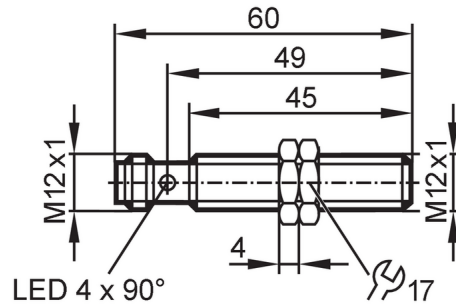




Inductive full-metal sensor

IFK3003BBPKG/AM/V4A/US-104



Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	3
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 60

Application

Special feature	Gold-plated contacts; Full-metal housing	
Application	Industrial applications / factory automation; Use in machine tools, coolants and lubricants	
Pressure rating	100 bar	10 MPa
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]	3
Operating distance	[mm]	0...2.4

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 0.6 / brass: 0.7 / aluminium: 0.6 / copper: 0.3
Hysteresis	[% of Sr]	1...20

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Inductive full-metal sensor

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Operating conditions		
Ambient temperature	[°C]	-25...70
Protection		IP 67; 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 emission	class B
Impact resistance		1 J
MTTF	[years]	1104
Embedded software included		no
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval no.	A012
	File number UL	E174191
Mechanical data		
Weight	[g]	28.3
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: stainless steel (316L/1.4404)
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.
Electrical connection - plug		
Connector: 1 x M12; coding: A; Contacts: 3, gold-plated		

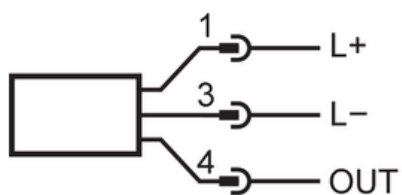
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Inductive full-metal sensor

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Connection



1	L+	
3	L-	
4	OUT	DO (NO)

DO: digital output; NO: normally open