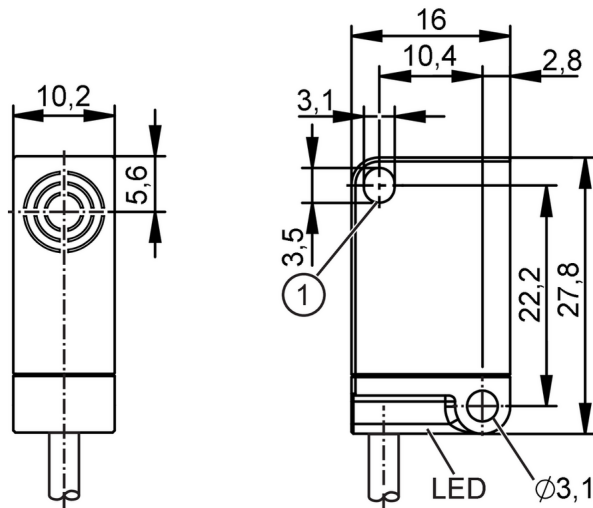


IS5001



Inductive sensor

IS-3002-BPKG



1 mounting hole



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2
Housing	rectangular
Dimensions [mm]	27.8 x 10.2 x 16

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 20
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	1000
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	2
Real sensing range S_r [mm]	$2 \pm 10 \%$
Operating distance [mm]	0...1.6
Increased sensing range	no

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
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IS5001



Inductive sensor

IS-3002-BPKG

Hysteresis	[% of Sr]	1...20
Switch-point drift	[% of Sr]	-10...10

Operating conditions

Ambient temperature	[°C]	-40...85
Protection		IP 65; IP 66; IP 67; IP 68

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
Fast temperature changes	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF	[years]	3044
Embedded software included		no
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A071
	File number UL	E174191

Mechanical data

Weight	[g]	44.6
Housing		rectangular
Mounting		flush mountable
Dimensions	[mm]	27.8 x 10.2 x 16
Material		housing: PPS orange; LED window: PPSU

Mounting hole

Tightening torque	[Nm]	< 0.5
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Displays / operating elements

Display	Switching status	1 x LED, yellow
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Remarks

Pack quantity		1 pcs.
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IS5001



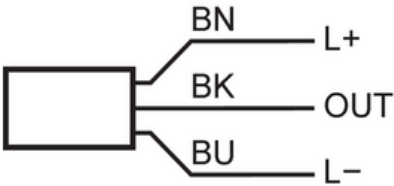
Inductive sensor

IS-3002-BPKG

Electrical connection

Cable: 2 m, PUR, Ø 2.9 mm; 3 x 0.14 mm²

Connection



BN :	brown	
BK:	black	
BU:	blue	
BN	L+	
BK	OUT	DO (NO)
BU	L-	
DO: digital output; NO: normally open		