



Inductive sensor

IBE2020-FBOA/RT



Product characteristics

Output function		normally open / closed; (selectable)
Sensing range	[mm]	20
Housing		tubular
Dimensions	[mm]	Ø 34 / L = 98

Electrical data

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

Outputs

Output function		normally open / 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 (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]	20
Real sensing range Sr	[mm]	20 ± 10 %



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Operating distance	[mm]	0...16.2
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminum: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	3...15
Switch-point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 65
Tests / approvals		
EMC	EN 60947-5-2	
	EN 55011	class B
MTTF	[years]	610
UL approval	Ta	0...40 °C
	Enclosure type	Type 1
	File number UL	E174191
Mechanical data		
Weight	[g]	175.5
Housing		tubular
Mounting		non-flush mountable
Dimensions	[mm]	Ø 34 / L = 98
Material		PBT; bevelled housing part: PC
Displays / operating elements		
Display	Switching status	1 x LED, red
Electrical connection		
Required protection		miniature fuse to IEC60127-2 sheet 1; ≤ 2 A; fast acting
Accessories		
Items supplied		Mounting clamp: 1
Remarks		
Remarks		Recommendation: check the unit for reliable function after a short circuit.
Pack quantity		1 pcs.

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Electrical connection

terminals: ...2.5 mm²; Cable sheath: Ø 7...13 mm; Cable gland: M20 X 1.5

Connection



Note miniature fuse to IEC60127-2 sheet 1 ≤ 2 A fast acting