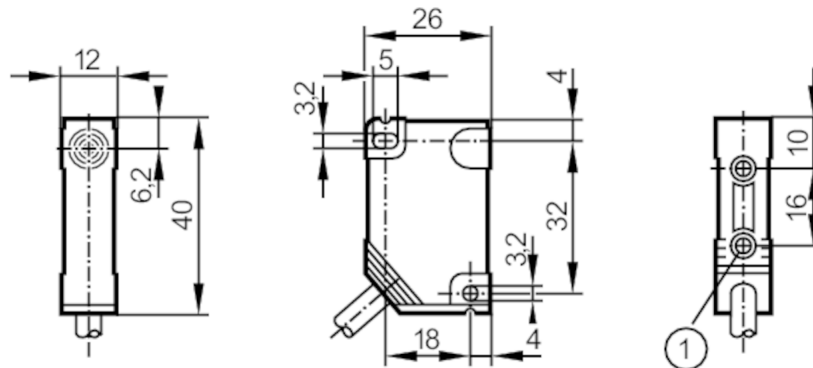


# NN5020



## Inductive NAMUR sensor

IN-2004-N/10M/1D/1G/2G



- 1 threaded bush M3 Depth 5.8 mm  
Tightening torque maximum 1.2 Nm screw fixing class 8.8  
when brass insert in contact with counterpart



Product characteristics	
Electrical design	NAMUR
Output function	normally closed
Sensing range [mm]	4
Housing	rectangular
Dimensions [mm]	40 x 12 x 26
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
Nominal voltage DC [V]	8.2; (1kΩ)
Supply voltage DC [V]	7.5...30; (when used outside the hazardous area)
Current consumption [mA]	< 1; (disabled; conductive: > 2,1)
Protection class	II
Outputs	
Electrical design	NAMUR
Output function	normally closed
Permanent current rating of switching output DC [mA]	30; (when used outside the hazardous area)
Switching frequency DC [Hz]	400
Detection zone	
Sensing range [mm]	4
Real sensing range Sr [mm]	4 ± 10 %
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

# NN5020

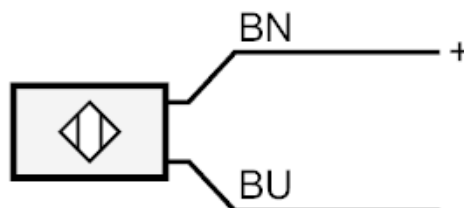


## Inductive NAMUR sensor

IN-2004-N/10M/1D/1G/2G

Operating conditions	
Ambient temperature [°C]	-20...80
Protection	IP 67
Tests / approvals	
Approval	PTB 01 ATEX 2191; BVS 04 ATEX E153; IECEx BVS 06.0003
ATEX marking	II 1G Ex ia IIB T6 Ga
	II 2G Ex ia IIC T6 Gb
	II 1D Ex ia IIIC T 90°C Da
EMC	EN 60947-5-6
Shock/vibration resistance	30 g (11 ms) / 10-55 Hz (1 mm)
MTTF [years]	4899
Safety classification	
Max. internal capacitance [nF]	112
Max. internal inductance [μH]	143
Mechanical data	
Weight [g]	447
Housing	rectangular
Mounting	non-flush mountable
Dimensions [mm]	40 x 12 x 26
Materials	PBT
Remarks	
Pack quantity	1 pcs.
Electrical connection	
Cable: 10 m, PVC; 2 x 0.5 mm <sup>2</sup>	

### Connection



Core colours :  
BN = brown  
BU = blue