

Product characteristics

Inductive sensor

Metal thread M30 x 1.5

Connector

Increased sensing range

Gold-plated contacts

Sensing range 15 mm; [f] flush mountable

Electrical data

Electrical design

DC PNP

Operating voltage [V]

10...30 DC; "supply class 2" to cULus.

Current consumption [mA]

< 10

Protection class

III

Reverse polarity protection

yes

Outputs

Output function

Normally closed

Voltage drop [V]

< 2.5

Current rating [mA]

100

Short-circuit protection

yes

Overload protection

yes

Switching frequency [Hz]

100

Range

Sensing range [mm]

15

Real sensing range (Sr) [mm]

15 ± 10 %

Operating distance [mm]

0...12.15

Accuracy / deviations

Correction factors

mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / Al approx. 0.4 / Cu approx. 0.3

Hysteresis [% of Sr]

3...15

Switch-point drift [% of Sr]

-10...10

Environment

Ambient temperature [°C]

-40...85

Protection

IP 65 / IP 66 / IP 67 / IP 68 / IP 69K

Tests / approvals

EMC

EN 61000-4-2 ESD: 4 kV CD / 8 kV AD
EN 61000-4-3 HF radiated: 10 V/m
EN 61000-4-4 Burst: 2 kV
EN 61000-4-6 HF conducted: 10 V
EN 55011: class B

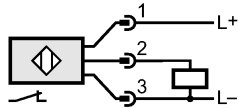
Vibration resistance

20 g (10...3000 Hz) / 50 cycles per frequency, 1 octave per minute in each of 3 mutually perpendicular axes
EN 60068-2-6 Fc

IIS246 - Inductive sensor - eclass: 27270101 / 27-27-01-01

Shock resistance		100 g (11 ms half sine; 3 shocks in each direction along the three coordinate axes)
	EN 60068-2-27 Ea	
Continuous shock resistance		40 g (6 ms; 4000 shocks in each direction along the three coordinate axes)
	EN 60068-2-29 Eb	
Fast temperature changes		TA = -40°C; TB = 85°C; t1 = 30 min; t2 = < 10 s; 50 cycles
	EN 60068-2-14 Na	
Salt spray test		severity level 5 (4 test cycles)
	EN 60068-2-52 Kb	
MTTF	[Years]	1594
UL approval number		A001
Mechanical data		
Mounting		flush mountable
Housing materials		Brass white bronze coated; active face: PBT orange; LED window: PEI; lock nuts: Brass white bronze coated
Weight	[kg]	0.11
Displays / operating elements		
Output status indication	LED	4 x yellow
Electrical connection		
Connection		M12 connector; Gold-plated contacts

Wiring



Accessories		
Accessories (included)		2 lock nuts
Remarks		
Pack quantity	[piece]	1