

Inductive sensor

IFB3002-BPKG/US-104



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 45

Application

Special feature	Gold-plated contacts
Application	Industrial applications / factory automation

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 10
Protection class	II
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]	700
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	2
Real sensing range Sr [mm]	$2 \pm 10 \%$
Operating distance [mm]	0...1.62

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
Hysteresis [% of Sr]	3...15
Switch point drift [% of Sr]	-10...10

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Operating conditions		
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]	1134
Embedded software included		no
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Hazardous voltage
	UL Approval no.	A003
	File number UL	E174191
Mechanical data		
Weight	[g]	24.4
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 45
Thread designation		M12 x 1
Materials		housing: brass white bronze coated; sensing face: PBT orange; LED window: PEI; lock nuts: brass white bronze coated
Displays / operating elements		
Display	switching status	4 x LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: gold-plated		

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Connection

