

IY5048



Inductive sensor

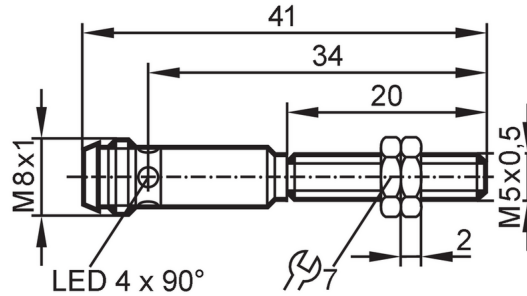
IYB31,5-BPKG/AS-514-TPS

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

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2
Hysteresis	[% of Sr]	< 15

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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 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
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

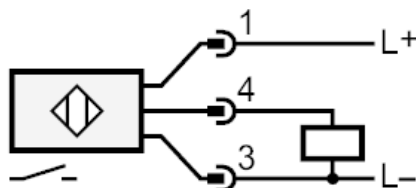
Pack quantity		1 pcs.
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Electrical connection - plug

Connector: 1 x M8; coding: A; Contacts: 3



Connection



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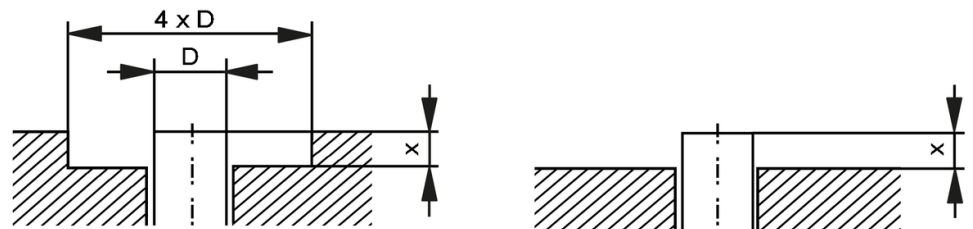


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Diagrams and graphs

Installation



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