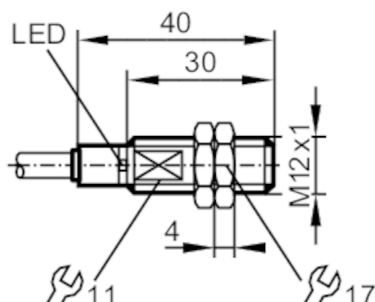




Inductive full-metal sensor

IFB2004BARKG/AM/SC/5,0M/2LED



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	4
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 40

Application

Special feature	Increased sensing range; Full-metal housing; Optical setting aid; anti-spatter
Application	Use in welding applications
Pressure rating [bar]	50
Note on pressure rating	sensing face

Electrical data

Operating voltage [V]	10...36 DC
Protection class	III
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]	0.6
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	75
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	4
Operating distance [mm]	0...3.25



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Increased sensing range	yes	
Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.2 / aluminium: 0.1 / copper: 0	
Hysteresis [% of Sr]	1...20	
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 emission	class B
Impact resistance	1 J	
MTTF [years]	967	
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	File number UL	E174191
Mechanical data		
Weight [g]	212.7	
Housing	threaded type	
Mounting	flush mountable	
Dimensions [mm]	M12 x 1 / L = 40	
Thread designation	M12 x 1	
Materials	housing: stainless steel (316L/1.4404) anti-spatter; sensing face: stainless steel (316L/1.4404) anti-spatter; lock nuts: stainless steel (316L/1.4404) anti-spatter	
Full-metal housing	yes	
Displays / operating elements		
Display	switching status	1 x LED, green
	setting aid	1 x LED, red
Optical setting aid	yes	
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	



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Electrical connection

Cable: 5 m, PVC; 2 x 0.5 mm²

Connection



BN = Core colours : brown
BU = blue

Diagrams and graphs

Installation

