

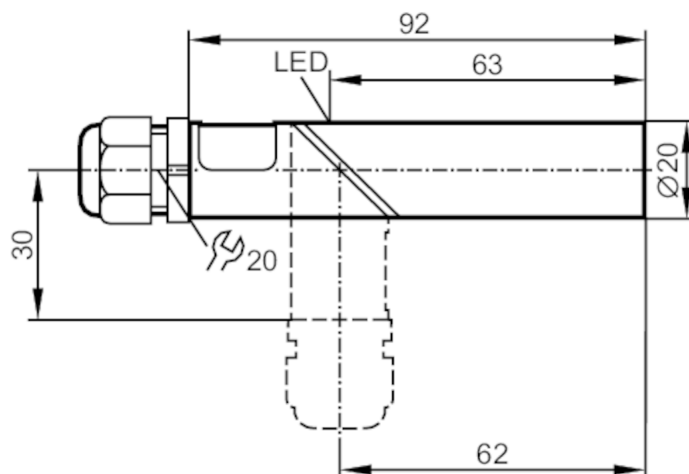
Inductive sensor

IAE2010-FBOA/3D

Article no longer available - archive entry

Alternative articles: IM001A

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



Product characteristics

Output function		normally open / normally closed; (selectable)
Sensing range	[mm]	10
Housing		cylindrical
Dimensions	[mm]	Ø 20 / L = 92

Electrical data

Operating voltage	[V]	20...250 AC/DC
Protection class		II
Reverse polarity protection		no

Outputs

Output function		normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	6
Max. voltage drop switching output AC	[V]	6.5
Minimum load current	[mA]	5
Max. leakage current	[mA]	2.5 (250 V AC) / 1.3 (130 V AC) / 0.8 (24 V DC)
Permanent current rating of switching output AC	[mA]	150; (350 (...50 °C); when used outside the hazardous area: 250 (...80 °C))
Permanent current rating of switching output DC	[mA]	100; (350 (...50 °C); when used outside the hazardous area: 250 (...80 °C))
Short-time current rating of switching output	[mA]	2200; (20 ms / 0,5 Hz)
Switching frequency AC	[Hz]	25
Switching frequency DC	[Hz]	70
Short-circuit proof		no

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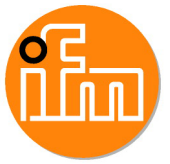


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Overload protection	no	
Detection zone		
Sensing range	[mm]	10
Real sensing range Sr	[mm]	10 ± 10 %
Operating distance	[mm]	0...8.1
Accuracy / deviations		
Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2	
Hysteresis	[% of Sr]	1...15
Switch point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-20...60
Note on ambient temperature	when used outside the hazardous area: -25...80 °C	
Protection	IP 54; (when used outside the hazardous area: IP 65)	
Tests / approvals		
ATEX marking	II 3D Ex tD A22 IP54 T80°C X	
EMC	EN 60947-5-2	
Mechanical data		
Weight	[g]	0.105
Housing	cylindrical	
Mounting	non-flush mountable	
Dimensions	[mm]	Ø 20 / L = 92
Materials	PBT; LED window: PC	
Tightening torque for cable gland	[Nm]	3
Displays / operating elements		
Display	switching status	1 x LED, yellow
Electrical connection		
Required protection	miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting; Place the fuse outside the hazardous area.	
Accessories		
Items supplied	Mounting clamps: 1	
Remarks		
Remarks	Recommendation: Check the safe functioning of the unit after a short circuit.	
Pack quantity	1 pcs.	

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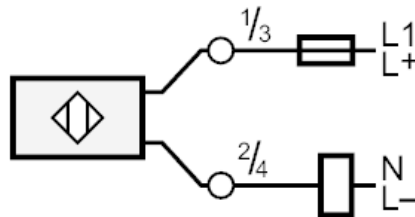
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Electrical connection

terminals: ...2.5 mm²; Cable sheath: Ø 5.5...13 mm

Connection



Note miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting
Place the fuse outside the hazardous area.