

Gages for Concrete (KM & KMC)

1
-32

STRAIN GAGES



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material
PCB
Plastics

Ultra-small strain
High temp.
Low temp.

High elongation

Non-magnetoresistive

Hydrogen gas
Bending

With protector

Embedded
Crack

Adhesive
Coating agent

Custom-
designed

1-32

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	

●KM Series Embedded Strain Gages

RoHS*

When ordering, suffix the lead-wire cable code (see table at the right) to the model number with a space in between.

E.g.
KM-120-120-H2-11 with a vinyl-coated flat 3-wire cable 5 m long
→ KM-120-120-H2-11 W5M3

Uniaxial foil strain gages with vinyl-coated flat 2-wire cable

Resistance: 120 Ω
Gage factor: Approx. 1.8 (Reference value)



The KM series gages are designed to be embedded in mortar or concrete for the purpose of measuring the internal stress. To ensure better adhesion to mortar or the like, the KM series gages feature a specially treated surface. They also provide suitable waterproofness and elastic modulus for the intended purpose.

Operating Temperature: -10 to 70°C

■Types, lengths and codes of lead-wire cables pre-attached to KM gages
For other lead-wire cable lengths, contact us.

Type	KM-30	KM-120
	Vinyl-coated flat 2-wire cable	Vinyl-coated flat 3-wire cable
Length	H1	H2
1 m	Y1M2	W1M3
3 m	Y3M2	W3M3
5 m	Y5M2	W5M3
Operating temp.	-10 to 70°C	

The following model is delivered with a vinyl-coated flat 2-wire cable 1 m long pre-attached.

KM-30-120-H1-11 Y1M2 30×9×3 1 gage/ pkg

Uniaxial foil strain gages with vinyl-coated flat 3-wire cable

Resistance: 120 Ω
Gage factor: Approx. 2.0 (Reference value)



The following model is delivered with a vinyl-coated flat 3-wire cable 1 m long pre-attached.

KM-120-120-H2-11 W1M3 120×15×5 1 gage/ pkg

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	

●KMC Series Concrete-embedded Strain Gages

RoHS

Uniaxial wire strain gages with vinyl-coated flat 3-wire cable 3 m long

Resistance: 120 Ω



The KMC series gages are designed to measure self-shrinkage and self-stress of cemented materials. They enable measurement of the self-shrinkage and high-fluidity concrete immediately after placing. They are also used effectively to check for cracks of cemented materials. Usually, a T-type thermocouple is installed near the gage, while the KMC series gages of H4 type do not require such the installation since they are equipped with a built-in thermocouple.

Operating Temperature: Normal temperature to 70°C

1 gage/ pkg

The KMC series gages are available only with a vinyl-coated flat 3-wire cable 3 m long pre-attached.

KMC-70-120-H3 80×10×2
KMC-70-120-H4 80×10×2 T-type thermocouple built in

*The above picture is KMC-70-120-H3.

*Some products will be sold together with non-RoHS compliant products.
If you have a request for RoHS compliant products, please contact us.