

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

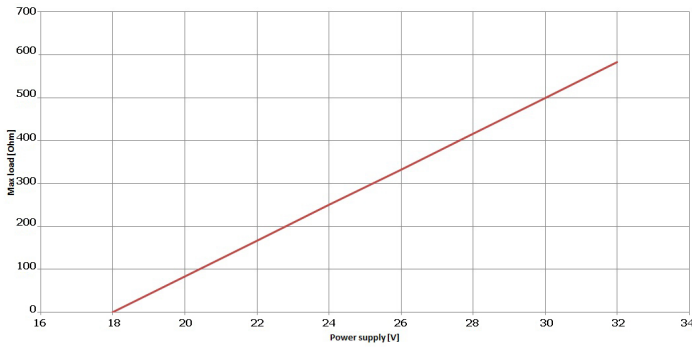
II 1 G Ex ia IIC T5 Ga

TECHNICAL CHARACTERISTICS

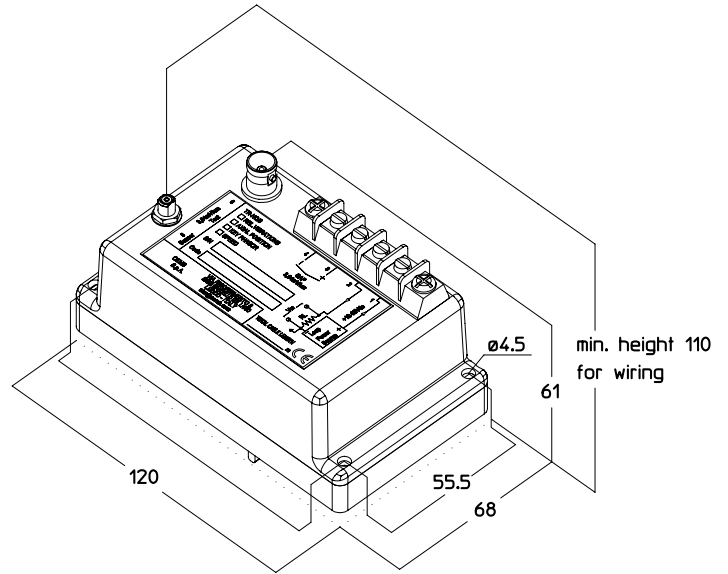
Composition	<ul style="list-style-type: none"> • T-NC/8-API sensor • Extension cable • TR-NC/8 transmitter
Power supply	<ul style="list-style-type: none"> • 24 Vdc ($18 \div 32$ Vdc) current loop $4 \div 20$ mA (2 wires) • Maximum load see figure 1
External connection	<ul style="list-style-type: none">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

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