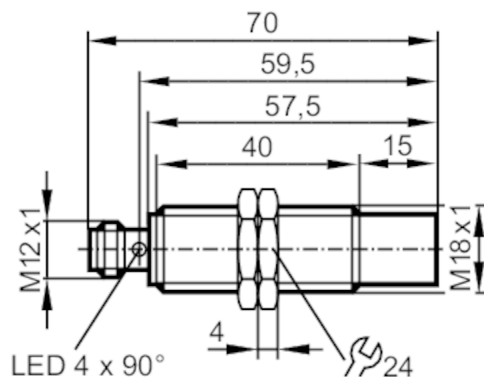


Inductive full-metal sensor

IGK3012-BPKG/AM/P/US



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	12
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 70

Application

Special feature	Gold-plated contacts; Increased sensing range; Full-metal housing
Application	constant cleaning with aggressive cleaning agents; regular cleaning processes
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]	< 25
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]	250
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	12
--------------------	----



Inductive full-metal sensor

IGK3012-BPKG/AM/P/US

Real sensing range Sr	[mm]	12 ± 10 %
Operating distance	[mm]	0...9.7
Increased sensing range		yes

Accuracy / deviations

Correction factor		steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.8 / copper: 0.5
Hysteresis	[% of Sr]	1...20
Switch point drift	[% of Sr]	-10...10

Operating conditions

Ambient temperature	[°C]	0...100
Protection		IP 65; IP 67; IP 68; IP 69K

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	EN 60068-2-75 Ehc	1 J
MTTF	[years]	1262
Embedded software included		yes
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191

Mechanical data

Weight	[g]	63.016
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M18 x 1 / L = 70
Thread designation		M18 x 1
Materials		housing: stainless steel (316L/1.4404); sensing face: stainless steel (316L/1.4404); lock nuts: stainless steel (316L/1.4404)
Tightening torque	[Nm]	50
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.
---------------	--	--------

Inductive full-metal sensor

IGK3012-BPKG/AM/P/US

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated



Connection



Diagrams and graphs

