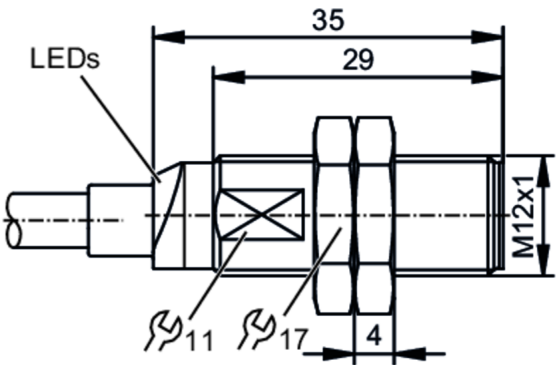


IFR204



Inductive full-metal sensor

IFB2004BARKG/AM/SC/3,0M/2LED



Product characteristics

Electrical design	PNP/NPN
Output function	normally open
Sensing range [mm]	4
Housing	Threaded type
Dimensions [mm]	M12 x 1 / L = 35

Application

System	Increased sensing range; Full-metal housing; optical setting aid
Application	Inductive sensors for welding applications
Pressure rating [bar]	50
Note on pressure rating	sensing face

Electrical data

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

Outputs

Electrical design	PNP/NPN
Output function	normally open
Max. voltage drop switching output DC [V]	3.2
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	yes (non-latching)
Overload protection	yes

Monitoring range

Sensing range [mm]	4
Operating distance [mm]	0...3.24

IFR204



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Increased sensing range		yes	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminum: 0.6 / copper: 0.3	
Hysteresis [% of Sr]		1...20	
Operating conditions			
Ambient temperature [°C]		-40...85	
Protection		IP 65; IP 66; IP 67; IP 68; IP 69K	
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		-25...70 °C
	Enclosure type		Type 1
	voltage supply		Limited Voltage/Current
	UL approval number		A042
	File number UL		E174191
Mechanical data			
Weight [g]		138.2	
Housing		Threaded type	
Mounting		flush mountable	
Dimensions [mm]		M12 x 1 / L = 35	
Thread designation		M12 x 1	
Material		housing: stainless steel (1.4404 / 316L) weld coated; sensing face: stainless steel (1.4404 / 316L) weld coated; cable plug: PEI; lock nuts: stainless steel (1.4404 / 316L) weld coated	
Tightening torque [Nm]		6	
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.	

IFR204



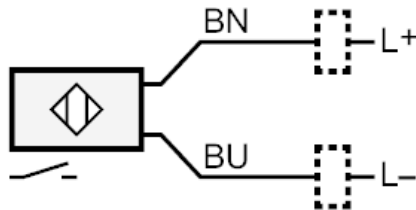
Inductive full-metal sensor

IFB2004BARKG/AM/SC/3,0M/2LED

Electrical connection

Cable: 3 m, PVC; 2 x 0.5 mm²

Connection



BN = Core colors : brown
BU = blue

Diagrams and graphs

Installation

