



ENGLISH

Datasheet

RS PRO M30 x 1.5 Inductive Sensor - Barrel

Stock No: 701-8247

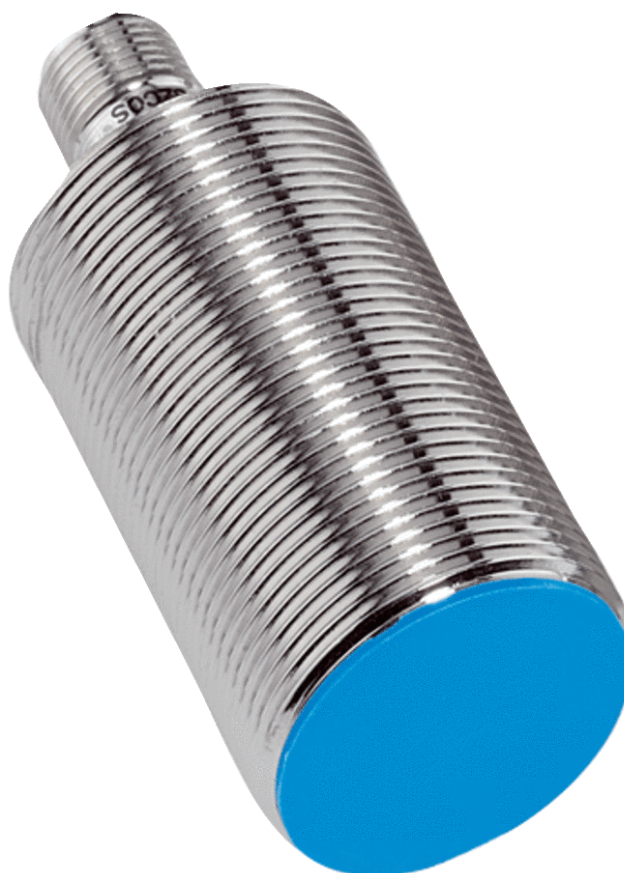




Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S_n	10 mm
Safe sensing range S_a	8.1 mm
Installation type	Flush
Switching frequency	500 Hz
Connection type	Male connector M12, 4-pin
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V ¹⁾
Current consumption	10 mA ²⁾

¹⁾ At I_a max.

²⁾ Without load.

³⁾ U_b and T_a constant.

⁴⁾ Of S_r .

Time delay before availability	≤ 125 ms
Hysteresis	5 % ... 15 %
Reproducibility	≤ 2 % ^{3) 4)}
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms/10 Hz ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	71 mm
Thread length	54 mm
Tightening torque, max.	≤ 100 Nm
Items supplied	Mounting nut, brass, nickel-plated (2x)
UL File No.	NRKH.E181493

1) At I_a max.

2) Without load.

3) U_b and T_a constant.

4) Of S_r.

Safety-related parameters

MTTF_D	1,735 years
DC_{avg}	0%

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
B	30 mm
C	30 mm
D	30 mm
F	80 mm

Classifications

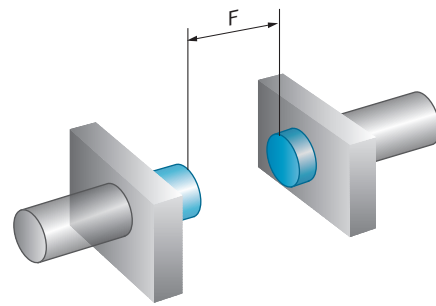
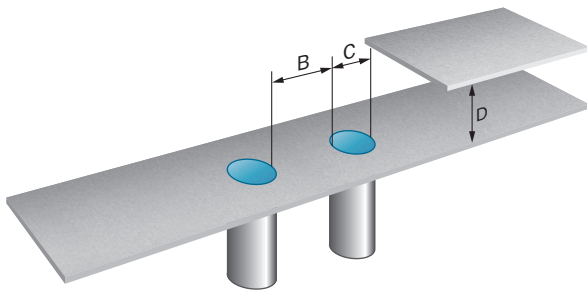
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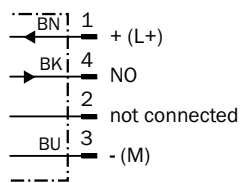
Installation note

Flush installation



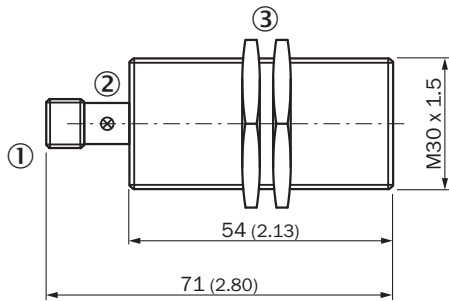
Connection diagram

Cd-007








Dimensional drawing (Dimensions in mm (inch))

IME30 Standard, connector, flush



- ① Connection
- ② LED indicator
- ③ Fastening nuts (2x); width across 36, metal

Brief description	
Mounting brackets and plates	
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware
	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware
Plug connectors and cables	
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m
	Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded

Brief description

Head A: female connector, M12, 4-pin, angled
Head B: -
Cable: unshielded