

Inductive sensor

ITB31,5BBPKG/AS



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	1.5
Housing	cylindrical
Dimensions [mm]	Ø 6.5 / L = 50

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
Short-time current rating of switching output [mA]	100
Switching frequency DC [Hz]	1700
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	1.5
Real sensing range Sr [mm]	1.5 ± 10 %
Operating distance [mm]	0...1.22

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.4 / copper: 0.2
Hysteresis [% of Sr]	1...20
Switch point drift [% of Sr]	-10...10

IT5034



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Operating conditions		
Ambient temperature	[°C]	0...60
Protection		IP 65; (with ifm socket duly screwed on: 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 61000-4-5 Surge	0,5 kV line to line, Ri: 2 Ohm
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
MTTF	[years]	2359
Embedded software included		yes
UL approval	Ta	0...60 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A017
	File number UL	E174191
Mechanical data		
Weight	[g]	16.8
Housing		cylindrical
Mounting		flush mountable
Dimensions	[mm]	Ø 6.5 / L = 50
Materials		housing: brass special coating; sensing face: PBT orange; LED window: PPSU
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
Accessories		
Items supplied		Mounting clamps: 1
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M8; coding: A		



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Connection

