

INDUCTIVE PROXIMITY SENSORS



INDUCTIVE PROXIMITY SENSORS



Ordering information

Туре	Part no.
IME30-15BDOZCOS	1067226

Included in delivery: BEF-MU-M30 (1)

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

Illustration may differ



Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard design
Thread size	M30 x 1.5
Diameter	Ø 30 mm
Sensing range S _n	15 mm
Safe sensing range S _a	12.15 mm
Installation type	Flush
Switching frequency	500 Hz
Connection type	Male connector M12, 4-pin
Output function	NC
Electrical wiring	DC 2-wire
Enclosure rating	IP67 ¹⁾
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	$\leq 4 V^{(1)}$ $\leq 4.5 V^{(2)}$

¹⁾ At I_a = 30 mA.

²⁾ At I_a max.

 $^{\rm 3)}$ Supply voltage U_B and constant ambient temperature Ta.

⁴⁾ Of Sr.

INDUCTIVE PROXIMITY SENSORS

Time delay before availability	≤ 100 ms
Hysteresis	3 % 15 %
Reproducibility	$\leq 2 \%^{(3)(4)}$
Temperature drift (of S _r)	± 10 %
EMC	According to EN 60947-5-2
Continuous current l _a	≤ 100 mA
Off-state current	≤ 0.8 mA
Minimum load current	≥ 3 mA
Short-circuit protection	✓
Reverse polarity protection	✓
Power-up pulse	≤ 5 ms
Shock and vibration resistance	30 g, 11 ms/10 Hz 55 Hz, 1 mm
Ambient operating temperature	-25 °C +75 °C
Housing material	Brass, nickel-plated
Sensing face material	Plastic, PA 66
Housing length	71 mm
Thread length	54 mm
-	
Tightening torque, max.	≤ 100 Nm

¹⁾ At I_a = 30 mA.

²⁾ At I_a max.

 $^{3)}$ Supply voltage ${\rm U}_{\rm B}$ and constant ambient temperature Ta.

⁴⁾ Of Sr.

Safety-related parameters

MTTF _D	1,103 years
DC _{avg}	0 %
T _M (mission time)	20 years

Reduction factors

Note	The values are reference values which may vary
St37 steel (Fe)	1
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (AI)	Approx. 0.45
Copper (Cu)	Approx. 0.4
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
В	60 mm
c	30 mm
D	45 mm
F	120 mm

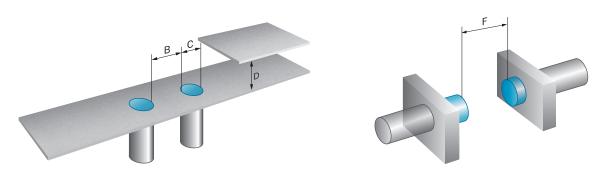
INDUCTIVE PROXIMITY SENSORS

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

Flush installation

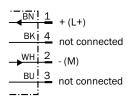


Connection type



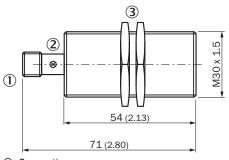
Connection diagram

Cd-245



Dimensional drawing (Dimensions in mm (inch))

IME30 Standard, connector, flush



① Connection

② Display LED

③ Fastening nuts (2x); width across 36, metal

Recommended accessories

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

	Brief description	Туре	Part no.	
Mounting bra	Mounting brackets and plates			
	Mounting plate for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M30	5321871	
	Mounting bracket for M30 sensors, steel, zinc coated, without mounting hardware	BEF-WN-M30	5308445	
Others				
N	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14- 020VB3XLEAX	2096234	

INDUCTIVE PROXIMITY SENSORS

	Brief description	Туре	Part no.
N	 Connection type head A: Female connector, M12, 4-pin, straight, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YF2A14- 050VB3XLEAX	2096235
3	 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 2 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG2A14- 020VB3XLEAX	2095895
3	 Connection type head A: Female connector, M12, 4-pin, angled, A-coded Connection type head B: Flying leads Signal type: Sensor/actuator cable Cable: 5 m, 4-wire, PVC Description: Sensor/actuator cable, unshielded Application: Zones with chemicals 	YG2A14- 050VB3XLEAX	2095897

SICK AT A GLANCE

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."

WORLDWIDE PRESENCE:

Contacts and other locations -www.sick.com



Online data sheet

