



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material
PCB
PlasticsUltra-small strain
High temp.
Low temp.

High elongation

Non-
magnetoiresistiveHydrogen gas
BendingWith protector
Embedded

Crack

Adhesive
Coating agentCustom-
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 | |

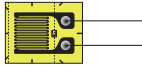
●KfV Foil Strain Gage for Hydrogen Gas Environment

RoHS

Uniaxial 350Ω gages

Resistance: 350 Ω

Gage factor: Approx. 2.5



RoHS

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.

Applicable Adhesives

| | Operating Temp. after Curing the Adhesive |
|--------|--|
| PC-600 | -30 to 80°C |

To Ensure Safe Usage

Before using KfV strain gages, request the leaflet and read thoroughly the Safety Precautions described there.

| | | | | | |
|--------------|---|-----|---|---|---|
| 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 | |

●KFF Series Foil Strain Gages for Bending Strain Measurement

RoHS

Uniaxial 350Ω gages

Resistance: 350 Ω

Gage factor: Approx. 2.1


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.

- 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.

[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

Applicable Adhesives

| | 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 | 30×7×1 | 5 gages/ pkg |
| KFF-30-350-C11-23 | | |
| KFF-30-350-C12-11 | | |
| KFF-30-350-C12-16 | 30×7×2 | 5 gages/ pkg |
| KFF-30-350-C12-23 | | |