

Product characteristics

Inductive sensor

Metal thread M12 x 1

Quick disconnect

Operation as 3-wire or 2-wire possible

Increased sensing range

Optical setting aid (2 LED)

gold-plated contacts

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

yes (non-latching)

Overload protection

yes

Switching frequency [Hz]

500

Monitoring 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. 0.5 / aluminium approx. 0.4 / copper approx. 0.3

Hysteresis [% of Sr]

3...15

Switch-point drift [% of Sr]

-10...10

Environment

Ambient temperature [°C]

-25...70

Protection

IP 67

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

MTTF [Years]

1291

Mechanical data

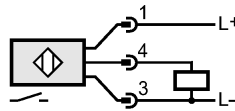
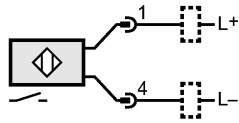
Mounting

non-flush mountable

# IFS209 - Inductive sensor - eclass: 27270101 / 27-27-01-01

Housing materials	brass white bronze coated; active face: PBT	
Weight [kg]	0.031	
Displays / operating elements		
Output status indication LED	yellow (4 x 90°)	
Setting aid LED	red	
Electrical connection		
Connection	M12 connector; gold-plated contacts	

## Wiring



Accessories		
Accessories (included)	2 lock nuts	
Remarks		
Remarks	suitable for PLC type 1 according to IEC 61131-2	
Pack quantity [piece]	1	