

IY5048



Inductive sensor

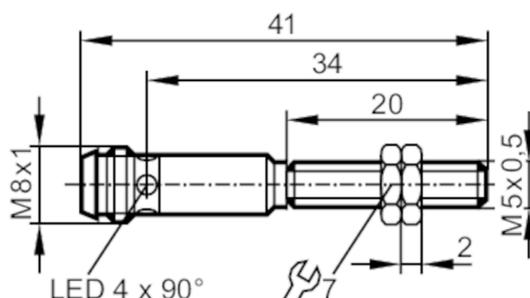
IYB31,5-BPKG/AS-514-TPS

phase-out article

Discontinuation date: 03/31/2026

Alternative articles: IY5062

When selecting an alternative article and accessories please note that technical data may differ!



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		pulsed
Overload protection		yes

Detection zone

Sensing range	[mm]	1.5
Real sensing range Sr	[mm]	1.5 ± 10 %
Operating distance	[mm]	0...1.2

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Accuracy / deviations

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

Operating conditions

Ambient temperature [°C]	-25...70	
Protection	IP 67	

Tests / approvals

EMC	EN 60947-5-2	
	EN 55011	class B
MTTF [years]	835	
UL approval	Ta	0...40 °C
	power 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	
Materials	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



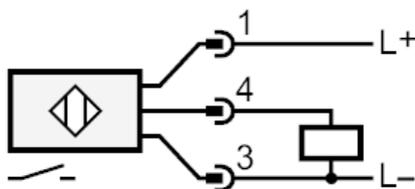
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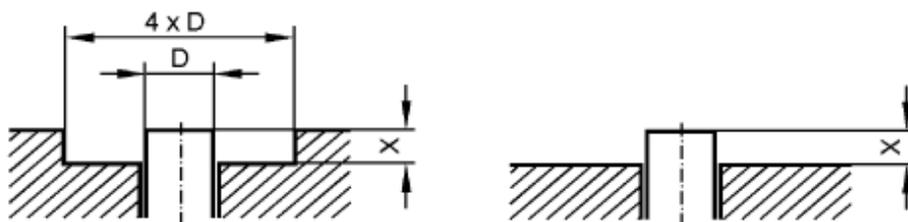
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Connection



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 $X > 3.0\text{ mm}$