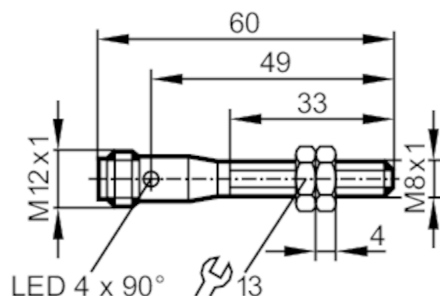


Inductive full-metal sensor

IEK3002BBPKG/AM/US-104



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	2
Housing	threaded type
Dimensions [mm]	M8 x 1 / L = 60

Application

Special feature	Gold-plated contacts; Increased sensing range; Full-metal housing
Application	Use in machine tools, coolants and lubricants
Pressure rating [bar]	100
Note on pressure rating	sensing face

Electrical data

Operating voltage [V]	10...36 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
Operating distance [mm]	0...1.6
Increased sensing range	yes



Inductive full-metal sensor

IEK3002BBPKG/AM/US-104

Accuracy / deviations		
Correction factor		stainless steel: 0.6 / brass: 0.4 / aluminium: 0.3 / copper: 0.2
Hysteresis	[% of Sr]	1...20
Operating conditions		
Ambient temperature		[°C] -25...70
Protection		IP 67; IP 68; IP 69K; ("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		1 J
MTTF	[years]	1446
Embedded software included		yes
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E174191
Mechanical data		
Weight	[g]	21.4
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M8 x 1 / L = 60
Thread designation		M8 x 1
Materials		housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); lock nuts: stainless steel (316L/1.4404)
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: gold-plated		
		

Inductive full-metal sensor

IEK3002BBPKG/AM/US-104

Connection

