



Pressure sensors  
Pressure switch

PBS-RB1X0SG2SS0BMA0Z



**Model Name** > **PBS-RB1X0SG2SS0BMA0Z**  
**Part No.** > **6041279**



*Product may differ from illustration*

#### At a glance

- Gauge measurement ranges from 0 ... 1 bar up to 0 ... 600 bar
- No moving parts: No mechanical wear, fatigue-proof, maintenance-free
- Stainless steel membrane
- Various programmable switching functions
- Digital outputs PNP or NPN, Analog output signal 4 ... 20 mA or 0 ... 10 V
- Min/max pressure memory
- Password protection
- Selection of different pressure units for the display
- IO-Link optional

#### Your benefits

- Compact size takes up less space
- Dual rotatable housing ensures flexible installation
- Quick and easy setup and operation due to three large buttons and bright display
- Wide range of applications
- Resistant against corrosive media due to circularly welded, hermetically sealed stainless steel membrane
- Available in a wide selection of configurations, enabling a perfect match to individual customer requirements
- IO-Link technology provides time and cost savings by enabling parameter adjustments, for example, upon product changeover to be performed remotely



#### Features

|                      |                                                                                                                                                                |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pressure type:       | Gauge pressure                                                                                                                                                 |
| Measuring range:     | 0 bar ... 1 bar                                                                                                                                                |
| Process temperature: | -20 °C ... 85 °C                                                                                                                                               |
| Rated temperature:   | 0 °C ... 80 °C                                                                                                                                                 |
| CE-conformity:       | ✓                                                                                                                                                              |
| Display:             | 14-segment-LED, blue, 4-digits, height 9 mm, electronically turnable by 180°, Update: 1000, 500, 200, 100 ms (adjustable), Accuracy: ≤ 1.0 % of span ± 1 digit |
| Output signal:       | 1x PNP + 4...20 mA                                                                                                                                             |

#### Performance

|                |                                       |
|----------------|---------------------------------------|
| Accuracy:      | ≤ +/- 1 % (of span)                   |
| Non-linearity: | 0.5 % (Best Fit Straight Line (BFSL)) |

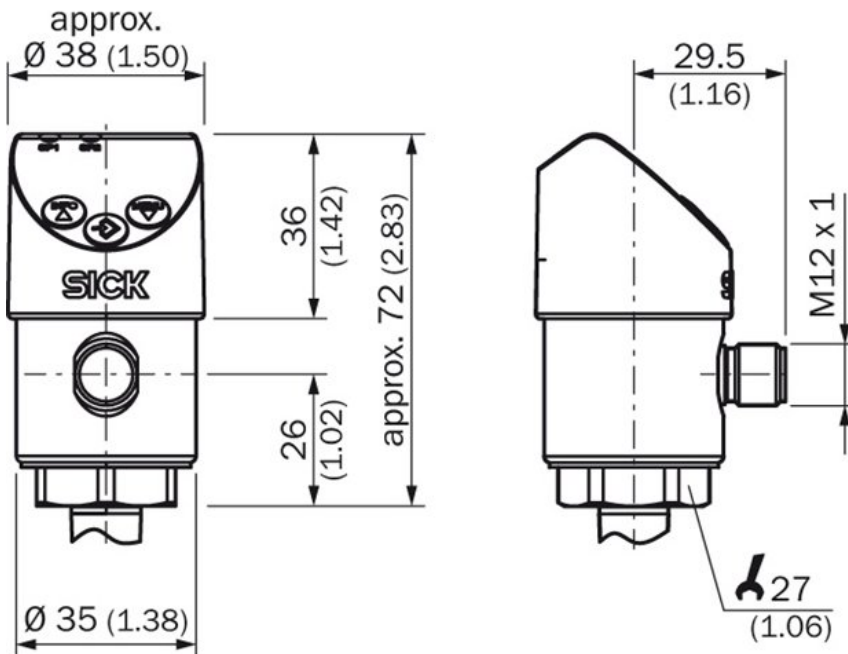
## Mechanics/electronics

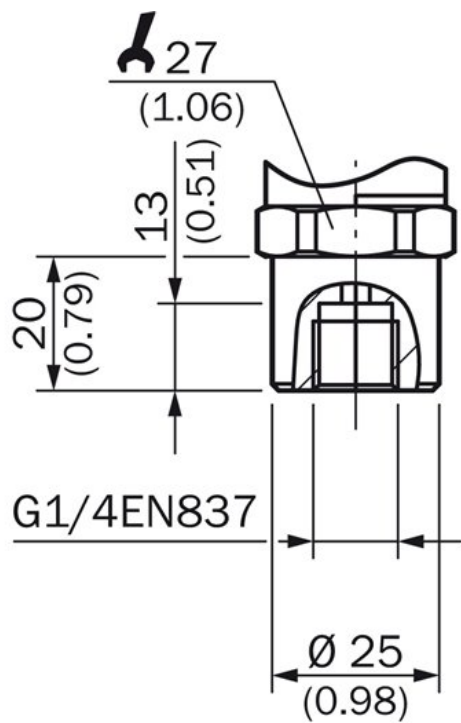
|                       |                                                                                                                                                   |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Process connection:   | G 1/4 (female)                                                                                                                                    |
| Wetted parts:         | Pressure Connection: 316L, Pressure sensor: 316 L (for measurement ranges from 0 ... 10 bar rel: 13-8 PH)                                         |
| Seal:                 | Without seal                                                                                                                                      |
| Housing material:     | Display window: PC, Plastic head: PC + ABS, Buttons: TPE-E, Lower body: 316 L                                                                     |
| Enclosure rating:     | IP 67                                                                                                                                             |
| Connection type:      | Plug M12 x1, 4-pin                                                                                                                                |
| Supply voltage:       | 15 V DC ... 35 V DC                                                                                                                               |
| Power consumption:    | 100 mA                                                                                                                                            |
| Electrical safety:    | Short-circuit protection: QA, Q1, Q2 towards M, Protection class: III, Overvoltage protection: 40 V DC, Reverse polarity protection: L+ towards M |
| Protection class III: | ✓                                                                                                                                                 |

## Ambient data

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| Ambient temperature: | -20 °C ... 80 °C                                            |
| Shock load:          | 50 g according to IEC 60068-2-27 (mechanical shock)         |
| Vibration load:      | 10 g according to IEC 60068-2-6 (vibration under resonance) |

## Dimensional drawing housing





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