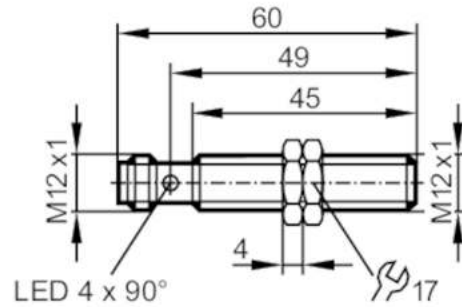


IFR200



Inductive full-metal sensor

IFK3004BBPKG/AM/SC/V4A/US-104



Product characteristics

Electrical design		PNP
Output function		normally open
Sensing range	[mm]	4
Housing		threaded type
Dimensions	[mm]	M12 x 1 / L = 60

Application

Special feature		Gold-plated contacts; Increased sensing range; Full-metal housing; Magnetic-field immune; anti-spatter
Application		Use in welding applications
Pressure rating	[bar]	100
Note on pressure rating		sensing face
Magnetic-field immune		yes; (pulse duration of the welding current: < 200 ms)

Electrical data

Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 20
Protection class		III
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]	2
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

IFR200



Inductive full-metal sensor

IFK3004BBPKG/AM/SC/V4A/US-104

Increased sensing range		yes
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.6 / brass: 0.7 / aluminium: 0.6 / copper: 0.3
Hysteresis	[% of Sr]	1...20
Operating conditions		
Ambient temperature	[°C]	0...85
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]	1152
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	power supply	Limited Voltage/Current
	UL Approval no.	A012
	File number UL	E174191
Mechanical data		
Weight	[g]	35
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 60
Thread designation		M12 x 1
Materials		housing: stainless steel (1.4404 / 316L) anti-spatter; sensing face: stainless steel (1.4404 / 316L) anti-spatter; LED window: PEI; lock nuts: stainless steel (1.4404 / 316L) anti-spatter
Tightening torque	[Nm]	6
Full-metal housing		yes
Displays / operating elements		
Display	switching status	4 x 90° LED, yellow
	operation	1 x LED, green
Accessories		
Items supplied		lock nuts: 2
Remarks		
Pack quantity		1 pcs.

IFR200

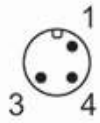


Inductive full-metal sensor

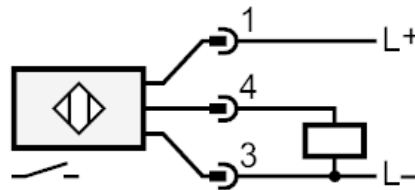
IFK3004BBPKG/AM/SC/V4A/US-104

Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: gold-plated

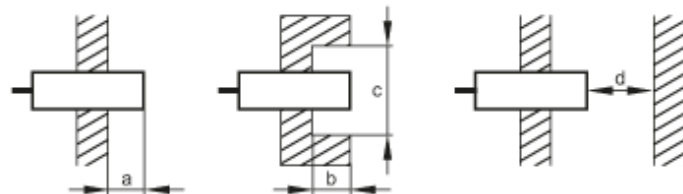


Connection



Diagrams and graphs

Installation



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

