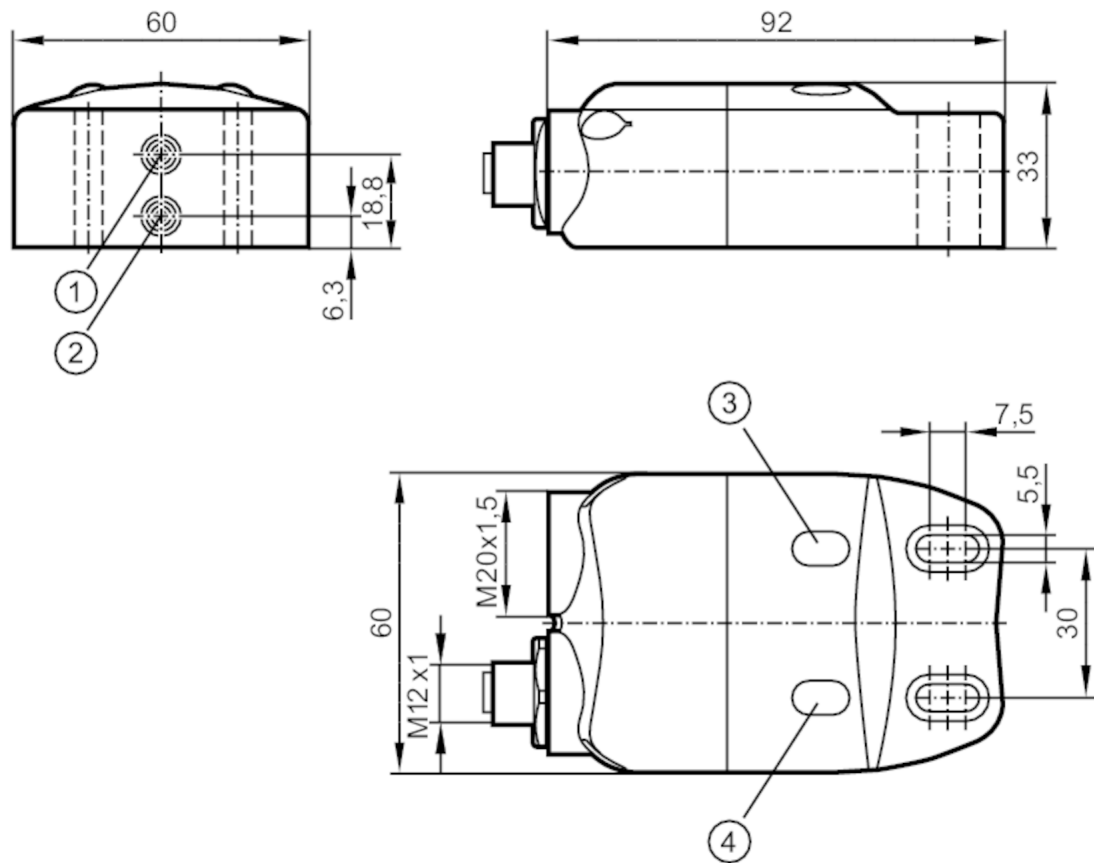


NN505A



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 at circuit amplifier	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 °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.)

NN505A



Inductive sensor

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

Outputs		
Electrical design	NAMUR	
Output function	2 x normally closed	
Switching frequency DC [Hz]	500	
Overload protection	yes	
Monitoring range		
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 / aluminum: 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	II 1G Ex ia IIB T4 Ga Ta: -25...70 °C	
	II 2G Ex ia IIC T4 Gb Ta: -25...70 °C	
	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 electric circuit)	
Max. internal inductance [μH]	130; (per intrinsically safe electric circuit)	
Mechanical data		
Weight [g]	221.5	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	33 x 60 x 92	
Material	housing: PA	
Displays / operating elements		
Display	Switching status	2 x LED, yellow
Accessories		
Items supplied	socket head screws: 2 x M5 x 16	
	socket head screws: 2 x M3 x 25	
Remarks		
Remarks	The unit is not approved for safety tasks in the field of safety of persons.	
Pack quantity	1 pcs.	

NN505A



Inductive sensor

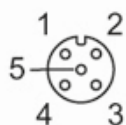
INE2004DN/1D/1G/2G/SOCKET M12

Electrical connection

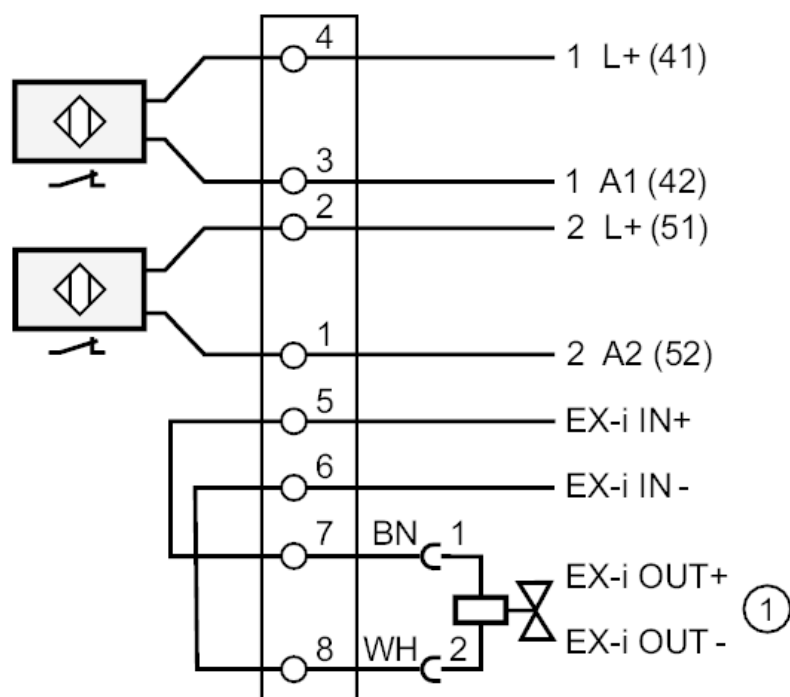
Terminal strip in the terminal chamber: ...2.5 mm²; Cable gland: M20 X 1.5

Electrical connection - Socket

Connector: 1 x M12; coding: A



Connection



1 solenoid valve output