IM503A

Inductive sensor

IMC4040-CPKG/US-100-DPA/3D

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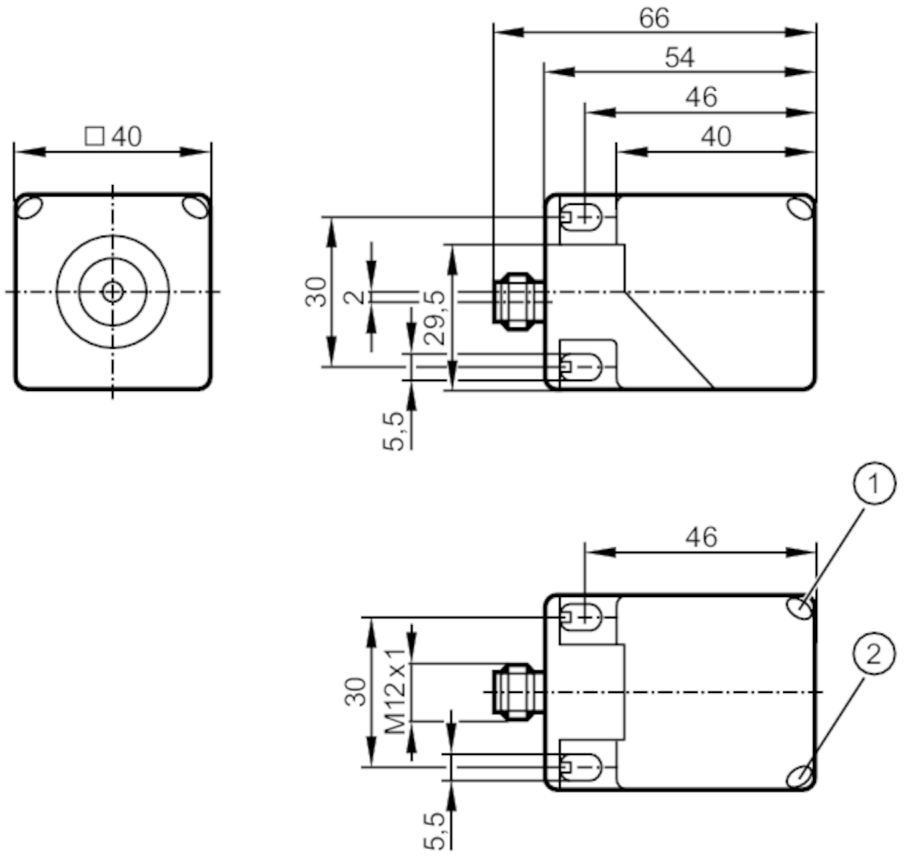
Alternative articles: IM511A

When selecting an alternative article and accessories please note that technical data may differ!



1 LED yellow
2 LED green

Product characteristics		
Electrical design		PNP
Output function		complementary
Sensing range	[mm]	40
Housing		rectangular
Dimensions	[mm]	40 x 40 x 54
Electrical data		
Operating voltage	[V]	10...30 DC; (when used outside the hazardous area: 10...36)
Current consumption	[mA]	< 20
Protection class		II
Reverse polarity protection		yes
Outputs		
Electrical design		PNP
Output function		complementary

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Max. voltage drop switching output DC	[V]	2.5	
Max. leakage current	[mA]	0.1	
Permanent current rating of switching output DC	[mA]	200	
Switching frequency DC	[Hz]	100	
Short-circuit protection		yes	
Type of short-circuit protection		pulsed	
Overload protection		yes	
Detection zone			
Sensing range	[mm]	40	
Operating distance	[mm]	0...32.4	
Accuracy / deviations			
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.4 / copper: 0.3	
Hysteresis	[% of Sr]	1...20	
Operating conditions			
Ambient temperature	[°C]	-20...50	
Note on ambient temperature		when used outside the hazardous area: -25...70 °C	
Protection		IP 5x; (when used outside the hazardous area: IP 67)	
Tests / approvals			
ATEX marking		II 3D Ex tD A22 IP67 T80°C X	
		II 3G Ex nA II T6 X	
EMC		EN 61000-4-2 ESD	8 kV CD / 6 kV AD
		EN 61000-4-3 HF radiated	10 V/m
		EN 61000-4-4 Burst	2 kV
		EN 61000-4-5 Surge	0,5 line to line, Ri: 2 Ohm
		EN 61000-4-6 HF conducted	10 V
		EN 55011	class B
Mechanical data			
Weight	[g]	0.17	
Housing		rectangular	
Mounting		non-flush mountable	
Dimensions	[mm]	40 x 40 x 54	
Materials		housing: PA; sensing face: PA black; end cap: PA; clamp: orange; screw: stainless steel (304CU/1.4567)	
Displays / operating elements			
Display		switching status	1 x LED, yellow
		operation	1 x LED, green
Remarks			
Pack quantity		1 pcs.	

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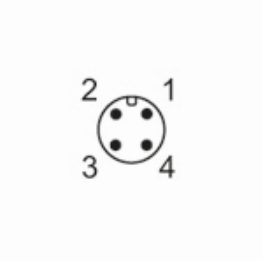
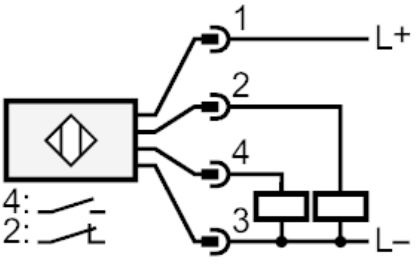
Electrical connection - plug

Connector: 1 x M12; coding: A; Locking: locking, rotatable, stainless steel (316L/1.4404)



Connection