

II505A



Inductive full-metal sensor

IIB3015BBPKG/AM/US-104/3G/3D



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	
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

Detection zone

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 / aluminium: 0.5 / copper: 0.2	
Hysteresis [% of Sr]	1...15	
Operating conditions		
Ambient temperature [°C]	-25...60	
Note on ambient temperature	when used outside the hazardous area: -40...85°C	
Protection	IP 67; (when used outside the hazardous area: IP 65, IP 66, IP 67, IP 68, IP 69K)	
Tests / approvals		
Approval	BVS 20 ATEX E 055 X; IECEx BVS 20.0042 X	
ATEX marking	II 3G Ex ec IIC T6 Gc	
	II 3D Ex tc IIIC T85°C Dc	
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
MTTF [years]	1217	
Embedded software included	no	
Mechanical data		
Weight [g]	134.4	
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); sensing face: stainless steel (316L/1.4404); LED window: PEI; lock nuts: stainless steel (316L/1.4404)	
Tightening torque [Nm]	70	
Full-metal housing	yes	
Displays / operating elements		
Display	switching status	4 x LED, yellow
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	
Electrical connection		
Connector: 1 x M12; coding: A; Contacts: gold-plated		
		

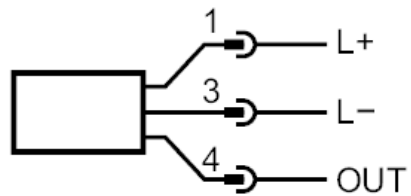
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Connection



Electrical connection - plug

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

DO: digital output; NO: normally open