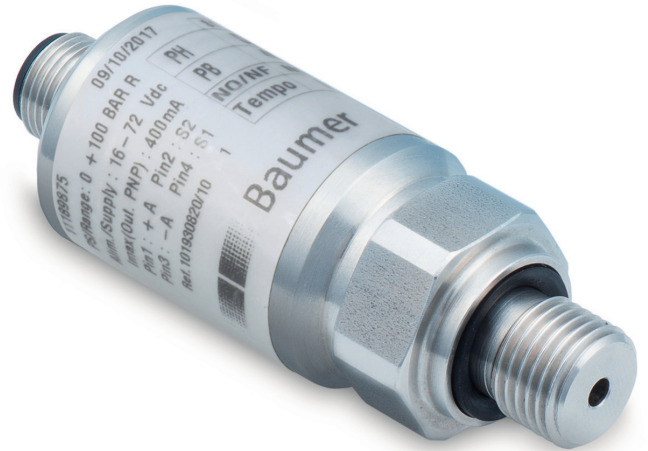


**Overview**

- OEM applications
- Excellent price/performance ratio
- Measurement of vacuum, absolute or gauge pressure
- 2 threshold outputs: PNP transistors
- Compact and robust stainless steel housing
- External programming of zero point and span with FlexProgrammer 9701



**Technical data**

**Performance characteristics**

|                                      |  |
|--------------------------------------|--|
| Pressure type                        | Absolute<br>Relative (gauged)  |
| Max. measuring error                 | ± 1.3 % FSR<br>Including zero-point and span error, non-linearity (by terminal base line), hysteresis and non-repeatability (EN 61298-2) |
| Max. measuring span                  | 601 bar  |
| Measuring range                      | 0... 60 bar , absolute<br>-1 ... 600 bar , relative (gauged)   |
| Standard error of measurement (BFSL) | ± 0.5 % FSR<br>Including non-linearity, hysteresis and non-repeatability according BFSL  |
| Threshold setting range              | 2 ... 98 % FSR   |
| Min. measuring span                  | 1 bar  |
| Rise time (10 ... 90 %)              | ≤ 50 ms  |
| Temperature coefficient              | ≤ 0.25 % FSR/10 K , measuring span @ -20 ... 60 °C   |
| Repeatability                        | ± 0.2 % FSR  |

**Process conditions**

|                           |   |
|---------------------------|---|
| Maximum media temperature | -20 ... 100 °C                          |
| Process pressure          | Refer to section "Operating conditions" |

**Process connection**

|   |   |
|---|---|
| Connection variants                       | Refer to section "Dimensional drawings" |
| Wetted parts material, process connection | AISI 316L (1.4404)                      |
| Wetted parts material, membrane           | Ceramic, 96% AL2O3                      |

**Ambient conditions**

|                                       |  |
|---------------------------------------|--|
| Operating temperature range           | -20 ... 80 °C  |
| Storage temperature range             | -30 ... 85 °C  |
| Degree of protection (EN 60529)       | IP 65 , with connector DIN EN 175301-803 A (DIN 43650 A), 4-pin<br>IP 67 , with connector M12-A. 5-pin |
| Free fall (EN 60068-2-32)             | 25 falls from 1 m onto concrete floor  |
| Vibration (sinusoidal) (EN 60068-2-6) | 1.5 mm p-p (10 ... 58 Hz), 20 g (58 Hz ... 2 kHz)  |

**Output signal**

|                          |  |
|--------------------------|--|
| Output signal            | Switching output   |
| Response time            | < 50 ms , typ.   |
| Switching capacity       | 400 mA , with connector M12-A. 5-pin<br>800 mA , max., with DIN EN 175301-803 A (DIN 43650 A), 4-pin |
| Short circuit protection | Yes  |

**Housing**

|              |  |
|--------------|--|
| Style        | Compact transmitter  |
| Overall size | Refer to section "Dimensional drawings"  |
| Material     | AISI 304 (1.4301)  |
| Weight       | 140 g , with connector M12-A. 5-pin<br>150 g , with DIN EN 175301-803 A (DIN 43650 A), 4-pin |

**Electrical connection**

|           |  |
|-----------|--|
| Connector | DIN EN 175301-803 A (DIN 43650 A), 4-pin<br>M12-A, 5-pin |
|-----------|--|

**Power supply**

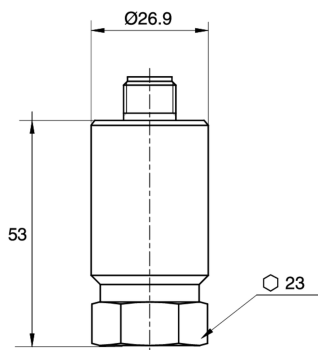
|                      |                |
|----------------------|----------------|
| Voltage supply range | 11 ... 40 V DC |
|----------------------|----------------|

**Operating conditions**

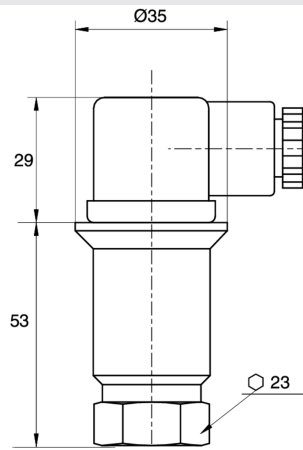
|            | Measuring range<br>(bar) |         | Proof pressure<br>(bar) | Burst Pressure<br>(bar) |      |
|------------|--------------------------|---------|-------------------------|-------------------------|------|
| -1 ... 0   | -1 ... 0,6               | 0 ... 1 | 0 ... 1,6               | 3                       | 6    |
| -1 ... 1,5 | 0 ... 2,5                |         |                         | 4                       | 7    |
| -1 ... 3   | 0 ... 4                  |         |                         | 8                       | 12   |
| -1 ... 5   | 0 ... 6                  |         |                         | 12                      | 18   |
| -1 ... 9   | 0 ... 10                 |         |                         | 20                      | 30   |
| -1 ... 15  | 0 ... 16                 |         |                         | 32                      | 48   |
| -1 ... 24  | 0 ... 25                 |         |                         | 50                      | 75   |
| -1 ... 39  | 0 ... 40                 |         |                         | 80                      | 120  |
|            | 0 ... 60                 |         |                         | 120                     | 180  |
|            | 0 ... 100                |         |                         | 200                     | 300  |
|            | 0 ... 160                |         |                         | 320                     | 480  |
|            | 0 ... 250                |         |                         | 500                     | 600  |
|            | 0 ... 400                |         |                         | 600                     | 800  |
|            | 0 ... 600                |         |                         | 800                     | 1000 |

**Dimensional drawings**

**Housing**

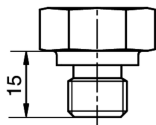


Housing with connector M12-A, 5-pin

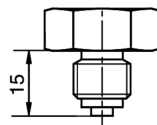


Housing with connector DIN EN 175301-803 A  
(DIN 43650 A), 4-pin

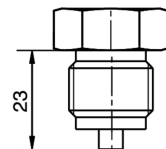
**Process connection**



G50-B  
G 1/4 A DIN 3852-E (BCID: G50)



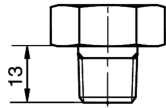
G30-2  
G 1/4 B EN 837-1 (BCID: G30)



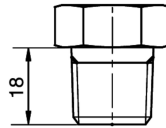
G31-3  
G 1/2 B EN 837-1 (BCID: G31)

**Dimensional drawings**

**Process connection**



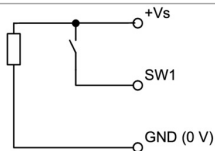
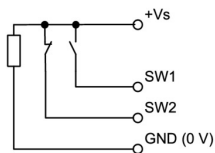
N01-5  
1/4-18 NPT (BCID: N01)



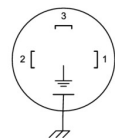
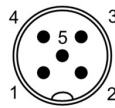
N02-6  
1/2-14 NPT (BCID: N02)

**Electrical connection**

**Equivalent circuit**



**Electrical connection**



**Function**

**Pin assignment**

|              |               |
|--------------|---------------|
| +Vs          | 1             |
| SW1          | 4             |
| SW2          | 2             |
| GND (0 V)    | 3             |
| Frame Ground | 5             |
|              |               |
| +Vs          | 1             |
| SW1          | 3             |
| GND (0 V)    | 2             |
| Frame Ground | Grounding lug |

**Ordering information**

**Ordering key - Configuration possibilities see website**

|                                     | CPX | - | X | . | # | . | # | ### | # | . | 0 | #### |
|-------------------------------------|-----|---|---|---|---|---|---|-----|---|---|---|------|
| <b>Product</b>                      | CPX |   |   |   |   |   |   |     |   |   |   |      |
| <b>Housing material</b>             |     |   |   |   |   |   |   |     |   |   |   |      |
| Stainless steel, 1.4404 (AISI 316L) |     |   | X |   |   |   |   |     |   |   |   |      |
| <b>Process connection</b>           |     |   |   |   |   |   |   |     |   |   |   |      |
| G 1/4 A DIN 3852-E (G50)            |     |   |   |   |   |   | B |     |   |   |   |      |
| G 1/4 B EN 837-1 (G30)              |     |   |   |   |   |   | 2 |     |   |   |   |      |
| G 1/2 B EN 837-1 (G31)              |     |   |   |   |   |   | 3 |     |   |   |   |      |
| 1/4-18 NPT (N01)                    |     |   |   |   |   |   | 5 |     |   |   |   |      |
| 1/2-14 NPT (N02)                    |     |   |   |   |   |   | 6 |     |   |   |   |      |
| <b>Sealing</b>                      |     |   |   |   |   |   |   |     |   |   |   |      |
| NBR                                 |     |   |   |   |   |   |   |     | 3 |   |   |      |
| EPDM                                |     |   |   |   |   |   |   |     | 5 |   |   |      |
| FKM (Viton®)                        |     |   |   |   |   |   |   |     | 9 |   |   |      |
| <b>Measuring range</b>              |     |   |   |   |   |   |   |     |   |   |   |      |
| 0...1 bar (EN)                      |     |   |   |   |   |   |   |     |   |   |   | B15  |
| 0...1,6 bar (EN)                    |     |   |   |   |   |   |   |     |   |   |   | B16  |
| 0 ... 2.5 bar (EN)                  |     |   |   |   |   |   |   |     |   |   |   | B18  |

**Ordering information**
**Ordering key - Configuration possibilities see website**

|                                 | CPX | - | X | . | # | . | # | ### | # | . | 0 | #### |
|---------------------------------|-----|---|---|---|---|---|---|-----|---|---|---|------|
| 0 ... 4 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 19   |
| -1...39 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 1L   |
| 0 ... 6 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 20   |
| 0 ... 10 bar (EN)               |     |   |   |   |   |   |   |     | B |   |   | 22   |
| 0 ... 16 bar (EN)               |     |   |   |   |   |   |   |     | B |   |   | 24   |
| 0...25 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 26   |
| 0...40 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 27   |
| 0...60 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 29   |
| 0...100 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 31   |
| 0 ... 160 bar (EN)              |     |   |   |   |   |   |   |     | B |   |   | 33   |
| 0...250 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 35   |
| 0...400 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 38   |
| 0...600 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 39   |
| -1...0 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 59   |
| -1...0,6 bar (EN)               |     |   |   |   |   |   |   |     | B |   |   | 72   |
| -1...1,5 bar (EN)               |     |   |   |   |   |   |   |     | B |   |   | 74   |
| -1...3 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 76   |
| -1...5 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 77   |
| -1...9 bar (EN)                 |     |   |   |   |   |   |   |     | B |   |   | 79   |
| -1...15 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 81   |
| -1...24 bar (EN)                |     |   |   |   |   |   |   |     | B |   |   | 82   |
| 0...100 kPa (EN)                |     |   |   |   |   |   |   |     | D |   |   | 15   |
| 0...160 kPa (EN)                |     |   |   |   |   |   |   |     | D |   |   | 16   |
| 0...250 kPa (EN)                |     |   |   |   |   |   |   |     | D |   |   | 18   |
| 0...400 kPa (EN)                |     |   |   |   |   |   |   |     | D |   |   | 19   |
| -100...3900 kPa (EN)            |     |   |   |   |   |   |   |     | D |   |   | 1L   |
| 0...600 kPa (EN)                |     |   |   |   |   |   |   |     | D |   |   | 20   |
| 0...1000 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 22   |
| 0...1600 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 24   |
| 0...2500 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 26   |
| 0...4000 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 27   |
| 0...6000 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 29   |
| 0...10000 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 31   |
| 0...16000 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 33   |
| 0...25000 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 35   |
| 0...40000 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 38   |
| 0...60000 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 39   |
| -100...0 kPa (EN)               |     |   |   |   |   |   |   |     | D |   |   | 59   |
| -100...60 kPa (EN)              |     |   |   |   |   |   |   |     | D |   |   | 72   |
| -100...150 kPa (EN)             |     |   |   |   |   |   |   |     | D |   |   | 74   |
| -100...300 kPa (EN)             |     |   |   |   |   |   |   |     | D |   |   | 76   |
| -100...500 kPa (EN)             |     |   |   |   |   |   |   |     | D |   |   | 77   |
| -100...900 kPa (EN)             |     |   |   |   |   |   |   |     | D |   |   | 79   |
| -100...1500 kPa (EN)            |     |   |   |   |   |   |   |     | D |   |   | 81   |
| -100...2400 kPa (EN)            |     |   |   |   |   |   |   |     | D |   |   | 82   |
| 0...1 kg/cm <sup>2</sup> (EN)   |     |   |   |   |   |   |   |     | F |   |   | 15   |
| 0...1,6 kg/cm <sup>2</sup> (EN) |     |   |   |   |   |   |   |     | F |   |   | 16   |
| 0...2,5 kg/cm <sup>2</sup> (EN) |     |   |   |   |   |   |   |     | F |   |   | 18   |
| 0...4 kg/cm <sup>2</sup> (EN)   |     |   |   |   |   |   |   |     | F |   |   | 19   |

**Ordering information**
**Ordering key - Configuration possibilities see website**

|                         | CPX | - | X | . | # | . | # | ### | # | . | 0 | #### |
|-------------------------|-----|---|---|---|---|---|---|-----|---|---|---|------|
| -1...39 kg/cm2          |     |   |   |   |   |   |   | F1L |   |   |   |      |
| 0...6 kg/cm2 (EN)       |     |   |   |   |   |   |   | F20 |   |   |   |      |
| 0...10 kg/cm2 (EN)      |     |   |   |   |   |   |   | F22 |   |   |   |      |
| 0...16 kg/cm2 (EN)      |     |   |   |   |   |   |   | F24 |   |   |   |      |
| 0...25 kg/cm2 (EN)      |     |   |   |   |   |   |   | F26 |   |   |   |      |
| 0...40 kg/cm2 (EN)      |     |   |   |   |   |   |   | F27 |   |   |   |      |
| 0...60 kg/cm2 (EN)      |     |   |   |   |   |   |   | F29 |   |   |   |      |
| 0...100 kg/cm2 (EN)     |     |   |   |   |   |   |   | F31 |   |   |   |      |
| 0...160 kg/cm2 (EN)     |     |   |   |   |   |   |   | F33 |   |   |   |      |
| 0...250 kg/cm2 (EN)     |     |   |   |   |   |   |   | F35 |   |   |   |      |
| 0...400 kg/cm2 (EN)     |     |   |   |   |   |   |   | F38 |   |   |   |      |
| 0...600 kg/cm2 (EN)     |     |   |   |   |   |   |   | F39 |   |   |   |      |
| -1...0 kg/cm2 (EN)      |     |   |   |   |   |   |   | F59 |   |   |   |      |
| -1...0,6 kg/cm2 (EN)    |     |   |   |   |   |   |   | F72 |   |   |   |      |
| -1...1,5 kg/cm2 (EN)    |     |   |   |   |   |   |   | F74 |   |   |   |      |
| -1...3 kg/cm2 (EN)      |     |   |   |   |   |   |   | F76 |   |   |   |      |
| -1...5 kg/cm2 (EN)      |     |   |   |   |   |   |   | F77 |   |   |   |      |
| -1...9 kg/cm2 (EN)      |     |   |   |   |   |   |   | F79 |   |   |   |      |
| -1...15 kg/cm2 (EN)     |     |   |   |   |   |   |   | F81 |   |   |   |      |
| -1...24 kg/cm2 (EN)     |     |   |   |   |   |   |   | F82 |   |   |   |      |
| 0...15 psi (ANSI)       |     |   |   |   |   |   |   | H15 |   |   |   |      |
| 0...30 psi (ANSI)       |     |   |   |   |   |   |   | H17 |   |   |   |      |
| 0...60 psi (ANSI)       |     |   |   |   |   |   |   | H19 |   |   |   |      |
| 0...20 psi (ANSI)       |     |   |   |   |   |   |   | H1C |   |   |   |      |
| -30Hg...600 psi (ANSI)  |     |   |   |   |   |   |   | H1L |   |   |   |      |
| 0...100 psi (ANSI)      |     |   |   |   |   |   |   | H21 |   |   |   |      |
| 0...160 psi (ANSI)      |     |   |   |   |   |   |   | H22 |   |   |   |      |
| 0...200 psi (ANSI)      |     |   |   |   |   |   |   | H23 |   |   |   |      |
| 0...300 psi (ANSI)      |     |   |   |   |   |   |   | H25 |   |   |   |      |
| 0...400 psi (ANSI)      |     |   |   |   |   |   |   | H26 |   |   |   |      |
| 0...600 psi (ANSI)      |     |   |   |   |   |   |   | H27 |   |   |   |      |
| -30HG...60 psi (ANSI)   |     |   |   |   |   |   |   | H2C |   |   |   |      |
| 0...1000 psi (ANSI)     |     |   |   |   |   |   |   | H30 |   |   |   |      |
| 0...1500 psi (ANSI)     |     |   |   |   |   |   |   | H31 |   |   |   |      |
| 0...3000 psi (ANSI)     |     |   |   |   |   |   |   | H34 |   |   |   |      |
| 0...6000 psi (ANSI)     |     |   |   |   |   |   |   | H38 |   |   |   |      |
| 0...10000 psi (ANSI)    |     |   |   |   |   |   |   | H40 |   |   |   |      |
| -30HG...0 psi (ANSI)    |     |   |   |   |   |   |   | H59 |   |   |   |      |
| -30HG...15 psi (ANSI)   |     |   |   |   |   |   |   | H73 |   |   |   |      |
| -30HG...30 psi (ANSI)   |     |   |   |   |   |   |   | H75 |   |   |   |      |
| -30HG...100 psi (ANSI)  |     |   |   |   |   |   |   | H78 |   |   |   |      |
| -30HG...150 psi (ANSI)  |     |   |   |   |   |   |   | H79 |   |   |   |      |
| -30HG...220 psi (ANSI)  |     |   |   |   |   |   |   | H81 |   |   |   |      |
| -30HG...300 psi (ANSI)  |     |   |   |   |   |   |   | H82 |   |   |   |      |
| <b>Kind of pressure</b> |     |   |   |   |   |   |   |     |   |   |   |      |
| Relative (gauged)       |     |   |   |   |   |   |   |     |   |   | R |      |
| Absolute                |     |   |   |   |   |   |   |     |   |   | A |      |
| <b>Settings</b>         |     |   |   |   |   |   |   |     |   |   |   |      |
| Without setting         |     |   |   |   |   |   |   |     |   |   | 0 |      |

**Ordering information**

**Ordering key - Configuration possibilities see website**

**CPX - X . # . # ### # . 0 ####**

**Electrical Connection**

|  |      |
|--|------|
| M12-A, 5-pin with shielded cable, length: 2 m  | 0604 |
| M12-A, 5-pin with shielded cable, length: 5 m  | 0605 |
| M12-A, 5-pin with shielded cable, length: 10 m | 0606 |
| DIN 43650, 4-pol, spec. Wiring                 | 2171 |
| M12 mobil plug + cable 10 m length             | 2236 |
| M12 mobil plug + cable 2 m length              | 2267 |
| M12 mobil plug + cable 5 m length              | 2269 |