

Inductive sensor

IFB3004BBPKG/US-104



Product characteristics

Electrical design	PNP
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
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]	100
Switching frequency DC [Hz]	700
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 10 %
Operating distance [mm]	0...3.24
Increased sensing range	yes



Inductive sensor

IFB3004BBPKG/US-104

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]	1528
Embedded software included	yes	
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	voltage supply	Hazardous voltage
	UL Approval no.	A003
	File number UL	E174191
Mechanical data		
Weight	[g]	24.5
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 white; LED window: PEI; lock nuts: brass white bronze coated	
Displays / operating elements		
Display	switching status	4 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection - plug		
Connector: 1 x M12; Contacts: gold-plated		
		



Inductive sensor

IFB3004BBPKG/US-104

Connection

