

Product characteristics

Inductive sensor

Metal thread M8 x 1

Quick disconnect

Operation as 3-wire or 2-wire possible

Sensing range 3 mm; [f] 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]

< 15 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]

800

Monitoring range

Sensing range [mm]

3

Operating distance [mm]

0...2.4

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

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 55011: class B
EN 60947-5-2

MTTF [Years]

2046

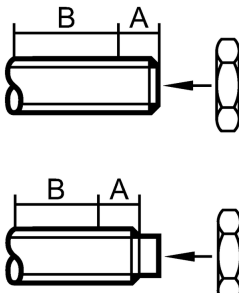
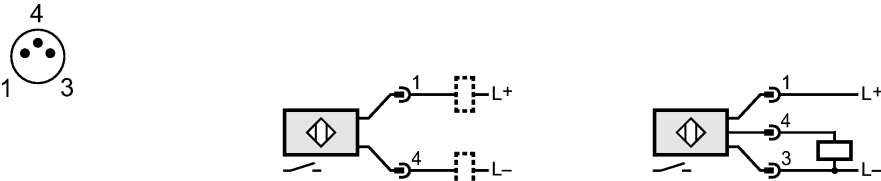
Mechanical data

Mounting

flush mountable

Housing materials

brass special coating; active face: LCP orange; lock nuts: brass

Installation			
Tightening torque	[Nm]	≤ 1 (A = 5 mm) ≤ 2 (B)	
Weight	[kg]	0.017	
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	