

Inductive sensor

IEB30,2-BPKG/AS



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	0.2; (for target made of mild steel)
Housing	threaded type
Dimensions [mm]	M8 x 1 / L = 50

Application

Special feature	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 open
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	300
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	0.2; (for target made of mild steel)
Real sensing range S_r [mm]	$0.2 \pm 10 \%$
Increased sensing range	yes

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
Hysteresis [mm]	0.002...0.025
Switch point drift [mm]	> 0.04
Repeatability [mm]	< 0.015

IE5339



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Operating conditions		
Ambient temperature	[°C]	0...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
Impact resistance	EN 60068-2-75 Ehc	
Vibration resistance	EN 60068-2-6 Fc	
Shock resistance	EN 60068-2-27 Ea	
Continuous shock resistance	EN 60068-2-29 Eb	
Fast temperature change	EN 60068-2-14 Na	
Salt spray test	EN 60068-2-52 Kb	
MTTF	[years]	1379
Embedded software included		yes
UL approval	Ta	0...80 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A017
	File number UL	E174191
Mechanical data		
Weight	[g]	18.8
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M8 x 1 / L = 50
Thread designation		M8 x 1
Materials		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 x LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.

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Electrical connection - plug

Connector: 1 x M8; coding: A



Connection



Diagrams and graphs

Installation

