

# Gages for Concrete (KM & KMC)



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material  
PCB  
Plastics

Ultra-small strain  
High temp.  
Low temp.

High elongation

Non-  
magneto  
resistive

Hydrogen gas  
Bending

With protector  
Embedded

Crack

Adhesive  
Coating agent

Custom-  
designed

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

## ●KM Series Embedded Strain Gages

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

E.g.

For the gage 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



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

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

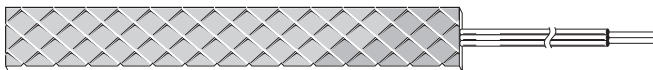
\* For other lead-wire cable lengths, contact us.

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



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

### 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