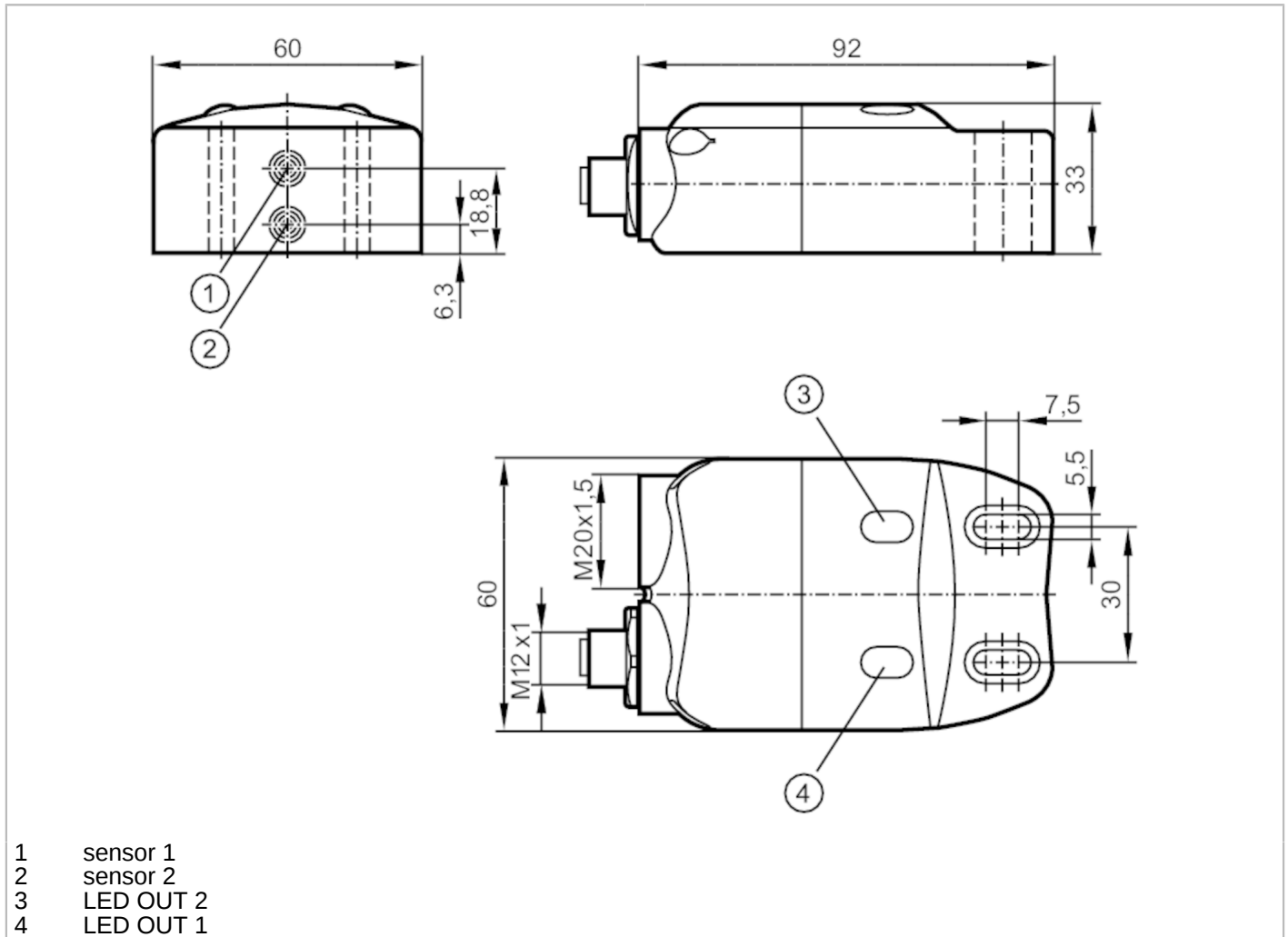


# NN505A



## Inductive sensor

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



### 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 °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

# NN505A



## Inductive sensor

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

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		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 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
Accessories		
Accessories (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-related tasks in the field of operator protection.
Pack quantity		1 pcs.
Electrical connection		
terminal strip in the terminal chamber: ...2.5 mm <sup>2</sup> ; Cable gland: M20 X 1.5		
Electrical connection - socket		
Connector: 1 x M12		

# NN505A

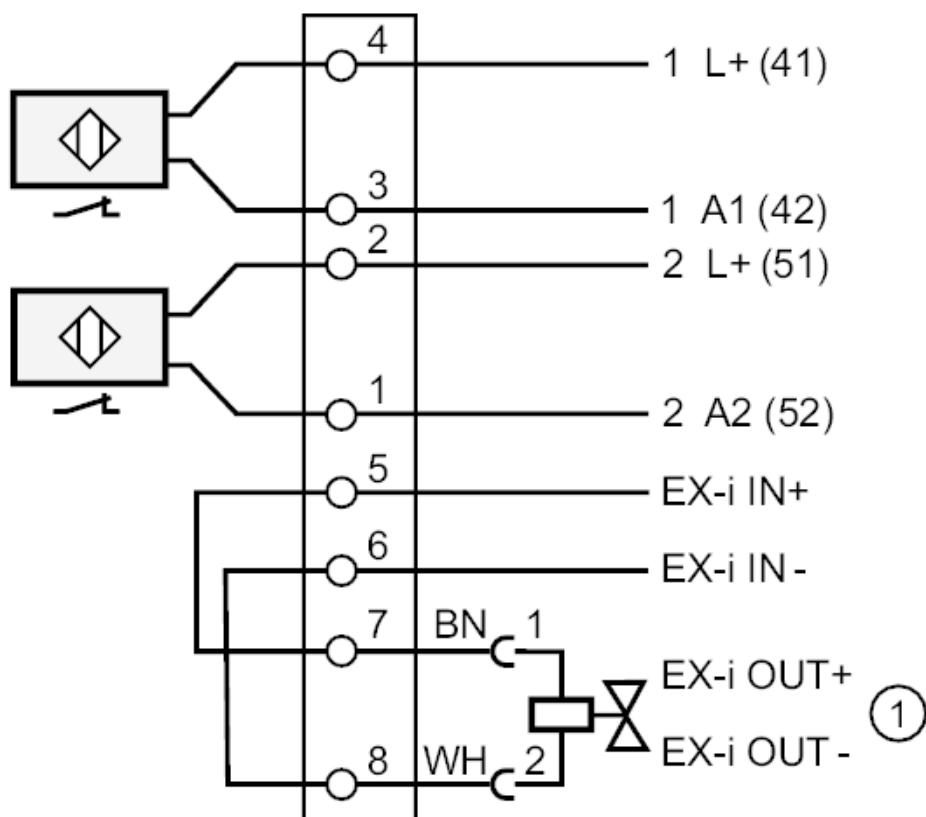


## Inductive sensor

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



### Connection



1 output solenoid valve