



Inductive full-metal sensor

IFK3003BANKG/AM/V4A/US-104



Product characteristics

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

Application

System	gold-plated contacts; Full-metal housing
Application	Oils and coolants
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	NPN
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	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	3
Operating distance [mm]	0...2.4



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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.6 / brass: 0.7 / aluminum: 0.6 / copper: 0.3	
Hysteresis	[% of Sr]	1...20	
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
MTTF	[years]	1177	
Embedded software included		yes	
UL approval		Ta	-25...70 °C
		Enclosure type	Type 1
		voltage supply	Limited Voltage/Current
		UL approval number	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	
Material		housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)	
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			



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Connection



Electrical connection - plug

Connector: 1 x M12; Contacts: gold-plated