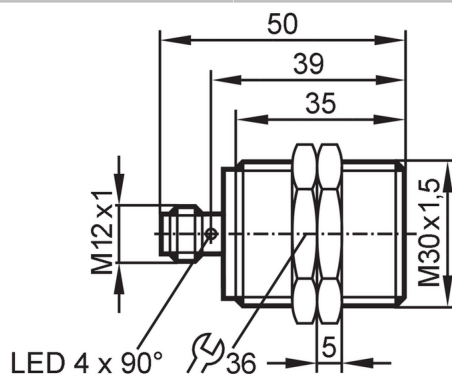




Inductive full-metal sensor

IIB3015BBPKG/AM/V4A/US-104



EC 1935/2004



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
Application	Use in hygienic areas / regular cleaning processes
Pressure rating	100 bar 10 MPa
Note on pressure rating	sensing face

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]	50
Short-circuit protection	yes
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



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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]	0...100	
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 Nc	\$TA_0GradC_TB_100GradC_t1_30_min_t2_10_s_50
MTTF [years]		1244
Embedded software included		no
UL approval	Ta	0...70 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	A012
	File number UL	E174191

Mechanical data

Weight [g]	113.2	
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); sensing face: stainless steel (1.4404 / 316L); LED window: PEI; lock nuts: stainless steel (1.4404 / 316L)	
Tightening torque [Nm]	80	
Full-metal housing	yes	

Displays / operating elements

Display	Switching status	4 x LED, yellow
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Accessories

Items supplied	lock nuts: 2	
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Remarks

Pack quantity	1 pcs.	
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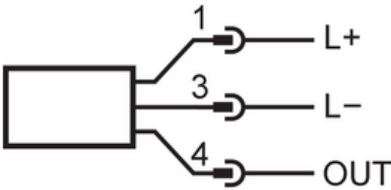
IIB3015BBPKG/AM/V4A/US-104

Electrical connection - plug

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



Connection



1	L+	
3	L-	
4	OUT	DO (NO)

DO: digital output; NO: normally open