



Inductive full-metal sensor

IFA2002-FRKG/V4A/0,3M/AMP



Product characteristics

Electrical design	PNP/NPN
Output function	normally open / normally closed; (selectable)
Sensing range [mm]	2
Housing	threaded type
Dimensions [mm]	M12 x 1 / L = 71

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]	4
Max. leakage current [mA]	0.5
Permanent current rating of switching output DC [mA]	400
Switching frequency DC [Hz]	1200
Short-circuit protection	yes
Type of short-circuit protection	pulsed
Overload protection	yes

Detection zone

Sensing range [mm]	2
Real sensing range S_r [mm]	$2 \pm 10 \%$
Operating distance [mm]	0...1.6

Accuracy / deviations

Correction factor	steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminium: 0.4 / copper: 0.3
Hysteresis [% of S_r]	3...15
Switch point drift [% of S_r]	-10...10

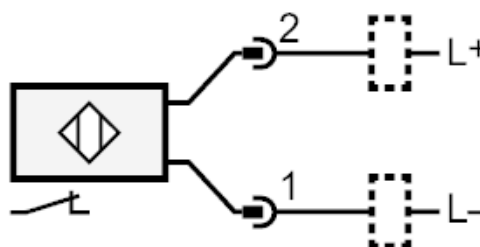
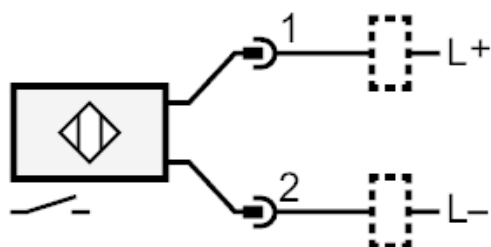
IF6042



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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 61000-4-5 Surge	0,5 kV line to line, Ri: 2 Ohm
	EN 61000-4-6 HF conducted	10 V
	EN 55011 emission	class B
MTTF	[years]	1815
Mechanical data		
Weight	[g]	49.7
Housing		threaded type
Mounting		flush mountable
Dimensions	[mm]	M12 x 1 / L = 71
Thread designation		M12 x 1
Materials		stainless steel (1.4571/316Ti); PBT
Displays / operating elements		
Display	switching status	1 x LED, yellow
Accessories		
Accessories (supplied)		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Cable: 0.3 m, PUR; 2 x 0.34 mm ²		
Connection		



Connector: 1 x AMP