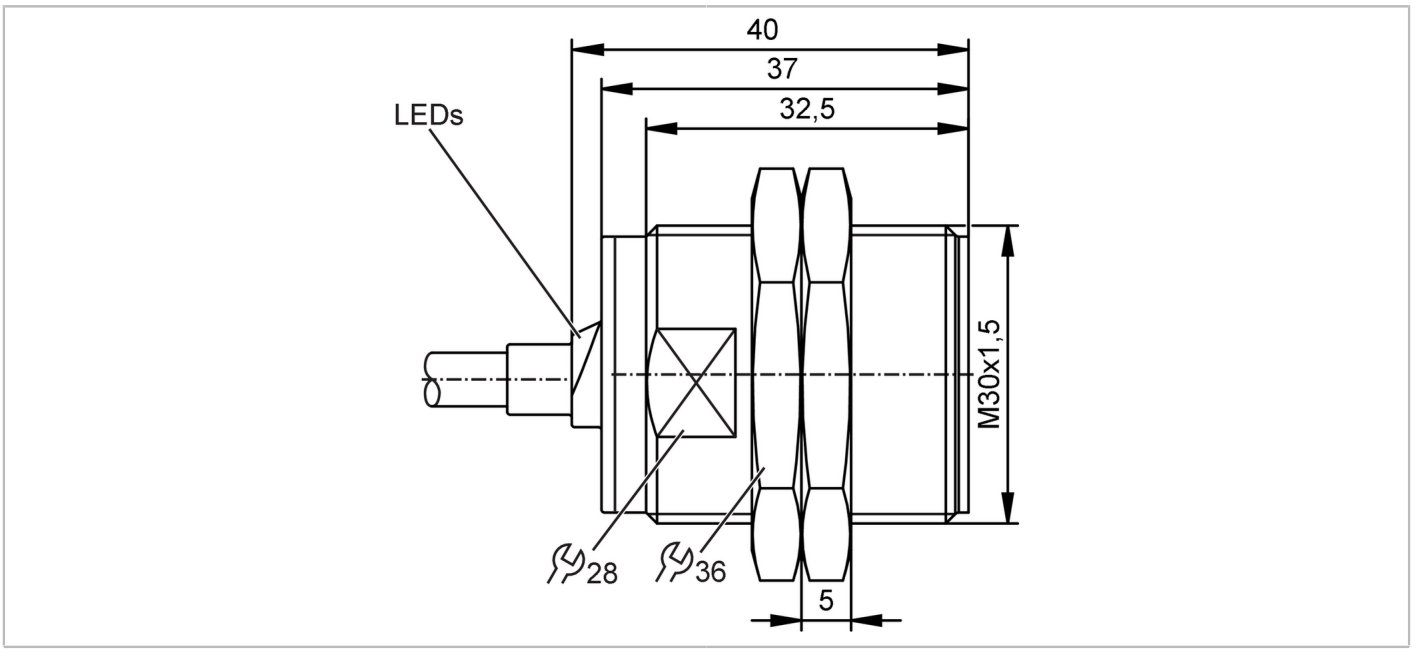
IIR205

Inductive full-metal sensor

IIB2012BARKG/AM/SC/5,0M/2LED



Product characteristics		
Electrical design		PNP/NPN
Output function		normally open
Sensing range	[mm]	12
Housing		threaded type
Dimensions	[mm]	M30 x 1.5 / L = 40
Application		
Special feature		Increased sensing range; Full-metal housing; Optical setting aid
Application		Use in welding applications
Pressure rating	[bar]	10
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]	25
Short-circuit protection		yes

IIR205

Inductive full-metal sensor

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Type of short-circuit protection			pulsed
Overload protection			yes
Detection zone			
Sensing range	[mm]		12
Operating distance	[mm]		0...9.72
Increased sensing range			yes
Accuracy / deviations			
Correction factor			steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminium: 0.5 / copper: 0.1
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]		959
UL approval		Ta	0...40 °C
		Enclosure type	Type 1
		voltage supply	Limited Voltage/Current
		UL approval no.	A042
		File number UL	E174191
Mechanical data			
Weight	[g]		299.5
Housing			threaded type
Mounting			flush mountable
Dimensions	[mm]		M30 x 1.5 / L = 40
Thread designation			M30 x 1.5
Materials			housing: stainless steel (316L/1.4404) anti-spatter; sensing face: stainless steel (316L/1.4404) anti-spatter; cable plug: PEI; lock nuts: stainless steel (316L/1.4404) anti-spatter
Tightening torque	[Nm]		60
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.

IIR205

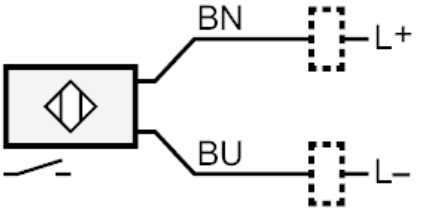
Inductive full-metal sensor

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Electrical connection

Cable: 5 m, PVC; 2 x 0.5 mm²

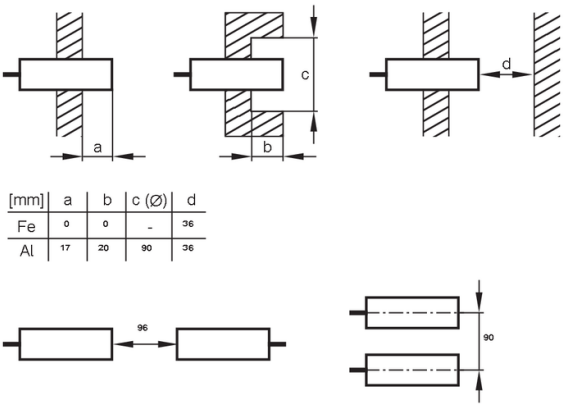
Connection



Core colours :
BN = brown
BU = blue

Diagrams and graphs

Installation



[mm]	a	b	c (Ø)	d
Fe	0	0	-	36
Al	17	20	90	36