

Inductive sensor

IEB3001-APKG/AS



Product characteristics

Electrical design	PNP
Output function	normally closed
Sensing range [mm]	1
Housing	Threaded type
Dimensions [mm]	M8 x 1 / L = 50

Application

System	Increased sensing range
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Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 10
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally closed
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	2000
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	1
Real sensing range S_r [mm]	$1 \pm 10 \%$
Operating distance [mm]	0...0.81
Increased sensing range	yes

Accuracy / deviations

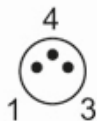
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of S_r]	1...20
Switch-point drift [% of S_r]	-10...10

IE5258



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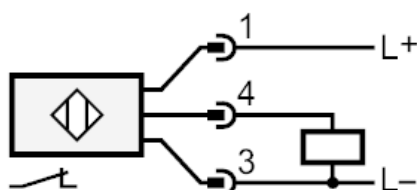
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Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 65; IP 67; (with ifm socket duly screwed on)
Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
MTTF	[years]	1376
Embedded software included		yes
UL approval	Ta	-25...80 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A017
	File number UL	E174191
Mechanical data		
Weight	[g]	18.5
Housing		Threaded type
Mounting		flush mountable
Dimensions	[mm]	M8 x 1 / L = 50
Thread designation		M8 x 1
Material		housing: brass white bronze coated; sensing face: LCP orange; LED window: PPSU; lock nuts: brass white bronze coated
Tightening torque	[Nm]	A = 5 mm: 1,5 Nm; B = 2 Nm
Displays / operating elements		
Display	Switching status	4 LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M8; coding: A		
		

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Connection



Diagrams and graphs

Installation

