

# VIBRATION TRANSMITTER

# TR-26 IECEx

## CERTIFIED IECEx

### 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 ÷ 20 mA) to an acquisition system (PLC or DCS).

The transmitter is certified for application in classified area as **Ex ia IIC T6, T5, T4 Gb**

### GENERAL DESCRIPTION

The transmitter, secured directly on machinery, generates an electric signal (4÷20 mA) which is proportional respectively to vibration velocity or acceleration. The transmitter is made of an AISI 316L body with machine connection thread; the connection to the acquisition system is effected by means of a MIL-C-5015-2 poles connector.

**NOTE:** The transmitter is available in different configuration versions and 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 (10 ÷ 35 Vdc) current loop 4 ÷ 20 mA (2 wires)</li> <li>maximum load – see Figure 1</li> </ul>
External connections	<ul style="list-style-type: none"> <li>MIL-C-5015 2 poles connector (conductors max section 2,5 mm<sup>2</sup>)</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>- 50°C ÷ + 120°C</li> <li>IP 65 EN 60529/10.91 standards</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>± 18 g</li> </ul>
Transverse sensitivity	<ul style="list-style-type: none"> <li>&lt; 5 %</li> </ul>
Linearity	<ul style="list-style-type: none"> <li>± 2% - 75 Hz</li> </ul>
Dynamic performances	<ul style="list-style-type: none"> <li>±3% / 10Hz – 1kHz - see Figure 2</li> <li>-3db / 1.5Hz – 2.5kHz</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>≥ 10<sup>8</sup> Ω 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>¼"-18NPT</li> <li>¼"-28UNF</li> <li>M6x1</li> </ul>
Maintenance	<ul style="list-style-type: none"> <li>No maintenance is needed</li> </ul>
Parameters to be defined when ordering	<ul style="list-style-type: none"> <li>Measuring field</li> <li>Machine connection thread</li> <li>IECEx certification</li> </ul>
Mounting torque	<ul style="list-style-type: none"> <li>5÷10 N-m</li> </ul>
Certification	<ul style="list-style-type: none"> <li>Ex ia IIC T6, T5, T4 Gb</li> </ul>

# TR-26 IECEx

Figure 1  
Maximum load on current loop

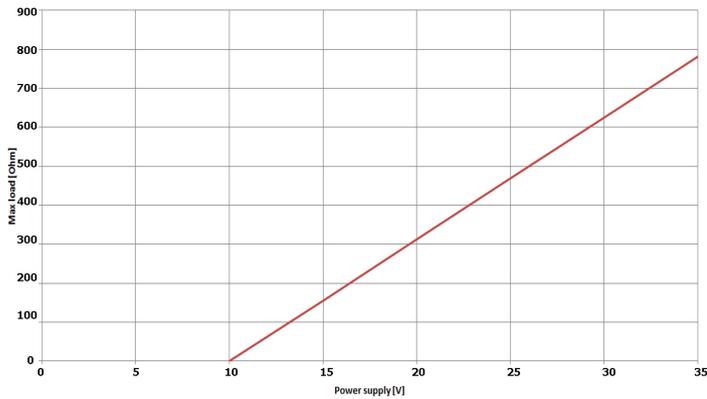
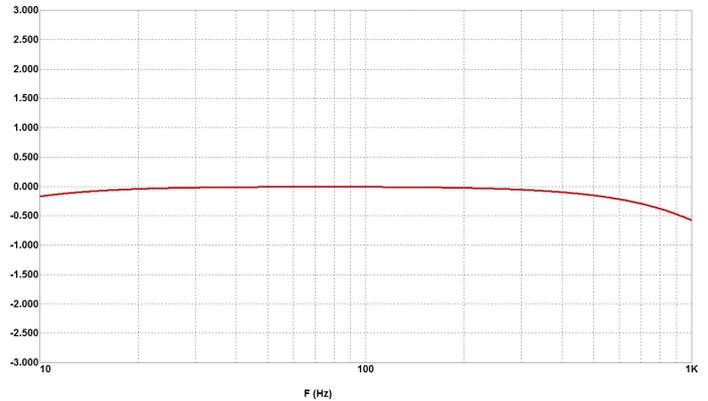


Figure 2  
Frequency response [db]



## 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 ÷ 25,4 mm/s (0 ÷ 1 in/s) RMS
8	0 ÷ 12,7 mm/s (0 ÷ 0,5 in/s) RMS
S	special to be defined

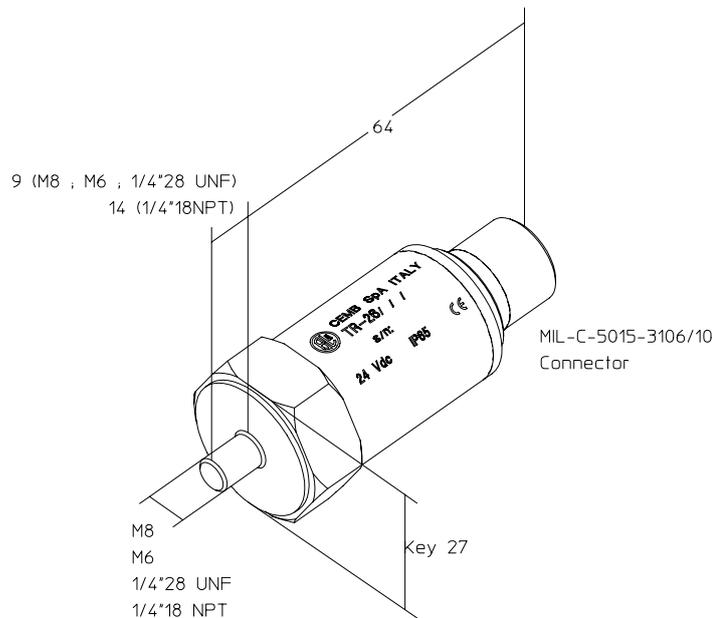
### B: MACHINE CONNECTION THREAD

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

### C: IECEx CERTIFICATION

5	IECEx Ex ia IIC T6/T5/T4 Gb
---	-----------------------------

## Dimensions



## PURCHASE ORDER EXAMPLE:

TR - 26 / 1 / 0 / 5

1= measuring field 0÷20 mm/s RMS

0= connection thread M8x1,25

5= IECEx certification