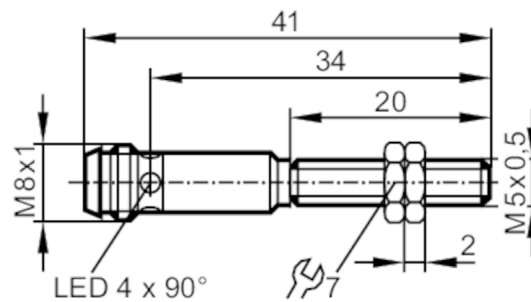


# IY5048



## 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		pulsed
Overload protection		yes

### Detection zone

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 / aluminium: 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
	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

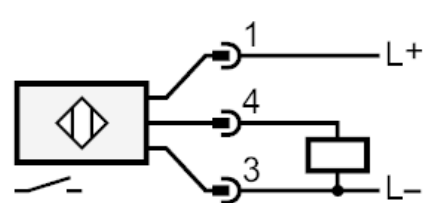
Pack quantity	1 pcs.
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### Electrical connection - plug

Connector: 1 x M8; coding: A



### Connection



# IY5048

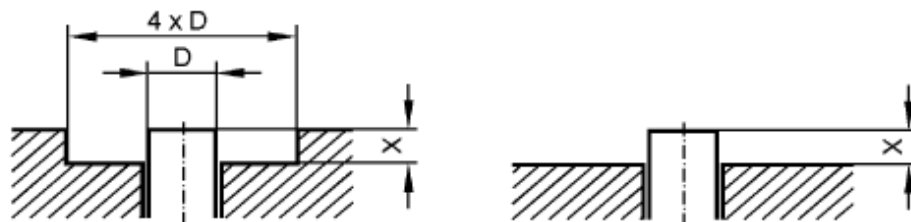


## Inductive sensor

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  $X > 3.0\text{ mm}$