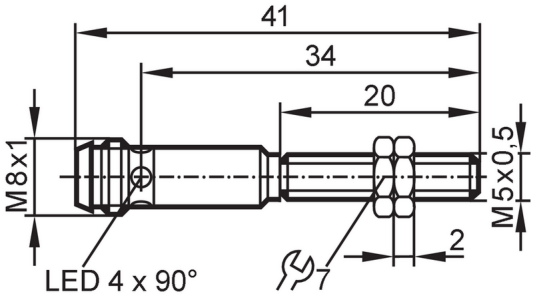
IY5048

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
Application		
Application		Industrial applications / factory automation; For use where space is restricted
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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Inductive sensor

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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
		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			
Items supplied		lock nuts: 2	
Remarks			
Pack quantity		1 pcs.	

Electrical connection - plug

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

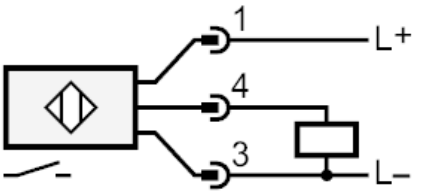


IY5048

Inductive sensor

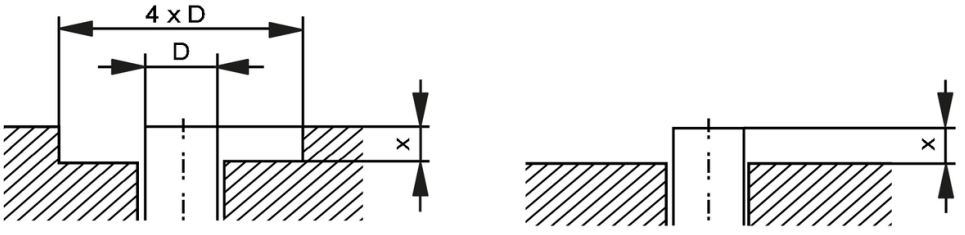
IYB31,5-BPKG/AS-514-TPS

Connection



Diagrams and graphs

Installation



If Sr varies by < 10 % the following free space must be maintained ferromagnetic materials X > 1.5 mm other metals X > 3.0 mm