



Inductive sensor

IIK2022-FRKG/M/2LED/US-104-IRF



Electrical data

Operating voltage	[V]	10...36 DC; ("supply class 2" to cULus)
Protection class		II
Reverse polarity protection		yes

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]	1
Permanent current rating of switching output DC	[mA]	100
Switching frequency DC	[Hz]	100
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes

Detection zone

Sensing range	[mm]	22
Real sensing range S_r	[mm]	$22 \pm 10 \%$
Operating distance	[mm]	0...17.6
Increased sensing range		yes

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	[% of S_r]	-10...10

Operating conditions

Ambient temperature	[°C]	-25...70
Protection		IP 68; ("Coolant")



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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 61000-4-5 Surge	0,5 kV
	EN 61000-4-6 HF conducted	10 V
	EN 55011	class B
MTTF	[years]	1143
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Class 2
	File number UL	E174191

Mechanical data		
Weight	[g]	125.6
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 70
Thread designation		M30 x 1.5
Materials		brass white bronze coated; sensing face: PBT orange

Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
	setting aid	1 x LED, red
Optical setting aid		yes

Accessories	
Accessories (supplied)	lock nuts: 2

Remarks	
Pack quantity	1 pcs.

Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated



II5829



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normally open

