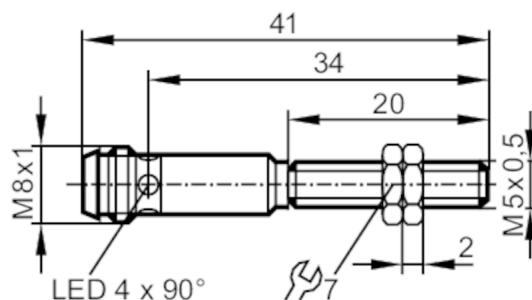




Inductive sensor

IYB31,5-BPKG/AS-514-TPS



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	1.5
Housing	Threaded type
Dimensions [mm]	M5 x 0.5 / L = 41

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	10; (24 V)
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	3
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	1800
Short-circuit protection	yes
Type of short-circuit protection	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	1.5
Real sensing range S_r [mm]	$1.5 \pm 10\%$
Operating distance [mm]	0...1.2

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2
Hysteresis [% of S_r]	< 15
Switch-point drift [% of S_r]	-10...10

Operating conditions

Ambient temperature [°C]	-25...70
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IY5048



Inductive sensor

IYB31,5-BPKG/AS-514-TPS

Protection	IP 67
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Tests / approvals

EMC	EN 60947-5-2	
	EN 55011	class B
MTTF	[years]	835
UL approval	Ta	0...40 °C
	voltage supply	Class 2
	File number UL	E174191

Mechanical data

Weight	[g]	15.8
Housing		Threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M5 x 0.5 / L = 41
Thread designation		M5 x 0.5
Material		housing: stainless steel; sensing face: POM

Displays / operating elements

Display	Switching status	4 x 90° LED, red
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Accessories

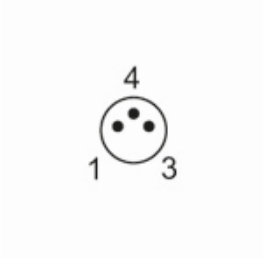
Items supplied	lock nuts: 2
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Remarks

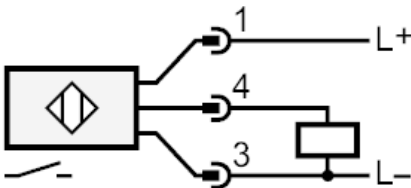
Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M8; coding: A



Connection



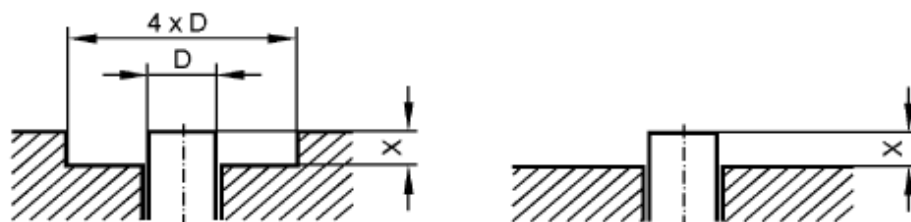


Inductive sensor

IYB31,5-BPKG/AS-514-TPS

Diagrams and graphs

Installation



If S_r varies by $< 10\%$ the following free space must be maintained ferromagnetic materials $X > 1.5\text{ mm}$ other metals $X > 3.0\text{ mm}$