IB5023

Inductive sensor

IB-2020SFROG/20M

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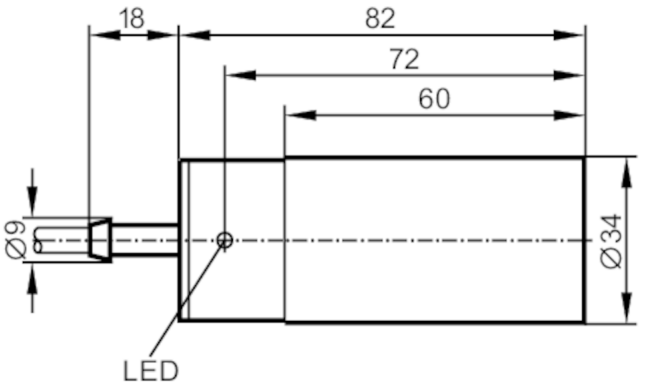

Product characteristics		
Electrical design		PNP; (self-monitoring system)
Output function		normally open / normally closed; (selectable)
Sensing range	[mm]	20
Housing		cylindrical
Dimensions	[mm]	Ø 34 / L = 82
Electrical data		
Connection to switching amplifiers		yes
Switching amplifiers		connection to F400 control monitor or as 2-wire DC DNP
Operating voltage	[V]	10...55 DC
Reverse polarity protection		no
Outputs		
Electrical design		PNP; (self-monitoring system)
Output function		normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	6.5
Minimum load current	[mA]	5
Max. leakage current	[mA]	1.5
Permanent current rating of switching output DC	[mA]	50
Switching frequency DC	[Hz]	20
Short-circuit protection		no
Overload protection		no
Detection zone		
Sensing range	[mm]	20
Real sensing range Sr	[mm]	20 ± 10 %
Operating distance	[mm]	0...16.2
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.4 / aluminium: 0.3 / copper: 0.2
Hysteresis	[% of Sr]	1...15

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Switch point drift	[% of Sr]	-10...10	
Operating conditions			
Ambient temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
EMC		EN 60947-5-2	
		EN 55011	class B
Mechanical data			
Housing		cylindrical	
Mounting		non-flush mountable	
Dimensions	[mm]	Ø 34 / L = 82	
Materials		PBT; end cap: PC	
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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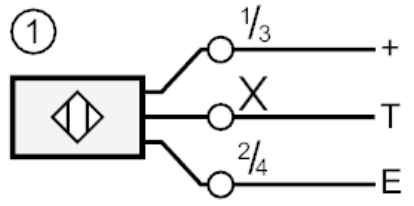
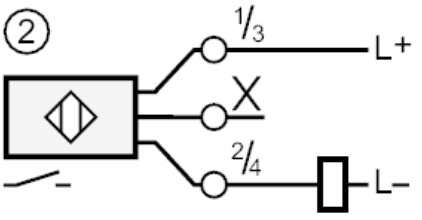
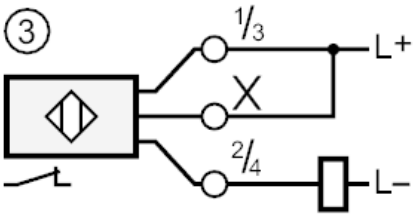
Electrical connection

Cable: 20 m, PVC; 3 x 0.5 mm²

Connection







1 =	connection to F400
2 =	Connection 2-wire DC
3 =	Connection 2-wire DC
	Core colours :
BK =	black
BN =	brown
BU =	blue