



PFT-23PDM

PFT-2

PRESSURE SENSORS

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|-----------|----------|
| PFT-23PDM | 6087730 |

Other models and accessories → www.sick.com/PFT-2

Illustration may differ



Detailed technical data

Features

| | |
|--|--|
| Medium | Liquid, gaseous |
| Pressure type | Gauge pressure |
| Pressure unit | bar psi |
| Measuring range | 0 bar ... 1 bar 0 psi ... 14.5 psi |
| Process temperature | -40 °C ... +100 °C -40 °F ... 212 °F |
| Maximum ohmic load R_A | 4 mA ... 20 mA, 2-wire ($R_A \leq (L^+ - 12 \text{ V}) / 0.022 \text{ A [0hm]}$) |
| Output signal | 4 mA ... 20 mA, 2-wire |

Mechanics/electronics

| | |
|------------------------------------|--|
| Communication interface | - |
| Process connection | G ½ flush-mounted (ISO228-1) with EPDM O-ring |
| Wetted parts | Process connection, measuring diaphragm: 316L |
| Internal transmission fluid | Silicone oil |
| Housing material | Stainless steel 316L |
| Connection type | M12 round connector x 1, 4-pin |
| Supply voltage | 12 V DC ... 35 V DC |
| Electrical safety | Overvoltage protection: 39 V DC |
| Dielectric strength | 500 V AC |
| CE-conformity | EMC Directive: 2014/30 / EU, EN 61326-1, EN 61326-2-3:2013 ¹⁾ |
| Weight sensor | Approx. 250 g |
| Seal | EPDM |
| Enclosure rating | IP66 ²⁾ |

¹⁾ Emission: Class B/Immunity: Industrial Area.

²⁾ Enclosure rating IP per IEC 60529. The enclosure rating classes specified only apply when connected with female connectors that provide the corresponding enclosure rating.

| | |
|-----------------------------|------|
| | IP67 |
| Protection class III | ✓ |

¹⁾ Emission: Class B/Immunity: Industrial Area.

²⁾ 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 | $\leq \pm 0.5 \%$, of the span (DIN EN 60770-1) ¹⁾ |
| Response time (10 % ... 90 %) | Approx. 15 ms |
| Long-term drift/one-year stability | < 0.15 % Within the nominal measuring range |
| Temperature coefficient in rated temperature range | < 0.15% / 10 K ²⁾ |
| Rated temperature range | 0 °C ... +100 °C |
| Service life | Minimum 10 Mio. load cycles |

¹⁾ Within the nominal measuring range, incl. non-linearity, hysteresis and non-repeatability.

²⁾ In the compensated temperature range -40 °C ... 100 °C (-40 °F ... 212 °F), reference temperature 20 °C (68 °F).

Ambient data

| | |
|---------------------------------------|--|
| Ambient temperature, operation | -40 °C ... +70 °C -40 °F ... 158 °F |
| Storage temperature | -40 °C ... +70 °C, with flush-mounted membrane and cooling element -20 °C ... +100 °C -40 °F ... 158 °F |
| Shock load | Class 6M4 according to IEC 60721-3-6 (50 g, 2.3 ms) |
| Vibration load | Class 4M8 according to IEC 60271-3-4 (5 g at 4 Hz ... 200 Hz) |

Classifications

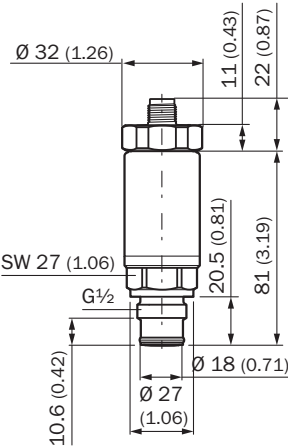
| | |
|-----------------------|----------|
| ECLASS 5.0 | 27200614 |
| ECLASS 5.1.4 | 27200614 |
| ECLASS 6.0 | 27200614 |
| ECLASS 6.2 | 27200614 |
| ECLASS 7.0 | 27200614 |
| ECLASS 8.0 | 27200614 |
| ECLASS 8.1 | 27200614 |
| ECLASS 9.0 | 27200614 |
| ECLASS 10.0 | 27200614 |
| ECLASS 11.0 | 27200614 |
| ECLASS 12.0 | 27200614 |
| ETIM 5.0 | EC011478 |
| ETIM 6.0 | EC011478 |
| ETIM 7.0 | EC011478 |
| ETIM 8.0 | EC011478 |
| UNSPSC 16.0901 | 41112410 |

Certificates

| | |
|-------------------------------------|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |

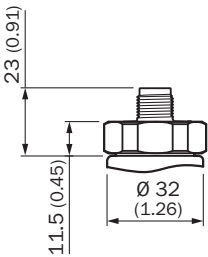
| | |
|---|---|
| ACMA declaration of conformity | ✓ |
| Moroccan declaration of conformity | ✓ |
| China-RoHS | ✓ |
| cULus certificate | ✓ |
| RoHS manufacturer declaration | ✓ |

Dimensional drawing G ½ flush-mounted with O-ring (ISO228-1)



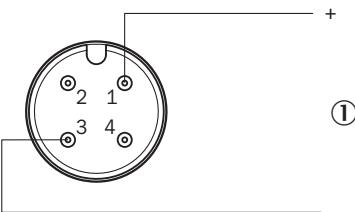
Dimensions in mm (inch)

Dimensional drawing Housing with circular plug-in connector M12 x 1



Dimensions in mm (inch)

Connection type





Recommended accessories

Other models and accessories → www.sick.com/PFT-2

| | Brief description | Type | part no. |
|---|---|--------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-020UB3XLEAX | 2095607 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF2A14-020VB3XLEAX | 2096234 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-050UB3XLEAX | 2095608 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF2A14-050VB3XLEAX | 2096235 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-100UB3XLEAX | 2095609 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF2A14-100VB3XLEAX | 2096236 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 15 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-150UB3XLEAX | 2095610 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 15 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Uncontaminated zones | YF2A14-150VB3XLEAX | 2096237 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-200UB3XLEAX | 2095611 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded | YF2A14-200VB3XLEAX | 2096238 |

| | Brief description | Type | part no. |
|---|---|--------------------|----------|
|  | <ul style="list-style-type: none"> Application: Zones with chemicals, Untaminated zones Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 25 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-250UB3XLEAX | 2095615 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-020UB3XLEAX | 2095766 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-020VB3XLEAX | 2095895 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-050UB3XLEAX | 2095767 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-050VB3XLEAX | 2095897 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-100UB3XLEAX | 2095768 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 10 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-100VB3XLEAX | 2095898 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 15 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-150UB3XLEAX | 2095769 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 15 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-150VB3XLEAX | 2096213 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-200UB3XLEAX | 2095770 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 20 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded | YG2A14-200VB3XLEAX | 2096214 |

| | Brief description | Type | part no. |
|---|---|--------------------|----------|
|  | <ul style="list-style-type: none"> Application: Zones with chemicals, Untaminated zones Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 25 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-250UB3XLEAX | 2095771 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-C60UB3XLEAX | 2145654 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-010UB3XLEAX | 2145655 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 3 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YF2A14-030UB3XLEAX | 2145656 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-C60UB3XLEAX | 2145657 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PUR, halogen-free Description: Sensor/actuator cable, unshielded Application: Untaminated zones, Zones with oils and lubricants, Robot, Drag chain operation | YG2A14-010UB3XLEAX | 2145658 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-C60VB3XLEAX | 2145709 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YG2A14-010VB3XLEAX | 2145710 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 0.6 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YF2A14-C60VB3XLEAX | 2145707 |
|  | <ul style="list-style-type: none"> Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 1 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals, Untaminated zones | YF2A14-010VB3XLEAX | 2145708 |
| Mounting systems | | | |
|  | <ul style="list-style-type: none"> Description: Weld-in flange/weld-in socket for articles with flush-mounted membrane, process connection G 1/2 B Material: Stainless steel Details: Stainless steel 1.4571 | BEF-FL-316G12-BOPH | 5322449 |

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