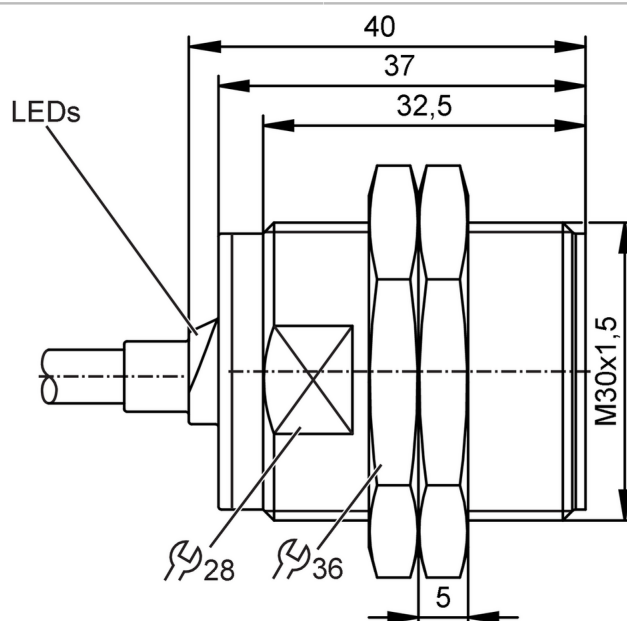


IIR205



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		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]	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	yes (non-latching)	
Overload protection	yes	
Monitoring range		
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 / aluminum: 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 number	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	
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	
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



BN = Core colors : brown
BU = blue

Diagrams and graphs

Installation

