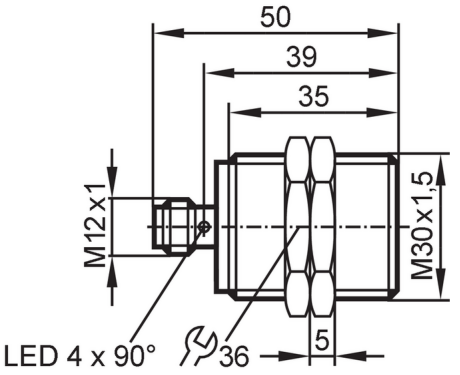
IIR207

Inductive full-metal sensor

IIB3015BBPKG/AM/SC/V4A/US-104

phase-out article
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		Use in welding applications	
Pressure rating		100 bar	10 MPa
Note on pressure rating		sensing face	
Magnetic-field immune		yes	
Max. magnetic 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	

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Overload protection			yes
Detection zone			
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 / aluminium: 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, 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 change		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 no.	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
Materials			stainless steel (316L/1.4404) anti-spatter; sensing face: stainless steel (316L/1.4404) anti-spatter; LED window: PEI; lock nuts: brass anti-spatter
Tightening torque	[Nm]		60
Full-metal housing			yes

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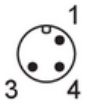
Displays / operating elements		
Display	switching status	4 x LED, yellow
	operation	1 x LED, green

Accessories	
Items supplied	lock nuts: 2

Remarks	
Pack quantity	1 pcs.

Electrical connection - plug

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



Connection

