

IA500A



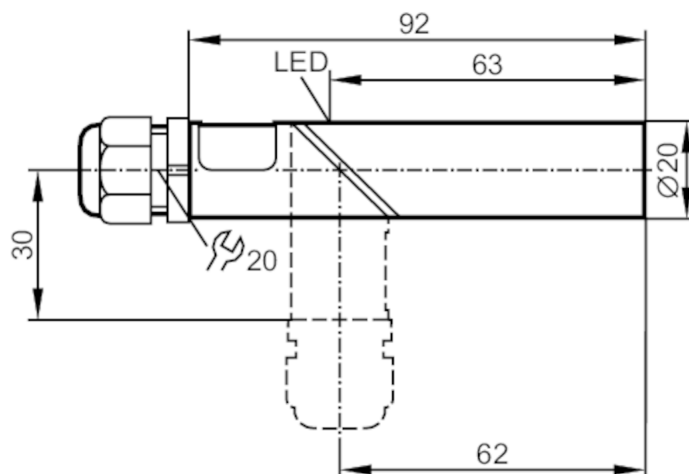
Inductive sensor

IAE2010-FRKG/3D

Article no longer available - archive entry

Alternative articles: IM508A

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



Product characteristics

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

Electrical data

Operating voltage [V]	10...55 DC
Protection class	II
Reverse polarity protection	yes

Outputs

Electrical design	PNP/NPN
Output function	normally open / normally closed; (selectable)
Max. voltage drop switching output DC [V]	4.6
Minimum load current [mA]	5
Max. leakage current [mA]	1
Permanent current rating of switching output DC [mA]	150; (when used outside the hazardous area: 300)
Short-time current rating of switching output [mA]	150
Switching frequency DC [Hz]	300
Short-circuit protection	yes
Type of short-circuit protection	pulsed

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Overload protection	yes	
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
Accessories		
Items supplied	Mounting clamps: 1	
Remarks		
Pack quantity	1 pcs.	

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Electrical connection

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

Connection

