

IME18-12BPSZQ9KS24

INDUCTIVE PROXIMITY SENSORS





Ordering information

Туре	Part no.
IME18-12BPSZQ9KS24	1081179

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

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



Detailed technical data

Features

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Housing	Metric
Housing	Short-body 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 M12 male connector, 4-pin, 0.3 m
Switching output	PNP
Output function	NO
Electrical wiring	DC 3-wire
Enclosure rating	IP67 ¹⁾
Items supplied	Mounting nut, brass, nickel-plated (2x) Washer, brass, nickel-plated (2 x)

 $^{^{1)}}$ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC
Ripple	≤ 10 %
Voltage drop	\leq 2 V $^{1)}$
Time delay before availability	≤ 50 ms

¹⁾ At I_a max.

 $^{^{\}rm 2)}$ Supply voltage U_{B} and constant ambient temperature Ta.

³⁾ Of Sr.

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
Short-circuit 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.

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 (AI)	Approx. 0.43	
Copper (Cu)	Approx. 0.35	
Brass (Br)	Approx. 0.47	

Installation note

Remark	Associated graphic see "Installation"
A	13.5 mm
В	35 mm
С	18 mm
D	36 mm
E	4 mm
F	120 mm

Classifications

ECLASS 5.0	27270101
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 $^{^{2)}\,\}mbox{Supply}$ voltage $\mbox{U}_{\mbox{\footnotesize B}}$ and constant ambient temperature Ta.

³⁾ Of Sr.

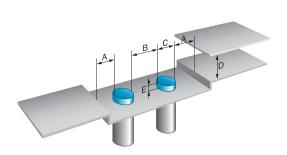
IME18-12BPSZQ9KS24 | IME

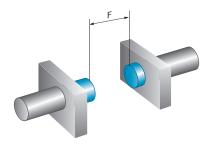
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ECLASS 5.1.4	27270101
ECLASS 6.0	27270101
ECLASS 6.2	27270101
ECLASS 7.0	27270101
ECLASS 8.0	27270101
ECLASS 8.1	27270101
ECLASS 9.0	27270101
ECLASS 10.0	27270101
ECLASS 11.0	27270101
ECLASS 12.0	27274001
ETIM 5.0	EC002714
ETIM 6.0	EC002714
ETIM 7.0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

Installation note

Quasi-flush installation



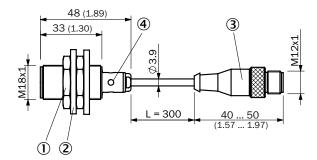


Connection diagram

Cd-008

Dimensional drawing (Dimensions in mm (inch))

IME18 short variant, cable with male connector, flush





- ① Fastening nuts (2x); width across 36, brass nickel-plated
- ② Two washers; nickel-plated brass
- ③ Connection
- 4 Function indicator

Recommended accessories

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

	Brief description	Туре	Part no.
Mounting brackets and plates			
	Mounting plate for M18 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M18	5321870
40	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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