

Inductive sensor

IEBC003BASKG/AS



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	3
Housing	Threaded type
Dimensions [mm]	M8 x 1 / L = 40

Electrical data

Operating voltage [V]	10...30 DC
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	3.5
Minimum load current [mA]	2; (only in 2-wire operation)
Max. leakage current [mA]	0.5; (only in 2-wire operation)
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	800
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	3
Real sensing range S_r [mm]	$3 \pm 10\%$
Operating distance [mm]	0...2.4

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis [% of S_r]	1...20
Switch-point drift [mm]	-10...10

Operating conditions

Ambient temperature [°C]	0...60
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Protection	IP 65; IP 67; (with ifm socket duly screwed on)
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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
MTTF [years]	403	
Embedded software included	no	
UL approval	Ta	0...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A017
	File number UL	E174191

Mechanical data

Weight [g]	16.5	
Housing	Threaded type	
Mounting	flush mountable	
Dimensions [mm]	M8 x 1 / L = 40	
Thread designation	M8 x 1	
Material	housing: brass white bronze coated; sensing face: LCP orange; LED window: PPSU; lock nuts: brass white bronze coated	
Tightening torque [Nm]	A = 5 mm: 1,5 Nm; B = 2 Nm	

Displays / operating elements

Display	Switching status	4 LED, yellow
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Accessories

Items supplied	lock nuts: 2	
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Remarks

Pack quantity	1 pcs.	
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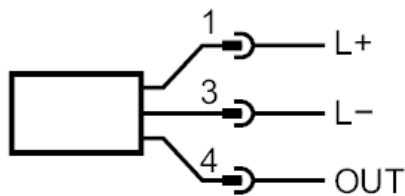


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Electrical connection - plug

Connector: 1 x M8; coding: A



2-wire

1	L+	DO (NPN)
4	L-	DO (PNP)

3-wire

1	L+	
3	L-	
4	OUT	DO (PNP)

Diagrams and graphs

Installation

