

Product characteristics

Inductive sensor

Metal thread M8 x 1

Quick disconnect

Operation as 3-wire or 2-wire possible

Sensing range 5 mm; [nfl] non-flush mountable

Electrical data

Electrical design

3-wire DC PNP; 2-wire DC PNP/NPN

Operating voltage [V]

10...30 DC; to PELV; cULus - Class 2 source required

Current consumption [mA]

< 10 only in 3-wire operation

Protection class

III

Reverse polarity protection

yes

Outputs

Output function

normally open

Voltage drop [V]

< 3.5

Minimum load current [mA]

2; only in 2-wire operation

Leakage current [mA]

< 0.5; only in 2-wire operation

Current rating [mA]

100

Short-circuit protection

yes (non-latching)

Overload protection

yes

Switching frequency [Hz]

600

Monitoring range

Sensing range [mm]

5

Real sensing range (Sr) [mm]

5 ± 10 %

Operating distance [mm]

0...4.05

Accuracy / deviations

Correction factors

mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.5 / aluminium approx. 0.4 / copper approx. 0.3

Hysteresis [% of Sr]

1...20

Switch-point drift [% of Sr]

-10...10

Environment

Ambient temperature [°C]

0...60

Protection

IP 65 / IP 67; with ifm socket duly screwed on

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 61000-4-5 Surge: 0.5 kV (line to line, Ri: 20hm)
EN 61000-4-6 HF conducted: 10 V
EN 60947-5-2
EN 55011: class B

MTTF [Years]

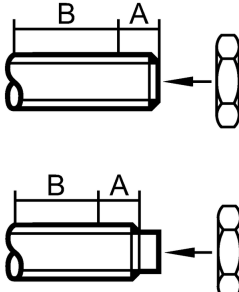
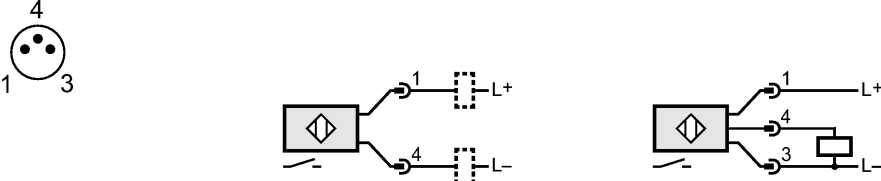
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Mechanical data

Mounting

non-flush mountable

IE5340 - Inductive sensor - eclass: 27270101 / 27-27-01-01

Housing materials		high-grade stainless steel; active face: LCP orange; lock nuts: high-grade stainless steel	
Installation			
Tightening torque		[Nm]	≤ 2 (A = 5 mm) ≤ 6 (B)
Weight		[kg]	0.018
Displays / operating elements			
Output status indication		LED	yellow (4 x 90°)
Electrical connection			
Connection		M8 connector	
Wiring			
			
Accessories			
Accessories (included)		2 lock nuts	
Remarks			
Pack quantity		[piece]	1