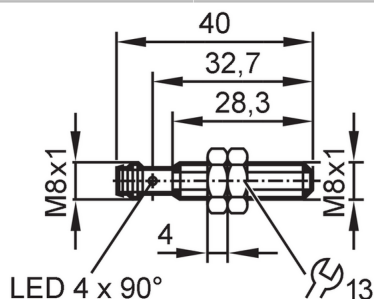




Inductive sensor

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

Detection zone

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 / aluminium: 0.4 / copper: 0.3
Hysteresis [% of S_r]	1...20
Switch point drift [mm]	-10...10

Operating conditions

Ambient temperature [°C]	0...60
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 no.	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
Materials	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

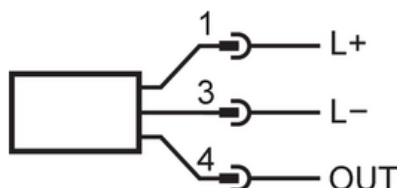
Items supplied	lock nuts: 2
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M8; coding: A; Contacts: 3



2-wire

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

3-wire

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

IE5338

Inductive sensor

IEBC003BASKG/AS



Diagrams and graphs

Installation

