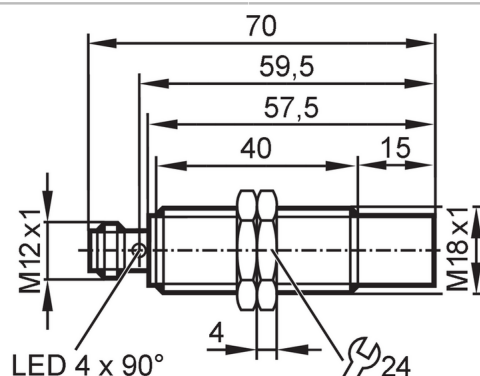




Inductive full-metal sensor

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	Use in hygienic areas / regular cleaning processes
Pressure rating	100 bar 10 MPa
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	yes (non-latching)
Overload protection	yes

Monitoring range

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



Inductive full-metal sensor

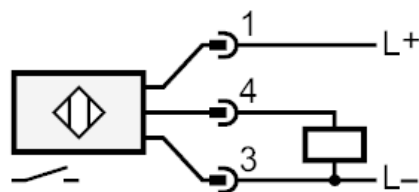
IGK3012-BPKG/AM/P/US

Increased sensing range		yes	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 1 / brass: 0.9 / aluminum: 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
	voltage supply		Limited Voltage/Current
	UL approval number		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	
Material		housing: stainless steel (1.4404 / 316L); sensing face: stainless steel (1.4404 / 316L); lock nuts: stainless steel (1.4404 / 316L)	
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.	
Electrical connection - plug			
Connector: 1 x M12; coding: A; Contacts: 3, gold-plated			
			

Inductive full-metal sensor

IGK3012-BPKG/AM/P/US

Connection



Diagrams and graphs

