

Datasheet

RS PRO INDUCTIVE PROXIMITY SENSORS

Stock No: 2066178





Detailed technical data

Features

Housing	Rectangular
Housing	Short-body
Dimensions (W x H x D)	40 mm x 40 mm x 66 mm
Sensing range S_n	20 mm
Safe sensing range S_a	16.2 mm
Installation type	Flush
Switching frequency	150 Hz
Connection type	Male connector M12, 4-pin
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67, IP68, IP69K
Special applications	Difficult application conditions

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	$\leq 10 V_{pp}$ 1)
Voltage drop	$\leq 2 V$
Current consumption	20 mA 2)
Time delay before availability	$\leq 50 ms$
Hysteresis	3 % ... 15 % 3)
Reproducibility	$\leq 2 %$
Temperature drift (of S_r)	$\pm 10 %$
Continuous current I_a	$\leq 200 mA$
Short-circuit protection	✓
Reverse polarity protection	✓

Power-up pulse protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +85 °C
Ambient storage temperature	-40 °C ... +85 °C
Housing material	Plastic, PA 66
Sensing face material	Plastic, PA 66
Tightening torque, max.	1.8 Nm
Items supplied	Push-lock mounting system (1x)
Protection class	II 4)
UL File No.	E348498

1) Of Ub.

2) Without load.

3) Of S_r.

4) Reference voltage: 50 V DC.

Safety-related parameters

MTTF _D	1,406 years
DC _{avg}	0%

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.71
Aluminum (Al)	Approx. 0.3
Copper (Cu)	Approx. 0.25
Brass (Br)	Approx. 0.36

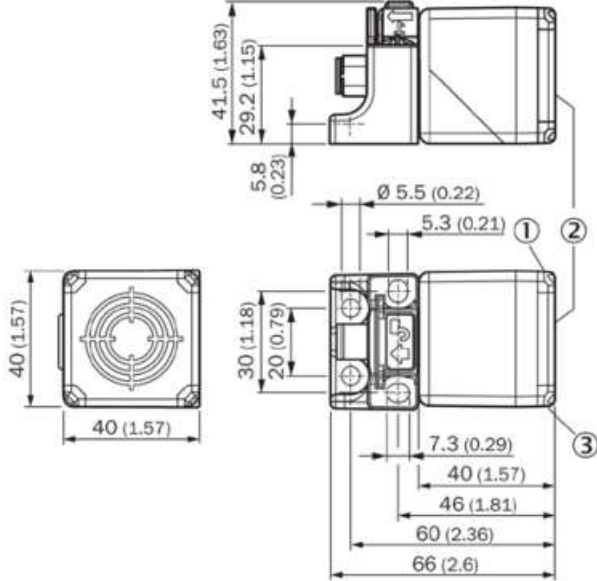
Installation note

Remark	Associated graphic see "Installation"
A	0 mm
B	40 mm
C	40 mm
D	60 mm
E	0 mm
F	70 mm

INDUCTIVE PROXIMITY SENSORS

Dimensional drawing (Dimensions in mm (inch))

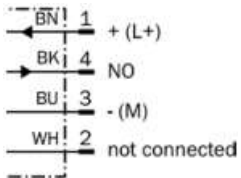
IQG Short-body housing



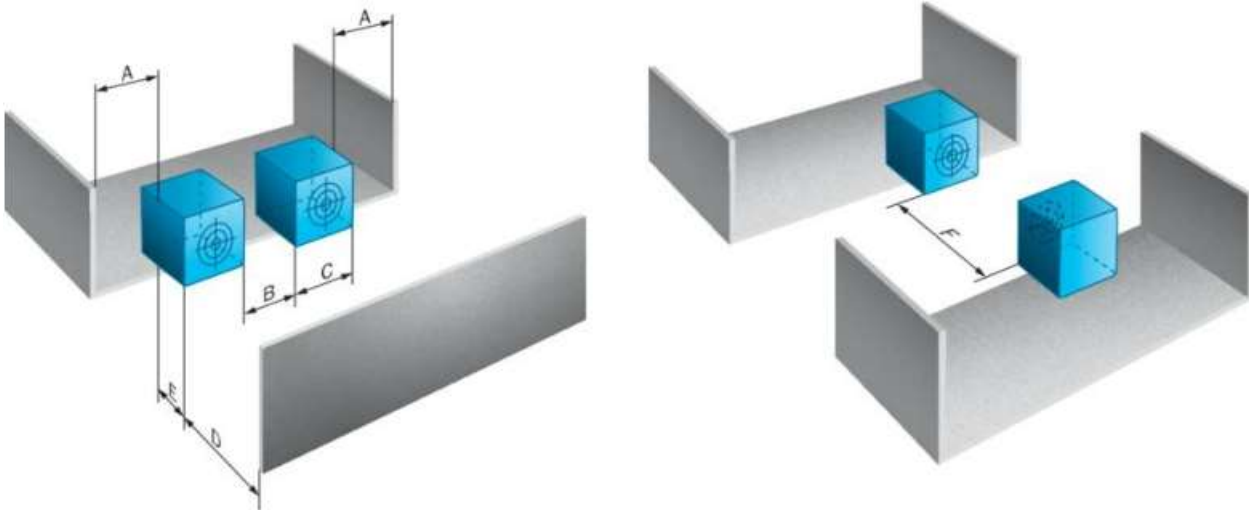
- 1 LED output state, yellow
- 2 Sensing face
- 3 Operational status LED, green

Connection diagram

Cd-011



Instruction for installation



Operating reserve

IQ40-20Bxxxxx

Distance in mm (inch)

