

Gages for Concrete (KFGS & KC)

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

●KFGS Series General-purpose Foil Strain Gages



Listed here are the KFGS series gages with a suitable lead-wire cable for strain measurement of concrete.

*For the types and lengths of lead-wire cables, see pages 1-15 and 1-16.

Applicable Adhesives (With vinyl-coated flat cable)

	Operating Temp. after Curing the Adhesive
CC-35	-10 to 80°C

Notes on pre-attached lead-wire cables

- Standard color of the 2-wire cable pre-attached to uniaxial gages is red (R). If desired, allows a white, green, yellow or black cable to be pre-attached.
- Standard 3-wire cable pre-attached to uniaxial gages has red stripes (R). If desired, allows the red stripes to be changed to blue or yellow stripes.
- In the case of a biaxial gage and triaxial gage, 2-wire cables are color-coded with red, white and green stripes for 0°, 90° and 45°, respectively and 3-wire cables, with red, yellow and blue stripes for 0°, 90° and 45°, respectively.
The letter code is S in common.

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

Uniaxial

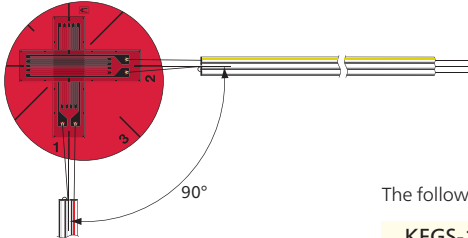
Resistance: 120 Ω
Gage factor: Approx. 2.1



KFGS-30-120-C1-11 L1M3R	30	3.3	37	5.2
KFGS-20-120-C1-11 L1M3R	20	5	28	8
KFGS-10-120-C1-11 L1M3R	10	3	16	5.2

Biaxial, 0°/90° stacked rosette

Resistance: 120 Ω
Gage factor: Approx. 2.1

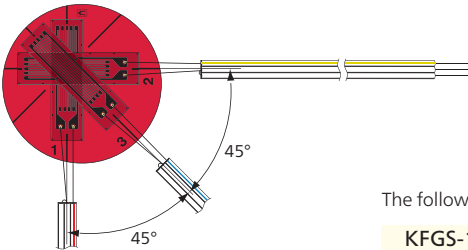


The following model is delivered with a vinyl-coated flat 3-wire cable 1 m long pre-attached.

KFGS-10-120-D16-11 L1M3S	10	3	φ21
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Triaxial, 0°/90°/45° stacked rosette

Resistance: 120 Ω
Gage factor: Approx. 2.1



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

KFGS-10-120-D17-11 L1M3S	10	3	φ21
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Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	

●KC Series Wire Strain Gages

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

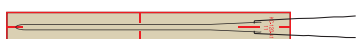
E.g.

For the gage with a vinyl-coated flat 2-wire cable 5 m long
→ [KC-120-120-A1-11 L5M2R](#)

If no lead-wire cable code is suffixed, the gage is delivered with gage leads only. (Silver-covered copper wires 25 mm long)

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 2.1



Featuring a longer gage length, the KC series gages are wire strain gages suitable for mean strain measurement of concrete under test. Usually, a model with the gage length over 3 times longer than the maximum diameter of the aggregate is selected for the purpose.

Applicable Adhesives

	Operating Temp. after Curing the Adhesive
CC-35	-30 to 120°C

■Types, lengths and codes of lead-wire cables pre-attached to KC series gages

Length	Type	Vinyl-coated flat 2-wire cable	Vinyl-coated flat 3-wire cable	
		A1		
15 cm		L15C2R	L15C3R	
30 cm		L30C2R	L30C3R	
1 m		L1M2R	L1M3R	
3 m		L3M2R	L3M3R	
5 m		L5M2R	L5M3R	
Operating temp.		-10 to 80°C		
Remarks		L-6, L-9 for ≥ 6 m		L-7, L-10 for ≥ 6 m

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

KC-120-120-A1-11	120	0.6	132	8
KC-80-120-A1-11	84	0.6	95	8
KC-70-120-A1-11	67	0.6	80	8
KC-60-120-A1-11	60	0.6	74	8



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