IME18-12BNSZUDKS28

IME

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.

Ordering information

Type	Part no.
IME18-12BNSZUDKS28	1087502

Included in delivery: BEF-MU-M18 (1)

Other models and accessories ➜ www.sick.com/IME

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Short-body
Thread size	M18 x 1
Diameter	Ø 18 mm
Sensing range S_n	12 mm
Safe sensing range S_a	9.72 mm
Installation type	Quasi-flush
Switching frequency	500 Hz
Connection type	Cable with AMP male connector, 3-pin, 0.99 m
Switching output	NPN
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 [1]
Special features	Triple sensing range
Special characteristic	10 kΩ pull-up resistance
Items supplied	Mounting nut, brass, nickel-plated (2x)

[1] According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2 V [1]

[1] At I_a max.

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] Of Sr.

Time delay before availability	≤ 50 ms
Hysteresis	1 % ... 15 %
Reproducibility	≤ 5 % [2] [3]
Temperature drift (of S_r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 200 mA
No load current	≤ 10 mA
Cable material	PUR
Cable diameter	Ø 3.9 mm
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
Ambient temperature, storage	–25 °C ... +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	48 mm
Thread length	33 mm
Tightening torque, max.	≤ 30 Nm
UL File No.	NRKH.E181493

[1] At I_a max.

[2] Supply voltage U_B and constant ambient temperature Ta.

[3] Of Sr.

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. 0.35
Brass (Br)	Approx. 0.47

Installation note

Remark	Associated graphic see "Installation"
A	13.5 mm
B	35 mm
C	18 mm
D	36 mm

E	4 mm
F	120 mm

Classifications

ECLASS 5.0	27270101
ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0	EC002714
ETIM 8.0	EC002714
UNSPSC 16.0901	39122230

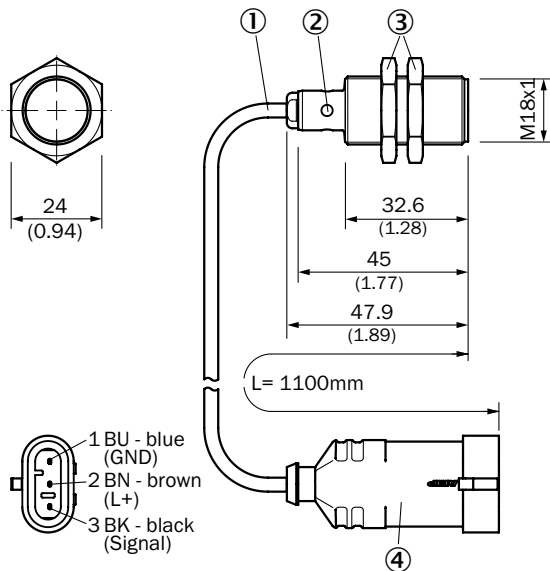## Installation note

Quasi-flush installation
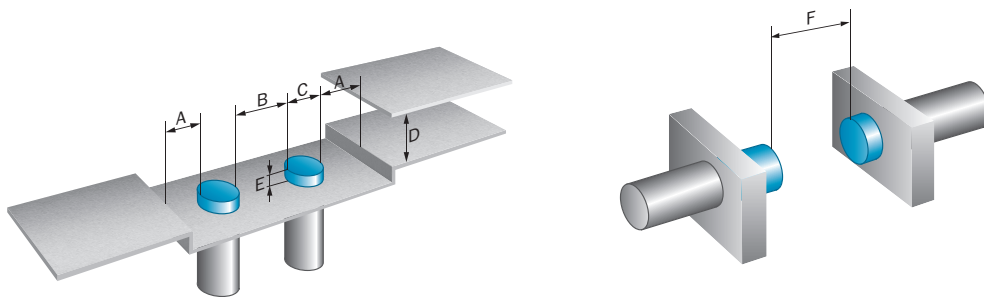
Connection diagram

Cd-459

NPN
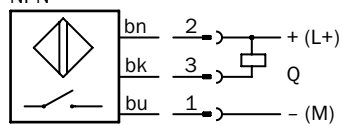
Dimensional drawing (Dimensions in mm (inch))

IME18 short variant, cable with male connector, flush

1 BU - blue (GND)
2 BN - brown (L+)
3 BK - black (Signal)

① Cable 3 x 0.25 mm² PUR; Ø 3.7 mm
② Function indicator
③ Fastening nuts (2x); width across 24, brass nickel-plated
④ Male connector: 1 x Housing: AMP no.: 0-0282105-1; 3 x Tab Contact (NC245) AMP no.: 183036-1; 3 x Green Seal (NC311) AMP no.: 281934-4

Recommended accessories

Other models and accessories ➜ www.sick.com/IME

	Brief description	Type	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
	Mounting bracket for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M18	5308446
Terminal and alignment brackets			
	Clamping block for round sensors M18, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M18	2051481
	Clamping block for round sensors M18, with fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KHF-M18	2051482

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SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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