



# PI-Safe

Inductive safety sensors

Short form

# PI-Safe

proximity inductive safety sensors



# A complete range of sensors for positioning detection ...

- Fail-safe inductive sensor
- Certification to EN 60947-5-3
- Ensuring operator and machine safety
- No special actuator required
- Connection to a Safety PLC or Safety Controller
- Protection class: III



# Key characteristics

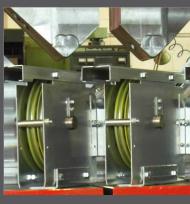
- DC voltage type and PNP Electrical design
- M12 4-pole connector
- IP65 and IP67 protection grade
- -25...70 °C ambient temperature
- Operation: green LED; Signal: yellow LED















PI-Safe safety sensors increase the uptime and safety of installations and can be connected to approved evaluation units without cross-fault monitoring.

PI-Safe can generally be installed in all those applications that require a non-contact and safe detection of a metal object.

Applications include reliable positioning on rotary indexing tables and machine tools, safe triggering of slow travel or switching off in end positions for presses, gantry robots and actuators.

Wear-free operation guarantees low maintenance costs.

Faults such as coil break or coil short circuit are diagnosed switching the sensor into the defined safe state. Even a cross fault between the supply voltage and one of the two outputs does not affect the safety function of the sensor.



according to EN 60947-5-3 IEC 61508

ISO 13849

# An extensive range of positioning sensors

# **PI M12 NF**

 $M12 \times 1 / L = 70 \text{ mm}$ Non-flush mounted



P/N 1293000

#### Characteristics

Enable zone 0.5...4 mm

Operating voltage DC

19.2...30 V

Current rating 100 mA

Materials

Body: stainless steel;

Head: PBT

Classification
SIL2 / PLd

# **PI M18 NF**

M18 x 1 / L = 70,5 mm Non-flush mounted



P/N 1293001

#### Characteristics

Enable zone 1...8 mm

Operating voltage DC

19.2...30 V

Current rating 100 mA

Materials

Body: stainless steel:

Head: PBT

Classification
SIL2 / PLd

#### PI M18 F

 $M18 \times 1 / L = 70 \text{ mm}$ Flush mounted



P/N 1293002

#### Characteristics

Enable zone 1...5 mm

Operating voltage DC

19.2...30 V

Current rating 100 mA

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Materials

Body: brass white bronze

coated; Head: PBT

Classification SIL2 / PLd

# Accessories

# Angle brackets



For mounting cylindrical sensors
Easy, quick and inexpensive fixing
Robust stainless steel design for
use in harsh industrial environments
For free-standing mounting

# Mounting clamps



End stop for defined installation position

Safe fixing of the sensor with click-fit mounting
For mounting cylindrical sensors

Easy, quick and inexpensive fixing Reliable mounting on a surface by means of two screws

# **PI M18 F R**

M18 x 1 / L = 86.5 mm Flush mounted



P/N 1293003

#### Characteristics

Enable zone > 10 mm

Operating voltage DC 10...30 V

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Current rating 50 mA

Materials

Body: brass white bronze

coated; Head: PBT

Classification SIL2 / PLd

# PI M30 NF

 $M30 \times 1.5 / L = 70 \text{ mm}$ Non-flush mounted



P/N 1293004

#### Characteristics

Enable zone 1...15 mm

Operating voltage DC

19.2...30 V

Current rating 100 mA

Materials

Body: stainless steel;

Head: PBT

Classification
SIL2 / PLd

# PI M30 F

 $M30 \times 1.5 / L = 70 \text{ mm}$ Flush mounted



P/N 1293005

#### Characteristics

Enable zone 1...10 mm

Operating voltage DC

19.2...30 V

Current rating 100 mA

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Materials

Body: brass white bronze

coated; Head: PBT

Classification

SIL2 / PLd



M12 Angle bracket P/N 1293100



M18 Angle bracket



M12 Mounting clamp P/N 1293103



M18 Mounting clamp P/N 1293104



# PI M30 NF K

 $M30 \times 1.5 / L = 80 \text{ mm}$ Non-flush mounted

# PI SQ F-NF

40 x 40 x 66 mm Flush/Non-flush mounted

# PI SQ NF

40 x 40 x 66 mm Non-flush mounted







P/N 1293007



P/N 1293008

#### Characteristics

Enable zone 6...12 mm Operating voltage DC 19.2...30 V Current rating

100 mA *Materials* 

Body: stainless steel;

Head: PBT Classification SIL3 / PLe

#### Characteristics

Enable zone 10...15 mm

Operating voltage DC 19.2...30 V

Materials

Body: diecast zinc;

Head: PPE

Classification
SIL3 / PLe

#### Characteristics

Enable zone 4...20 mm

Operating voltage DC

19.2...30 V

Materials

Body: diecast zinc;

Head: PPE Classification SIL3 / PLe



M30 Angle bracket P/N 1293102



M30 Mounting clamp
P/N 1293105



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The Safety Division is in fact today a world leader in the development and manufacturing of safety optoelectronic sensors and controllers.

ReeR is ISO 9001, ISO 14001 and ISO 45001 certified.





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