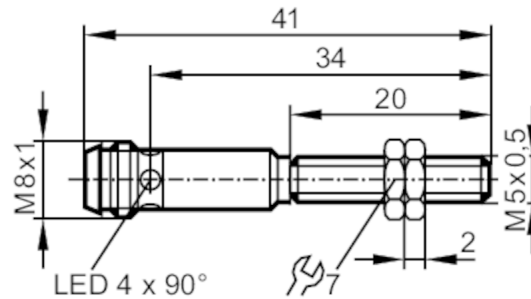


IY5048



Inductive sensor

IYB31,5-BPKG/AS-514-TPS



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
Protection		IP 67

IY5048



Inductive sensor

IYB31,5-BPKG/AS-514-TPS

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

Accessories	
Accessories (supplied)	lock nuts: 2

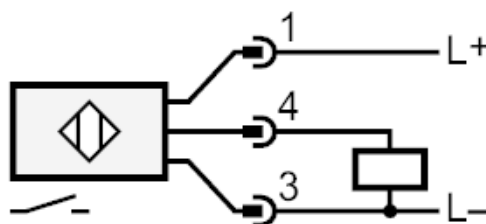
Remarks	
Pack quantity	1 pcs.

Electrical connection - plug

Connector: 1 x M8



Connection



IY5048

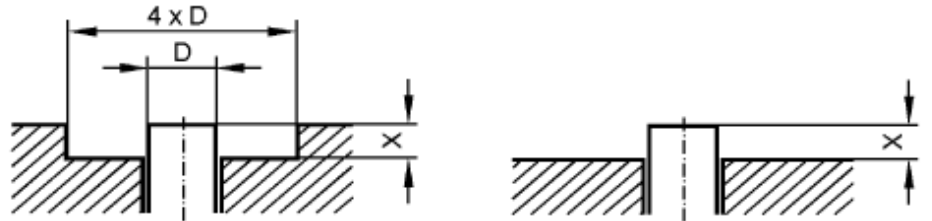


Inductive sensor

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 $X > 1.5$ mm other metals $X > 3.0$ mm