



Strain Gages

- Outline
- Lead-wire cable
- General
- Waterproof
- Concrete
- Composite material
PCB
Plastics
- Ultra-small strain
High temp.
Low temp.
- High elongation
- Non-magneto-resistant
- Hydrogen gas
Bending
- With protector
Embedded
- Crack
- Adhesive
Coating agent
- Custom-designed

High-elongation Gages (KFEM & KFEL)

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks																																																																							
		Gage (Grid)		Base																																																																									
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<p>●KFEM Series Ultrahigh-elongation Foil Strain Gages</p> <p style="text-align: right;">RoHS</p> <p>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 10 m long pre-attached → KFEM-5-120-C1 L10M2R</p> <p>If no lead-wire cable code is suffixed, the gage is delivered with gage leads only. (Silver-covered copper wires 25 mm long) *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.</p> <ul style="list-style-type: none"> ● 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. <p>Uniaxial Resistance: 120 Ω Gage factor: Approx. 2.0</p>																																																																													
<p>Operating Temp. after Curing the Adhesive</p> <table border="1"> <tr> <td>CC-36</td> <td>-20 to 80°C</td> </tr> </table> <p>■Types, lengths and codes of lead-wire cables pre-attached to KFEM gages</p> <table border="1"> <thead> <tr> <th>Type</th> <th>2 polyester-coated copper wires</th> <th>Vinyl-coated flat 2-wire cable</th> <th colspan="2">Vinyl-coated flat 3-wire cable</th> </tr> <tr> <th>Length</th> <th colspan="4">C1</th> </tr> </thead> <tbody> <tr> <td>15 cm</td> <td>N15C2</td> <td>L15C2R</td> <td colspan="2">L15C3R</td> </tr> <tr> <td>30 cm</td> <td>N30C2</td> <td>L30C2R</td> <td colspan="2">L30C3R</td> </tr> <tr> <td>1 m</td> <td>N1M2</td> <td>L1M2R</td> <td colspan="2">L1M3R</td> </tr> <tr> <td>3 m</td> <td>—</td> <td>L3M2R</td> <td colspan="2">L3M3R</td> </tr> <tr> <td>5 m</td> <td>—</td> <td>L5M2R</td> <td colspan="2">L5M3R</td> </tr> <tr> <td>Operating temp.</td> <td colspan="2">-20 to 80°C</td> <td colspan="2">-10 to 80°C</td> </tr> <tr> <td>Remarks</td> <td colspan="2">Twisted for ≥ 50 cm</td> <td colspan="2">L-6, L-9 for ≥ 6 m L-7, L-10 for ≥ 6 m</td> </tr> </tbody> </table> <p>* For other lead-wire cable lengths, contact us.</p> <table border="1"> <thead> <tr> <th></th> <th>KFEM-10-120-C1</th> <th>10.0</th> <th>2.5</th> <th>17.5</th> <th>4.5</th> </tr> </thead> <tbody> <tr> <td></td> <td>KFEM-5-120-C1</td> <td>5.0</td> <td>1.5</td> <td>11.5</td> <td>3.0</td> </tr> <tr> <td></td> <td>KFEM-2-120-C1</td> <td>2.0</td> <td>1.5</td> <td>8.5</td> <td>3.0</td> </tr> <tr> <td></td> <td>KFEM-1-120-C1</td> <td>1.0</td> <td>1.3</td> <td>7.0</td> <td>2.5</td> </tr> </tbody> </table>							CC-36	-20 to 80°C	Type	2 polyester-coated copper wires	Vinyl-coated flat 2-wire cable	Vinyl-coated flat 3-wire cable		Length	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 temp.	-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			KFEM-10-120-C1	10.0	2.5	17.5	4.5		KFEM-5-120-C1	5.0	1.5	11.5	3.0		KFEM-2-120-C1	2.0	1.5	8.5	3.0		KFEM-1-120-C1	1.0	1.3	7.0	2.5
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