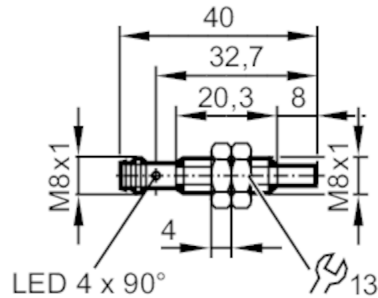


# IES201



## Inductive sensor

IEB3006-BPKG/V4A/K1/AS



### Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	6
Housing		Threaded type
Dimensions	[mm]	M8 x 1 / L = 40

### Application

System		gold-plated contacts; Increased sensing range; correction factor = 1; Magnetic-field immune
Application		material handling; refrigerated warehouse / shock freezing
Magnetic-field immune		yes
Max. electromagnetic field immunity	[mT]	300

### 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]	2000
Short-circuit protection		yes
Overload protection		yes

### Monitoring range

Sensing range	[mm]	6
Real sensing range $S_r$	[mm]	$6 \pm 10\%$
Operating distance	[mm]	0...4.86
Increased sensing range		yes

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## Inductive sensor

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Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 1 / brass: 1 / aluminum: 1 / copper: 1	
Hysteresis [% of Sr]	3...15	
Switch-point drift [% of Sr]	-10...10	
Correction factor = 1	yes	
Operating conditions		
Ambient temperature [°C]	-40...85	
Protection	IP 65; IP 66; IP 67; IP 68; IP 69K; (with ifm socket duly screwed on)	
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
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
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
Salt spray test	EN 60068-2-52 Kb	severity level 5 (4 test cycles)
MTTF [years]	552	
Embedded software included	yes	
UL approval	Ta	-25...80 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A011
	File number UL	E174191
Mechanical data		
Weight [g]	13.75	
Housing	Threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M8 x 1 / L = 40	
Thread designation	M8 x 1	
Material	stainless steel (1.4404 / 316L); sensing face: LCP white; LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	A = 6 mm: 2 Nm; B: 5 Nm	
Displays / operating elements		
Display	Switching status	4 x 90° LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	

# IES201



## Inductive sensor

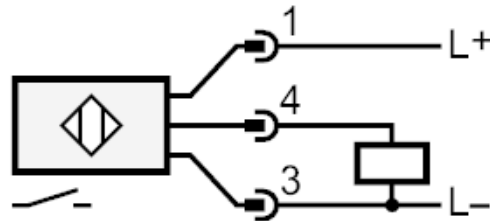
IEB3006-BPKG/V4A/K1/AS

### Electrical connection - plug

Connector: 1 x M8; coding: A; Contacts: gold-plated



### Connection



### Diagrams and graphs

#### Installation

