VIBRATION TRANSMITTER

TR-P

FUNCTION

The integrated transmitter TR-P 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).

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 basis AISI 316L with machine connection thread and a polyamide molded body; the connection to the acquisition system is effected by means of a TE CONNECTIVITY SUPERSEAL connector. The peculiar characteristics of the polyamide construction and of the connection allow unique resistance to extreme ambient conditions, enabling an IP67 protection degree.

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 thread basis • Polyamide body
Power supply	• 24Vdc (10 ÷ 35Vdc) current loop 4 ÷ 20mA • ·Maximum load - see figure 1
External connections	• TE SUPERSEAL 1,5 2 poles connector complete with cable
Electrical connections	• PVC bipolar shielded cable, conductors typical section 2x0,35 mm^2
Environmental use field	• - 30°C ÷ + 120°C • IP 67 EN 60529/10.91 standard
Measure type	• Omnidirectional seismic (absolute vibration)
Dynamic field	• ± 15 g
Transverse sensitivity	• < 5 %
Linearity	• ± 2% - 75 Hz
Dynamic performances	• ±3% / 10Hz-1kHz - see figure 2 • -3db / 3Hz – 1.5kHz
Insulation	• $\geq 10^8$ Ω between signal and container
Application axis	• Any
Standard machine connection thread	• M8x1,25
Maintenance	• No maintenance is needed
Parameters to be defined when ordering	• Measuring field • Cable length
Mounting torque	• 5÷10 N-m

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BALANCING MACHINES

TR-P

Figure 1
Maximum load on current loop

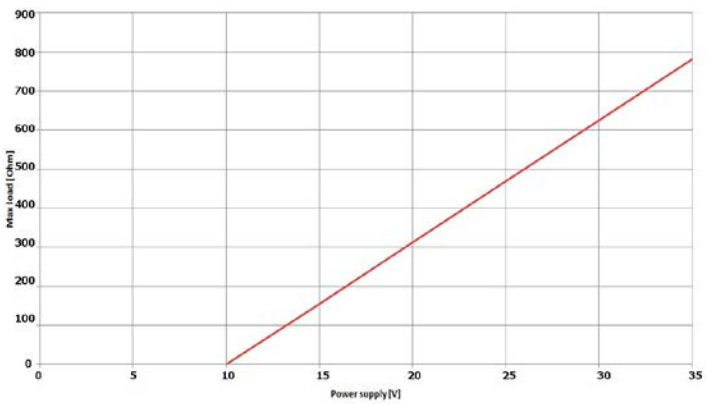
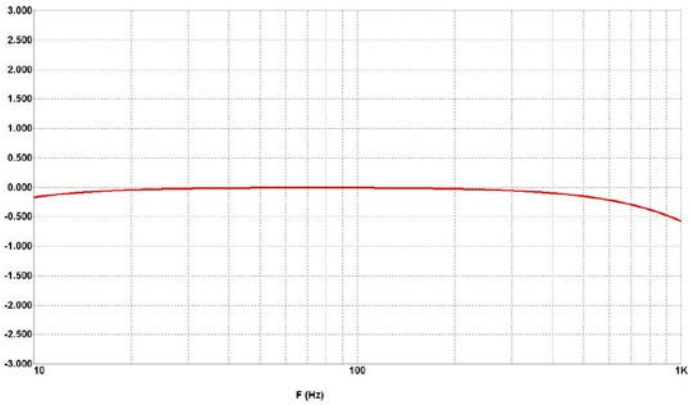


Figure 2
Frequency response [db]



ORDER INFORMATION

TR - P / □ (A)

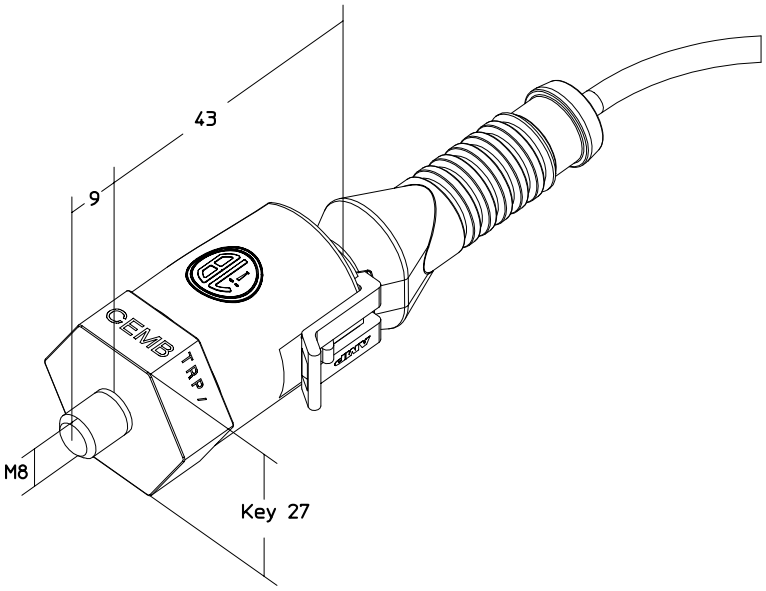
A: MEASURING FIELD

0	0 ÷ 10 mm/s RMS
1	0 ÷ 20 mm/s RMS
2	0 ÷ 50 mm/s RMS
S	special to be defined

CTR - P / □□ (L)

L: CABLE LENGTH IN METERS
(max 50 m)

Dimensions



PURCHASE ORDER EXAMPLE:

TR - P / 1
1 = Measuring field 0÷20 mm/S RMS

CTR - P / 05
05 = Cable length 5 m

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