

Datasheet

RS PRO INDUCTIVE PROXIMITY SENSORS

Stock No: 2066130





Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
Thread size	M8 x 1
Diameter	Ø 8 mm
Sensing range S_n	2 mm
Safe sensing range S_a	1.62 mm
Installation type	Flush
Switching frequency	4,000 Hz
Connection type	Male connector M12, 4-pin 1)
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP68 2) IP69K 3)
Special features	Resistant against coolant lubricants, Visual adjustment indicator
Special applications	Zones with coolants and lubricants, Mobile machines, Difficult application conditions

- 1) With gold plated contact pins.
- 2) According to EN 60529.
- 3) According to ISO 20653:2013-03.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V 1)
Current consumption	10 mA 2)
Hysteresis	3 % ... 20 %

Reproducibility	≤ 2 % ^{3) 4)}
Temperature drift (of Sr)	± 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	100 g / 11 ms / 1000 cycles; 150 g / 1 Mio cycles; 10 Hz ... 55 Hz, 1 mm / 55 Hz ... 500 Hz / 15 g
Ambient operating temperature	-40 °C ... +100 °C
Housing material	Stainless steel V2A, DIN 1.4305 / AISI 303
Sensing face material	Plastic, LCP
Housing length	60 mm
Thread length	32 mm
Tightening torque, max.	Typ. 14 Nm ⁵⁾
Items supplied	Mounting nut, V2A stainless steel, with locking teeth (2x)
UL File No.	E181493

1) At I_a max.

2) Without load.

3) U_b and T_a constant.

4) Of Sr.

5) Valid if toothed side of nut is used.

Safety-related parameters

MTTF _D	1,971 years
DC _{avg}	0%

Reduction factors

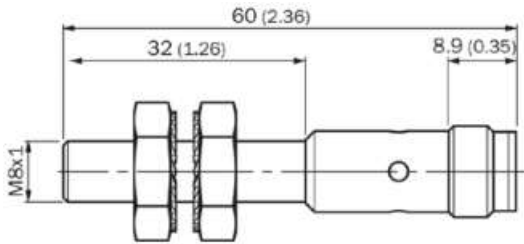
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.74
Aluminum (Al)	Approx. 0.43
Copper (Cu)	Approx. 0.33
Brass (Br)	Approx. 0.46

Installation note

Remark	Associated graphic see "Installation"
B	6.5 mm
C	8 mm
D	6 mm
F	16 mm

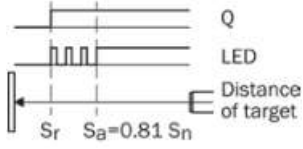
Dimensional drawing (Dimensions in mm (inch))

Standard, connector, M12, flush



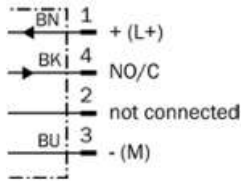
Adjustments

Installation aid



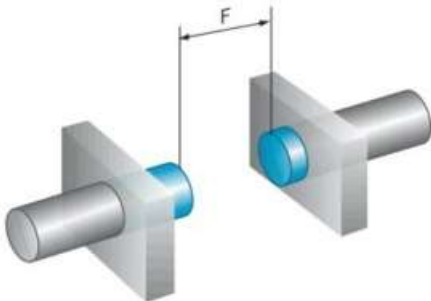
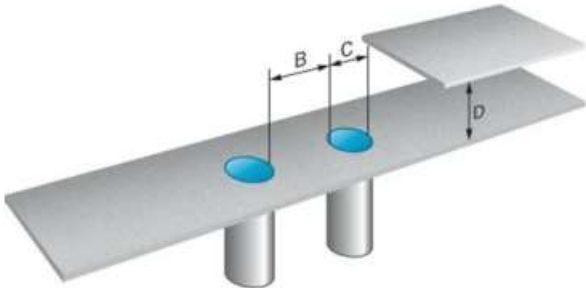
Connection diagram

Cd-456



Instruction for installation

Flush installation



Operating reserve

Response diagram

Distance in mm (inch)

