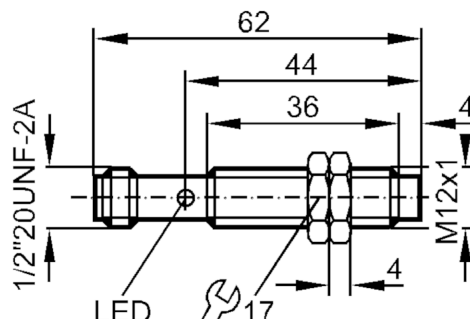




Inductive sensor

IFK2004-AROA/SL/LS100-AK RT



Product characteristics

Output function		normally open
Sensing range	[mm]	4
Housing		Threaded type
Dimensions	[mm]	M12 x 1

Electrical data

Frequency AC	[Hz]	47...63
Operating voltage	[V]	20...140 AC / 10...140 DC
Protection class		I
Reverse polarity protection		no

Outputs

Output function		normally open
Max. voltage drop switching output DC	[V]	5
Max. voltage drop switching output AC	[V]	5
Minimum load current	[mA]	5
Max. leakage current	[mA]	0.8
Permanent current rating of switching output AC	[mA]	200
Permanent current rating of switching output DC	[mA]	200
Short-time current rating of switching output	[mA]	900; (20 ms / 0,5 Hz)
Switching frequency AC	[Hz]	25
Switching frequency DC	[Hz]	90
Short-circuit proof		no
Overload protection		no

Monitoring range

Sensing range	[mm]	4
Real sensing range S_r	[mm]	$4 \pm 10 \%$
Operating distance	[mm]	0...3.25

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.45 / aluminum: 0.4 / copper: 0.33
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Inductive sensor

IFK2004-AROA/SL/LS100-AK RT

Hysteresis	[% of Sr]	3...15
Switch-point drift	[% of Sr]	-10...10

Operating conditions

Ambient temperature	[°C]	-25...70
Protection		IP 67

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN61000-4-3 HF radiated	3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 6100-4-6 HF conducted	3 V
	EN 55011	class B
MTTF	[years]	1257
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	voltage supply	Hazardous voltage
	File number UL	E174191

Mechanical data

Weight	[g]	28.2
Housing		Threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M12 x 1
Thread designation		M12 x 1
Material		housing: brass white bronze coated; sensing face: PBT natural; LED window: PBT natural; lock nuts: brass white bronze coated
Tightening torque	[Nm]	A = 4 mm: 3,5 Nm; B: 5 Nm
Length	[mm]	62

Displays / operating elements

Display	Switching status	1 x LED, red
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Electrical connection

Required protection	miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting
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Accessories

Items supplied	lock nuts: 2
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Remarks

Remarks	Recommendation: check the unit for reliable function after a short circuit.
Pack quantity	1 pcs.

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Inductive sensor

IFK2004-AROA/SL/LS100-AK RT

Electrical connection - plug

Connector: 1 x 1/2"; coding: C



Note miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting

Diagrams and graphs

Installation

