



IH20-10NUS-KU0

IH Standard

INDUCTIVE PROXIMITY SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	part no.
IH20-10NUS-KU0	7902130

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

Detailed technical data

Features

Housing	Cylindrical
Housing	Standard design
Diameter	Ø 20 mm
Sensing range S_n	10 mm
Safe sensing range S_a	8.1 mm
Installation type	Non-flush
Switching frequency	25 Hz ¹⁾ 70 Hz ²⁾
Connection type	Cable, 2-wire, 2 m
Output function	NO
Electrical wiring	AC/DC 2-wire
Enclosure rating	IP67 ³⁾

¹⁾ Supply voltage AC.

²⁾ Supply voltage DC.

³⁾ According to EN 60529.

Mechanics/electronics

Supply voltage	20 V AC/DC ... 250 V AC/DC
Voltage drop	≤ 6.5 V (AC) ≤ 6 V (DC)
Hysteresis	1 % ... 15 %
Reproducibility	≤ 10 % ¹⁾ 2) 3)
Temperature drift (of S_r)	± 10 %
EMC	As per EN 55011, class B According to EN 60947-5-2
Continuous current I_a	≤ 350 mA ⁴⁾ ≤ 250 mA ⁵⁾ ≤ 100 mA ⁶⁾
Load current	± 5 mA
Off-state current	≤ 2.5 mA (AC 250 V) ≤ 1.3 mA (AC 110 V) ≤ 0.8 mA (DC 24 V)
Short-time withstand current	2.2 A ⁷⁾
Cable material	PVC
Conductor size	0.5 mm ²
Cable diameter	Ø 5.6 mm
Short-circuit protection	8)
Shock and vibration resistance	30 g, 11 ms / 10 ... 55 Hz, 1 mm
Ambient operating temperature	-25 °C ... +80 °C
Housing material	Plastic, PBT
Sensing face material	Plastic
Housing length	77 mm
Protection class	II
Rated insulation voltage U_i	250 V AC
Usage category	AC-140 ⁹⁾ DC-13 ¹⁰⁾
Contamination rating	3
Rated impulse withstand voltage	4 kV

¹⁾ Supply voltage U_B and constant ambient temperature T_a.

²⁾ Of S_r.

³⁾ Repeatability (T_a not constant).

⁴⁾ Supply voltage AC (+50 °C).

⁵⁾ Supply voltage AC (+80 °C).

⁶⁾ Supply voltage DC.

⁷⁾ 20 ms / 0.5 Hz.

⁸⁾ Miniature fuse to IEC 60217-2 Sheet 1, ≤ 2 A (quick-blow).

⁹⁾ Control of small electromagnetic loads with holding currents < 200 mA.

¹⁰⁾ Control of solenoids.

Safety-related parameters

MTTF_D	964 years
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Reduction factors

Note	The values are reference values which may vary
Stainless steel (V2A, 304)	Approx. 0.7
Aluminum (Al)	Approx. 0.3
Copper (Cu)	Approx. 0.2
Brass (Br)	Approx. 0.4

Installation note

Remark	Associated graphic see "Installation"
A	20 mm
B	40 mm
C	20 mm
D	30 mm
E	20 mm
F	80 mm

Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
CCC certificate	✓

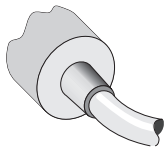
Classifications

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

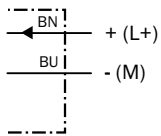
Installation note Non-flush installation



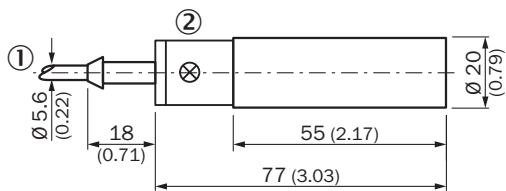
Connection type



Connection diagram Cd-012



Dimensional drawing IH20-10Nxx-xU0




Dimensions in mm (inch)

- ① Connection
- ② Display LED

Recommended accessories

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

	Brief description	Type	part no.
connectors and cables			
	<ul style="list-style-type: none">• Connection type head A: Male connector, M8, 3-pin, straight, A-coded• Description: Unshielded• Connection systems: Screw-type terminals• Permitted cross-section: 0.14 mm² ... 0.5 mm²	STE-0803-G	6037322

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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