



IM30-15NDS-ZC1

IM Standard

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
IM30-15NDS-ZC1	6020332

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

Detailed technical data

Features

Housing	Cylindrical thread design
Housing	Standard
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	Non-flush
Switching frequency	150 Hz
Connection type	Male connector M12, 4-pin
Output function	NO
Electrical wiring	DC 2-wire
Enclosure rating	IP67 ¹⁾

¹⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	≤ 10 %
Voltage drop	≤ 2.8 V ¹⁾
Time delay before availability	≤ 50 ms
Hysteresis	2 % ... 10 %
Reproducibility	≤ 2 % ^{2) 3)}
Temperature drift (of S_n)	± 10 %
EMC	According to EN 60947-5-2
Continuous current I_a	≤ 100 mA
Off-state current	≤ 0.8 mA

¹⁾ At I_a max.

²⁾ U_b and T_a constant.

³⁾ Of S_r .

Minimum load current	≥ 3 mA
Short-circuit protection	✓
Reverse polarity protection	✓
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +70 °C
Housing material	Metal, Nickel-plated brass
Sensing face material	Plastic
Housing length	76 mm
Thread length	38 mm
Tightening torque, max.	60 Nm

¹⁾ At I_a max.

²⁾ U_b and T_a constant.

³⁾ Of S_r.

Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.8
Aluminum (Al)	Approx. 0.5
Copper (Cu)	Approx. 0.45
Brass (Br)	Approx. 0.55

Installation note

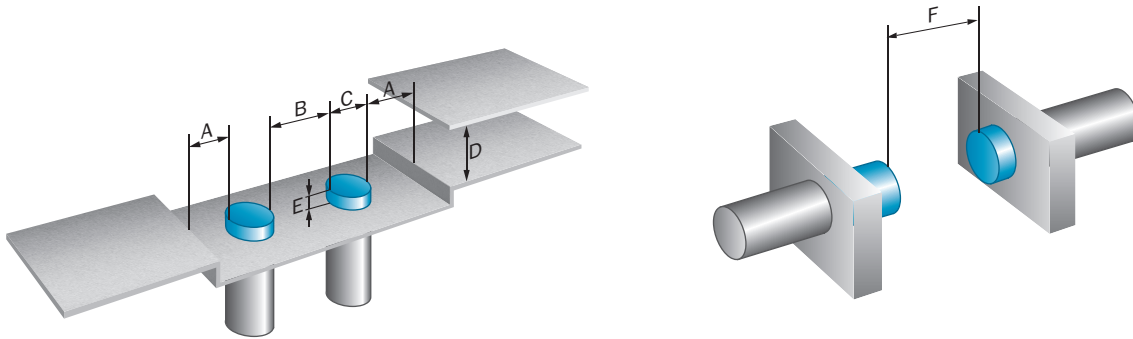
Remark	Associated graphic see "Installation"
A	15 mm
B	45 mm
C	30 mm
D	45 mm
E	18 mm
F	120 mm

Classifications

ECI@ss 5.0	27270101
ECI@ss 5.1.4	27270101
ECI@ss 6.0	27270101
ECI@ss 6.2	27270101
ECI@ss 7.0	27270101
ECI@ss 8.0	27270101
ECI@ss 8.1	27270101
ECI@ss 9.0	27270101
ETIM 5.0	EC002714
ETIM 6.0	EC002714
UNSPSC 16.0901	39122230

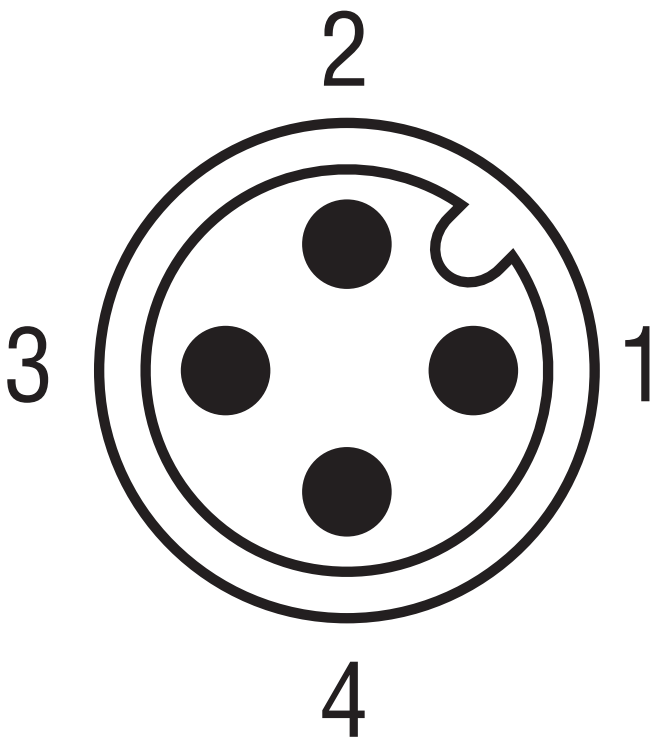
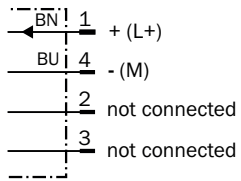
Installation note

Non-flush installation



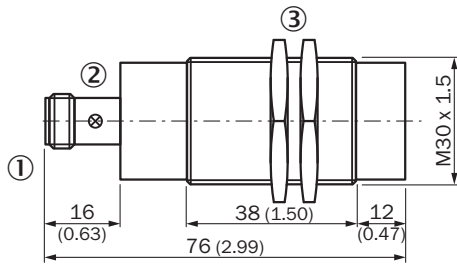
Connection diagram

Cd-014



Dimensional drawing (Dimensions in mm (inch))

IM30, DC 2-wire, male connector, non-flush



- ① Connection
- ② Indication LED
- ③ Fastening nuts (2x); width across 36, metal

Recommended accessories

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

	Brief description	Type	Part no.
Universal bar clamp systems			
	Plate N10 for universal clamp bracket, M30, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware	BEF-KHS-N10	2062372
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
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14-020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14-020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled with LED, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m Only suitable for PNP sensors	YI2A14-020VB3XLEAX	2096222

	Brief description	Type	Part no.
	Head A: female connector, M12, 4-pin, angled with LED, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m Only suitable for PNP sensors	Y12A14-050VB3XLEAX	2096223
	Head A: female connector, M12, 4-pin, straight Head B: - Cable: unshielded	D0S-1204-G	6007302
	Head A: female connector, M12, 4-pin, angled Head B: - Cable: unshielded	D0S-1204-W	6007303
	Head A: male connector, M12, 4-pin, straight Head B: - Cable: unshielded	STE-1204-G	6009932
	Head A: male connector, M12, 4-pin, angled Head B: - Cable: unshielded	STE-1204-W	6022084

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:

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