

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	Use in machine tools, coolants and lubricants

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	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	12
Real sensing range Sr [mm]	12 ± 10 %



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Operating distance	[mm]	0...9.7
Increased sensing range		yes

Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 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 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 61000-4-6 HF conducted	10 V
	EN 55011	class B
MTTF	[years]	2655
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Hazardous voltage
	File number UL	E174191

Mechanical data		
Weight	[g]	44.3
Housing		threaded type
Mounting		non-flush mountable
Dimensions	[mm]	M18 x 1 / L = 51
Thread designation		M18 x 1
Materials		brass white bronze coated; sensing face: LCP

Displays / operating elements		
Display	switching status	4 x 90° LED, yellow

Accessories		
Items supplied		lock nuts: 2

Remarks		
Remarks		Conventional 3-wire npn sensors can be replaced. 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

