

Product characteristics

Inductive sensor

Metal thread M12 x 1

Cable

Operation as 3-wire or 2-wire possible

Increased sensing range

Optical setting aid (2 LED)

Sensing range 7 mm; [nf] non-flush mountable

Electrical data

Electrical design

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

Operating voltage [V]

10...30 DC

Current consumption [mA]

12 (24 V)

Protection class

II

Reverse polarity protection

yes

Outputs

Output function

normally open

Voltage drop [V]

< 2.8

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

pulsed

Overload protection

yes

Switching frequency [Hz]

700

Range

Sensing range [mm]

7

Real sensing range (Sr) [mm]

7 ± 10 %

Operating distance [mm]

0...5.7

Accuracy / deviations

Correction factors

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

Hysteresis [% of Sr]

3...15

Switch-point drift [% of Sr]

-10...10

Environment

Ambient temperature [°C]

0...100

Protection

IP 68 / IP 69K; "COP"

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

MTTF [Years]

1287

Mechanical data

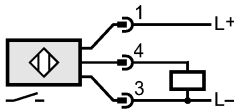
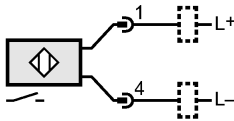
Mounting

non-flush mountable

IFT242 - Inductive sensor - eclass: 27270101 / 27-27-01-01

Housing materials		housing: stainless steel (316L); active face: PEEK (polyether ether ketone)
Weight	[kg]	0.074
Displays / operating elements		
Output status indication	LED	yellow (4 x 90°)
Setting aid	LED	Red
Electrical connection		
Connection		PUR cable / 0.4 m; 3 x 0.34 mm²; Ø 4.9 mm; with M8 connector (snap-fit)

Wiring



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