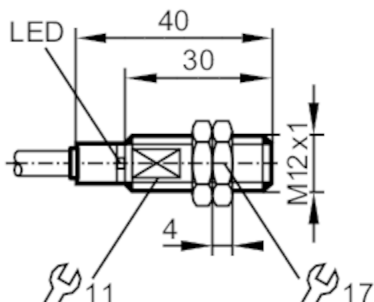


IFR205



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	

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
Increased sensing range		yes

IFR205



Inductive full-metal sensor

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

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]	1422
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E174191
Mechanical data		
Weight	[g]	214.3
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 40
Thread designation		M12 x 1
Materials		housing: stainless steel (1.4404 / 316L) anti-spatter; sensing face: stainless steel (1.4404 / 316L) anti-spatter; lock nuts: stainless steel (1.4404 / 316L) 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		
Accessories (supplied)		lock nuts: 2
Remarks		
Pack quantity		1 pcs.

IFR205



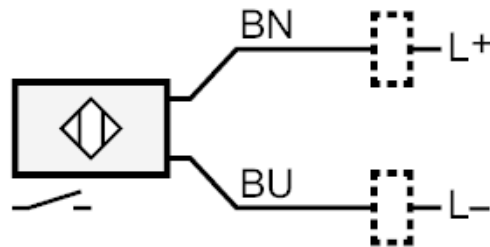
Inductive full-metal sensor

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

Electrical connection

Cable: 5 m, PVC; 2 x 0.5 mm²

Connection

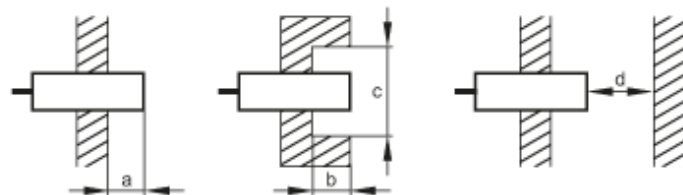


Core colours :

BN = brown
BU = blue

Diagrams and graphs

Installation



[mm]	a	b	c (Ø)	d
Fe	0	0	-	12
Al	9	15	36	12

