AbN
automation



# PBST-RB010SN1SSFQMA0Z
## PBST

**PRESSURE SENSORS**

**SICK**
Sensor Intelligence.

# PBST-RB010SN1SSFQMA0Z | PBST

## PRESSURE SENSORS



Illustration may differ

## Ordering information

| Type | part no. |
|---|---|
| PBST-RB010SN1SSFQMA0Z | 6088776 |

Other models and accessories ➜ www.sick.com/PBST

## Detailed technical data

### Features

| | |
|---|---|
| Medium | Liquid, gaseous |
| Pressure type | Gauge pressure |
| Pressure unit | bar (can be switched to psi, MPa, kPa, mmH2O, mmHG, %) |
| Measuring range | 0 bar … 10 bar |
| Process temperature | −25 °C … +100 °C |
| Maximum ohmic load $R_A$ | 4 mA … 20 mA ($R_A$ ≤ 0.5 kOhm), 0 V … 10 V, 3-wire ($R_A$ > 10 kOhm) |
| Zero point adjustment | Max. + 3 % of span |
| Output signal | Output 1 (pin 4): PNP/NPN/PP or IO-Link, Output 2 (pin 2): PNP/NPN/PP or analog 4...20 mA, 0...10 V, 1...10 V (each freely scalable up to max. 5:1) |
| Rotatable housing | Housing with display opposite process connection: 350° |
| Display | 0.96" TFT color display with touch function (160 x 80 pixels) |

### Mechanics/electronics

| | |
|---|---|
| Communication interface | IO-Link |
| Process connection | ¼" NPT |
| Wetted parts | Process connection: 1.4404 stainless steel<br>Measuring chamber: Al2O3 96%<br>Seals: FPM/FKM |
| Pressure port | M5 internal thread for pressure spike restrictor |
| Housing material | Housing: 1.4301/1.4305 stainless steel, Display: glass, Display seal: PE |
| Connection type | M12 round connector x 1, 4-pin |
| Supply voltage | 9 V DC … 30 V DC |

[1] Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

| | |
|---|---|
| **Power consumption** | < 30 mA |
| **Total current consumption** | 400 mA (max. 200 mA per output) |
| **Electrical safety** | Protection class: III<br>Overvoltage protection: 32 V DC<br>Short-circuit resistance: Yes<br>Reverse polarity protection: Yes |
| **CE-conformity** | EMC Directive: 2014/30 / EU (EN 61326-1:2013; EN 61326-2-3:2013) |
| **Weight sensor** | Approx. 190 g |
| **Seal** | FKM |
| **Enclosure rating** | IP65 [1]<br>IP67 [1]<br>IP68 [1] |
| **Protection class III** | ✓ |
| **MTTF** | 478 years |

[1] Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

## Performance

| | |
|---|---|
| **Accuracy** | ≤ ± 0.5 % |
| **Response time** | < 3 ms |
| **Long-term drift/one-year stability** | ≤ 0.1 % FS / K |
| **Temperature coefficient in rated temperature range** | +/- 1.5% FS (< 100 bar)<br>+/- 2.5% (≥ 100 bar) |
| **Rated temperature range** | –25 °C ... +80 °C |
| **Service life** | 100 million load cycles |

## Ambient data

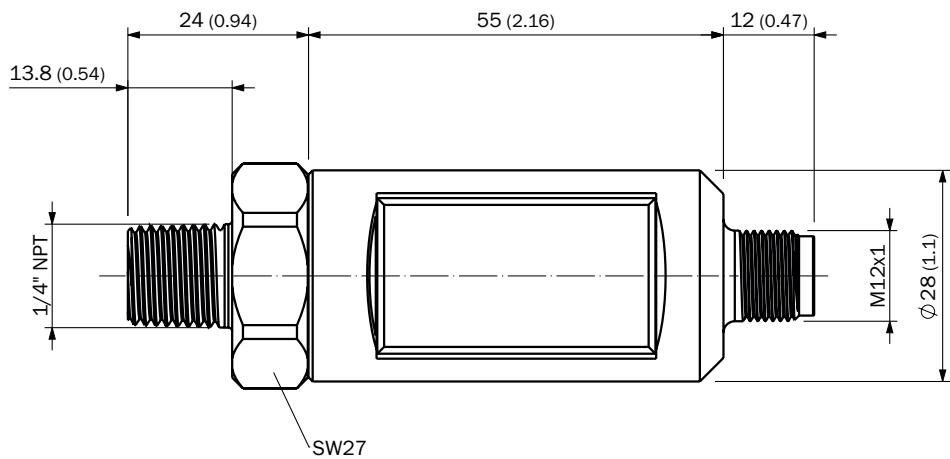| | |
|---|---|
| **Ambient temperature, operation** | –25 °C ... +80 °C |
| **Storage temperature** | –30 °C ... +85 °C |
| **Relative humidity** | ≤ 90 % |
| **Shock load** | 50 g, 11 ms, XYZ, according to DIN EN 60068-2-27 |
| **Vibration load** | 20 g, 10 Hz ... 2,000 Hz, XYZ, according to DIN EN 60068-2-6 |

## Classifications

| | |
|---|---|
| **ECLASS 5.0** | 27200620 |
| **ECLASS 5.1.4** | 27200620 |
| **ECLASS 6.0** | 27200620 |
| **ECLASS 6.2** | 27200620 |
| **ECLASS 7.0** | 27200620 |
| **ECLASS 8.0** | 27200620 |
| **ECLASS 8.1** | 27200620 |
| **ECLASS 9.0** | 27200620 |
| **ECLASS 10.0** | 27200620 |
| **ECLASS 11.0** | 27200620 |
| **ECLASS 12.0** | 27200620 |
| **ETIM 5.0** | EC000243 |

| ETIM 6.0 | EC000243 |
|---|---|
| ETIM 7.0 | EC000243 |
| ETIM 8.0 | EC000243 |
| UNSPSC 16.0901 | 41112409 |

## Certificates

| EU declaration of conformity | ✓ |
|---|---|
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China-RoHS | ✓ |
| cULus certificate | ✓ |
| IO-Link | ✓ |

## Dimensional drawing



Dimensions in mm (inch)

## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is "Sensor Intelligence."**

## WORLDWIDE PRESENCE:

Contacts and other locations –**www.sick.com**

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