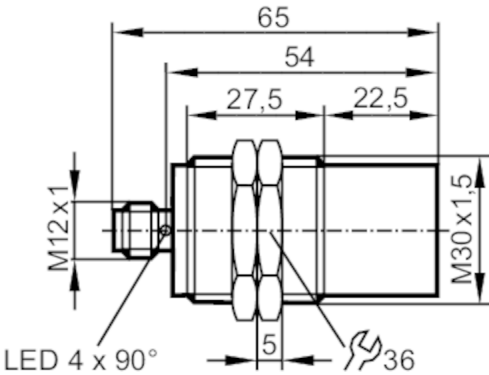


II503A



Inductive full-metal sensor

IIK3025-BPKG/AM/P/US104/3G/3D



Product characteristics		
Electrical design		PNP
Output function		normally open
Sensing range	[mm]	25
Housing		threaded type
Dimensions	[mm]	M30 x 1.5 / L = 65
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]	< 25
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]	250
Short-circuit protection		yes
Overload protection		yes
Detection zone		
Sensing range	[mm]	25
Real sensing range Sr	[mm]	25 ± 10 %
Operating distance	[mm]	0...20.3

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Increased sensing range		yes	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 1 / brass: 0.9 / aluminium: 0.6 / copper: 0.5	
Hysteresis [% of Sr]		1...20	
Switch point drift [% of Sr]		-10...10	
Operating conditions			
Ambient temperature [°C]		-40...60	
Protection		IP 67; (when used outside the hazardous area: IP 65, 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 T4 Gc	
		 II 3D Ex tc IIIC T95°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		class B
Impact resistance	EN 60068-2-75 Ehc		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 Ea		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
Salt spray test	EN 60068-2-52 Kb		50 cycles
MTTF [years]	1352		
Mechanical data			
Weight [g]	139.771		
Housing	threaded type		
Mounting	non-flush mountable		
Dimensions [mm]	M30 x 1.5 / L = 65		
Thread designation	M30 x 1.5		
Materials	stainless steel (316L/1.4404); PEI; lock nuts: brass white bronze coated		
Tightening torque [Nm]	80		
Full-metal housing	yes		
Displays / operating elements			
Display	switching status	4 x 90° LED, yellow	
Accessories			
Items supplied	lock nuts: 2		
Remarks			
Remarks	To maintain the EMC data:		
	Equalise potential by connecting the sensor housing to the machine earth.		
Pack quantity	1 pcs.		

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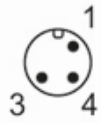


Inductive full-metal sensor

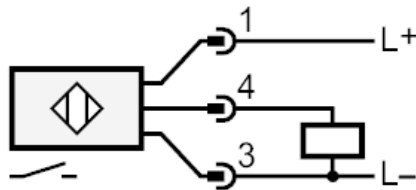
IIK3025-BPKG/AM/P/US104/3G/3D

Electrical connection - plug

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



Connection



Diagrams and graphs

