

Compact Size KM-M Strain Transducer

Smaller diameter enables strain measurement during the curing process of concrete, mortar, asphalt, synthetic resin, etc. with thin cover thicknesses!

Features

- Smaller diameter (**50% by volume compared to conventional products**)
- Applicable to concrete, mortar, asphalt, and synthetic resin with thin cover thickness
- Applicable to measurement of surface strain on cut beams and steel sheet piles of mountain retaining
- Possible to measure from young lumber age
- Low apparent modulus of elasticity,
so it can be measured from the concrete hardening process
(Conventional product 40N/mm² → KM-M approx. 25N/mm²)
- Possible to measure strain and temperature simultaneously
(KM-100HM, KM-100MT)

"KM-M Strain Transducer" have **extremely high insulation properties and can measure strain with high accuracy**. The "**Strain Transducer with built-in temperature measuring function**" can measure strain and temperature at the same time, which **greatly simplifies wiring work**. In addition, a wide variety of related products enable measurement of not only internal strain of concrete but also **surface strain of steel materials** such as "concrete surface" and "H-shaped steel".



φ17⇒φ12
**30%
smaller!**

Protection ratings :
IP 68 equivalent

Specifications

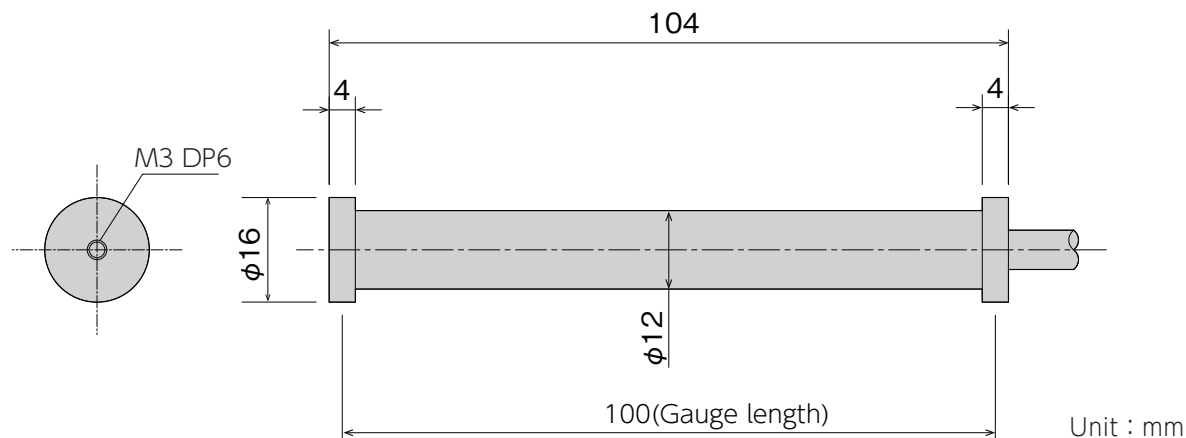
Type	KM-100M	KM-100HM	KM-100MT
Capacity	±5000×10 ⁻⁶ strain		
Gauge length	100mm		
Rated output (Approx.)	approx. 2.5mV/V(5000×10 ⁻⁶ strain)		
Non-linearity	2%RO		
Apparent elastic modulus	approx. 25N/mm ²		
Temperature measurement	-	Strain gauge 350Ω Quarter bridge 3-wire method (approx. 50×10 ⁻⁶ strain/°C)	Thermocouple T
Allowable temperature range	-20~+80°C	-20~+180°C	-20~+80°C
Input/output resistance	350Ω Full bridge		

Input-output cable

- KM-100M φ6mm 0.35mm² 4-core shielded chloroprene cable 2m, free end
 KM-100HM φ6mm 0.3mm² 5-core shielded fluoroplastic cable 2m free end
 KM-100MT φ6mm 0.18mm² 4-core shielded T-thermocouple compound cable, free end

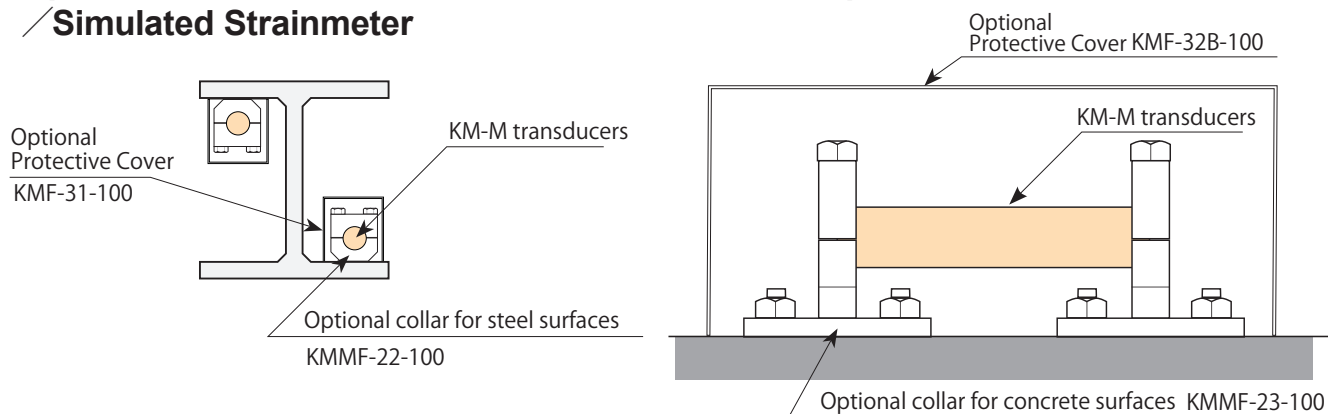
Dimension

Common to all KM-M/KM-HM/KM-MT models



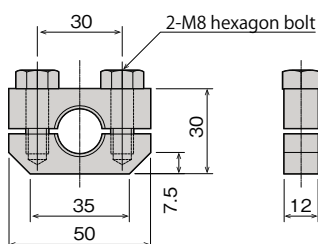
Related products

Optional collar for steel and concrete surfaces / Optional Protective Cover
/ Simulated Strainmeter

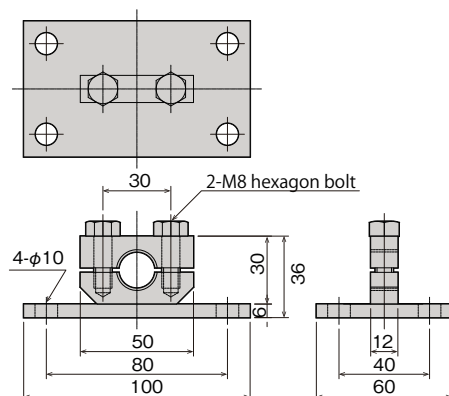


External Dimensions

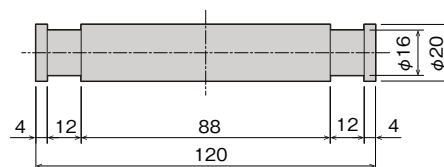
For steel surfaces
Optional Collar
KMMF-22-100



For concrete surfaces
Optional Collar KMMF-23-100



Simulated strainmeter
KMMF-12-100



Unit : mm

The contents of this catalog are subject to change without prior notice.
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Approval Certificate ISO9001
Design and manufacture of
strain gauges, strain measuring
equipment and transducers



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