

Inductive sensor

IEA2001-FRKG/PH



Product characteristics

Electrical design	PNP/NPN
Output function	normally open / normally closed; (selectable)
Sensing range [mm]	1
Housing	threaded type
Dimensions [mm]	M8 x 1 / L = 50

Electrical data

Operating voltage [V]	5...36 DC
Protection class	III

Outputs

Electrical design	PNP/NPN
Output function	normally open / normally closed; (selectable)
Max. voltage drop switching output DC [V]	4.6
Minimum load current [mA]	4
Max. leakage current [mA]	0.8
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	2000
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

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

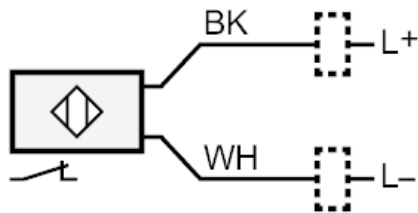
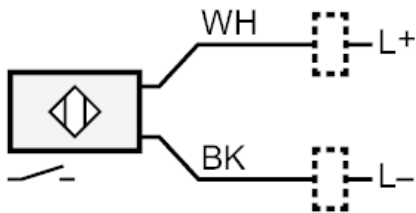
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Tests / approvals		
EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
	EN 55011	class B
MTTF	[years]	3377
Mechanical data		
Weight	[g]	49.6
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M8 x 1 / L = 50
Thread designation		M8 x 1
Materials		brass white bronze coated; sensing face: PBT; lock nuts: brass
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		
Cable: 2 m, PUR / PVC; 2 x 0.14 mm ²		
Connection		



Core colours :
BK = black
WH = white

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Diagrams and graphs

Installation

