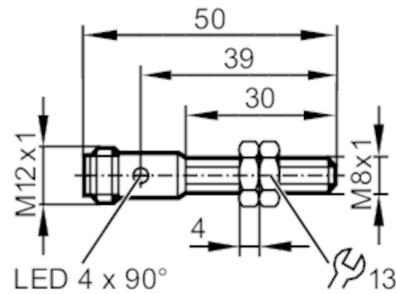


# IE5090



## Inductive sensor

IEB3001-BPKG/US-100-DPS



### Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	1
Housing		threaded type
Dimensions	[mm]	M8 x 1 / L = 50

### Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 10
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]	750
Short-circuit protection		yes
Overload protection		yes

### Detection zone

Sensing range	[mm]	1
Real sensing range $S_r$	[mm]	$1 \pm 10\%$
Operating distance	[mm]	0...0.81
Increased sensing range		no

### Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.3 / aluminium: 0.3 / copper: 0.1
Hysteresis	[% of $S_r$ ]	1...20
Switch point drift	[% of $S_r$ ]	-10...10

### Operating conditions

Ambient temperature	[°C]	-25...80
Protection		IP 67

# IE5090



## Inductive sensor

IEB3001-BPKG/US-100-DPS

Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
	EN 55011	class B
MTTF	[years]	1376
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A028
	File number UL	E174191

Mechanical data		
Weight	[g]	20.7
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M8 x 1 / L = 50
Thread designation		M8 x 1
Materials		brass white bronze coated; sensing face: LCP orange; LED window: PEI; lock nuts: brass white bronze coated
Tightening torque	[Nm]	A = 5 mm: 1,5 Nm; B: 2 Nm
Full-metal housing		no

Displays / operating elements		
Display	switching status	1 x LED, yellow

Accessories		
Items supplied		lock nuts: 2

Remarks		
Pack quantity		1 pcs.

### Electrical connection - plug

Connector: 1 x M12; coding: A



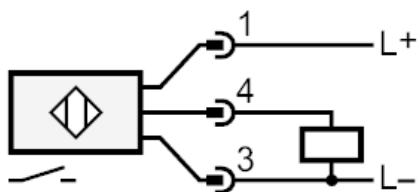
# IE5090



## Inductive sensor

IEB3001-BPKG/US-100-DPS

### Connection



### Diagrams and graphs

#### Installation

