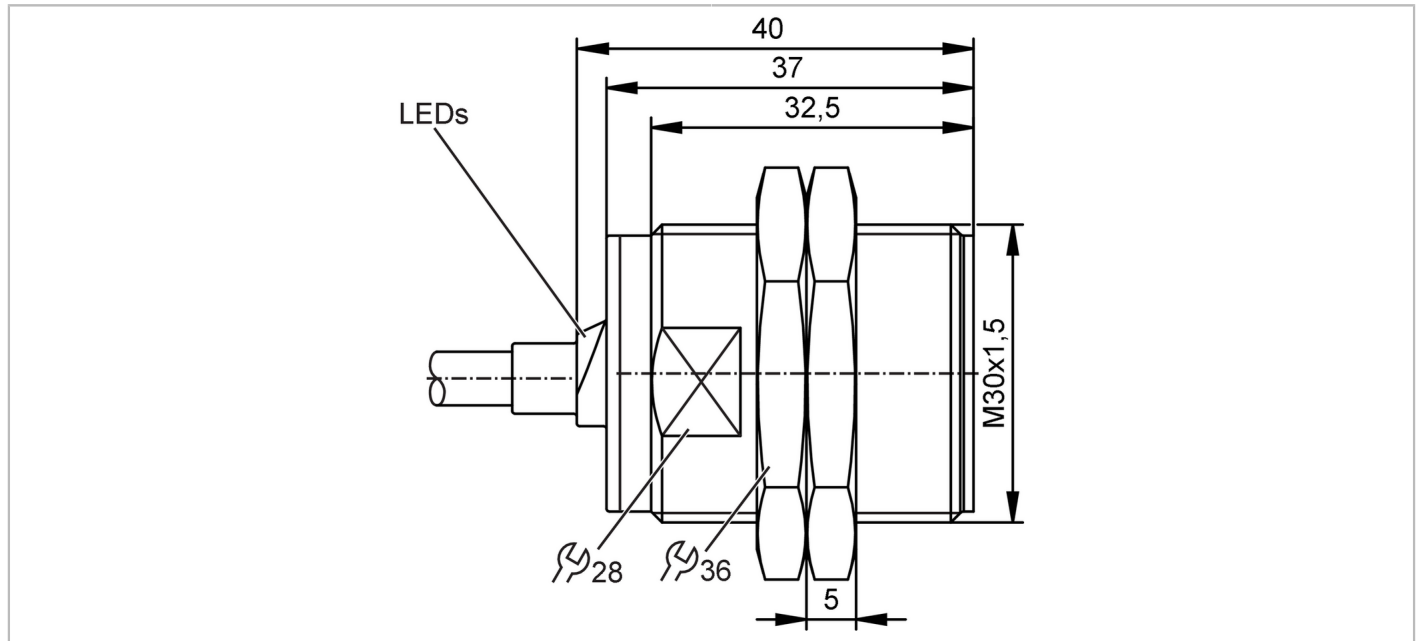


# IIR206



## Inductive full-metal sensor

IIB2012BARKG/AM/SC/0,3M/US/2LE



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	gold-plated contacts; Increased sensing range; Full-metal housing; optical setting aid
Application	Inductive sensors for 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]	5.2
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

# IIR206



## Inductive full-metal sensor

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Type of short-circuit protection		yes (non-latching)
Overload protection		yes
<b>Monitoring range</b>		
Sensing range	[mm]	12
Operating distance	[mm]	0...9.72
Increased sensing range		yes
<b>Accuracy / deviations</b>		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.7 / aluminum: 0.5 / copper: 0.1
Hysteresis	[% of Sr]	1...20
<b>Operating conditions</b>		
Ambient temperature	[°C]	-40...85
Protection		IP 65; IP 66; IP 67; IP 68; IP 69K
<b>Tests / approvals</b>		
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]	871
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A042
	File number UL	E174191
<b>Mechanical data</b>		
Weight	[g]	133
Housing		Threaded type
Mounting		flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 40
Thread designation		M30 x 1.5
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]	60
Full-metal housing		yes
<b>Displays / operating elements</b>		
Display	Switching status	1 x LED, green
	Setting aid	1 x LED, red
Optical setting aid		yes
<b>Accessories</b>		
Items supplied		lock nuts: 2
<b>Remarks</b>		
Pack quantity		1 pcs.

# IIR206



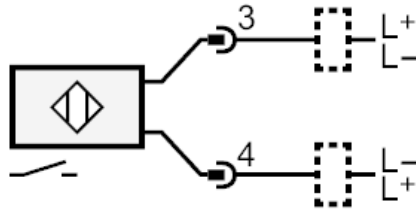
## Inductive full-metal sensor

IIB2012BARKG/AM/SC/0,3M/US/2LE

### Electrical connection - plug

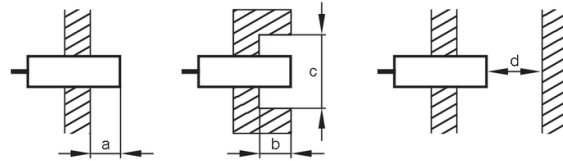
Cable: 0.3 m, PVC; 2 x 0.5 mm<sup>2</sup>

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



### Diagrams and graphs

#### Installation



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

