

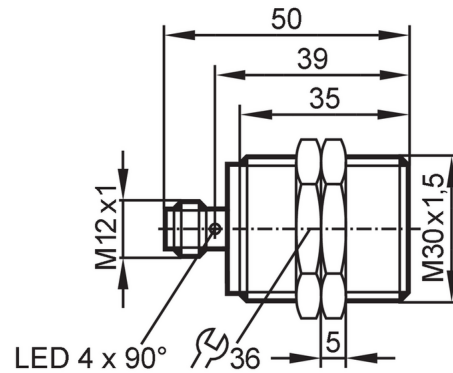


Inductive full-metal sensor

IIB3015BBPKG/AM/SC/IV4A/US-104

Article to be discontinued
Discontinuation date: 03/31/2026

Alternative articles: IIR200
When selecting an alternative article and accessories please note that technical data may differ!



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	15
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 50

Application

Special feature	gold-plated contacts; Increased sensing range; Full-metal housing; Magnetic-field immune
Application	Inductive sensors for welding applications
Pressure rating	100 bar / 10 MPa
Note on pressure rating	sensing face
Magnetic-field immune	yes
Max. electromagnetic field immunity [mT]	100

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 10
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

IIR207



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Overload protection		yes
Monitoring range		
Sensing range	[mm]	15
Real sensing range Sr	[mm]	15 ± 10 %
Operating distance	[mm]	0...12.15
Increased sensing range		yes
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.6 / aluminum: 0.5 / copper: 0.2
Hysteresis	[% of Sr]	3...15
Switch-point drift	[% of Sr]	-10...10
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	class B
Impact resistance		1 J
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	100 g 11 ms half-sine; 3 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-27	40 g 6 ms; 4000 shocks each in every direction of the 3 coordinate axes
Fast temperature changes	EN 60068-2-14 Na	TA = -40 °C; TB = 85 °C; t1 = 30 min; t2 = < 10 s; 50 cycles
MTTF	[years]	1176
Embedded software included		yes
UL approval	Ta	-25...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A012
	File number UL	E174191
Mechanical data		
Weight	[g]	115.5
Housing		Threaded type
Mounting		flush mountable
Dimensions	[mm]	M30 x 1.5 / L = 50
Thread designation		M30 x 1.5
Material		stainless steel (1.4404 / 316L) weld coated; sensing face: stainless steel (1.4404 / 316L) weld coated; LED window: PEI; lock nuts: brass weld coated
Tightening torque	[Nm]	60
Full-metal housing		yes

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Displays / operating elements

Display	Switching status	4 x LED, yellow
	Power	1 x LED, green

Accessories

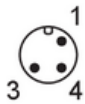
Items supplied	lock nuts: 2
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3, gold-plated



Connection

