

82610/84620 2/2-way seat valves

- > Port size: DN 1,5 ... 5, 1/8 ... 3/8 (ISO G/NPT)
- > Suitable for vacuum
- > High flow rate
- > Functional compact design
- > Body with M5 fastening thread as standard
- > Solenoid interchangeable without tools (Click-on®)
- > Valve operates without pressure differential
- > International approvals



Technical features

Medium:

Neutral and slightly aggressive gases and liquid fluids

Switching function:

Normally closed

Operation:

Directly solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/8, G1/4, G3/8
1/8 NPT, 1/4 NPT, 3/8 NPT

Operating pressure:

0 ... 40 bar (0 ... 580 psi)

Fluid temperature:

-10 ... +110°C (+14 ... 230°F)

Ambient temperature:

-10 ... +50°C (+14 ... +122°F)

Material:

Body: Stainless steel (1.4408)

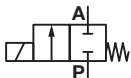
Seat seal: FPM

(70 bar version – PTFE)

Internal parts: Stainless steel

For contaminated fluids insertion of a strainer is recommended.

Technical data – standard models – Valves normally closed

| Symbol | Port size | Orifice (mm) | Flow kv value *1) (m³/h) | Operating pressure *2) | | Weight (kg) | Model | |
|---|-----------|-----------------|-----------------------------|------------------------|------------|----------------|--------------------|--------------------|
| | | | | (bar) | (psi) | | Solenoid in V d.c. | Solenoid in V a.c. |
|  | G1/8 | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8261803.9101.xxxxx | 8261803.9104.xxxxx |
| | 1/8 NPT | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8462803.9101.xxxxx | 8462803.9104.xxxxx |
| | G1/4 | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8261003.9101.xxxxx | 8261003.9104.xxxxx |
| | 1/4 NPT | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8462003.9101.xxxxx | 8462003.9104.xxxxx |
| | G3/8 | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8261103.9101.xxxxx | 8261103.9104.xxxxx |
| | 3/8 NPT | 1,5 | 0,07 | 0 ... 25 | 0 ... 362 | 0,33 | 8462103.9101.xxxxx | 8462103.9104.xxxxx |
| | G1/8 | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8261807.9151.xxxxx | 8261807.9154.xxxxx |
| | 1/8 NPT | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8462807.9151.xxxxx | 8462807.9154.xxxxx |
| | G1/4 | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8261007.9151.xxxxx | 8261007.9154.xxxxx |
| | 1/4 NPT | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8462007.9151.xxxxx | 8462007.9154.xxxxx |
| | G3/8 | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8261107.9151.xxxxx | 8261107.9154.xxxxx |
| | 3/8 NPT | 1,5 | 0,07 | 0 ... 70 | 0 ... 1015 | 0,57 | 8462107.9151.xxxxx | 8462107.9154.xxxxx |
| | G1/8 | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8261823.9101.xxxxx | 8261823.9104.xxxxx |
| | 1/8 NPT | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8462823.9101.xxxxx | 8462823.9104.xxxxx |
| | G1/4 | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8261023.9101.xxxxx | 8261023.9104.xxxxx |
| | 1/4 NPT | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8462023.9101.xxxxx | 8462023.9104.xxxxx |
| | G3/8 | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8261123.9101.xxxxx | 8261123.9104.xxxxx |
| | 3/8 NPT | 2,5 | 0,15 | 0 ... 10 | 0 ... 145 | 0,33 | 8462123.9101.xxxxx | 8462123.9104.xxxxx |
| | G1/8 | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8261823.9151.xxxxx | 8261823.9154.xxxxx |
| | 1/8 NPT | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8462823.9151.xxxxx | 8462823.9154.xxxxx |
| | G1/4 | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8261023.9151.xxxxx | 8261023.9154.xxxxx |
| | 1/4 NPT | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8462023.9151.xxxxx | 8462023.9154.xxxxx |
| | G3/8 | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8261123.9151.xxxxx | 8261123.9154.xxxxx |
| | 3/8 NPT | 2,5 | 0,15 | 0 ... 40 | 0 ... 580 | 0,57 | 8462123.9151.xxxxx | 8462123.9154.xxxxx |

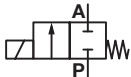
xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) = kv value x 1,2

*2) For gases and liquid fluids up to 25 mm²/s (cSt)

G1/4 ... 1 max. 16 bar on request

Technical data – standard models – Valves normally closed

| Symbol | Port size | Orifice (mm) | Flow kv value *3) (m³/h) | Operating pressure *4) | | Weight (kg) | Model | |
|---|-----------|-----------------|-----------------------------|------------------------|-----------|----------------|--------------------|--------------------|
| | | | | (bar) | (psi) | | Solenoid in V d.c. | Solenoid in V a.c. |
|  | G1/8 | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8261843.9101.xxxxx | 8261843.9104.xxxxx |
| | 1/8 NPT | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8462843.9101.xxxxx | 8462843.9104.xxxxx |
| | G1/4 | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8261043.9101.xxxxx | 8261043.9104.xxxxx |
| | 1/4 NPT | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8462043.9101.xxxxx | 8462043.9104.xxxxx |
| | G3/8 | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8261143.9101.xxxxx | 8261143.9104.xxxxx |
| | 3/8 NPT | 3 | 0,21 | 0 ... 4 | 0 ... 58 | 0,33 | 8462143.9101.xxxxx | 8462143.9104.xxxxx |
| | G1/8 | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8261843.9151.xxxxx | 8261843.9154.xxxxx |
| | 1/8 NPT | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8462843.9151.xxxxx | 8462843.9154.xxxxx |
| | G1/4 | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8261043.9151.xxxxx | 8261043.9154.xxxxx |
| | 1/4 NPT | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8462043.9151.xxxxx | 8462043.9154.xxxxx |
| | G3/8 | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8261143.9151.xxxxx | 8261143.9154.xxxxx |
| | 3/8 NPT | 3 | 0,21 | 0 ... 20 | 0 ... 290 | 0,57 | 8462143.9151.xxxxx | 8462143.9154.xxxxx |
| | G1/8 | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8261863.9151.xxxxx | 8261863.9154.xxxxx |
| | 1/8 NPT | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8462863.9151.xxxxx | 8462863.9154.xxxxx |
| | G1/4 | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8261063.9151.xxxxx | 8261063.9154.xxxxx |
| | 1/4 NPT | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8462063.9151.xxxxx | 8462063.9154.xxxxx |
| | G3/8 | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8261163.9151.xxxxx | 8261163.9154.xxxxx |
| | 3/8 NPT | 4 | 0,35 | 0 ... 12 | 0 ... 174 | 0,57 | 8462163.9151.xxxxx | 8462163.9154.xxxxx |
| | G1/8 | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8261883.9151.xxxxx | 8261883.9154.xxxxx |
| | 1/8 NPT | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8462883.9151.xxxxx | 8462883.9154.xxxxx |
| | G1/4 | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8261083.9151.xxxxx | 8261083.9154.xxxxx |
| | 1/4 NPT | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8462083.9151.xxxxx | 8462083.9154.xxxxx |
| | G3/8 | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8261183.9151.xxxxx | 8261183.9154.xxxxx |
| | 3/8 NPT | 5 | 0,5 | 0 ... 6 | 0 ... 87 | 0,57 | 8462183.9151.xxxxx | 8462183.9154.xxxxx |

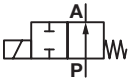
xxxxx Please insert voltage and frequency codes

*3) Cv-value (US) = kv value x 1,2

*4) For gases and liquid fluids up to 25 mm²/s (cSt)

G1/4 ... 1 max. 16 bar on request

Technical data – standard models – Valves normally open

| Symbol | Port size | Orifice (mm) | Flow kv value *5) (m ³ /h) | Operating pressure *6) | | Weight (kg) | Model | |
|---|-----------|-----------------|--|------------------------|-----------|----------------|--------------------|--------------------|
| | | | | (bar) | (psi) | | Solenoid in V d.c. | Solenoid in V a.c. |
|  | G1/4 | 1,5 | 0,07 | 0 ... 16 | 0 ... 232 | 0,33 | 8261001.9101.xxxxx | 8261001.9104.xxxxx |
| | 1/4 NPT | 1,5 | 0,07 | 0 ... 16 | 0 ... 232 | 0,33 | 8462001.9101.xxxxx | 8462001.9104.xxxxx |
| | G1/4 | 2,5 | 0,15 | 0 ... 6 | 0 ... 87 | 0,33 | 8261021.9101.xxxxx | 8261021.9104.xxxxx |
| | 1/4 NPT | 2,5 | 0,15 | 0 ... 6 | 0 ... 87 | 0,33 | 8462021.9101.xxxxx | 8462021.9104.xxxxx |
| | G1/4 | 2,5 | 0,15 | 0 ... 25 | 0 ... 362 | 0,57 | 8261021.9151.xxxxx | 8261021.9154.xxxxx |
| | 1/4 NPT | 2,5 | 0,15 | 0 ... 25 | 0 ... 362 | 0,57 | 8462021.9151.xxxxx | 8462021.9154.xxxxx |
| | G1/4 | 3 | 0,21 | 0 ... 3 | 0 ... 43 | 0,33 | 8261041.9101.xxxxx | 8261041.9104.xxxxx |
| | 1/4 NPT | 3 | 0,21 | 0 ... 3 | 0 ... 43 | 0,33 | 8462041.9101.xxxxx | 8462041.9104.xxxxx |
| | G1/4 | 3 | 0,21 | 0 ... 16 | 0 ... 232 | 0,57 | 8261041.9151.xxxxx | 8261041.9154.xxxxx |
| | 1/4 NPT | 3 | 0,21 | 0 ... 16 | 0 ... 232 | 0,57 | 8462041.9151.xxxxx | 8462041.9154.xxxxx |
| | G1/4 | 4 | 0,35 | 0 ... 8 | 0 ... 116 | 0,57 | 8261061.9151.xxxxx | 8261061.9154.xxxxx |
| | 1/4 NPT | 4 | 0,35 | 0 ... 8 | 0 ... 116 | 0,57 | 8462061.9151.xxxxx | 8462061.9154.xxxxx |

xxxxx Please insert voltage and frequency codes

*5) Cv-value (US) = kv value x 1,2

*6) For gases and liquid fluids up to 25 mm²/s (cSt)

G1/4 ... 1 max. 16 bar on request

Option selector
8*6***.*******

| Thread form | Substitute |
|---|------------|
| ISO G | 1 |
| NPT | 2 |
| Port size | Substitute |
| 1/8 | 8 |
| 1/4 | 0 |
| 3/8 | 1 |
| Valve options | Substitute |
| Normally open (NO), DN 1,5 Operating pressure 0 ... 16 bar (0 ... 232 psi) | 01 |
| Normally closed (NC), DN 1,5 Operating pressure 0 ... 25 bar (0 ... 362 psi) | 03 |
| Seat seal PTFE Normally closed (NC), DN 1,5 Operating pressure 0 ... 70 bar (0 ... 1015 psi) | 07 |
| Normally open (NO), DN 2,5 Operating pressure 0 ... 6 bar (0 ... 87 psi) (with solenoid 9101) | 21 |
| Normally open (NO), DN 2,5 Operating pressure 0 ... 25 bar (0 ... 362 psi) (with solenoid 9151) | 21 |
| Normally closed (NC), DN 2,5 Operating pressure 0 ... 10 bar (0 ... 145 psi) (with solenoid 9101) | 23 |
| Normally closed (NC), DN 2,5 Operating pressure 0 ... 40 bar (0 ... 580 psi) (with solenoid 9151) | 23 |
| Normally open (NO), DN 3 Operating pressure 0 ... 3 bar (0 ... 43 psi) (with solenoid 9101) | 41 |
| Normally open (NO), DN 3 Operating pressure 0 ... 16 bar (0 ... 232 psi) (with solenoid 9151) | 41 |
| Normally closed (NC), DN 3 Operating pressure 0 ... 4 bar (0 ... 58 psi) (with solenoid 9101) | 43 |
| Normally closed (NC), DN 3 Operating pressure 0 ... 20 bar (0 ... 290 psi) (with solenoid 9151) | 43 |
| Normally open (NO), DN 4 Operating pressure 0 ... 8 bar (0 ... 116 psi) (with solenoid 9151) | 61 |
| Normally closed (NC), DN 4 Operating pressure 0 ... 12 bar (0 ... 174 psi) (with solenoid 9151) | 63 |
| Normally closed (NC), DN 5 Operating pressure 0 ... 6 bar (0 ... 87 psi) (with solenoid 9151) | 83 |

| Frequency | Substitute |
|---------------------------|------------|
| See table frequency codes | xx |
| Voltage | Substitute |
| See table voltage codes | xxx |
| Solenoid options | Substitute |
| Solenoid 9101 | 9101 |
| Solenoid 9151 | 9151 |

Standard solenoid systems

Voltage and Frequency Solenoid 9101 / 9104 *7)

| Code Voltage | Code Frequency | Voltage | Frequency | Power consumption | |
|-----------------|-------------------|--------------|--------------|-------------------|---------|
| | | | | Inrush | Holding |
| 024 | 00 | 24 V DC | - | 8 W | 8 W |
| 024 | 49 | 24 V AC *8) | 40 ... 60 Hz | 9 VA | 9 VA |
| 110 | 49 | 110 V AC *8) | 40 ... 60 Hz | 9 VA | 9 VA |
| 120 | 49 | 120 V AC *8) | 40 ... 60 Hz | 9 VA | 9 VA |
| 230 | 49 | 230 V AC *8) | 40 ... 60 Hz | 9 VA | 9 VA |

Voltage and Frequency Solenoid 9151 / 9154 *7)

| | | | | | |
|-----|----|--------------|--------------|-------|-------|
| 024 | 00 | 24 V DC | - | 18 W | 18 W |
| 024 | 49 | 24 V AC *8) | 40 ... 60 Hz | 20 VA | 20 VA |
| 110 | 49 | 110 V AC *8) | 40 ... 60 Hz | 20 VA | 20 VA |
| 120 | 49 | 120 V AC *8) | 40 ... 60 Hz | 20 VA | 20 VA |
| 230 | 49 | 230 V AC *8) | 40 ... 60 Hz | 20 VA | 20 VA |

*7) c  us only

*8) a.c. only with rectifier plug

Further versions on request!

Electrical details for all solenoid systems

| | |
|-------------------------|---|
| Design | DIN VDE 0580 |
| Voltage range | ±10% |
| Duty cycle | 100% ED |
| Protection class | EN 60529 IP65 |
| Socket | Form A acc. to DIN EN 175301-803 (included) |

According to DIN VDE 0580 at a solenoid temperature of +20°C.
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

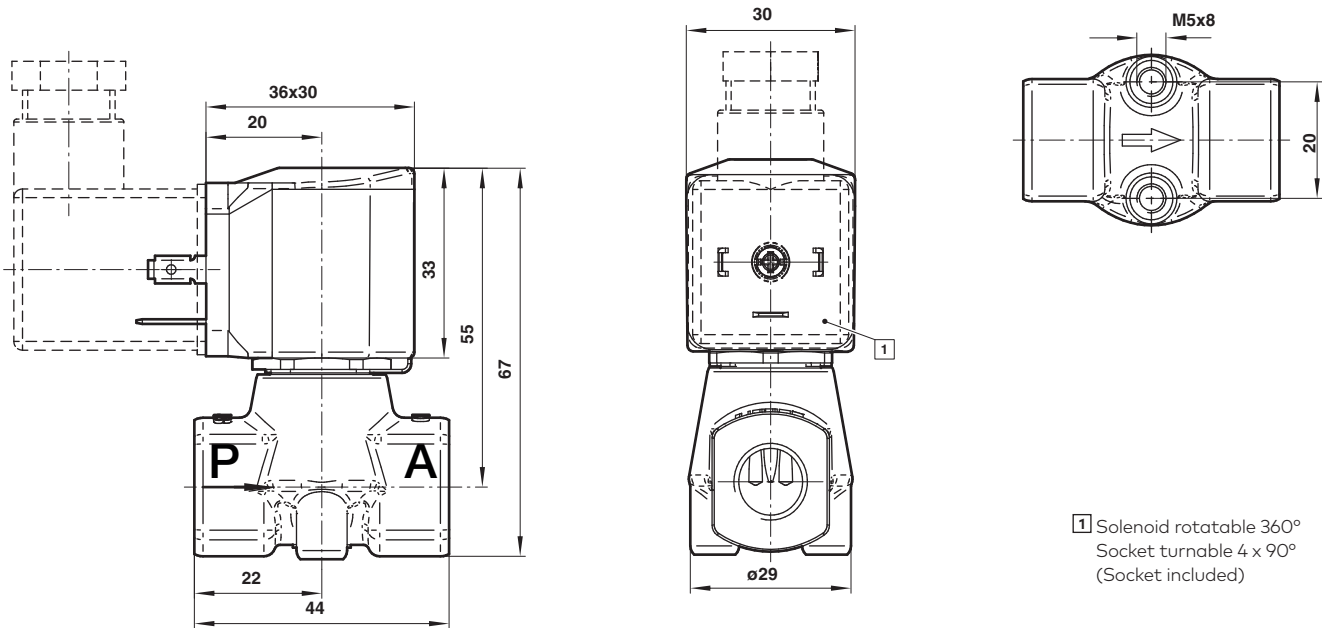
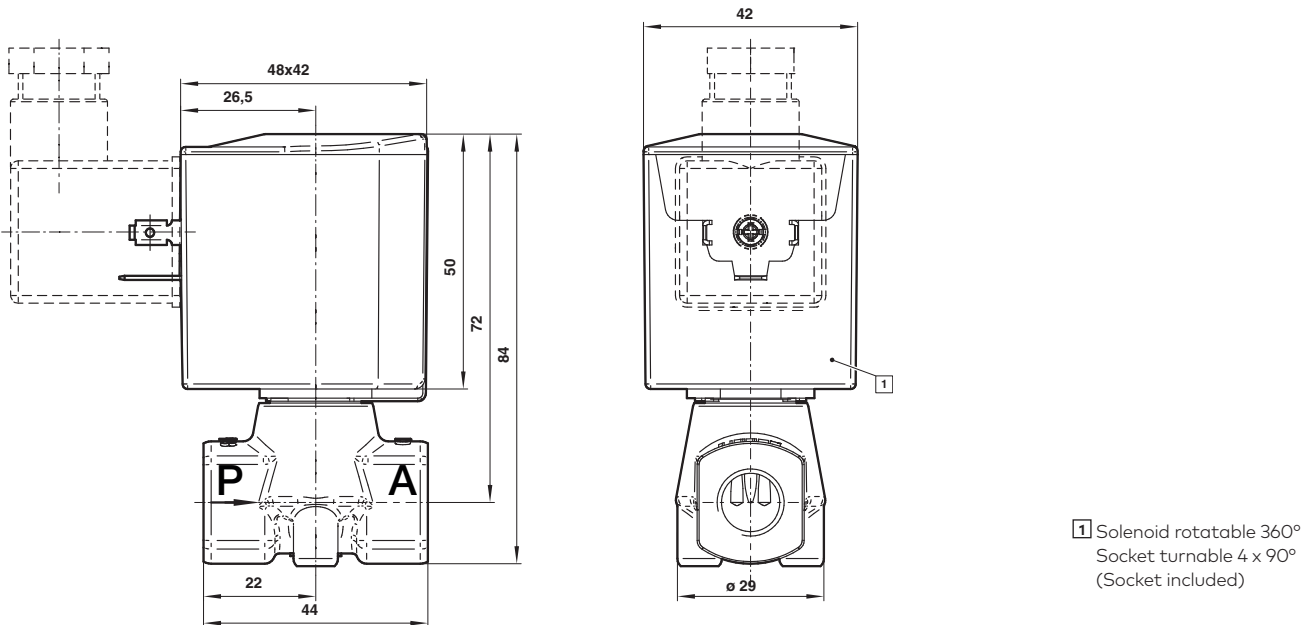
Additional solenoid systems for hazardous areas

| ATEX category | ATEX protection class | IP protection class | Solenoid | Standard voltages |
|----------------|---|---------------------|----------|--------------------------------------|
| II 2G II 2D | Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db | IP66 | 6106 | 24 V d.c., 110 V a.c., 230 V a.c. |
| II 2G II 2D | Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db | IP66 | 6126 | 24 V d.c., 110 V a.c., 230 V a.c. |
| II 3G II 3D | Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc | IP65 | 9116 | 24 V d.c., 110 V a.c., 230 V a.c. |
| I 3G II 3D | Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc | IP65 | 9176 | 24 V d.c., 110 V a.c., 230 V a.c. |

Attention!

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

Dimensions
Solenoid 9101

 Dimensions in mm
 Projection/First angle

Solenoid 9151

Note to Pressure Equipment Directive (PED):

The valves of this series are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfield.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.