

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



# TR-26

Figure 1  
Maximum load on current loop

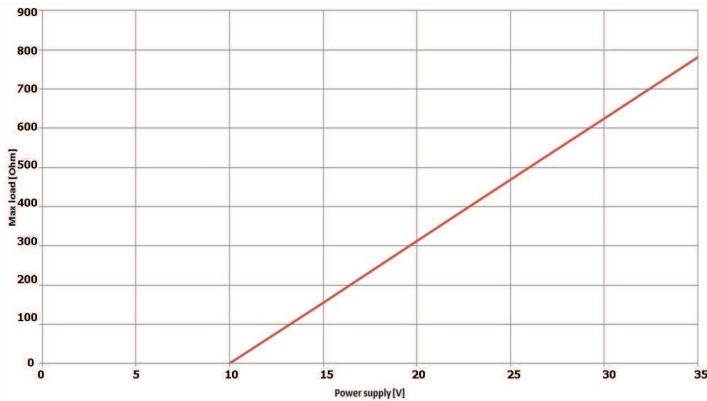
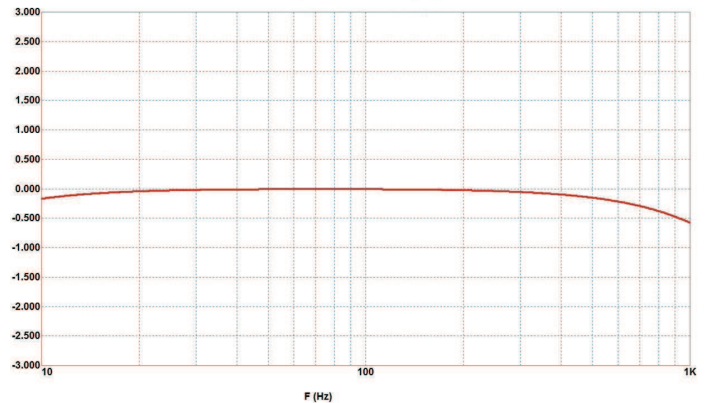


Figure 2  
Frequency response [db]



## 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
7	0 ÷ 25 mm/s RMS
S	special to be defined

### B: MACHINE CONNECTION THREAD

0	M8x1,25
1	1/4" - 18NPT
2	1/4" - 28UNF
3	M6x1

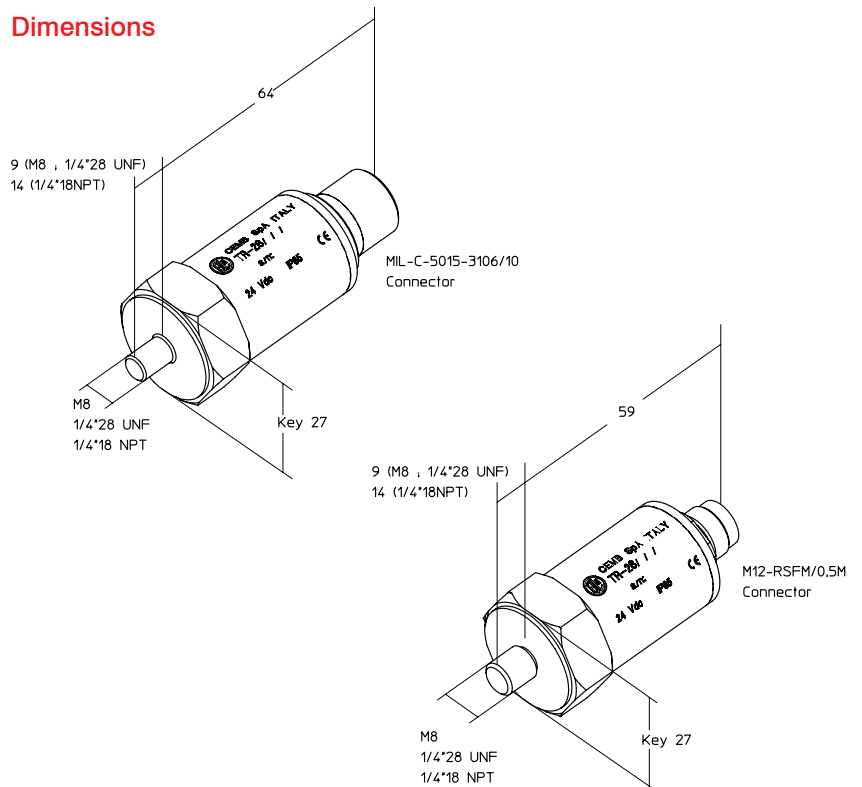
### C: CERTIFICATION

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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