# Inductive **Proximity Switch** Mi250-Ex



- Proximity switch for the use in explosive areas
- Temperature range -15°C ... 230°C (short-time up to 250°C)
- up to 20 m cable length

## Mounting of the sensor head:

The proximity switch can be attached to a metallic base with 4 screws at the fastening angle.

The metallic base should be in line with the white teflon cover of the initiator.

Sensor head and cable can be mounted inside the Ex zone, the electronic module should be mounted outside.

#### Minimum lateral distances:

Sensor to sensor:

NJ 20: 30 mm; NJ 25: 50 mm

Sensor to metal:

NJ 20: 30 mm; NJ 25: 50 mm

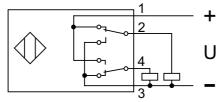
### Minimun distances of opposite sensors:

NJ 20: 90 mm; NJ 25: 120 mm

#### Sensor cable:

The cable is delivered with external steel mesh protection. Since the inside material is teflon, no sharp bending or permanent pressing may be applied!

## **Connections:**

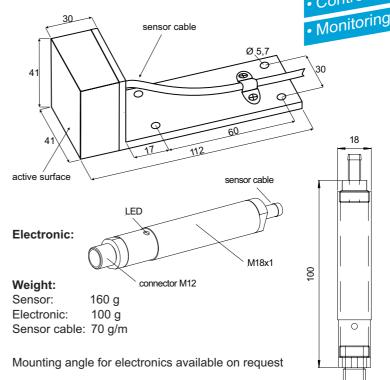


Pin assignment: 1: +24 V

4: Switching output NO

2: Switching output NC 5: PE

#### Sensor head:



#### **Technical Data:**

Hardware class Group II, class 3

Ambient temperature.	_
< 75°C	
< 90°C	😉 II 3 G EEx n IIC T5
< 125°C	😉 II 3 G EEx n IIC T4
< 190°C	
< 250°C	🕼 II 3 G EEx n IIC T2

Ex-protection standards EN 60079-0:2004,

ignition protection class "n" according to EN 60079-15:2003

Measuring

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Switching distance \* NJ 20 = 20 - 22,5 mm

NJ 25 = 24,5 - 26 mm

Work piece (St37) NJ 20: min. 40x32 mm NJ 25: min. 60x60 mm

Supply voltage 24 V / 15 ... 50mA + la Ripple max. 0,5 Vss

Switching frequency 0 ... 60 Hz

4: 24 V (NO) short-circuit proof Switching outputs

2: 24 V (NC)

Ia / 20°C = 100 mA Output current

 $I_a / 70^{\circ}C = 50 \text{ mA}$ 

LED red, illuminated if initiated

Sensor: -15°C ... 230°C, Temperature range

(short-time up to 250°C) Electronic: 0°C ... 70°C

Protection class Sensor: IP60, Electronic: IP64

Connector M12, 5 pin

Cable length 7, 10 or 20 m (20 m only at

switching distance 20 mm)

Mounting angle for electronic Option

module

<sup>\*</sup> used sensor surface is 70%