



Inductive sensor

IGA2005-BBOA/RT



Product characteristics

Output function	normally closed
Sensing range [mm]	5
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 80

Electrical data

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

Outputs

Output function	normally closed
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 (110 V AC) / 0.8 (24 V DC)
Permanent current rating of switching output AC [mA]	250; (350 (...50 °C))
Permanent current rating of switching output DC [mA]	100
Short-time current rating of switching output [mA]	2200; (20 ms / 0,5 Hz)
Switching frequency AC [Hz]	25
Switching frequency DC [Hz]	50
Short-circuit proof	no
Overload protection	no

Monitoring range

Sensing range [mm]	5
Real sensing range Sr [mm]	5 ± 10 %
Operating distance [mm]	0...4.05

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.3 / copper: 0.2
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Hysteresis	[% of Sr]	1...15
Switch-point drift	[% of Sr]	-10...10

Operating conditions

Ambient temperature	[°C]	-25...80
Protection		IP 67

Tests / approvals

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
MTTF	[years]	609
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	voltage supply	Hazardous voltage
	File number UL	E174191

Mechanical data

Weight	[g]	153.8
Housing		Threaded type
Mounting		flush mountable
Dimensions	[mm]	M18 x 1 / L = 80
Thread designation		M18 x 1
Material		brass white bronze coated; sensing face: PBT natural; LED window: PBT natural
Tightening torque	[Nm]	23

Displays / operating elements

Display	Switching status	1 x LED, red
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Electrical connection

Required protection	miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting
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Accessories

Items supplied	lock nuts: 2
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Remarks

Remarks	Recommendation: check the unit for reliable function after a short circuit.
Pack quantity	1 pcs.

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Electrical connection

Cable: 2 m, PVC; 2 x 0.5 mm²

Connection



Note miniature fuse to IEC60127-2 sheet 1 $\leq$ 2 A fast acting

Core colors :

BN =

brown

BU =

blue