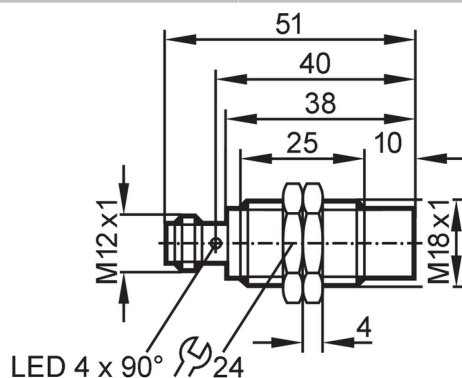


Inductive sensor

IGB2012-ARKG/M/US-104-ARS



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	12
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 51

Application

Special feature	gold-plated contacts; Increased sensing range
Application	Industrial applications

Electrical data

Operating voltage [V]	10...30 DC
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Minimum load current [mA]	2
Max. leakage current [mA]	0.5
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 S_r [mm]	$12 \pm 10 \%$
Operating distance [mm]	0...9.7
Increased sensing range	yes



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Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3	
Hysteresis	[% of Sr]	3...15	
Switch-point drift	[% of Sr]	-10...10	
Operating conditions			
Ambient temperature		[°C]	-25...70
Protection		IP 67	
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
MTTF	[years]	2655	
UL approval		Ta	0...40 °C
		Enclosure type	Type 1
		File number UL	E174191
Mechanical data			
Weight		[g]	44.4
Housing		Threaded type	
Mounting		non-flush mountable	
Dimensions		[mm]	M18 x 1 / L = 51
Thread designation		M18 x 1	
Material		housing: brass white bronze coated; sensing face: PBT	
Displays / operating elements			
Display		Switching status	4 x 90° LED, yellow
Accessories			
Items supplied		lock nuts: 2	
Remarks			
Remarks		For direct replacement of 3-wire NPN sensors	
		In this case pin 1 (grey in the wiring diagram) is not used.	
Pack quantity		1 pcs.	
Electrical connection - plug			
Connector: 1 x M12; coding: A; Contacts: gold-plated			
			



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Connection

