTFE, PEEK, TPE                                                                                                                                                      |
| Supply voltage       | AC~ 24V, 110V, 230V<br>DC= 12V, 24V<br>Other supply voltages on request                                                                                              |
| Voltage tolerance    | -10% / +10%                                                                                                                                                          |
| Power consumption    | .032 = 11 Watt .148 = 10 Watt<br>.012 = 18 Watt<br>.702 = 25 Watt<br>.802 = 24 Watt .808 = 24 Watt<br>.322 = 30 Watt .328 = 24 Watt<br>.242 = 46 Watt .248 = 30 Watt |
| Protection class     | IP65 according to DIN 60529                                                                                                                                          |
| Duty factor          | 100% ED-VDE 0580                                                                                                                                                     |
| Connection type      | Device plug DIN 43650, terminal box                                                                                                                                  |
| Ex-proof             | acc. to 2014/34/EG (ATEX)                                                                                                                                            |

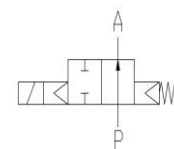
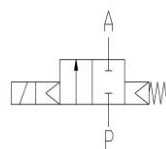
## VALVE FEATURES

- For high pressure applications up to 900 bar
- No pressure difference required
- High life time
- Simple compact valve design
- High-quality materials
- Reliable and sturdy sealing elements

## FUNCTION

NC – non energized closed

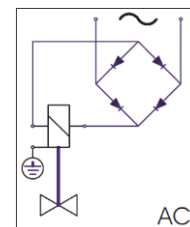
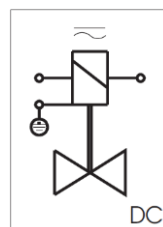
NO – non-energized open



## CONNECTION DIAGRAM

For AC/DC coils

For DC coils  
w/ integr. rectifier



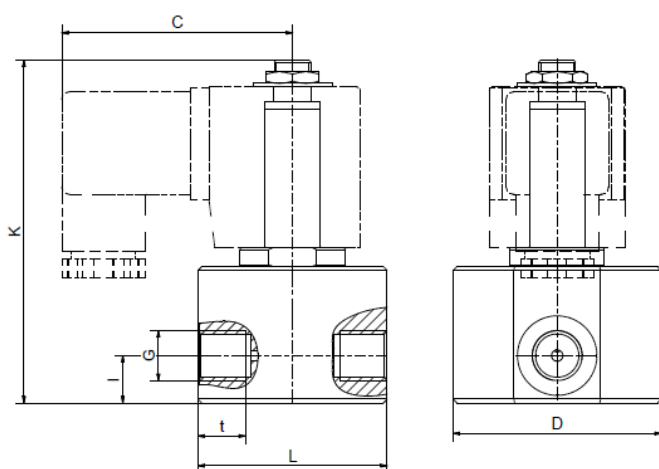
## CERTIFICATES



## TECHNICAL FEATURES

[With solenoid system .032 // .012 // .148]

| Seat Ø<br>mm | Kv-value<br>m³/h | Standard type | max. pressure for coils |       |        |       |               |       |
|--------------|------------------|---------------|-------------------------|-------|--------|-------|---------------|-------|
|              |                  |               | .032-S                  |       | .012-S |       | .148-S (ATEX) |       |
| mm           | m³/h             |               | NC                      | NO    | NC     | NO    | NC            | NO    |
| 0,5          | 0,015            | .554E/0615/   | 0-300                   | 0-300 | -      | -     | 0-250         | 0-250 |
| 0,7          | 0,02             | .554G/0615/   | 0-210                   | 0-210 | 0-500  | 0-500 | 0-170         | 0-170 |
| 0,8          | 0,025            | .554H/0615/   | 0-170                   | -     | 0-250  | 0-250 | 0-170         | 0-170 |
| 1,0          | 0,025            | .5540/0615/   | -                       | -     | 0-200  | 0-200 | -             | -     |

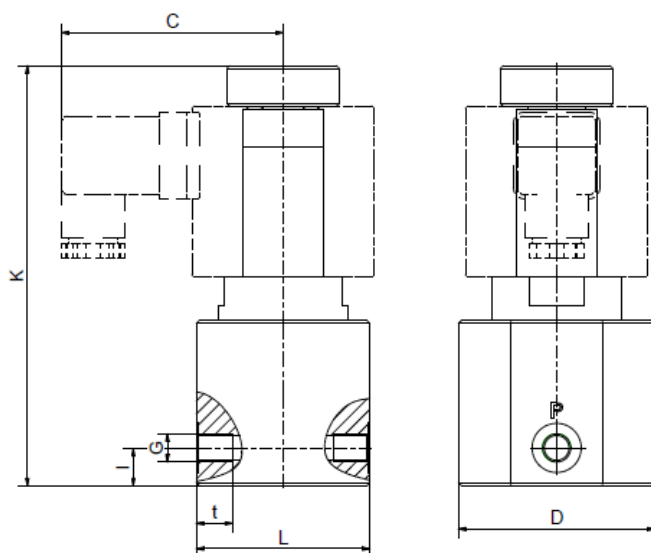


| Coil | .032-S | .012-S / .148-S * |
|------|--------|-------------------|
| G    | 1/4    | 1/4               |
| C    | 59     | 61                |
| D    | 55     | 55                |
| K    | 90,5   | 90,5              |
| I    | 12,5   | 12,5              |
| L    | 50     | 50                |
| t    | 12,5   | 12,5              |
| kg   | 0,9    | 0,9               |

\*Differing dimension "C" for ATEX coils

[With solenoid system .802 // .808]

| Seat Ø mm | Kv-value m³/h | Standard type | max. pressure for coils |             |
|-----------|---------------|---------------|-------------------------|-------------|
|           |               |               | .802                    | .808 (ATEX) |
| mm        | m³/h          |               | NC                      | NC          |
| 0,5       | 0,015         | .554E/0815/   | 0-900                   | 0-900       |
| 0,7       | 0,02          | .554G/0815/   | 0-600                   | 0-500       |
| 0,8       | 0,025         | .554H/0815/   | 0-450                   | 0-350       |



| Coil | .802 / .808 * |
|------|---------------|
| G    | 1/4           |
| C    | 70            |
| D    | 68            |
| K    | 122           |
| I    | 12,5          |
| L    | 60            |
| t    | 12,5          |
| kg   | 1,9           |

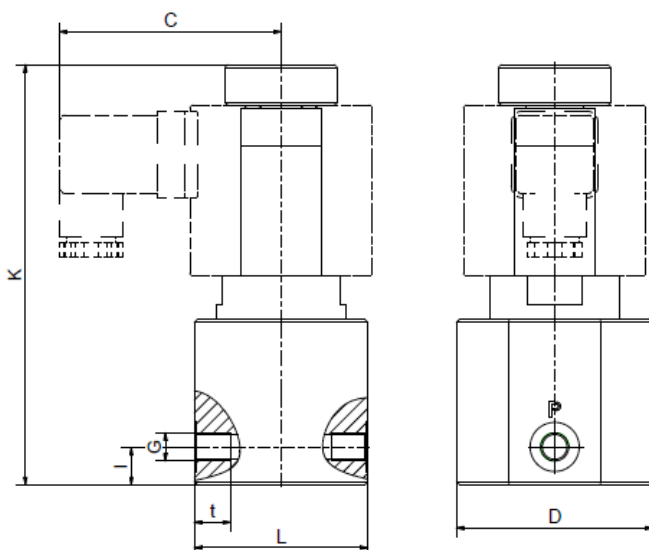
\*Differing dimension "C" for ATEX coils

## TECHNICAL FEATURES

[With solenoid system .702 // .692-NO // .802 // .322 // .242]

| Brass           |                      |                  | max. pressure for coils |    |      |     |      |     |      |     |      |    |      |     |      |     |
|-----------------|----------------------|------------------|-------------------------|----|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|
| Seat<br>Ø<br>mm | Kv-<br>value<br>m³/h | Standard<br>type | .702/.692               |    | .802 |     | .808 |     | .322 |     | .328 |    | .242 |     | .248 |     |
|                 |                      |                  | NC                      | NO | NC   | NO  | NC   | NO  | NC   | NO  | NC   | NO | NC   | NO  | NC   | NO  |
| 1,0             | 0,06                 | .5540/1004/      | -                       | -  | 200  | 100 | 200  | 100 | 200  | 200 | -    | -  | -    | -   | -    | -   |
| 1,5             | 0,09                 | .5541/1004/      | 100                     | 80 | 140  | 80  | 140  | 80  | 200  | 180 | 120  | 80 | -    | -   | -    | -   |
| 2,0             | 0,13                 | .5542/1004/      | 80                      | 40 | 100  | 50  | 100  | 50  | 180  | 160 | 90   | 70 | 200  | 200 | 200  | 200 |
| 2,5             | 0,16                 | .5543/1004/      | 50                      | 28 | 50   | 40  | 50   | 40  | 110  | 110 | 60   | 60 | 200  | 180 | 200  | 100 |
| 3,0             | 0,2                  | .5544/1004/      | 35                      | 20 | 40   | 25  | 40   | 25  | 80   | 80  | 40   | 40 | 150  | 120 | 150  | 70  |
| 4,0             | 0,35                 | .5545/1004/      | 16                      | 12 | 25   | 15  | 25   | 15  | 40   | 35  | 25   | 25 | 100  | 60  | 80   | 60  |
| 5,0             | 0,5                  | .5546/1004/      | 12                      | 6  | 16   | 9   | 16   | 9   | 28   | 20  | 12   | 12 | 60   | 40  | 40   | 30  |
| 6,0             | 0,75                 | .5547/1004/      | 10                      | 4  | 12   | 6   | 10   | 6   | 20   | 14  | 10   | 10 | 45   | 30  | 25   | 20  |

| Brass           |                      |                  | max. pressure for coils |    |      |     |      |     |      |     |      |     |      |     |      |     |
|-----------------|----------------------|------------------|-------------------------|----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
| Seat<br>Ø<br>mm | Kv-<br>value<br>m³/h | Standard<br>type | .702/.692               |    | .802 |     | .808 |     | .322 |     | .328 |     | .242 |     | .248 |     |
|                 |                      |                  | NC                      | NO | NC   | NO  | NC   | NO  | NC   | NO  | NC   | NO  | NC   | NO  | NC   | NO  |
| 1,0             | 0,06                 | .5540/06../      | -                       | -  | 350  | 100 | 200  | 100 | 350  | 350 | 300  | 200 | 450  | 400 | 450  | 350 |
| 1,5             | 0,09                 | .5541/06../      | 100                     | 80 | 140  | 80  | 140  | 80  | 330  | 180 | 120  | 80  | 410  | 300 | 320  | 250 |
| 2,0             | 0,13                 | .5542/06../      | 80                      | 40 | 100  | 50  | 100  | 50  | 180  | 160 | 90   | 70  | 300  | 200 | 200  | 200 |
| 2,5             | 0,16                 | .5543/0604/      | 50                      | 28 | 50   | 40  | 50   | 40  | 110  | 110 | 60   | 60  | 200  | 180 | 200  | 100 |
| 3,0             | 0,2                  | .5544/0604/      | 35                      | 20 | 40   | 25  | 40   | 25  | 80   | 80  | 40   | 40  | 150  | 120 | 150  | 70  |
| 4,0             | 0,35                 | .5545/0604/      | 16                      | 12 | 25   | 15  | 25   | 15  | 40   | 35  | 25   | 25  | 100  | 60  | 80   | 60  |
| 5,0             | 0,5                  | .5546/0604/      | 12                      | 6  | 16   | 9   | 16   | 9   | 28   | 20  | 12   | 12  | 60   | 40  | 40   | 30  |
| 6,0             | 0,75                 | .5547/0604/      | 10                      | 4  | 12   | 6   | 10   | 6   | 20   | 14  | 10   | 10  | 45   | 30  | 25   | 20  |



| Coil | .702/.692 | .802/.808 | .322/.328 | .242/.248 |
|------|-----------|-----------|-----------|-----------|
| G    | 1/4       | 1/4       | 1/4       | 1/4       |
| C    | 67        | 70        | 77        | 92,5      |
| D    | 68        | 68        | 68        | 68        |
| K    | 109       | 113       | 145       | 166       |
| I    | 12,5      | 12,5      | 13        | 13        |
| L    | 60        | 60        | 60        | 60        |
| t    | 12,5      | 12,5      | 12,5      | 12,5      |
| kg   | 1,9       | 2,0       | 3,0       | 4,4       |

\*Differing dimension "C" for ATEX coils

## INFORMATION

- It is imperative to observe the installation and safety instructions in our operating and service manuals.
- Required ordering information: valve type, function NC/NO, pressure range, connection, nominal width, medium, flow rate, medium and ambient temperatures, connection voltage.
- **For information on the heating and performance of solenoid coils, refer to the corresponding "Coils" data sheet.**
- **Detailed production-specific drawings and other technical information will be made available when an order is placed.**

## PLEASE NOTE

Each individual application decides which valve type is required, the main factor being the resistance of the materials to the operating medium. The correct selection of materials requires knowledge of the concentration, temperature and degree of contamination of the medium. Other criteria include the operating pressure and max. volumetric flow, since, in addition to high temperatures, high pressures and high flow rates must also be taken into account when selecting the materials.

**All materials used for our valves, be it housing, seals or magnets, will be carefully selected in view of the different application areas. Any information given is non-binding and serves for orientation only. No claims under warranty can be derived therefrom.**

## ORDERING CODE

| Type        | Connection |          | Body       | Sealing    |          | Coil         |          | Option       |
|-------------|------------|----------|------------|------------|----------|--------------|----------|--------------|
| <b>. 55</b> | <b>4 0</b> | <b>/</b> | <b>0 8</b> | <b>1 5</b> | <b>/</b> | <b>. 8 0</b> | <b>2</b> | <b>- X X</b> |

|     |        |
|-----|--------|
| 4 . | G 1/4  |
| . E | 0,5 mm |
| . G | 0,7 mm |
| . H | 0,8 mm |
| . 0 | 1,0 mm |
| . 1 | 1,5 mm |
| . 2 | 2,0 mm |
| . 3 | 2,5 mm |
| . 4 | 3,0 mm |
| . 5 | 4,0 mm |
| . 6 | 5,0 mm |

|    |                    |
|----|--------------------|
| 06 | St. steel 1.4301   |
| 08 | St. steel 1.4571   |
| 10 | Brass              |
| 13 | St. steel 1.4404 * |

|    |      |
|----|------|
| 04 | PTFE |
| 15 | PEEK |
| 19 | XHPU |

|    |      |   |                   |
|----|------|---|-------------------|
| 03 | 11 W | 2 | Standard IP65     |
| 01 | 18 W | 8 | 2014/34/EU (ATEX) |
| 70 | 25 W |   |                   |
| 69 | 25 W |   |                   |
| 80 | 24 W |   |                   |
| 32 | 30 W |   |                   |
| 24 | 46 W |   |                   |

|    |               |
|----|---------------|
| NO | normally open |
| 1W | Hydrogen      |

\* only in conjunction with option 1W for hydrogen applications.

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