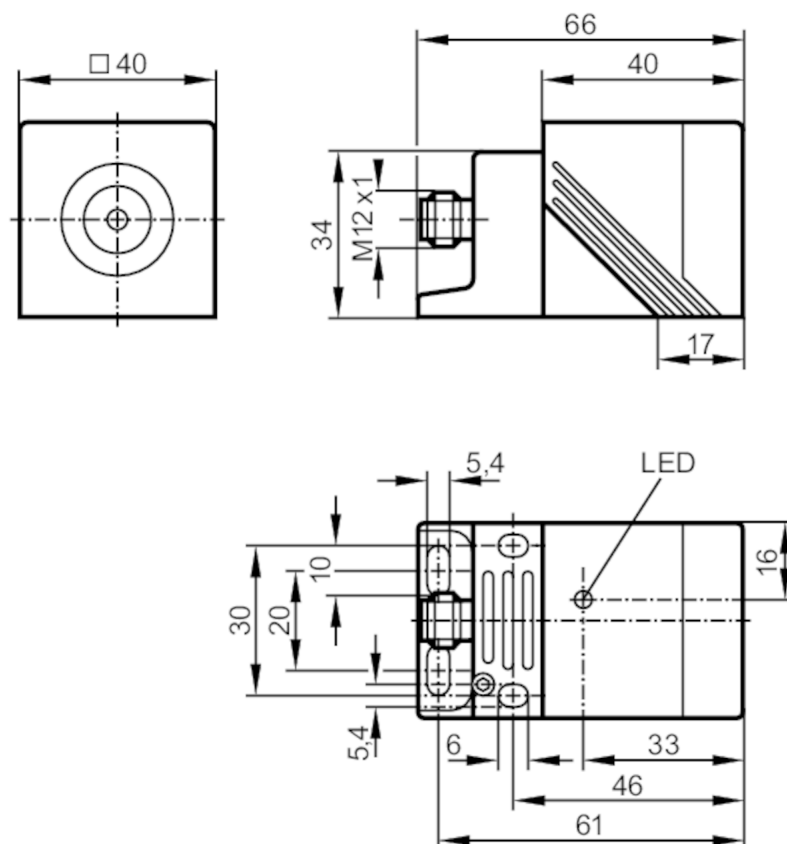


NM500A



Inductive NAMUR sensor

IMC2020BN/US/2G/1D



Product characteristics

Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	20
Housing	rectangular
Dimensions [mm]	40 x 40 x 66

Application

System	gold-plated contacts
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Electrical data

Connection at circuit amplifier	yes
Switching amplifiers	connection to certified intrinsically safe circuits with the max. values: $U = 15\text{ V}$ / $I = 50\text{ mA}$ / $P = 120\text{ mW}$
Nominal voltage DC [V]	8.2; (1k Ω)
Supply voltage DC [V]	7.5...30; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	III

Outputs

Electrical design	NAMUR
Output function	normally closed

NM500A



Inductive NAMUR sensor

IMC2020BN/US/2G/1D

Permanent current rating of switching output DC	[mA]	30; (when used outside the hazardous area)
Switching frequency DC	[Hz]	200
Monitoring range		
Sensing range	[mm]	20
Real sensing range Sr	[mm]	20 ± 10 %
Accuracy / deviations		
Correction factor		steel: 1 / stainless steel: 0.7 / brass: 0.5 / aluminum: 0.4 / copper: 0.3
Hysteresis	[% of Sr]	1...15
Switch-point drift	[% of Sr]	-10...10
Operating conditions		
Ambient temperature	[°C]	-20...70
Protection		IP 67
Tests / approvals		
Approval		BVS 04 ATEX E 091 X; IECEx BVS 06.0003X
ATEX marking		II 1D Ex ia IIC T200 90°C Da
		II 2G Ex ia IIB T6 Gb
EMC		EN 60947-5-6
Shock/vibration resistance		30 g (11 ms) / 10-55 Hz (1 mm)
MTTF	[years]	2825
Safety classification		
Max. internal capacitance	[nF]	250
Max. internal inductance	[μH]	450
Mechanical data		
Weight	[g]	181.5
Housing		rectangular
Mounting		flush mountable
Dimensions	[mm]	40 x 40 x 66
Material		housing: PPE; sensing face: PPE orange; bevelled housing part: PPS; Mounting adapter: PPS black; screw: steel galvanized
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Accessories		
Items supplied		Mounting bracket: 1 Allen key: 1
Remarks		
Remarks		5 positions of the active zone possible
Pack quantity		1 pcs.

NM500A

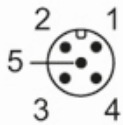


Inductive NAMUR sensor

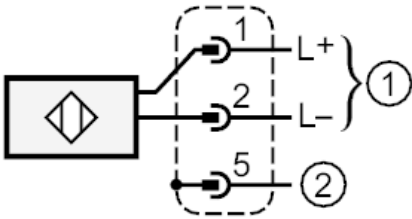
IMC2020BN/US/2G/1D

Electrical connection - plug

Connector: 1 x M12; coding: A; Locking: brass, white bronze coated; Contacts: gold-plated



Connection



1	L+	
2	L-	
3	n.c.	
4	n.c.	
5	FE	(Potential equalization plug housing)