

CV-87 High Temperature Velocity Transducer

The CV-87 high-temperature velocity transducer can be continuously used at temperatures up to 375°C and therefore is most suitable for measuring the bearing vibration of gas turbines. Generally, as this is a self-generating moving coil or electrodynamic type, no power supply is required. In addition, it can be installed in any direction facilitating selection of the installation location.



Specifications

Sensitivity	■ 5.90mV/mm/s (150mV/in/s REF.) pk ±5% at 100Hz, 25°C.(77°F REF.) (Load resistance >100kΩ)
Displacement limit	■ 1.8mm(70 mils REF.) pk to pk
Frequency response	■ 30 to 1,000Hz ±15% at 25°C (77°F) 50 to 500Hz ±5% at 25°C(77°F)
Natural vibration	■ 15Hz ±2Hz
Coil resistance	■ 122Ω ±25Ω at 25°C, 245Ω ±30Ω at 375°C(typical)
Output impedance	■ 122Ω ±25Ω at 25°C, 245Ω ±30Ω at 375°C(typical)
Installation	■ Any (Sensitivity error max. 10%)
Damping ratio	■ 0.8 at 20°C, 0.55 at 200°C, 0.4 at 375°C
Temperature response	■ -0.04%/°C at 100Hz (20 to 375°C)
Insulation resistance	■ 100MΩ (each case to coil) at 20°C
Strength voltage	■ 500VAC for one minute
Accuracy warrant temperature	■ 20 to 375°C (68 to 707°F REF.)
Operational temperature range	■ -54 to +375°C (-65 to +707°F REF.)
Max. Transverse sensitivity	■ Within 10%
Max. acceleration	■ 490m/s ² (50g REF.)
Magnetic effect	■ Max. 7.5V/T
Mass	■ Approx. 210g

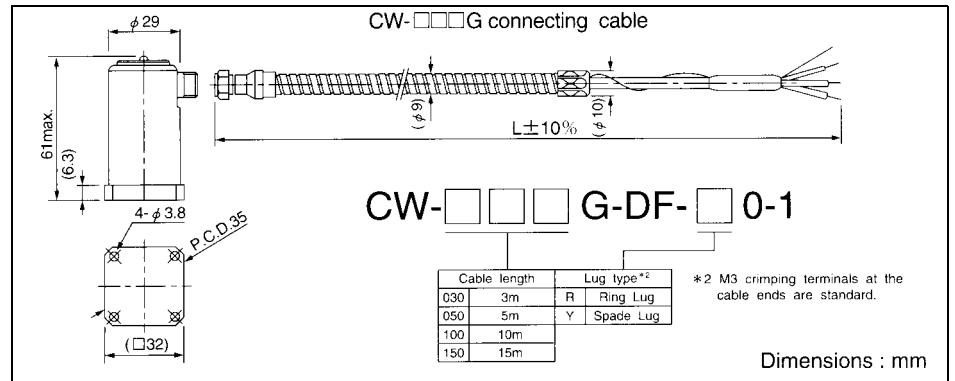
Model Code No.

CV-871 Connector type

CV-872 With integral cable type*¹
(with 2-conductor shielded)
cable 3m standard

*¹ Cable length 3m(end cut ot). cw cable not required

CV-871 (connector type) Outline Drawing



CV-872 (With integral cable type) Outline Drawing

