

Inductive sensor

IFB2004BARKG/M/US-104-DRS



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	4
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 45

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]	700
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 10 %
Operating distance [mm]	0...3.25
Increased sensing range	yes



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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]	2487	
UL approval	Ta		0...40 °C
	Enclosure type		Type 1
	power supply		Hazardous voltage
	File number UL		E174191
Mechanical data			
Weight		[g]	25
Housing		threaded type	
Mounting		flush mountable	
Dimensions		[mm]	M12 x 1 / L = 45
Thread designation		M12 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			
Pack quantity		1 pcs.	
Electrical connection - plug			
Connector: 1 x M12; coding: A; Contacts: gold-plated			
			

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Connection

