VIBRATION TRANSMITTER

TR-26

FUNCTION

The integrated transmitter TR-26 measures the absolute vibrations of any rotatiing 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).

GENERAL DESCRIPTION

The transmitter, secured directly on machinery, generates an electric signal (4÷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	• AISI 316L stainless steel body
Power supply	• 24 Vdc (10 ÷ 35 Vdc) current loop 4 ÷ 20 mA (2 wires) • Maximum load - see figure 1
External connections	• 2 poles MIL-C-5015 connector (conductors max section 2,5 mm^2) • 4 poles M12 connector
Environmental use field	• - 50°C ÷ + 120°C • IP 65 EN 60529/10.91 standard
Measure type	• Omnidirectional seismic (absolute vibration)
Dynamic field	• ± 18 g
Transverse sensitivity	• < 5 %
Linearity	• ± 2% - 75 Hz
Dynamic performances	• ±3% / 10Hz-1kHz - see figure 2 • -3db / 1.5Hz - 2.5kHz
Insulation	• ≥10^8 Ω between signal and container
Application axis	• Any
Standard machine connection thread	• M8x1,25 • ¼"-18NPT • ¼''-28UNF
Maintenance	• No maintenance is needed
Electrical connections	• Bipolar shielded cable, conductors typical section 2x1mm^2
Parameters to be defined when ordering	• Measuring field • Fixing thread • Certification • Connection
Mounting torque	• 5÷10 N-m

TR-26

Figure 1
Maximum load on current loop

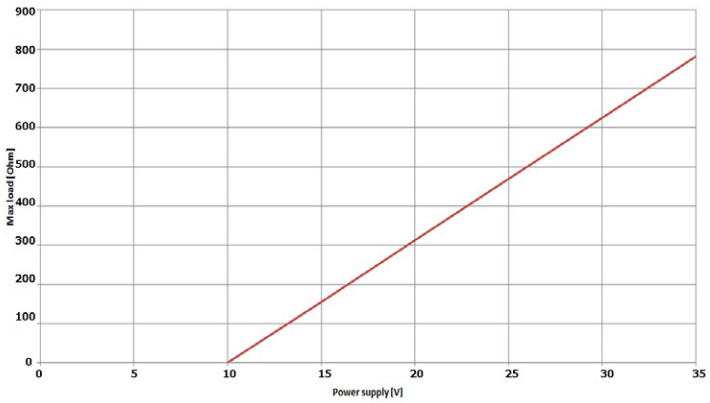
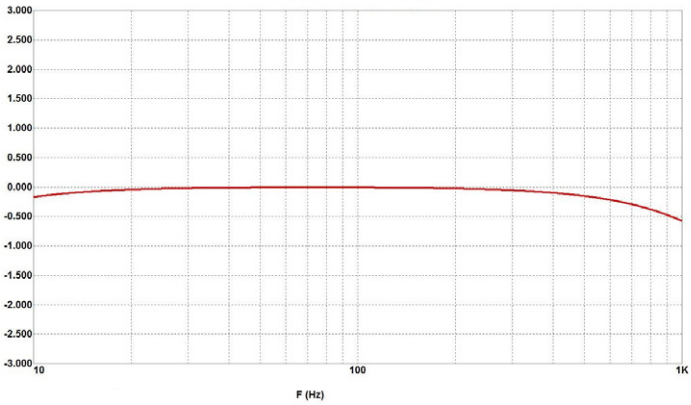


Figure 2
Frequency response [db]



ORDER INFORMATION

	A	B	C	D
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	¼'' – 18NPT
2	¼'' – 28UNF

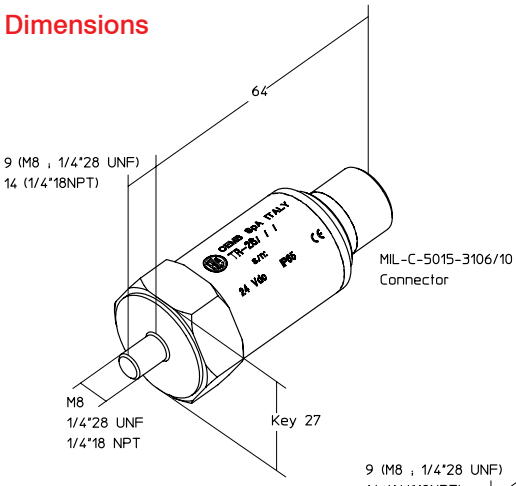
C: CERTIFICATION

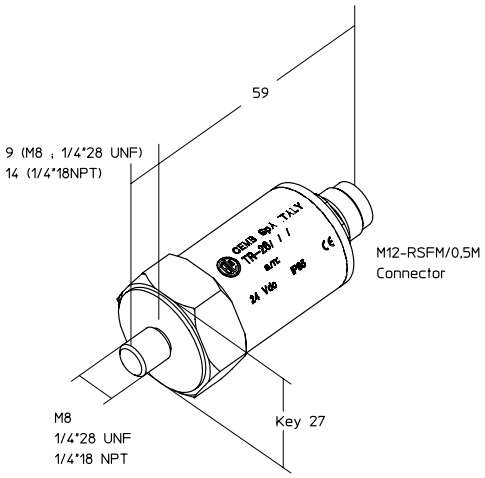
0	None
2	ATEX II 2 G Ex ia IIC T6 or T5 or T4 (Zone 1)

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