

Vibro-Meter Velocity Transducer

CHARACTERISTICS

- Vibration Monitoring for low frequencies
- Hydraulic and steam turbine application
- Vertical to horizontal operation
- Self-generating transducer
- Fully Sealed
- Radial or axial cable exit
- 200 °C ambient temperature



GENERAL

The velocity transducer CV 211 HT – is suited to the special requirements of hydraulic turbo-machinery in an environment with low speed range and high ambient temperature.

The relatively high output signal reduces the additional effort for the signal transmission especially over longer distances. The usable frequency range without linearization is between 10 and 1000 Hz, the frequency range can be extended to 3 Hz through frequency linearization.

Attention should be paid to the nominal resonant frequency of the measuring system which is at 8 Hz.

The velocity transducer is a very sensitive vibration sensor with a rugged design that is amongst others oil-proof, waterproof and vacuum resistant. A stainless steel case permits use for very harsh industrial environments.

FUNCTIONAL DESCRIPTION

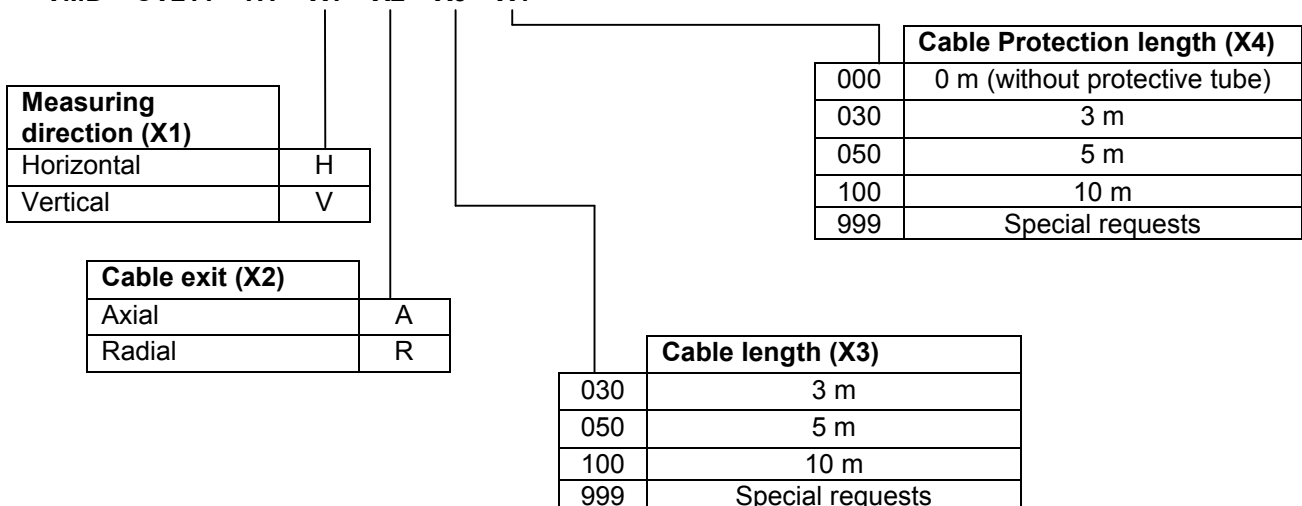
The velocity transducer CV211 HT is based on the electrodynamic principle. The sensing element of the transducer is a coil moving around a permanent magnet, which produces a voltage directly proportional to the vibration velocity. The signal is generated without external power source.

TECHNICAL DATA

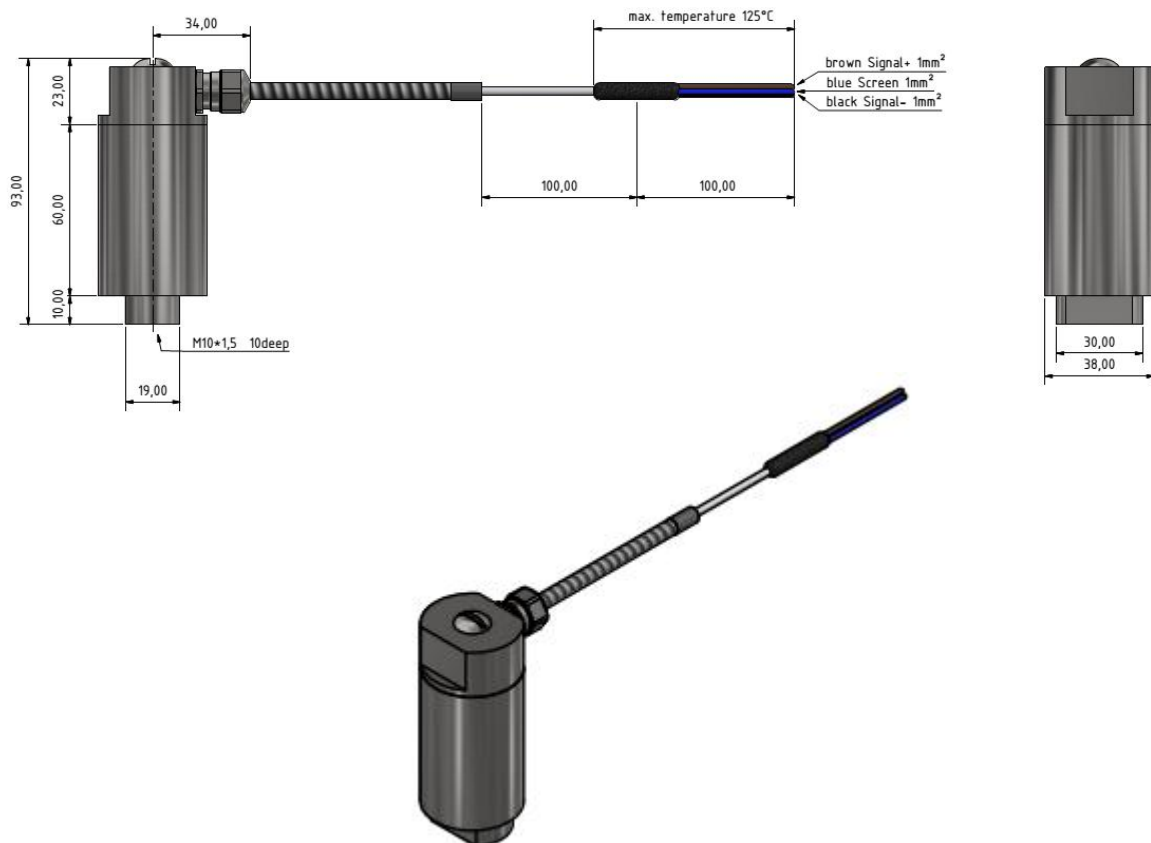
Measuring principle	electrodynamic; no external power source required
Measuring direction	Vertical or horizontal (please take into account when ordering)
Signal transmission	2-wire system insulated from casing
Frequency range	10 ... 1000 Hz 3 ... 1000 Hz with Frequency linearization
Output signal	36.3 mV/mm/s RMS +/- 10 % with external damping of 4.99 kΩ
Transverse sensitivity	< 5 %
Coil resistance	900 Ohm
Maximum displacement	4 mm p - p
Nominal resonant frequency	8 Hz +/- 0,5 Hz
maximum ambient temperature	- 40 to + 200 °C
Protection Class	IP 66
Housing material	Stainless steel casing 1.405
Dimensions	93 x 38 mm
Weight	approx. 600 g, without cable
Mounting	Mounting base M10x1.5x10mm deep, key width 19 mm
Connection cable	Teflon 2 x AWG 20, shielded Outer diameter 3.4 mm ± 0,15 mm Minimum bending radius 50 mm Screen not connected to housing unit
Cable protection	Protective stainless steel tube Outer diameter 6.5 mm Minimum bending radius 50 mm

ORDERING INFORMATION

VMD – CV211 – HT – X1 – X2 – X3 – X4



DRAWING



Subject to change without prior notice!

Sales Offices

Meggitt has offices in over 30 countries.



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