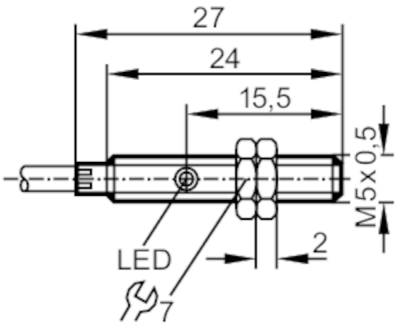
IY5049

Inductive sensor

IYB31,5-BPKG/ZH



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
Switch point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-25...70
Protection		IP 67

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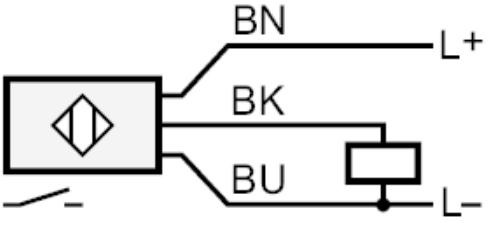
Tests / approvals			
EMC		EN 60947-5-2	
		EN 55011	class B
MTTF	[years]	835	
UL approval		Ta	0...40 °C
		voltage supply	Class 2
		File number UL	E174191
Mechanical data			
Weight	[g]	54	
Housing		threaded type	
Mounting		non-flush mountable	
Dimensions	[mm]	M5 x 0.5 / L = 27	
Thread designation		M5 x 0.5	
Materials		housing: stainless steel; sensing face: POM	
Displays / operating elements			
Display		switching status	1 x LED, yellow
Accessories			
Accessories (supplied)		lock nuts: 2	
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Cable: 2 m, PUR; 3 x 0.14 mm²

Connection



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

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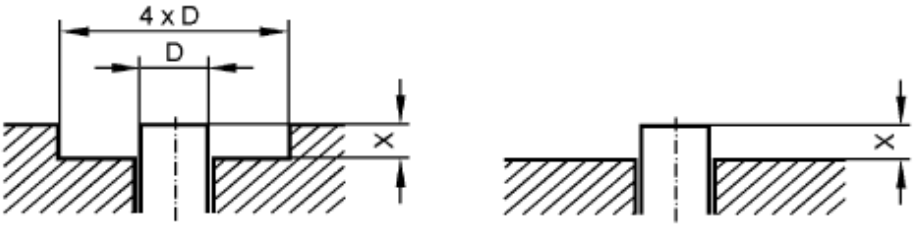
Diagrams and graphs

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