Strain Gages Selection Chart

Selecting strain gage types matching to measurement purpose and environment.

KFG-2-120-

Series Designation

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Selecting strain gage types matching to the kind of material and the temperature of the environment.

For example

· Outdoor Environment , measurement in underwater

KFW
Waterproof foil strain gages

· Measurement under high temperature

KFU
High-temperature foil strain gages

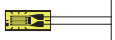
· Concrete internal strain measurement

KM
Embedded strain gages

Gage Length(mm)

Gage Length(mm)

Selecting gage length types matching to the kind of material and the environment of space.

Main Application	Strain Gage Length (mm)
Strain measurement for Mortar /Concrete	30~120 
Strain measurement for Wood/Glass	5~30
Strain measurement for Common steel / Acrylic	1~6 
Concentrated stress measurement	0.15~2 
Strain measurement in narrow space.	0.2~1 
Strain measurement in fast phenomenon (Impact-shock, etc.)	0.2~1

Resistance(Ω)

Gage Resistance

Selecting strain gage resistance matching the measurement application.

Application	Resistance
Bending compensation	60Ω
General-purpose strain measurement	120Ω
For Transducer	350~ 1000Ω

Note: Combination of codes is limited and menu options cannot freely be selected.

C1-11 L1M3R

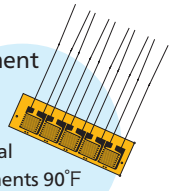
Gage Pattern

Pattern of strain gages

Selecting a pattern matching the measurement application.

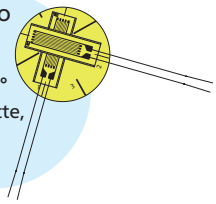
For example

· Concentrated stress measurement



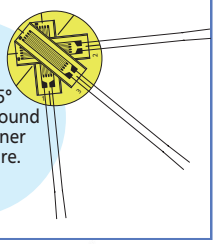
D9
Uniaxial
5-elements 90˚F

· Measurement of Poisson ratio



D16
Biaxial 0°/ 90°
Stacked rosette,
Round base.

· Stress analysis



D17
Triaxial 0°/90°/ 45°
Stacked rosette,Round base Applicable liner expansion software.

Applicable Linear Expansion Coefficient

Linear expansion coefficient of strain gages

Selecting a pattern matching the measurement application.

For example

1
Composite materials such as CFRP
Amber (1.1)
Diamond (1.2)

16
Stainless steel SUS 304 (16.2)
Beryllium steel (16.7)
Copper (16.7)

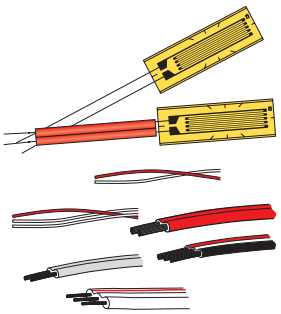
65
Acrylic resin (65.0)
Polycarbonate (66.6)

Applicable linear expansion coefficient (μm/m/˚C)

Type and Length of Lead Wire Type Cable

Lead wire cable of strain gage

Selecting a kind of lead wire cable matching the measuring condition under environments and a temperature.



A strain gage with a leadwire for safe labor

We supply these two types:
- Gages with leads only
- Gages connected to flat vinyl lead wires of reguired length

Gages connected to lead wires provide increases in speed and work required for adhesion. Refer to the pages for each gage for combinations of gages and lead wires.