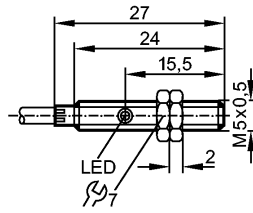


**IY5049**

IYB31.5-BPKG/ZH

**Inductive sensors**



**Product characteristics**

Inductive sensor
Metal thread M5 x 0.5
Cable
Sensing range 1.5 mm; [nf] non-flush mountable

**Electrical data**

Electrical design	DC PNP
Operating voltage [V]	10...30 DC
Current consumption [mA]	10 (24 V)
Reverse polarity protection	yes

**Outputs**

Output function	normally open
Voltage drop [V]	< 3
Current rating [mA]	100
Short-circuit protection	pulsed
Overload protection	yes
Switching frequency [Hz]	1800

**Range**

Sensing range [mm]	1.5
Real sensing range (Sr) [mm]	1.5 ± 10 %
Operating distance [mm]	0...1.2

**Accuracy / deviations**

Correction factors	mild steel = 1 / stainless steel approx. 0.7 / brass approx. 0.4 / Al approx. 0.3 / Cu approx. 0.2
Hysteresis [% of Sr]	< 15
Switch-point drift [% of Sr]	-10...10

**Environment**

Ambient temperature [°C]	-25...70
Protection	IP 67

**Tests / approvals**

EMC	EN 60947-5-2 EN 55011: class B
MTTF [Years]	835

**Mechanical data**

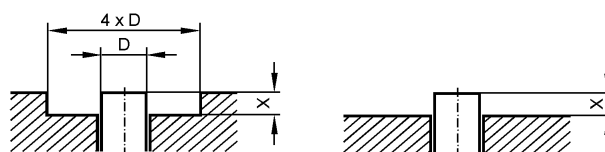
Mounting	non-flush mountable
Housing materials	housing: stainless steel; active face: POM (polyoxymethylene)

## IY5049

IYB31.5-BPKG/ZH

Inductive sensors

### Installation



If  $S_r$  varies by  $< 10\%$   
 the following free space must be maintained:  
 $X > 1.5\text{ mm}$  for ferromagnetic materials  
 $X > 3.0\text{ mm}$  for other metals

Weight	[kg]	0.054
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### Displays / operating elements

Output status indication	LED	yellow
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### Electrical connection

Connection	PUR cable / 2 m; 3 x 0.14 mm <sup>2</sup>
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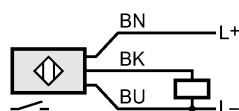
### Wiring

Core colours

BK black

BN brown

BU blue



### Accessories

Accessories (included)	2 lock nuts
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### Remarks

Pack quantity	[piece]	1
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