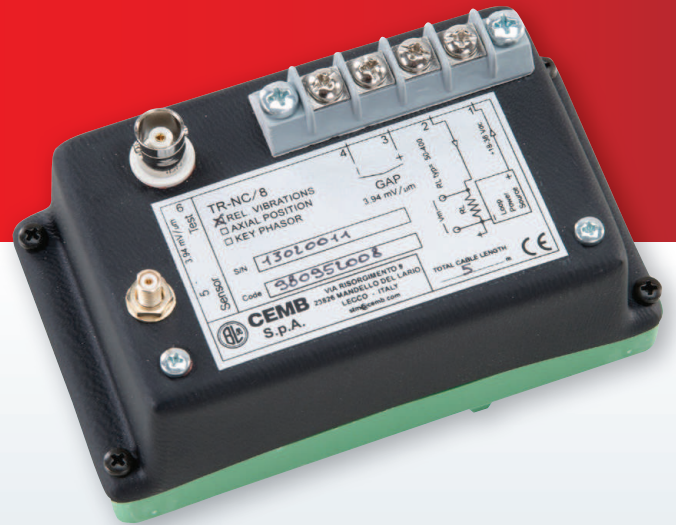


# TR-NC/8



## FUNCTION

The TR-NC/8 transmitter measures the relative vibration or the axial displacement of a shaft and it is able to interface directly in 2 wires technique (current loop  $4 \div 20$  mA) to an acquisition system (PLC or DCS).

## GENERAL DESCRIPTION

The transmitter is normally composed of T-NC8/API proximity probe, extension cable and transmitter. It is supplied complete with:

- No. 4 contacts: two for the 24 Vdc connection of the power supply and two for the check of the voltage gap for the probe positioning
- BNC socket for the connection to a portable analyser
- Coaxial connector for the sensor connection

The transmitter is also available as Atex certified for classified area application

II 1 G Ex ia IIC T6 Ga

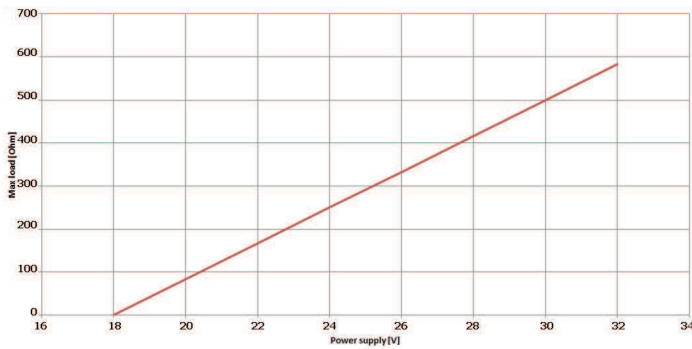
II 1 G Ex ia IIC T5 Ga

## TECHNICAL CHARACTERISTICS

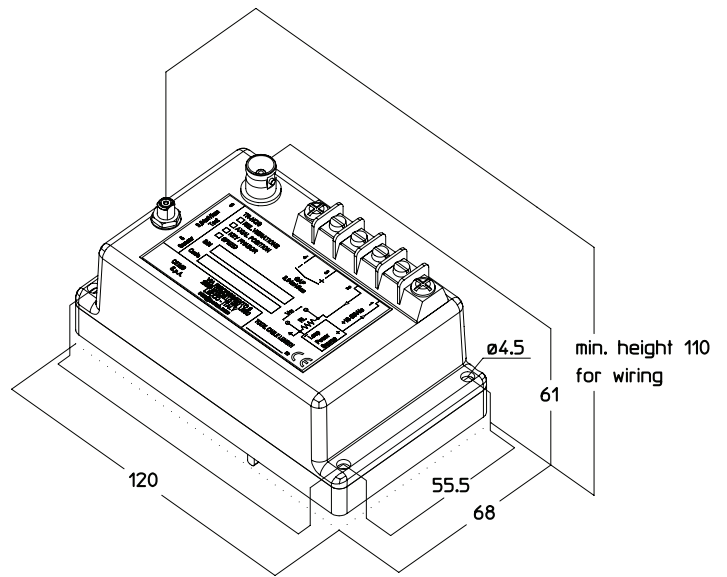
Composition	<ul style="list-style-type: none"> <li>• T-NC/8-API sensor</li> <li>• Extension cable</li> <li>• TR-NC/8 transmitter</li> </ul>
Power supply	<ul style="list-style-type: none"> <li>• 24 Vdc (<math>18 \div 32</math> Vdc) current loop <math>4 \div 20</math> mA (2 wires)</li> <li>• Maximum load see figure 1</li> </ul>
External connection	<ul style="list-style-type: none"> <li>• Bipolar shielded cable to the terminals POWER +/-</li> </ul>
Environmental field	<ul style="list-style-type: none"> <li>• Sensor <math>-35^{\circ}\text{C} \div +175^{\circ}\text{C}</math></li> <li>• Extension cable <math>-35^{\circ}\text{C} \div +175^{\circ}\text{C}</math></li> <li>• Transmitter <math>-20^{\circ}\text{C} \div +70^{\circ}\text{C}</math></li> </ul>
Measurement type	<ul style="list-style-type: none"> <li>• Relative vibration</li> <li>• Axial displacement</li> </ul>
Dynamic field	<ul style="list-style-type: none"> <li>• <math>1.5 \div 10.000</math> Hz (vibration)</li> <li>• <math>0 \div 500</math> Hz (displacement)</li> </ul>
Linearity	<ul style="list-style-type: none"> <li>• <math>\pm 2\%</math> in the whole measuring field and within the limits of the indicated operating temperatures</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• <math>\geq 10^8 \Omega</math> between signal and container</li> </ul>
Possible arrangements to the order	<ul style="list-style-type: none"> <li>• Measurement type (vibration, axial displacement)</li> <li>• Cable length</li> <li>• Measuring range</li> <li>• Type of target</li> <li>• Type of certification</li> </ul>

# TR-NC/8

Figure 1  
Maximum load on current loop



## Dimensions



## ORDER INFORMATION

TR-NC/8 /  /  /   /  /

### A: MEASUREMENT TYPE

- 1 Relative vibration
- 2 Axial displacement

### B: CABLE TOTAL LENGTH

- 1 5 mt
- 2 7 mt
- 3 9 mt
- S special

### C: MEASURING RANGE

- 01 0 ÷ 100 µm vibration
- 02 0 ÷ 125 µm vibration
- 03 0 ÷ 200 µm vibration
- 04 0 ÷ 250 µm vibration
- 05 ± 0,5 mm axial displacement
- 06 ± 0,75 mm axial displacement
- 07 ± 1 mm axial displacement
- SP special

### D: TYPE OF TARGET

- 1 AISI 4140
- 2 AISI 410
- S special

### E: TYPE OF CERTIFICATION

- 1 Standard
- 2 Atex II 1G Ex ia IIC T5 o T6

## PURCHASE ORDER EXAMPLE

TR-NC/8 / 1 / 3 / 03 / 1 / 2  
 1= Relative vibration  
 3= Cable total length 9 mt  
 03= Measuring range 0 ÷ 200 µm vibration  
 1= Target AISI 4140  
 2= ATEX certification



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