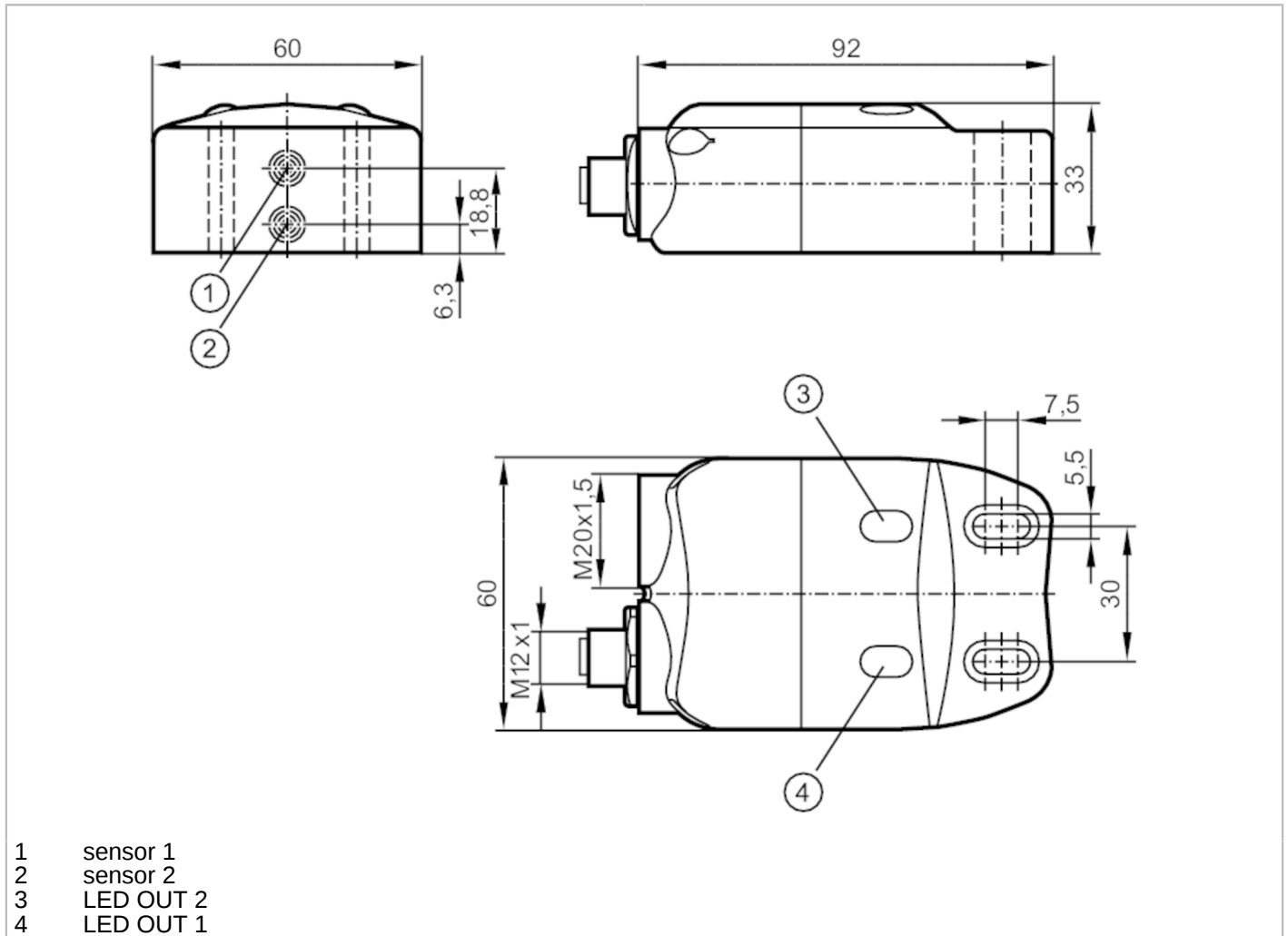


NN505A



Inductive sensor

INE2004DN/1D/1G/2G/SOCKET M12



- 1 sensor 1
- 2 sensor 2
- 3 LED OUT 2
- 4 LED OUT 1



Product characteristics

Electrical design	NAMUR
Output function	2 x normally closed
Sensing range [mm]	4
Housing	rectangular
Dimensions [mm]	33 x 60 x 92

Electrical data

Connection to switching amplifiers	yes
Switching amplifiers	connection to certified intrinsically safe circuits with the max. values: U = 15 V / I = 50 mA / P = 120 mW
Operating voltage [V]	8.2 DC; (1kΩ)
Supply voltage DC [V]	7.5...15; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	III
Actuator wiring	connection to certified intrinsically safe circuits of solenoid valves with the max. values: U = 28 V / I = 250 mA / P = 750 mW (bis 40 °C) / P = 650 mW (bis 70

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Inductive sensor

INE2004DN/1D/1G/2G/SOCKET M12

°C); (When used in gas atmospheres (group II) the following maximum values are permitted: U = 28 V / P = 1,1 W; These values must not be exceeded.)

Outputs

Electrical design	NAMUR
Output function	2 x normally closed
Switching frequency DC [Hz]	500
Overload protection	yes

Detection zone

Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 10 %
Operating distance [mm]	0...3.25

Accuracy / deviations

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

Operating conditions

Ambient temperature [°C]	-25...70
Protection	IP 65; IP 67

Tests / approvals

Approval	BVS 14 ATEX E 005 X; IECEx BVS 14.0005X
ATEX marking	Ex II 1G Ex ia IIB T4 Ga Ta: -25...70 °C
	Ex II 2G Ex ia IIC T4 Gb Ta: -25...70 °C
	Ex II 1D Ex ia IIIB T135 °C Da Ta: -25...70 °C
EMC	EN 60947-5-6
Vibration resistance	10...55 Hz (1 mm)
Shock resistance	30 g (11 ms)
MTTF [years]	1268

Safety classification

Max. internal capacitance [nF]	60; (per intrinsically safe circuit)
Max. internal inductance [μH]	130; (per intrinsically safe circuit)

Mechanical data

Weight [g]	221.5
Housing	rectangular
Mounting	non-flush mountable
Dimensions [mm]	33 x 60 x 92
Materials	housing: PA

Displays / operating elements

Display	switching status	2 x LED, yellow
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Accessories

Accessories (supplied)	socket head screws: 2 x M5 x 16
	socket head screws: 2 x M3 x 25

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Remarks

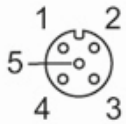
Remarks	The unit is not approved for safety-related tasks in the field of operator protection.
Pack quantity	1 pcs.

Electrical connection

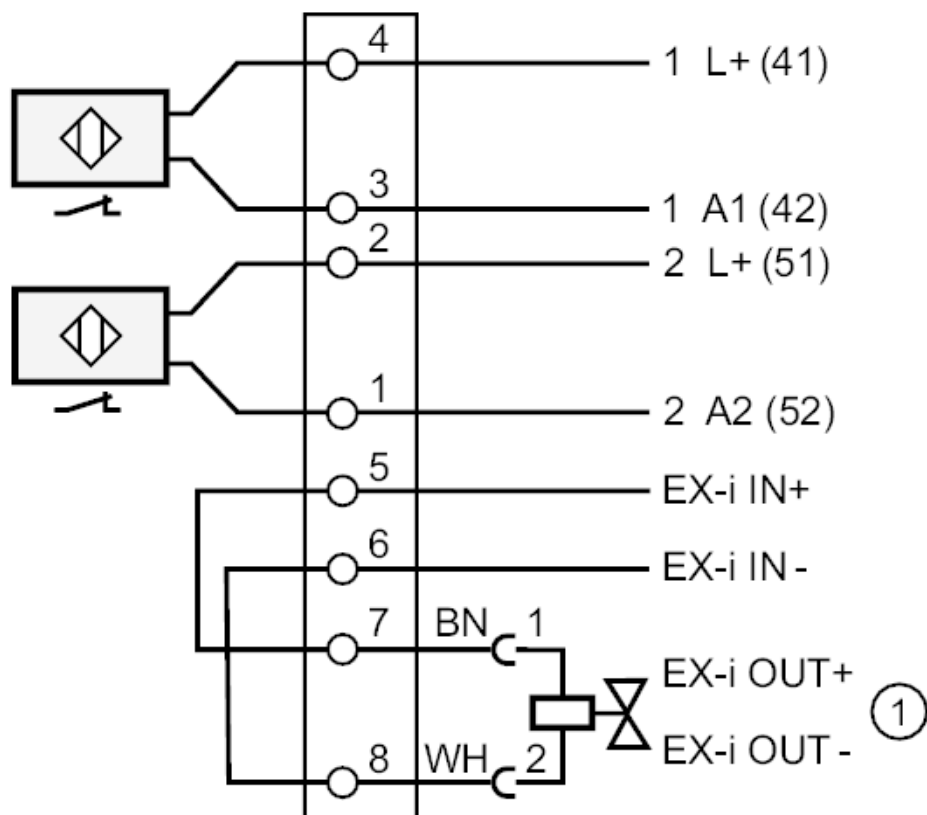
terminal strip in the terminal chamber: ...2.5 mm²; Cable gland: M20 X 1.5

Electrical connection - socket

Connector: 1 x M12



Connection



1 output solenoid valve