

Product characteristics

Inductive sensor

Metal thread M12 x 1

Quick disconnect

gold-plated contacts

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

Electrical data

Electrical design

AS-i

Operating voltage [V]

26.5...31.6 DC (AS-i)

Current consumption [mA]

< 30

Protection class

III

Reverse polarity protection

yes

Outputs

Switching frequency [Hz]

100

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. 0.5 / Cu approx. 0.4

Hysteresis [% of Sr]

1...20

Switch-point drift [% of Sr]

-10...10

Reaction times

Power-on delay time [ms]

< 1000

Environment

Ambient temperature [°C]

-25...70

Protection

IP 68; "Coolant"

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]

1679

AS-i classification

AS-i version

2.1

Extended addressing mode possible

yes

AS-i profile

S-0.A.F

I/O configuration [hex]

0

ID code [Hex]

A.F


AS-i certificate

57101

Data bits

Data bit	D0	D1	D2	D3
Designation	switching signal	not used	not used	not used

IFC248 - Inductive sensor - eclass: 27270101 / 27-27-01-01

	State = 0	Medium outside the active zone - - -
	State = 1	Medium within the active zone default value default value default value
Mechanical data		
Mounting		non-flush mountable
Housing materials		stainless steel (316L); active face: LCP uncolored
Weight [kg]		0.028
Displays / operating elements		
Output status indication	LED	yellow (4 x 90°)
Function display	LED	red
Electrical connection		
Connection		M12 connector; gold-plated contacts
Wiring		
		
Accessories		
Accessories (included)		2 lock nuts
Remarks		
Pack quantity	[piece]	1