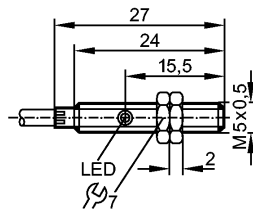


IY5049

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	yes (non-latching)
Overload protection	yes
Switching frequency [Hz]	1800

Monitoring 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 / aluminium approx. 0.3 / copper 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

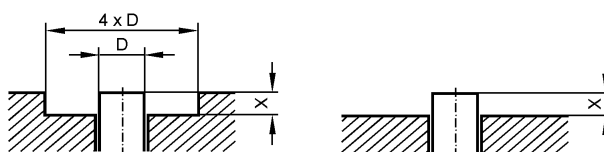
Mounting	non-flush mountable
Housing materials	housing: stainless steel; active face: POM (polyoxymethylene)

IY5049

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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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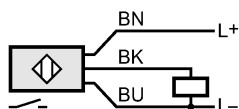
Electrical connection

Connection	PUR cable / 2 m; 3 x 0.14 mm ²
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Wiring

Core colors

- 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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