Gages for Concrete (KFGS & KC)

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

●KFGS Series General-purpose Foil Strain Gages

RoHS

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
EP-340	–10 to 80°C
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.

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 2.1



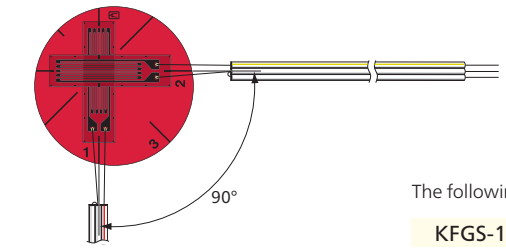
*The above picture is KFGS-10-120-C1-11 L1M3R.

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

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

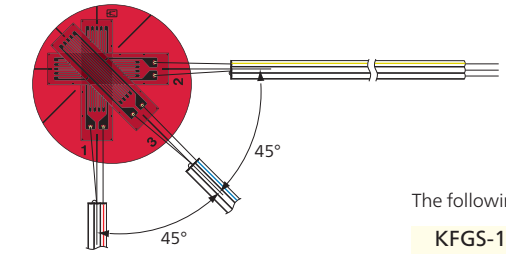


The following model is delivered with a vinyl-coated flat 3-wire cable 1 m long pre-attached.

KFGS-10-120-D16-11 L1M3S	10	3	ϕ21

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

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

●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.

RoHS

E.g.
KC-120-120-A1-11 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 30 mm long)

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 (gravel, sand, etc.) is selected for the purpose.

Applicable Adhesives

	Operating Temp. after Curing the Adhesive
EP-340	–55 to 150°C
CC-35	–30 to 120°C

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

For other lead-wire cable lengths, contact us.

Type / Length	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

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 2.1



*The above picture is KC-60-120-A1-11.

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

10 gages/ pkg