



Inductive full-metal sensor

IFK32,5BBPKG/AM/US-104/K0



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2.5
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 60

Application

Special feature	Gold-plated contacts; Increased sensing range; Full-metal housing; Correction factor K = 0
Application	Use in machine tools, coolants and lubricants
Media	ferrous only; aluminium chip immune
Pressure rating [bar]	100
Pressure rating [MPa]	10
Note on pressure rating	sensing face

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 20
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
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]	2.5
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Operating distance	[mm]	0...2.02
Increased sensing range		yes
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.5
Hysteresis	[% of Sr]	1...20
Correction factor K = 0		yes
Operating conditions		
Ambient temperature	[°C]	-25...70
Protection		IP 68; ("Coolant")
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
Impact resistance	EN 60068-2-27 Ehc	1 J
MTTF	[years]	1258
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191
Mechanical data		
Weight	[g]	28.1
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 60
Thread designation		M12 x 1
Materials		housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: brass white bronze coated
Tightening torque	[Nm]	15
Full-metal housing		yes
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.

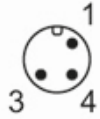
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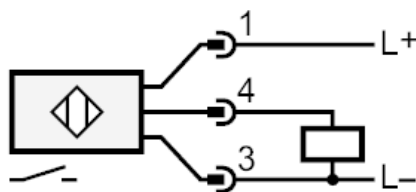
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Electrical connection



Connection



Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated