



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

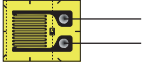
With protector
Embedded

Crack


Adhesive
Coating agent

Custom-
designed

Gages for High-pressure Hydrogen Gas Environment (KfV)

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks				
		Gage (Grid)		Base						
		Length	Width	Length	Width					
<p>●KfV Foil Strain Gage for Hydrogen Gas Environment</p> <p>RoHS</p> <p>Uniaxial 350Ω gages Resistance: 350 Ω Gage factor: Approx. 2.5</p>  <p>KfV is a foil strain gage that enables stable strain measurement under high-pressure hydrogen gas environments. The metal foil of conventional foil strain gages has the electric resistance changed by receiving hydrogen effect, thereby disabling stable strain measurement. KfV strain gage receives less electric resistance change due to hydrogen, thereby enabling stable strain measurement.</p> <p>Applicable Adhesives</p> <table border="1"> <thead> <tr> <th></th> <th>Operating Temp. after Curing the Adhesive</th> </tr> </thead> <tbody> <tr> <td>PC-600</td> <td>-30 to 80°C</td> </tr> </tbody> </table> <p>To Ensure Safe Usage Before using KfV strain gages, request the leaflet and read thoroughly the Safety Precautions described there.</p>								Operating Temp. after Curing the Adhesive	PC-600	-30 to 80°C
	Operating Temp. after Curing the Adhesive									
PC-600	-30 to 80°C									
KfV-2-350-C1		2	3.2	6	5	Polyester-coated copper wires (15 cm) 2 gages/ pkg				

Bending Strain Measuring Gages (KFF)

Patterns, Gage Resistance, Gage Factor	Models	Dimensions (mm)				Remarks						
		Gage (Grid)		Base								
		Length	Width	Length	Width							
<p>●KFF Series Foil Strain Gages for Bending Strain Measurement</p> <p>RoHS</p> <p>Uniaxial 350Ω gages Resistance: 350 Ω Gage factor: Approx. 2.1</p>  <p>The KFF series foil strain gages have one each sensing element on both the upper and lower sides of the thick plastic base. If measuring stress in box structures such as bridge girders, or in high-pressure vessels that do not allow gages to be bonded directly to the inside of the measuring object, the KFF series gages can be bonded to the outside surface to obtain strain on the inside.</p> <ul style="list-style-type: none"> ●When using this gage, use it properly according to the thickness of the object being measured. ●When the object being measured is thin (approx. 1 mm or less), the sensitivity drops due to the impact of the reinforcement effect caused by gage contact. When the measurement object is thick (approx. 30 mm or more), the accuracy deteriorates. <p>[Examples of proper gage models for the thickness of measurement objects] KFF-30-350-C11: Approx. 1 mm to 15 mm KFF-30-350-C12: Approx. 4 mm to 30 mm</p> <p>Applicable Adhesives</p> <table border="1"> <thead> <tr> <th></th> <th>Operating Temp. after Curing the Adhesive</th> </tr> </thead> <tbody> <tr> <td>CC-33A</td> <td>-50 to 80°C</td> </tr> <tr> <td>EP-340</td> <td>-50 to 80°C</td> </tr> </tbody> </table>								Operating Temp. after Curing the Adhesive	CC-33A	-50 to 80°C	EP-340	-50 to 80°C
	Operating Temp. after Curing the Adhesive											
CC-33A	-50 to 80°C											
EP-340	-50 to 80°C											
	KFF-30-350-C11-11 KFF-30-350-C11-16 KFF-30-350-C11-23 KFF-30-350-C12-11 KFF-30-350-C12-16 KFF-30-350-C12-23			30×7×1 30×7×2		5 gages/ pkg 5 gages/ pkg						

*The above picture is KFF-30-350-C11-11.