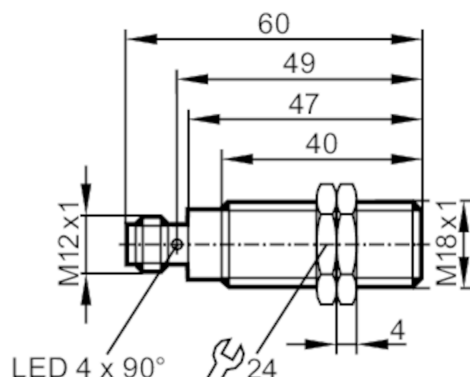




Inductive sensor

IGK3005-BPKG/M/US-104-DPS



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	5
Housing	threaded type
Dimensions [mm]	M18 x 1 / L = 60

Application

Special feature	Gold-plated contacts
Application	Use in machine tools, coolants and lubricants

Electrical data

Operating voltage [V]	10...36 DC
Current consumption [mA]	< 10
Protection class	II
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]	200
Switching frequency DC [Hz]	400
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

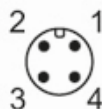
Detection zone

Sensing range [mm]	5
Real sensing range S_r [mm]	$5 \pm 10 \%$
Operating distance [mm]	0...4.1



Inductive sensor

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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.5 / copper: 0.4	
Hysteresis	[% of Sr]	1...20	
Switch point drift	[% of Sr]	-10...10	
Operating conditions			
Ambient temperature		[°C]	-25...70
Protection		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 61000-4-5 Surge	0,5 kV
		EN 61000-4-6 HF conducted	10 V
		EN 55011	class B
MTTF	[years]	1689	
UL approval		Ta	0...40 °C
		Enclosure type	Type 1
		power supply	Hazardous voltage
		File number UL	E174191
Mechanical data			
Weight	[g]	47.5	
Housing		threaded type	
Mounting		flush mountable	
Dimensions	[mm]	M18 x 1 / L = 60	
Thread designation		M18 x 1	
Materials		brass white bronze coated; sensing face: LCP uncoloured	
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 sensor

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Connection

