

Ultrahigh-elongation Foil Strain Gages

These foil type large-elongation strain gages are for measuring strain from the structural elastic region to the plastic region of various structures. They are capable of measuring from approximately 20 to 30% material deformation in simple tensile strain.

Operating Temperature

Operating Temperature	Applicable Adhesives
-20 to 80°C	CC-36

Models

Patterns, Gage Resistance, Gage Factor	Model	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	
Uniaxial Resistance: 120 Ω Gage factor: Approx. 2.0	KFEM-10-120-C1	10	2.5	17.5	4.5	
	KFEM-5-120-C1	5	1.5	11.5	3.0	
	KFEM-2-120-C1	2	1.5	8.5	3.0	
	KFEM-1-120-C1	1	1.3	7.0	2.5	



*The above picture is KFEM-5-120-C1.

*Strain limit of 20% to 30% is ensured for simple tension applied to the gage bonded on stainless steel SUS 304 or aluminum alloy A1050 at normal temperature.

*Strain limit will be decreased under the following conditions.

- In case of bonding to non-adhesive materials such as aluminum alloy A7075 and plastics Polypropylene.
- In case of the targets have discontinuous distortion, or any crack on its surface.
- In case of measurement at high/low temperature.

Types, lengths and codes of lead-wire cables pre-attached to KFEM

	2 polyester-coated copper wires	Vinyl-coated flat 2-wire cables	Vinyl-coated flat 3-wire cables
		C1	
15 cm	N15C2	L15C2R	L15C3R
30 cm	N30C2	L30C2R	L30C3R
1 m	N1M2	L1M2R	L1M3R
3 m	-	L3M2R	L3M3R
5 m	-	L5M2R	L5M3R
Operating Temperature	-20 to 80°C	-10 to 80°C	
Remarks	Twisted for ≥ 50 cm	L-6, L-9 for ≥ 6 m	L-7, L-10 for ≥ 6 m

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

How to order

When ordering, specify the model of the strain gage and the code of the lead-wire cable with a space in between.

E.g. KFEM-5-120-C1 with a vinyl-coated flat 2-wire cable 3 m long pre-attached → **KFEM-5-120-C1 L3M2R**

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

*10 gages/pkg



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor