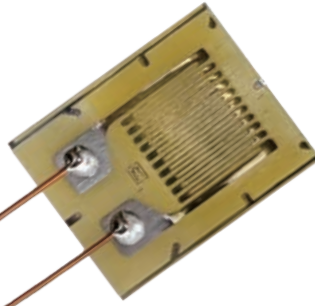


FOR HYDROGEN

KFV



Foil Strain Gage for Hydrogen Gas Environment

The KFV is suitable strain measurement in hydrogen gas.

Metal atom

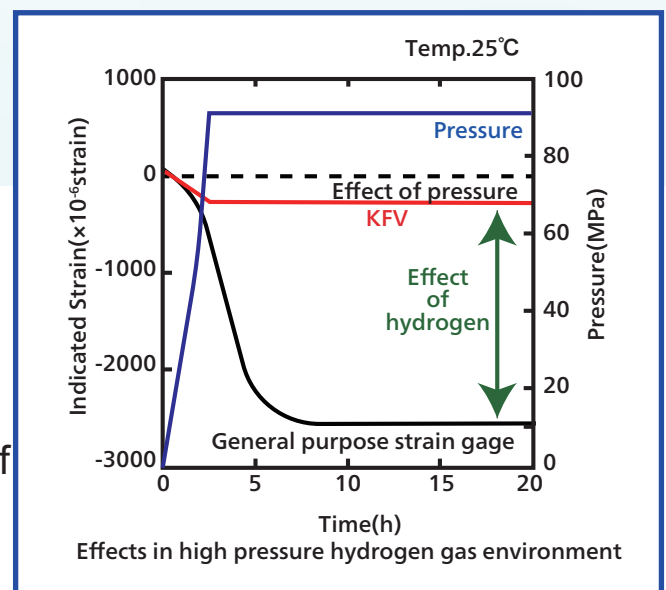
Hydrogen molecule (H₂) Hydrogen atom (H)

Metallic bond is weakened.

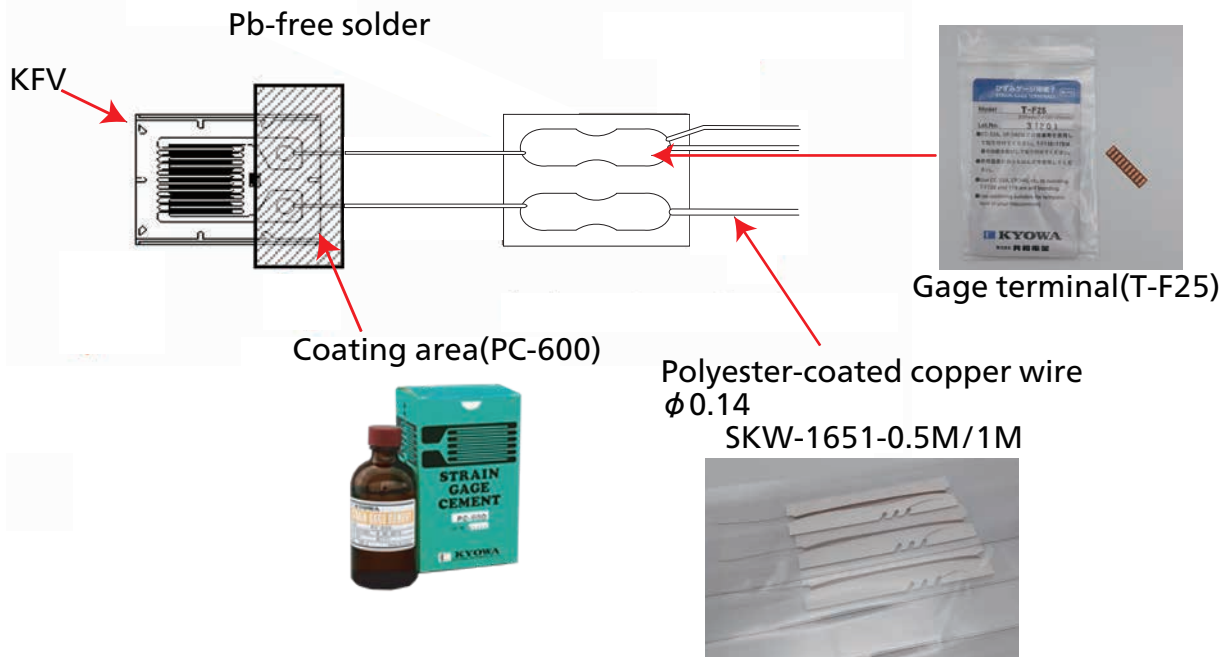
Hydrogen is very small, and when it comes into contact with metal, the ionized hydrogen atoms easily penetrate into the metal. Such penetrating hydrogen weakens the interatomic bonds and combines with carbon components, then the strength significantly decreases. This phenomenon is called Hydrogen Embrittlement.

Features

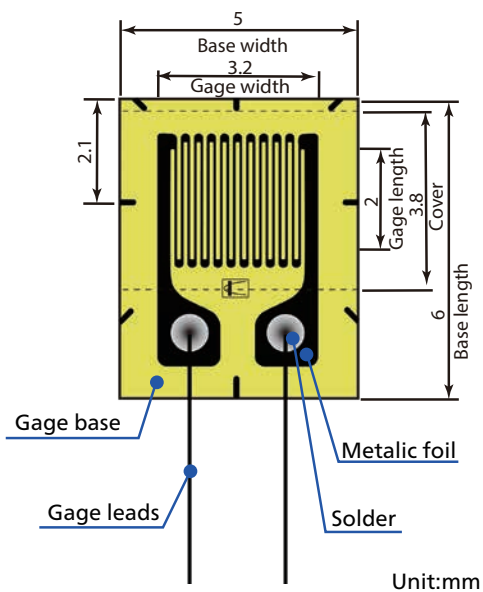
- Small influence on gage resistance** by Hydrogen penetration.
- Faster stabilization to save time** for test setup.
- High-pressure resistance - 90MPa.**
- Almost the same bonding process** with normal strain gages.
- Installation in a narrow space** instead of transducers.



Wiring image



Dimensions and specifications



Gage pattern	Uniaxial
Gage length	2mm
Resistance value	350 Ω \pm 1.0%
Materials	Resistive element: Fe-Cr alloy foil
	Base: Polyimide resin
	Cover: Polyimide resin
	Gage lead: Polyester-coated copper wires $\phi 0.14 \times 15$ mm
Applicable linear expansion coefficient	Incompatible
Operating temp limit	-30 to 80°C
Gage factor	Approx. 2.5
Applicable adhesive	PC-600
Hydrogen gas pressure resistance	90MPa
Package	2 sheets/1 pkg
Size	Refer to external drawing

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Safety Precautions

Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

- Specifications are subject to change without notice for improvement.
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Contact to KYOWA



PRODUCTS

