

IY5049

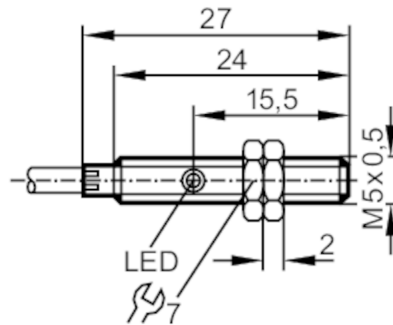


Inductive sensor

IYB31,5-BPKG/ZH

Article to be discontinued
Discontinuation date: 03/31/2026

Alternative articles: IY5066
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 = 27

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		yes (non-latching)
Overload protection		yes

Monitoring range

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 / aluminum: 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]	50.5	
Housing	Threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M5 x 0.5 / L = 27	
Thread designation	M5 x 0.5	
Material	housing: stainless steel; sensing face: POM	
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	

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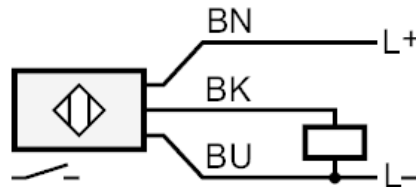
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Electrical connection

Cable: 2 m, PUR; 3 x 0.14 mm²

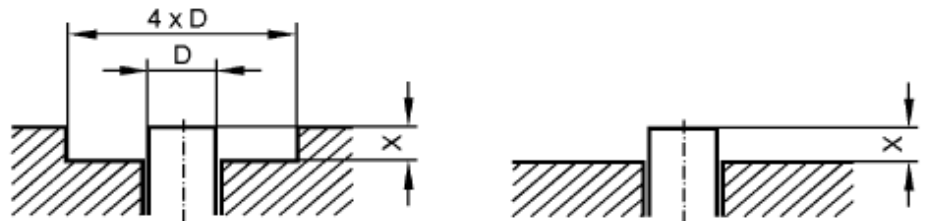
Connection



Core colors :
BK = black
BN = brown
BU = blue

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