

Datasheet

RS PRO INDUCTIVE PROXIMITY SENSORS

Stock No: 2066164





Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	20 mm
Safe sensing range S_a	16.2 mm
Installation type	Non-flush
Switching frequency	200 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 1)
Special features	Triple sensing range

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)
Time delay before availability	≤ 100 ms
Hysteresis	1 % ... 15 %
Reproducibility	≤ 5 % 3) 4)

Temperature drift (of S_r)	$\pm 10\%$
EMC	According to EN 60947-5-2
Continuous current I_a	$\leq 200\text{ mA}$
Current consumption, no load	$\leq 10\text{ mA}$
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	$-25\text{ °C} \dots +75\text{ °C}$
Ambient storage temperature	$-25\text{ °C} \dots +75\text{ °C}$
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	50 mm
Thread length	23 mm
Tightening torque, max.	$\leq 30\text{ Nm}$
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

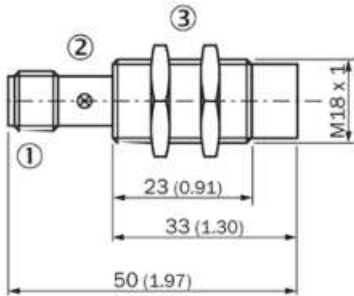
Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.78
Aluminum (Al)	Approx. 0.43
Copper (Cu)	Approx. 0.37
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
A	30 mm
B	86 mm
C	18 mm
D	60 mm
E	20 mm
F	200 mm

Dimensional drawing (Dimensions in mm (inch))

Short-body housing, connector, non-flush



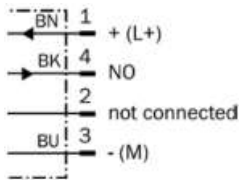
- 1 Connection
- 2 Indication LED
- 3 Fastening nuts (2x); width across 24, metal

Connection type



Connection diagram

Cd-007



Instruction for installation

Non-flush installation

