

VIBRATION TRANSMITTER

TR-26



FUNCTION

The integrated transmitter TR-26 measures the absolute vibrations of any rotating machine support 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, secured directly on machinery, generates an electric signal ($4 \div 20$ mA) which is proportional to vibration velocity or acceleration. The transmitter is made of a stainless steel body AISI 316L with machine connection thread. The connection to the acquisition system is effected by means of a MIL-C-5015-2 poles connector or a M12 4 poles connector.

NOTE: The transmitter is available in different configuration versions and it does not need any set-up or maintenance.

TECHNICAL CHARACTERISTICS

Composition	<ul style="list-style-type: none"> AISI 316L stainless steel body
Power supply	<ul style="list-style-type: none"> 24 Vdc ($10 \div 35$ Vdc) current loop $4 \div 20$ mA (2 wires) Maximum load - see figure 1
External connections	<ul style="list-style-type: none"> 2 poles MIL-C-5015 connector (conductors max section $2,5 \text{ mm}^2$) 4 poles M12 connector
Environmental use field	<ul style="list-style-type: none"> $-50^\circ\text{C} \div +120^\circ\text{C}$ IP 65 EN 60529/10.91 standard
Measure type	<ul style="list-style-type: none"> Omnidirectional seismic (absolute vibration)
Dynamic field	<ul style="list-style-type: none"> ± 18 g
Transverse sensitivity	<ul style="list-style-type: none"> < 5 %
Linearity	<ul style="list-style-type: none"> ± 2 % - 75 Hz
Dynamic performances	<ul style="list-style-type: none"> ± 3 % / 10Hz-1kHz - see figure 2 -3db / 1.5Hz - 2.5kHz
Insulation	<ul style="list-style-type: none"> $\geq 10^8 \Omega$ between signal and container
Application axis	<ul style="list-style-type: none"> Any
Standard machine connection thread	<ul style="list-style-type: none"> M8x1,25 $\frac{1}{4}$"-18NPT $\frac{1}{4}$"-28UNF
Maintenance	<ul style="list-style-type: none"> No maintenance is needed
Electrical connections	<ul style="list-style-type: none"> Bipolar shielded cable, conductors typical section $2 \times 1 \text{ mm}^2$
Parameters to be defined when ordering	<ul style="list-style-type: none"> Measuring field Fixing thread Certification Connection
Mounting torque	<ul style="list-style-type: none"> $5 \div 10$ N-m

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Figure 1
Maximum load on current loop

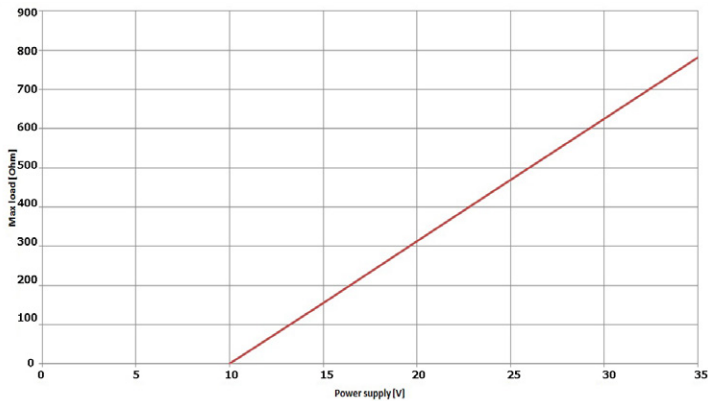
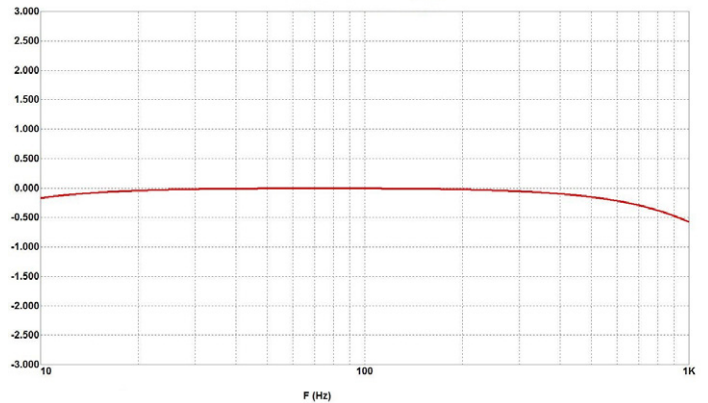


Figure 2
Frequency response [db]



ORDER INFORMATION

TR - 26 / / / /

A: MEASURING FIELD

0	0 ÷ 10 mm/s RMS
1	0 ÷ 20 mm/s RMS
2	0 ÷ 50 mm/s RMS
3	0 ÷ 100 mm/s RMS
4	0 ÷ 1 g RMS
5	0 ÷ 5 g RMS
6	0 ÷ 10 g RMS
S	special to be defined

B: MACHINE CONNECTION THREAD

0	M8x1,25
1	1/4" - 18NPT
2	1/4" - 28UNF

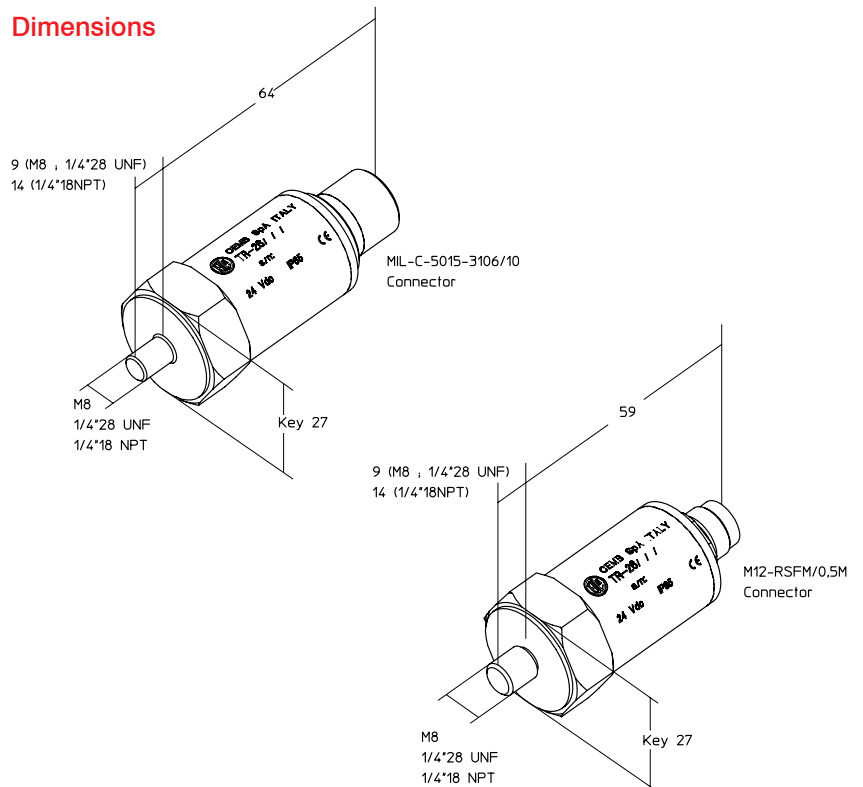
C: CERTIFICATION

0	None
2	ATEX II 2 G Ex ia IIC T6 or T5 or T4 (Zone 1)

D: CONNECTIONS

0	MIL-C-5015 2 poles
1	M12 4 poles (only for NON ATEX version)

Dimensions




PURCHASE ORDER EXAMPLE

TR - 26 / 1 / 0 / 0 / 0

- 1 = measuring field 0÷20 mm/s RMS
- 0 = machine connection thread M8x1,25
- 0 = no certification
- 0 = connection MIL-C-5015 2 poles



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