

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 [bar]	100
Pressure rating [MPa]	10
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

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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	

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
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Accessories

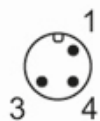
Items supplied	lock nuts: 2
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Remarks

Pack quantity	1 pcs.
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Electrical connection

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



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Connection

