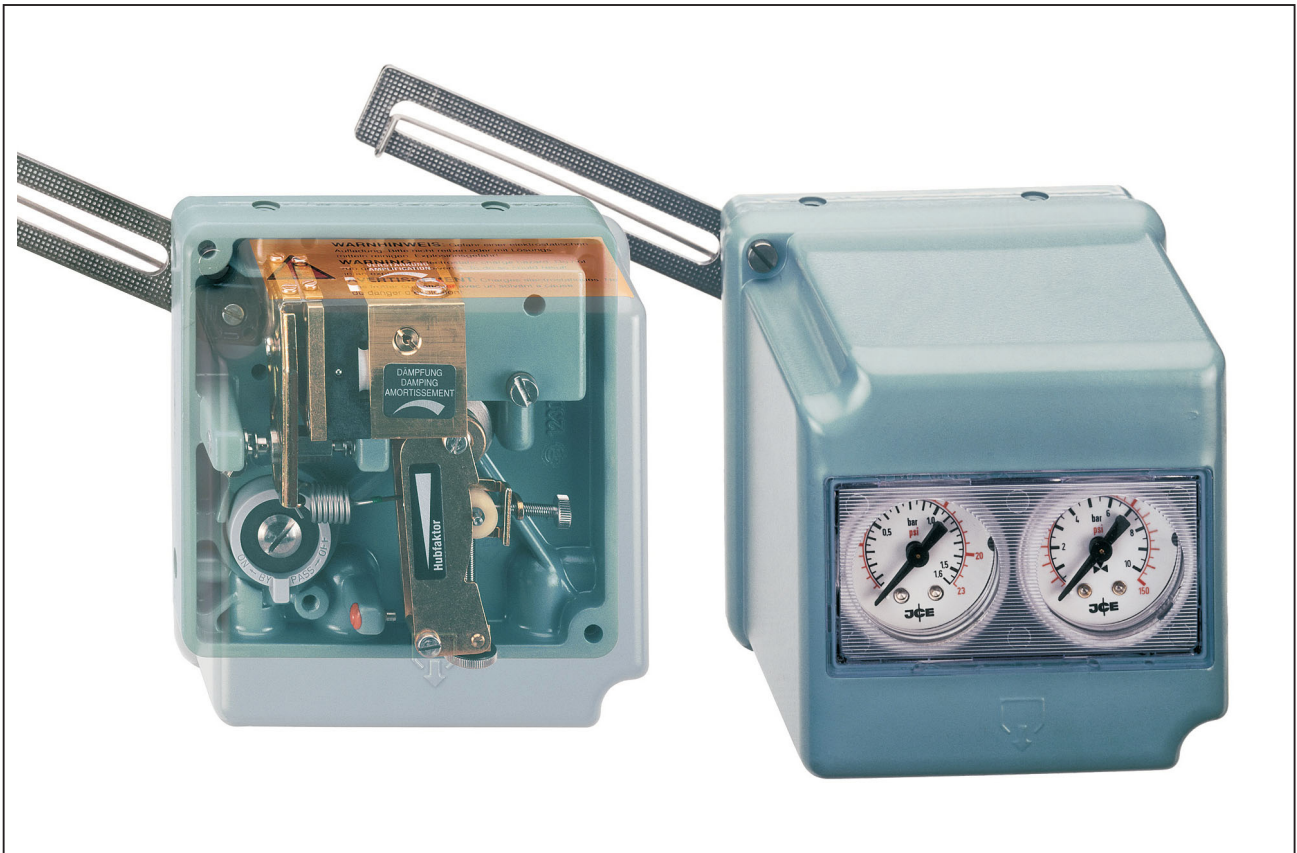


## SRP981 Pneumatic Positioner



The SRP981 Positioner is for operation of pneumatic valve actuators with pneumatic control signals. It is used to reduce the adverse effects of valve friction, for higher thrust and shorter positioning time.

### FEATURES

- Independent adjustment of stroke range and zero
- Adjustable amplification and damping
- Split range up to 4-fold possible
- Supply pressure up to 6 bar (90 psig)
- Low vibration effect in all directions
- Mounting according to IEC 534, part 6 (NAMUR)
- Rotation adapter for angles up to 120 °
- Ambient temperature -40 ... 80 °C (-40 ... 176 °F)
- Travel 8 to 100 mm (0.3 to 4 in)
- Angular range 30 ° to 120 °
- Modular system of additional equipment
  - Electrical limit switches
  - Electrical position transmitter
  - Booster
  - Connection manifold
- Protection class IP54 (IP 65 on request)
- Certificate No. 90/20226(E2) Lloyd's Register of Shipping for use on vessels
- Explosion protection
  - pn. basic device:  
ATEX II 2 G c IIC T6 constructive design
  - el. additional built-in equipment:  
ATEX II 2 G EEx ib/ia IIB/IIC T4/T6

## TECHNICAL DATA

### Input

Signal range . . . . . 0.2 ... 1 bar (3 ... 15 psig)  
 or split range  
 down to  $\Delta w$  0.2 bar (3 psi)  
 Stroke range . . . . . 8 ... 100 mm (0.3 ... 4 in)  
 Angular range  
 linear . . . . . 30 ° ... 120 °  
 equal percentage . . . . . 90 °; from 70 ° linear

### Output

Output to actuator . . . . . 0 ... 100 %  
 supply air pressure

### Supply

Supply air pressure . . . . . 1.4 ... 6 bar (20 ... 90 psig)  
 Supply air . . . . . free of oil, dust, water  
 according to IEC 654-2

### Ambient conditions

Ambient temperature . . . . . -40 ... 80 °C (-40 ... 176 °F)  
 Relative humidity . . . . . up to 100 %  
 Operating conditions  
 as per IEC 654-1 . . . . . The device can be operated  
 at a class D2 location  
 Transport and storage  
 temperature . . . . . -50 ... 80 °C (-58 ... 176 °F)

Protection class . . . . . IP 54 (IP 65 on request)

### Response characteristic<sup>1)</sup>

Amplification . . . . . adjustable  
 Sensitivity . . . . . < 0.1 % F.S.  
 Non-linearity (terminal  
 based adjustment) . . . . . < 1.0 % F.S.  
 Hysteresis . . . . . < 0.3 % F.S.  
 Supply air dependency. . . . . < 0.2 % / 0.1 bar (1.5 psi)  
 Temperature effect. . . . . < 0.3 % / 10 K

### Air consumption

| supply air pressure         | air consumption                   |
|-----------------------------|-----------------------------------|
| single acting               |                                   |
| 1.4 bar (20 psig) . . . . . | 200 l <sub>r</sub> /h ( 7.1 scfh) |
| 3.0 bar (45 psig) . . . . . | 400 l <sub>r</sub> /h (12.4 scfh) |
| 6.0 bar (90 psig) . . . . . | 600 l <sub>r</sub> /h (21.2 scfh) |
| double acting               |                                   |
| 1.4 bar (20 psig) . . . . . | 350 l <sub>r</sub> /h (10.6 scfh) |
| 3.0 bar (45 psig) . . . . . | 550 l <sub>r</sub> /h (17.7 scfh) |
| 6.0 bar (90 psig) . . . . . | 750 l <sub>r</sub> /h (33.5 scfh) |

### Air output

Load effect<sup>2)</sup> . . . . . -3 % for delivery flow  
 2 350 l<sub>r</sub>/h (83 scfh)  
 +3 % for exhausted flow  
 1 900 l<sub>r</sub>/h (67 scfh)

### Capacity at max. deviation

| Supply air pressure bar (psig) | 1.4 (20)       | 2 (30)         | 4 (60)         | 6 (90)          |
|--------------------------------|----------------|----------------|----------------|-----------------|
| without booster                | 2 700 (95)     | 3 500 (124)    | 5 500 (194)    | 7 500 (265)     |
| l <sub>r</sub> /h (scfh)       |                |                |                |                 |
| with booster code VKXG -FN,-GN | 18 000 (636)   | 24 000 (847)   | 40 000 (1 412) | 55 000 (1 942)  |
| l <sub>r</sub> /h (scfh)       |                |                |                |                 |
| with booster code VKXG -HN     | 36 000 (1 271) | 48 000 (1 695) | 80 000 (2 825) | 110 000 (3 884) |
| l <sub>r</sub> /h (scfh)       |                |                |                |                 |

Data measured according to VDI/VDE 2177

- 1) Data based on following parameters:  
 stroke 30 mm (1.28 in), range spring FES 628/1, feedback lever effective length 117.5 mm ( 4.63 in), max. amplification, supply air pressure 3 bar (45 psig)
- 2) measured at air supply 1.4 bar (20 psig) and 50 % of signal range

**Materials**

|  |  |
|--|--|
| Base plate . . . . .                             | Aluminium (Alloy No. 230)<br>finished with DD-varnish<br>gray blue |
| Cover. . . . .                                   | impact resistant polyester<br>gray blue                            |
| All moving parts of<br>feedback system . . . . . | 1.4305 / 1.4571  |
| Mounting bracket . . . . .                       | 1.4301   |

**Weight**

|   |                          |
|---|--------------------------|
| single acting<br>without gauges. . . . .            | approx. 0.7 kg (1.5 lbs) |
| with gauges . . . . .                               | approx. 0.8 kg (1.8 lbs) |
| double acting . . . . .                             | approx. 0.9 kg (2.0 lbs) |
| attachment kit<br>for diaphragm actuators . . . . . | approx. 0.3 kg (0.6 lbs) |
| for rotary actuators . . . . .                      | approx. 0.5 kg (1.1 lbs) |

**Connection**

|                     |   |
|---------------------|---|
| Pneumatic . . . . . | Female threads<br>G 1/8 acc. to ISO 228 |
|---------------------|---|

**Mounting**

|                               |   |
|-------------------------------|---|
| Type of mounting . . . . .    | for attaching to<br>diaphragm actuators<br>acc. IEC 534-6 (NAMUR)<br>. . . . . for attaching to<br>rotary actuators |
| Mounting orientation. . . . . | any   |

**Gauges**

|                                    |                               |
|------------------------------------|-------------------------------|
| Indicating range<br>Input. . . . . | 0 ... 1.6 bar (0 ... 23 psig) |
| Output . . . . .                   | 0 ... 10 bar (0 ... 150 psig) |
| Error limit . . . . .              | class 1.6                     |

**ACCESSORIES****Connection Manifold With Gauges Code J, M**

|                                 |  |
|---------------------------------|--|
| Indicating range . . . . .      | 0 ... 10 bar (0 ... 150 psig)                        |
| Error limit . . . . .           | class 1.6  |
| Pneumatic connections . . . . . | Female threads<br>Q 1/4-18 NPT<br>acc. to DIN 45 141 |

**Connection Manifold With Gauges Code K, L, N**

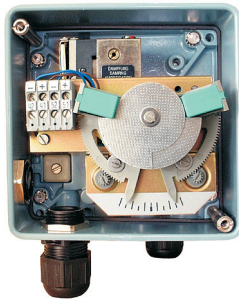
|  |  |
|--|--|
| Indicating range<br>Supply, output . . . . . | 0 ... 10 bar (0 ... 150 psig)                        |
| Input. . . . .                               | 0 ... 1.6 bar (0 ... 23 psig)                        |
| Error limit . . . . .                        | class 1.6  |
| Pneumatic connections . . . . .              | Female threads<br>Q 1/4-18 NPT<br>acc. to DIN 45 141 |

**ADDITIONAL EQUIPMENT** (built-in into basic device)**Inductive Limit Switch Code T, U**  
**Two-wire system**

Input . . . . .

Stroke / angle from actuator  
via positioner feedback lever

Output . . . . .

2 inductive proximity sensors  
acc. to DIN 19234 or NAMUR  
for connection to a switching  
amplifier with an intrinsically  
safe control circuit <sup>1) 2) 3)</sup>

Current consumption

Vane clear . . . . . &gt; 3 mA

Vane interposed . . . . . &lt; 1 mA

for control circuit with the following electrical values

Supply voltage . . . . . DC 8 V, R<sub>i</sub> approx. 1 kΩ

Residual ripple . . . . . &lt; 5 %

Permissible line resistance &lt; 100 Ω

Response characteristic <sup>6)</sup>Gain . . . . . Continuously adjustable  
from 1:1 to approx. 7:1

Switching differential . . . . . &lt; 1 %

Switching point repeatability &lt; 0.2 %

**Explosion protection** <sup>7) 8)</sup>

Type of protection . . . . . II 2 G EEx ib/ia IIB/IIC T4/T6

Certificate of conformity . . . . . PTB 02 ATEX 2153

For operation in certified intrinsically safe circuits with the  
following maximum values:U<sub>max</sub> . . . . . 16 VI<sub>max</sub> . . . . . 25 mAP<sub>max</sub> . . . . . 64 mW

Internal inductance . . . . . 100 μH

Internal capacitance . . . . . 30 nF

Ambient temperature

Temperature class T6 . . . . . -40 ... 65 °C (-4 ... 149 °F)

T1 to T5 . . . . . -40 ... 80 °C (-4 ... 176 °F)

Parts set for later installation

Code T . . . . . EW 419 510 334

Code U . . . . . EW 419 510 352

**Inductive Limit Switch Code R**  
**Three-wire system**Input . . . . . Stroke / angle from  
actuator via positioner  
feedback leverOutput . . . . . 2 inductive proximity  
sensors, three-wire system,  
LED-indication,  
contact, pnp <sup>2) 4)</sup>Supply voltage U<sub>s</sub> . . . . . DC 10 ... 30 VResidual ripple . . . . . ± 10 %, U<sub>s</sub> = 30 V

Switching frequency . . . . . 2 kHz

Constant current . . . . . 100 mA

Response characteristic <sup>6)</sup>Gain . . . . . Continuously adjustable  
from 1:1 to approx. 7:1

Switching differential . . . . . &lt; 1 %

Switching point

repeatability . . . . . &lt; 0.2 %

Parts set for later installation

Code R . . . . . EW 419 510 291

**Limit Switch Assembly with Micro switches Code V**Input . . . . . Stroke / angle from  
actuator via positioner  
feedback leverOutput . . . . . 2 micro-switches <sup>2) 5)</sup>

Connected load

Alternating current

Switching capacity . . . . . max. 250 VA

Switching voltage . . . . . max. 50 V

Switching current with

ohmic resistance . . . . . max. 5 A

inductive resistance . . . . . max. 2 A

Bulb, metal filament . . . . . max. 0.5 A

Direct current

| Switching<br>voltage, max. | Ohmic<br>load | Inductive<br>load |
|----------------------------|---------------|-------------------|
| 30 V                       | 5 A           | 3 A               |
| 50 V                       | 1 A           | 1 A               |

Response characteristic <sup>6)</sup>Gain . . . . . Continuously adjustable  
from 1:1 to approx. 7:1

Switching differential . . . . . &lt; 2.5 %

Switching point

repeatability . . . . . &lt; 0.2 %

Parts set for later installation

Code V . . . . . EW 420 421 017

1) For the standard version code T one switching amplifier is required  
eg Pepperl & Fuchs type WE 77/Ex2For the security version code U a fail-safe switching amplifier for each  
inductive proximity sensor is required  
eg Pepperl & Fuchs type WE 77/Ex-SH-032) Operating mode min. (= low) / max. (= high) selectable by adjustment  
of switch vanes3) Operating mode normally closed circuit / normally open circuit selectable  
at switch amplifier output

4) Contact closed within the positive range

5) Contact open within the positive range

6) For feedback lever effective length of 117.5 mm (4.63 in),  
stroke 30 mm (1.28 in) and maximum gain

7) National installation regulations must be observed

8) For retrofitting in positioner version -B and -C, the product must be tested  
by a qualified inspector as a special version in accordance with ElexV.

**Electrical Position Transmitter Code W**

Input . . . . . Stroke / angle from actuator  
via positioner feedback lever

Sensor . . . . . resistive precision conductive  
plastic element

Stroke range . . . . . 15 ... 80 mm (0.6 ... 3.15 in)  
< 15 mm (0.6 in) on request

Angular range . . . . . 60 ... 120 °

Output . . . . . Two-wire system  
Signal range . . . . . 4 ... 20 mA  
Permitted load . . . . .  $R_{B\max} = (U_S - 12\text{ V}) / 0.02\text{ A}$   
( $U_S$  = supply voltage)

Power supply  
Supply voltage . . . . . DC 12 ... 36 V  
Permitted ripple . . . . . < 10 % p.p.  
Supply voltage dependency < 0.2 %

Response characteristic<sup>1)</sup>  
Non-linearity with  
terminal based setting. . . . . < 1.0 % F.S.  
Hysteresis . . . . . < 0.5 % F.S.  
External resistance  
dependency . . . . . < 0.2 % /  $\Delta R_{B\max}$   
Temperature effect . . . . . < 0.3 % / 10 K

**Explosion protection** <sup>2) 3)</sup>

Type of protection . . . . . II 2 G EEx ib/ia IIB/IIC T4/T6

Certificate of conformity . . . . . PTB 02 ATEX 2153

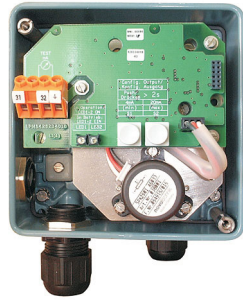
For operation in certified intrinsically safe circuits with the  
following maximum values:

$U_{\max}$  . . . . . T4: 30 V T6: 22 V  
 $I_{\max}$  . . . . . T4: 130 mA T6: 66 mA  
 $P_{\max}$  . . . . . T4: 0,9 W T6: 0,5 W  
Internal inductance . . . . . 9  $\mu$ H  
Internal capacitance . . . . . to earth 10 nF or  
6 nF differential

Ambient temperature  
Temperature class T6 . . . . . -40 ... 40 °C (-40 ... 104 °F)  
T5 . . . . . -40 ... 55 °C (-40 ... 131 °F)  
T4 . . . . . -40 ... 80 °C (-40 ... 176 °F)

Parts set for later installation

Code W . . . . . EW 420 661 092

**Common Data** <sup>4)</sup>

Ambient conditions  
Ambient temperature <sup>5) 6)</sup> . . . . . -25 ... 80 °C (-13 ... 176 °F)  
-40 ... 80 °C (-40 ... 176 °F)

Relative humidity . . . . . up to 100 %

Operating conditions  
as per IEC 654-1 . . . . . The device can be operated  
at a class D2 location

Transport and storage  
temperature . . . . . -40 ... 80 °C (-40 ... 176 °F)  
Protection class . . . . . IP 54 (IP 65 on request)

Electrical connection  
Line entry . . . . . 1 or 2 cable glands M20x1.5  
(others with Adapter AD-...)  
Cable diameter . . . . . 6 to 12 mm (0.24 to 0.47 in)  
Screw terminals . . . . . Screw terminals for wires  
up to 2.5 mm<sup>2</sup> (AWG 14)

Materials  
Base plate . . . . . Galvanized steel  
Control vane . . . . . Aluminum  
Setting mechanism . . . . . Fibre glass-reinforced  
polyamid

Electromagnetic compatibility EMC  
Operating conditions . . . . . industrial environment  
Immunity according to  
- NAMUR recommendation NE21 fulfilled  
- EN 61 326 . . . . . fulfilled  
- EN 61 000-6-2 . . . . . fulfilled  
Emission according to  
- EN 55 011,  
Group 1, Class A . . . . . fulfilled  
- EN 61 000-6-2 . . . . . fulfilled

CE marking  
Electromagnetic  
compatibility . . . . . 89/336/EWG  
Low voltage regulations . . . . . w/o Ex: 73/23/EWG fulfilled  
(with Ex: not applicable)

Safety  
as per DIN EN 61010-1  
(DIN IEC 61010-1)  
(VDE 0411 part 1). . . . . safety class III  
overvoltage category . . . . . 1  
internal fuses . . . . . none  
external fuses . . . . . Limitation of power supplies  
for fire protection has to be  
observed due to EN 61010-1  
9.3. ff.

- 1) For feedback lever effective length of 117.5 mm (4.63 in) and stroke 30 mm (1.28 in)
- 2) National installation regulations must be observed
- 3) For retrofitting in positioner version -B and -C, the product must be tested by a qualified inspector as a special version in accordance with ElexV
- 4) Except manifold with gauges
- 5) Without explosion protection
- 6) -40 ... 80 °C (-40 ... 176 °F) for the fail-safe version of inductive limit switch code U

**MODEL CODES SRP981**

|  |               |    |  |  |  |  |  |  |  |        |
|--|---------------|----|--|--|--|--|--|--|--|--------|
| <b>Pneumatic Positioner</b>  | <b>SRP981</b> |    |  |  |  |  |  |  |  | 011004 |
| <b>Version</b>   |               |    |  |  |  |  |  |  |  |        |
| Single Acting . . . . .  |               | -B |  |  |  |  |  |  |  |        |
| Double Acting. . . . .   |               | -C |  |  |  |  |  |  |  |        |
| <b>Input</b>   |               |    |  |  |  |  |  |  |  |        |
| Signal Range 0.2 to 1 bar/3 to 15 psi/ 20 - 100 kPa;<br>Split-Range Up To 4-Fold Possible, Must Be Specified . . . . . |               |    |  |  |  |  |  |  |  | -I     |
| <b>Mode of Action</b>  |               |    |  |  |  |  |  |  |  |        |
| Increasing Input Increases Output . . . . .  |               |    |  |  |  |  |  |  |  | D      |
| Increasing Input Decreases Output . . . . .  |               |    |  |  |  |  |  |  |  | R      |
| <b>Gauges</b>  |               |    |  |  |  |  |  |  |  |        |
| Without Gauges. . . . .  |               |    |  |  |  |  |  |  |  | L      |
| Two Built-In Gauges (bar/psi) . . . . . (a)  |               |    |  |  |  |  |  |  |  | M      |
| Two Built-In Gauges (kPa/psi) . . . . . (a)  |               |    |  |  |  |  |  |  |  | N      |
| <b>Built-In Limit Switch/Position Transmitter</b>  |               |    |  |  |  |  |  |  |  |        |
| Without . . . . .  |               |    |  |  |  |  |  |  |  | S      |
| Inductive Limit Switch Three-Wire Technique, Without Explosion Protection . (b)  |               |    |  |  |  |  |  |  |  | R      |
| Inductive Limit Switch (Standard Version) w. Expl. Prot. II 2 G EEx ia IIC T6 acc. to ATEX (b)                         |               |    |  |  |  |  |  |  |  | T      |
| Inductive Limit Switch (Security Version) w. Expl. Prot. II 2 G EEx ia IIC T6 acc. to ATEX (b)                         |               |    |  |  |  |  |  |  |  | U      |
| Two Micro Switches, Without Explosion Protection. . . (b)  |               |    |  |  |  |  |  |  |  | V      |
| Position Transmitter 4-20 mA, with Expl. Prot. II 2 G EEx ia IIC T6 acc. to ATEX . (b)                                 |               |    |  |  |  |  |  |  |  | W      |
| <b>Cable Entry</b>   |               |    |  |  |  |  |  |  |  |        |
| Without Cable Gland . . . . .  |               |    |  |  |  |  |  |  |  | 1      |
| M20 x 1.5 With One Plastic Cable Gland, Color Gray . (c)   |               |    |  |  |  |  |  |  |  | 7      |
| <b>Attachment Kit</b>  |               |    |  |  |  |  |  |  |  |        |
| Order as Auxiliary . . . . .   |               |    |  |  |  |  |  |  |  | N      |
| <b>Manifold</b>  |               |    |  |  |  |  |  |  |  |        |
| Order as Auxiliary . . . . .   |               |    |  |  |  |  |  |  |  | A      |
| <b>Options</b>   |               |    |  |  |  |  |  |  |  |        |
| Amplifier Free Of Nonferrous Metals . . . . . (a)  |               |    |  |  |  |  |  |  |  | -C     |
| Manual Bypass Switch . . . . . (a)   |               |    |  |  |  |  |  |  |  | -T     |
| Protection Class IP65 . . . . . (b)  |               |    |  |  |  |  |  |  |  | -F     |
| Assembled Free Of Oil And Grease / Designed for Aux. Energy Oxygen . . . . .   |               |    |  |  |  |  |  |  |  | -S     |
| <b>Tag No. Labeling</b>  |               |    |  |  |  |  |  |  |  |        |
| Stamped With Weather Resistant Color . . . . .   |               |    |  |  |  |  |  |  |  | -G     |
| Stainless Steel Label Fixed With Wire . . . . .  |               |    |  |  |  |  |  |  |  | -L     |

Example Model Code: SRP981 -B I D L S 1 N A -L

- (a) Only available with Version -B
- (b) Not available with Gauge Code M or N
- (c) Not available with Built-In Limit Switch / Position Transmitter Code S

Auxiliaries see EVE9902  
Fittings see EOO9001L

**MODEL CODES Accessories**

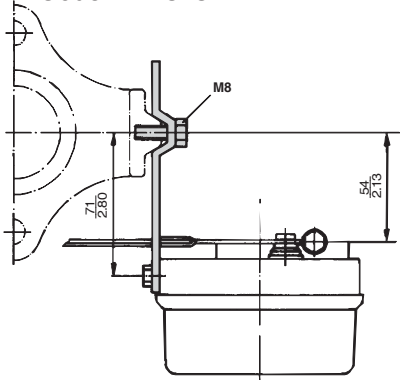
|  |  |             |
|--|--|-------------|
| <b>Couple lever / cam</b>  |  | <b>EBZG</b> |
| Standard (a = 72 mm) (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985) . . . . .      |  | -AN         |
| Extended (a = 91 mm) (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985) . . . . .      |  | -BN         |
| Inverse equal percentage cam for rotary actuators (for <b>SRP981</b> , SRI983, SRI986) . . . . . |  | -CN         |
| <b>Spring set</b>  |  | <b>FESG</b> |
| Range-Springs (4 pc.) (for <b>SRP981</b> , SRI983, SRI986) . . . . .                             |  | -FN         |
| (continued on next page)   |  |             |

**MODEL CODES Accessories** (continued)

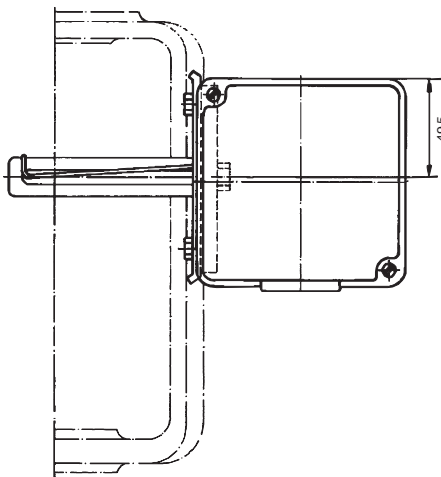
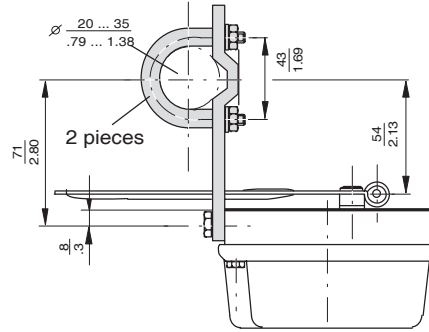
|  |             |
|--|-------------|
| <b>Attachment kit</b>  | <b>EBZG</b> |
| For diaphragm actuators with casting yoke acc. NAMUR. (incl. standard Couple Lever)<br>(for <b>SRP981</b> , SRI983, SMP981, SMI983, SGE985) . . . . .  | -GN         |
| For diaphragm actuators with pillar yoke acc. NAMUR. (incl. standard Couple lever)<br>(for <b>SRP981</b> , SRI983, SMP981, SMI983, SGE985) . . . . .   | -FN         |
| For rotary actuators, without flange, 3 drill holes 6.5 mm (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985) . . . . .                      | -PN         |
| For rotary actuators, without flange, 4 threads M6 (e.g for Petras actuators)<br>(for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985). . . . . | -NN         |
| For rotary actuators, with flange (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985) . . . . .   | -JN         |
| For rotary actuators acc. to VDI/VDE 3845, with shaft (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985). . . . .                            | -ZN         |
| For Masoneilan type Camflex II (for <b>SRP981</b> , SRI983, SRI986, SMP981, SMI983, SGE985). . . . .   | -RN         |
| For Masoneilan type Sigma F (for SRI986, <b>SRP981</b> , SRI983) . . . . .   | -SN         |
| For Masoneilan type 37/38, Fisher Elliott type 656, 667 (for <b>SRP981</b> , SRI983, SGE985, SMI983, SMP981) . . . . .                                 | -TN         |
| For Guide type P (for <b>SRP981</b> , SRI983) . . . . .  | -UN         |
| For Masoneilan type 87/88 (for <b>SRP981</b> , SRI983, SMP981, SMI983, SGE985) . . . . .   | -EN         |
| For Masoneilan VariPak (for <b>SRP981</b> , SRI983, SGE985, SMI983, SMP981). . . . .   | -MN         |
| For IAL actuators (for <b>SRP981</b> , SRI983, SGE985, SMI983, SMP981) . . . . .   | -VN         |
| Brackets VDI/VDE 3845 (A = 130 mm/5.12 in; B = 50 mm/1.97 in) ( <b>SRP981</b> , SRI983, SRI986, SGE985, SMI983, SMP981) . . . . .                      | -C3         |
| Brackets VDI/VDE 3845 (A = 80 mm/3.15 in; B = 30 mm/1.18 in) ( <b>SRP981</b> , SRI983, SRI986, SGE985, SMI983, SMP981). . . . .                        | -C2         |
| Brackets VDI/VDE 3845 (A = 80 mm/3.15 in; B = 20 mm/0.79 in) ( <b>SRP981</b> , SRI983, SRI986, SGE985, SMI983, SMP981). . . . .                        | -C1         |
| <b>Manifold (Connection 1/4-18NPT)</b>   | <b>LEXG</b> |
| Staggered connections (for SRP981, SRI986) . . . . .   | -BN         |
| Connections same level (for SRP981, SRI986) . . . . .  | -CN         |
| Staggered connections for 1/4"-thread pneum. tube-conn. (e.g. tube-diameter: 8 mm / 0.3 in) (for SRP981, SRI986) . . . . .                             | -DN         |
| With gauges for supply air, y, for version single acting (for SRP981, SRI986). . . . .   | -JN         |
| With gauges for supply air, w, for version single acting (for SRP981) . . . . .  | -KN         |
| With gauges for supply air, w, y, for version single acting (for SRP981). . . . .  | -LN         |
| With gauges for supply air, y1, y2, for version double acting (for SRP981, SRI986) . . . . .   | -MN         |
| With gauges for w, y1, y2, for version double acting (for SRP981) . . . . .  | -NN         |
| Gauge manifold without gauge (for SRP981, SRI986) . . . . .  | -RN         |
| Gauge manifold without gauge, for supply air, y1, y2, for version double acting (for SRP981, SRI986) . . . . .   | -SN         |
| Gauge manifold without gauge, for w, y1, y2, for version double acting (for SRP981) (b) . . . . .  | -TN         |
| <b>Booster (Connection 1/4-18NPT)</b>  | <b>VKXG</b> |
| For version single acting (for SRP981, SRI986) . . . . .   | -FN         |
| For version double acting (for SRP981, SRI986). . . . .  | -GN         |
| For version single acting with doubled output capacity (for SRP981, SRI986) . . . . .  | -HN         |
| <b>Adapter</b>   | <b>AD</b>   |
| Adapter 1/2" NPT to 3/4" NPT (stainless steel) . . . . .   | -A3         |
| Adapter M20 x 1.5 to G1/2" (internal thread) (stainless steel) . . . . .   | -A8         |
| Adapter M20 x 1.5 to 1/2" - 14 NPT (internal thread) (brass with nickel coating) . . . . .   | -A5         |
| Adapter M20 x 1.5 to 1/2" - 14 NPT (internal thread) (stainless steel) . . . . .   | -A6         |
| Adapter (plastic) M20 x 1.5 to PG13.5 (internal thread) . . . . .  | -A9         |
| <b>Cable gland</b>   | <b>BUSG</b> |
| M20 x 1.5 plastics, color blue . . . . .   | -K7         |
| M20 x 1.5 plastics, color white . . . . .  | -K9         |
| M20 x 1.5 stainless steel. . . . .   | -S6         |
| M20 x 1.5 plastics, color gray . . . . .   | -K6         |
| M20 x 1.5 stainless steel EEx d . . . . .  | -S7         |
| M20 x 1.5 brass zink plated EEx d . . . . .  | -S8         |
| 1/2-14 NPT cable gland 6...12 mm, Stainless steel, EEx d . . . . .   | -N1         |
| 1/2-14 NPT cable gland 6...12 mm, Steel zink plated, EEx d . . . . .   | -N2         |
| 1/2-14 NPT, brass zink plated, EEx d . . . . .   | -N3         |
| M20 x 1.5 plug, plastic . . . . .  | -V3         |
| M20 x 1.5 plug, Stainless steel, EEx d. . . . .  | -V4         |
| 1/2-14 NPT plug, Stainless Steel, EEx d . . . . .  | -V5         |
| M20 x 1.5 plug, brass zink plated, EEx d. . . . .  | -V6         |
| 1/2-14 NPT plug, brass zink plated, EEx d . . . . .  | -V7         |

**ATTACHMENT KIT FOR DIAPHRAGM ACTUATORS**

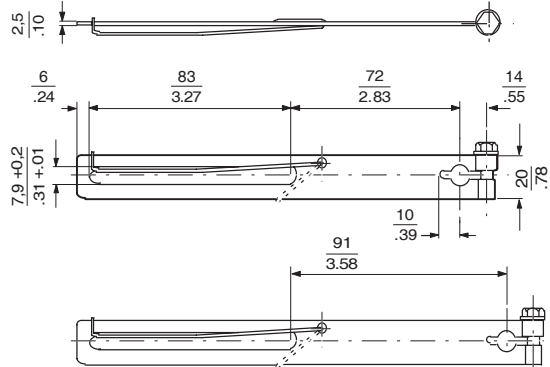
**Attachment to casting yoke**  
according to IEC 534-6 (NAMUR)  
Code EBZG-GN



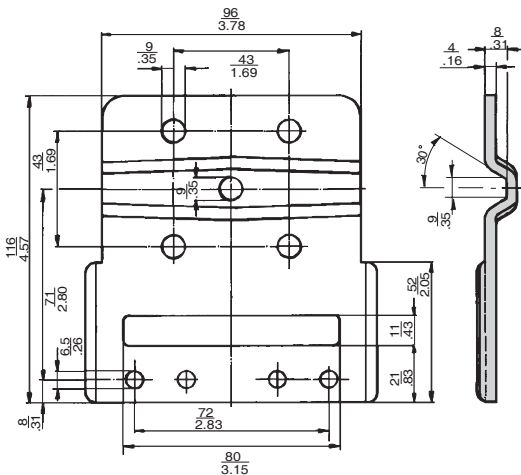
**Attachment to pillar yoke**  
according to IEC 534-6 (NAMUR)  
Code EBZG-FN



**Feedback lever**  
Code EBZG-AN, -FN, -GN  
Code EBZG-BN (extended version)

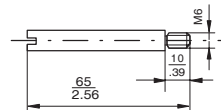


**Mounting bracket**  
according to IEC 534-6 (NAMUR)  
for Code EBZG-GN, FN



|    |
|----|
| mm |
| in |

**Carrier bolt**  
for attachment to valve stem

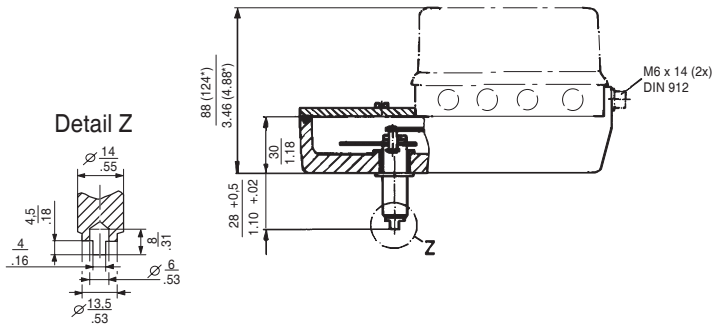




**ATTACHMENT KIT FOR ROTARY ACTUATORS**

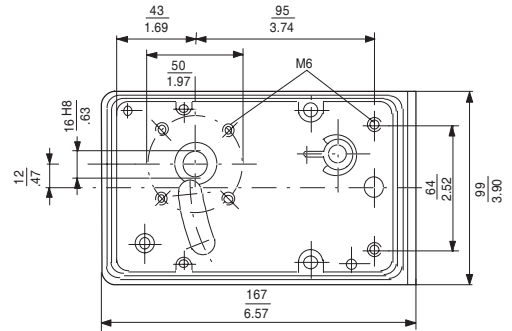
**With shaft**

(according to VDI/VDE 3845)  
Code EBZG-ZN



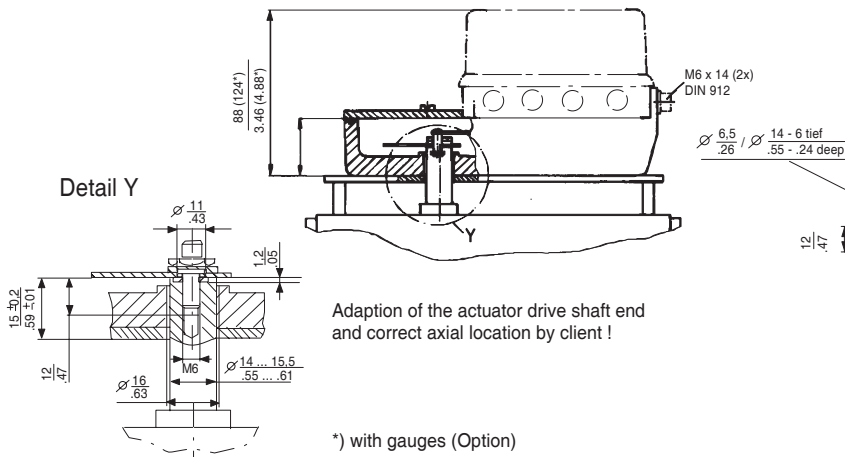
**Housing dimensions**

Attachment kit with shaft  
resp. without flange  
Code EBZG-NN



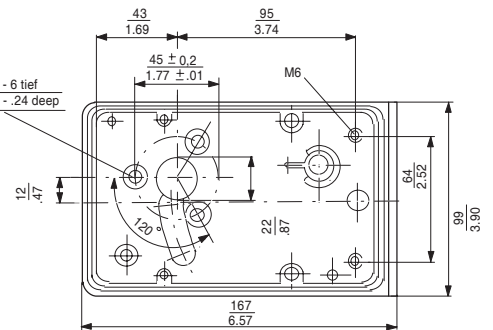
**Without flange**

Code EBZG-NN, -PN



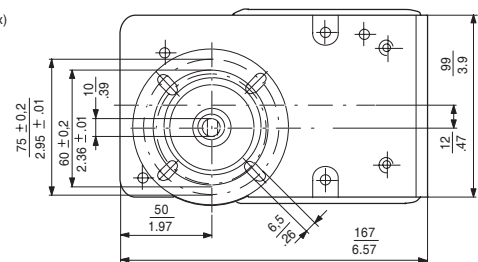
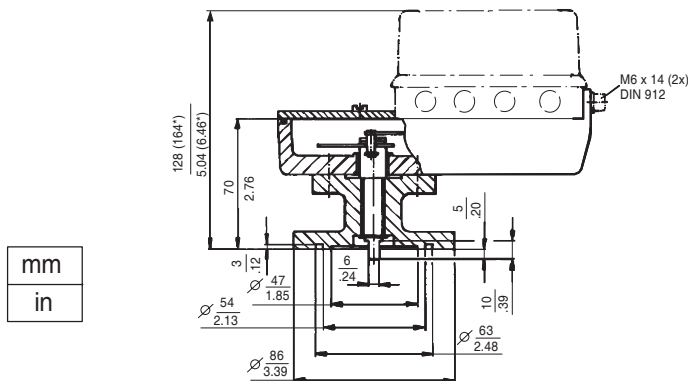
**Housing dimensions**

Attachment kit without flange  
Code EBZG-PN



**With flange**

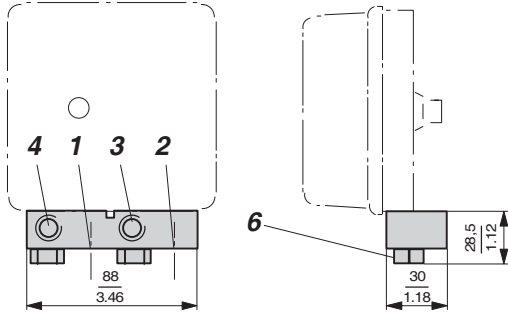
Code EBZG-JN



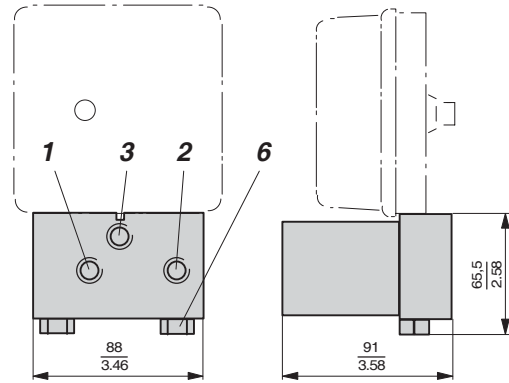
Rotation angle max 120°; torque requirement 14 Nm

## DIMENSIONS Additional equipment

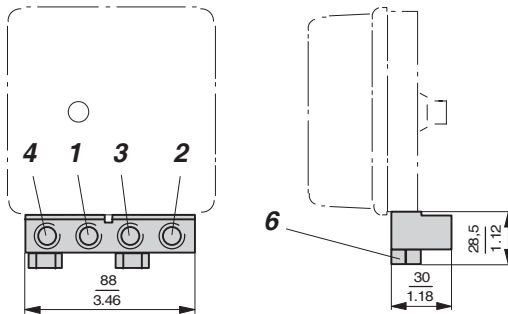
**Connection manifold, staggered connections**  
Code LEXG-BN



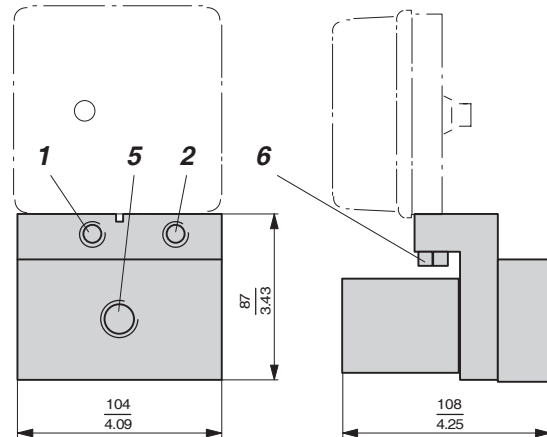
**Booster single acting**  
Code VKXG-FN



**Connection manifold, connections same level**  
Code LEXG-CN

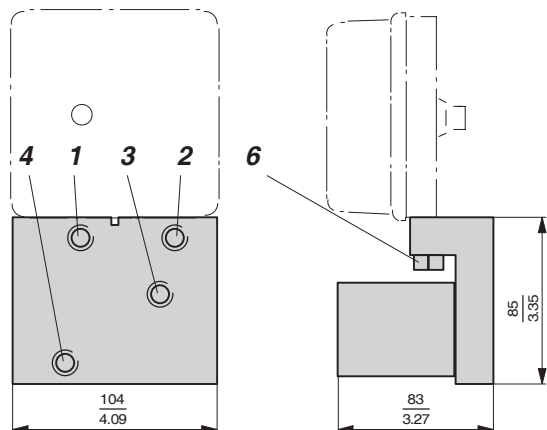


**Booster single acting with doubled output capacity**  
Code VKXG-HN



|    |
|----|
| mm |
| in |

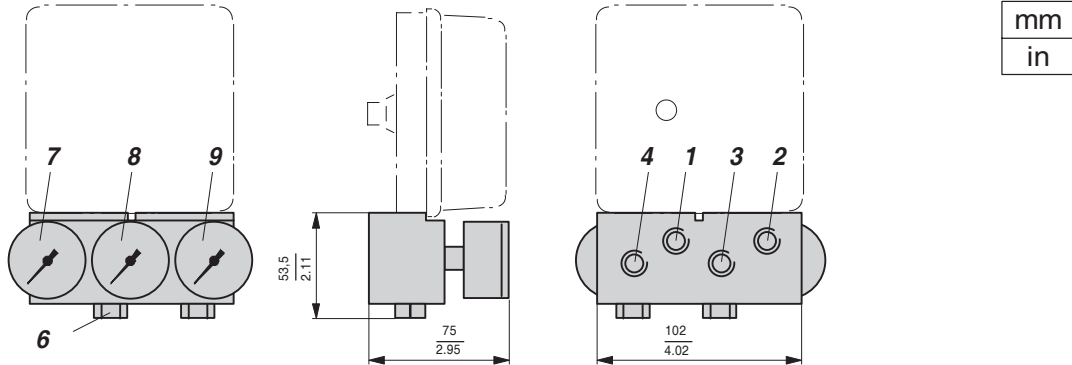
**Booster double acting**  
Code VKXG-GN



- 1 Female thread 1/4-18 NPT for supply air
- 2 Female thread 1/4-18 NPT for input (w)
- 3 Female thread 1/4-18 NPT for output I (y1)
- 4 Female thread 1/4-18 NPT for output II (y2)
- 5 Female thread 1/2-14 NPT for output I (y1)
- 6 Fixing screws 17 mm A/F

**DIMENSIONS Additional equipment**

Connection manifold with gauges Code LEXG-JN, -KN, -LN, -MN, -NN  
 Connection manifold for gauges Code LEXG-RN, -TN, -SN



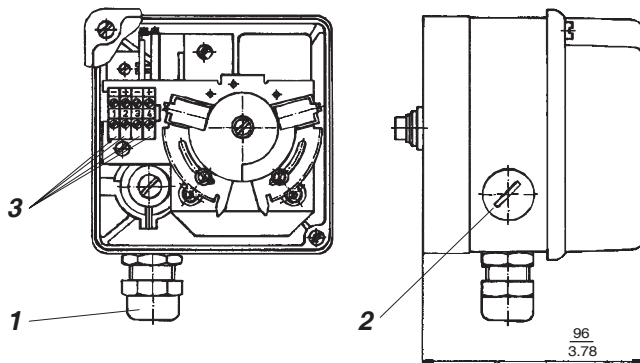
| Manifold Code LEXG | 7 Gauge for | 8 Gauge for   | 9 Gauge for    | Version Action |
|--------------------|-------------|---------------|----------------|----------------|
| -JN (-RN*)         | without     | output (y)    | supply air     | single         |
| -KN (-RN*)         | input (w)   | without       | supply air     | single         |
| -LN (-RN*)         | input (w)   | output (y)    | supply air     | single         |
| -MN (-SN*)         | supply air  | output I (y1) | output II (y2) | double         |
| -NN (-TN*)         | input (w)   | output I (y1) | output II (y2) | double         |

- 1 Female thread 1/4-18 NPT for supply air
- 2 Female thread 1/4-18 NPT for input (w)
- 3 Female thread 1/4-18 NPT for output I (y1)
- 4 Female thread 1/4-18 NPT for output II (y2) (only on manifold Code M, N)

6 Fixing screws 17 mm A/F

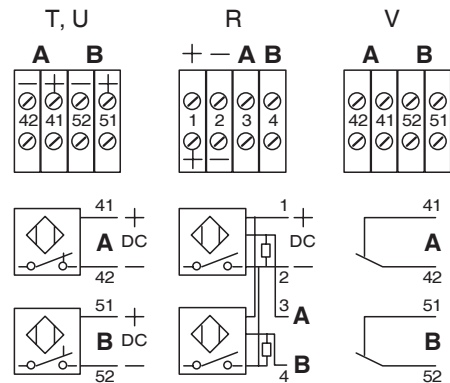
\*) Connection manifold for gauges, without gauges (for customer's gauges)

**Built-in limit switch Code R, T, U, V**

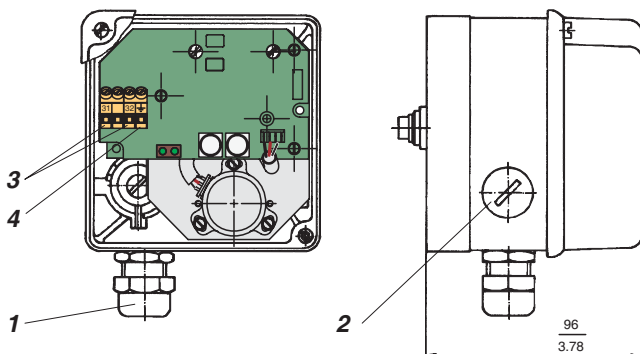


- 1 Cable gland
- 2 Dummy plug can be replaced with 1
- 3 Connection terminals

Built-in limit switch Code

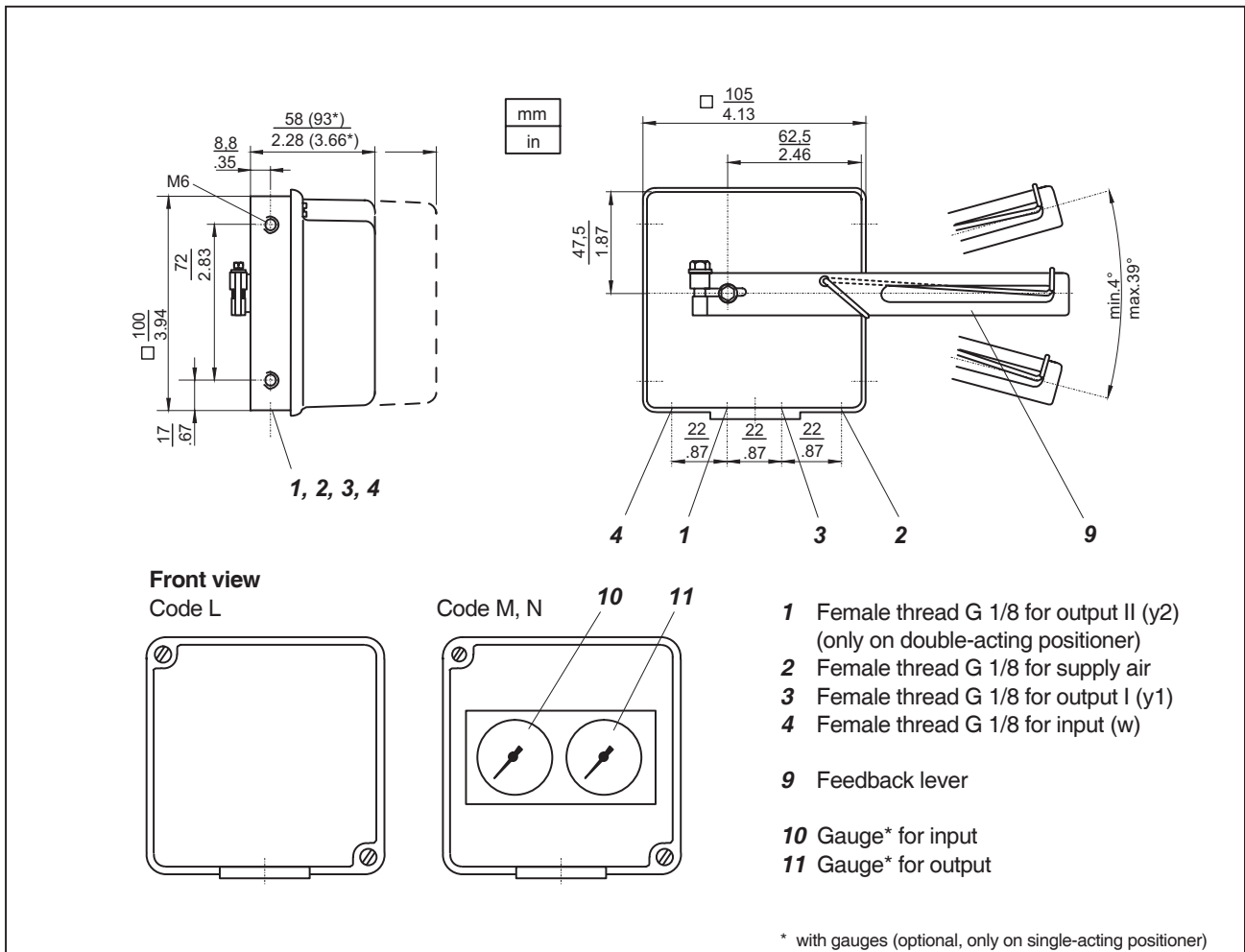


**Built-in position transmitter Code W**



- 1 Cable gland
- 2 Dummy plug can be replaced with 1
- 3 Connection terminals (+/-)
- 4 Ground connection

## DIMENSIONS, CONNECTIONS



### Further Product Specification Sheets:

|                   |        |   |
|-------------------|--------|---|
| PSS EVE0101A-(de) | SRP981 | Pneumatic Positioner  |
| PSS EVE0102A-(de) | SRI986 | Electro-Pneumatic Positioner                                    |
| PSS EVE0103A-(de) | SRI983 | Electro-Pneumatic Positioner - explosion proof or EEx d version |
| PSS EVE0105A-(de) | SRD991 | Intelligent Positioner  |
| PSS EVE0107A-(de) | SRI990 | Analog Positioner   |
| PSS EVE0109A-(de) | SRD960 | Universal Positioner  |

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