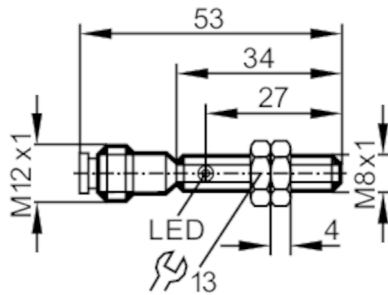


IE5090



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 = 53

Electrical data

Operating voltage	[V]	10...36 DC
Current consumption	[mA]	15; (24 V)
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]	200
Switching frequency DC	[Hz]	750
Short-circuit protection		yes
Overload protection		yes

Detection zone

Sensing range	[mm]	1
Real sensing range Sr	[mm]	1 ± 10 %
Operating distance	[mm]	0...0.8

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2
Hysteresis	[% of Sr]	1...15
Switch point drift	[% of Sr]	-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
Embedded software included		yes
UL approval	Ta	-25...80 °C
	Enclosure type	Type 1
	power supply	Class 2
	File number UL	E174191

Mechanical data		
Weight [g]		20.7
Housing		threaded type
Mounting		flush mountable
Dimensions [mm]		M8 x 1 / L = 53
Thread designation		M8 x 1
Materials		housing: brass white bronze coated; sensing face: PBT
Tightening torque [Nm]		A = 5 mm: 1 Nm; B: 2 Nm

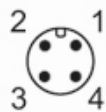
Displays / operating elements		
Display	switching status	1 x LED, yellow

Accessories		
Items supplied		lock nuts: 2

Remarks		
Pack quantity		1 pcs.

Electrical connection - plug

Connector: 1 x M12; coding: A



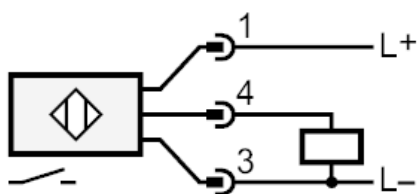
IE5090



Inductive sensor

IEB3001-BPKG/US-100-DPS

Connection



Diagrams and graphs

Installation

