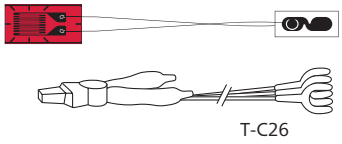
General-purpose Foil Strain Gages KFG

Patterns, Gage Resistance, Gage Factor	Models	Corresponds to the Material End color	Dimensions (mm) Grid Length	Grid Width	Base Length	Base Width	Remarks

●KFG Series Foil Strain Gages with Gage Terminal

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 2.1



(When the clip-equipped dedicated cable is used, the operating temperature range of each adhesive after curing is –10 to 80°C.)

*Figure is KFG-2-120-C1-11 T-F7

KFG gages equipped with a gage terminal enable one touch connection/disconnection of the lead wire cable. They are suitable for residual stress measurement with the cutting method. A clip equipped dedicated cable T-C26 (Vinyl-coated, 2 m long) is optionally available.

Applicable Adhesives and Operating Temperature Range after Curing

PC-600: -196 to 150°C
CC-33A: -196 to 120°C
CC-35: -30 to 120°C
CC-36: -30 to 100°C
EP-340: -55 to 150°C

Models	Corresponds to the Material End color	Grid Length	Grid Width	Base Length	Base Width	Remarks
KFG-2-120-C1-11 T-F7	red	2	1.2	6.3	2.8	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-2-120-C1-16 T-F7	orange					
KFG-2-120-C1-23 T-F7	green					
KFG-1-120-C1-11 T-F7	red	1	1.1	4.8	2.4	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-1-120-C1-16 T-F7	orange					
KFG-1-120-C1-23 T-F7	green					

Biaxial, 0°/90° stacked rosette

Resistance: 120 Ω
Gage factor: Approx. 2.1

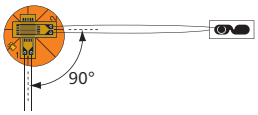


*Figure is KFG-2-120-D16-16 T-F7

Models	Corresponds to the Material End color	Grid Length	Grid Width	Base	Remarks
KFG-2-120-D16-11 T-F7	red	2	1.2	ϕ8	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-2-120-D16-16 T-F7	orange				
KFG-2-120-D16-23 T-F7	green				
KFG-1-120-D16-11 T-F7	red	1	1.1	ϕ5	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-1-120-D16-16 T-F7	orange				
KFG-1-120-D16-23 T-F7	green				

Triaxial, 0°/90°/45° stacked rosette

Resistance: 120 Ω
Gage factor: Approx. 2.1

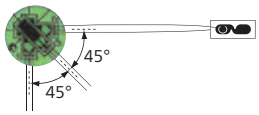


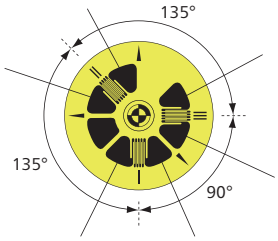
*Figure is KFG-2-120-D17-23 T-F7

Models	Corresponds to the Material End color	Grid Length	Grid Width	Base	Remarks
KFG-2-120-D17-11 T-F7	red	2	1.2	ϕ8	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-2-120-D17-16 T-F7	orange				
KFG-2-120-D17-23 T-F7	green				
KFG-1-120-D17-11 T-F7	red	1	1.1	ϕ5	ϕ0.14 Polyester-coated copper cable 15 mm long
KFG-1-120-D17-16 T-F7	orange				
KFG-1-120-D17-23 T-F7	green				

●KFG Series Foil Strain Gages for Boring Method

Triaxial, 0°/135°/90°

Resistance: 120 Ω
Gage factor: Approx. 2.1



For KFG gages with the lead wire cable pre-attached, refer to page 1-18.

*Figure is KFG-3-120-D28-27

Designed to measure residual stress released by the boring method.

Applicable Adhesives and Operating Temperature Range after Curing

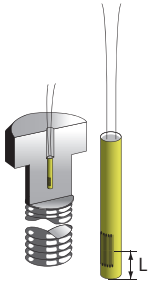
CC-33A: -196 to 120°C
CC-35: -30 to 120°C
CC-36: -30 to 100°C
EP-340: -55 to 150°C
PC-620: -196 to 150°C

Models	Corresponds to the Material End color	Grid Length	Grid Width	Base	Remarks
KFG-3-120-D28-11	red	3	2	ϕ19.8	Gage center diameter 10.8
KFG-3-120-D28-16	orange				
KFG-3-120-D28-23	green				
KFG-3-120-D28-27	yellow				
KFG-1.5-120-D28-11	red	1.5	1.3	ϕ12	Gage center diameter 5.5
KFG-1.5-120-D28-16	orange				
KFG-1.5-120-D28-23	green				
KFG-1.5-120-D28-27	yellow				

●KFG Series Foil Strain Gages for Measuring Axial Tension of Bolts

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 1.9



Length from the tip of base to the center of grid

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	KFG-3 : 2.7mm
	KFG-1.5 : 1.75mm

If it is difficult to bond a strain gage to the surface of a bolt for measuring the tightening stress, these gages enable the measurement by embedding into a hole, 2 mm diameter, bored from the top head of the bolt. They are applicable to materials having a linear expansion coefficient of 11μm/m per °C.

ϕ0.14 Polyester-coated copper cable 5 mm long

Applicable Adhesives and Operating Temperature Range after Curing

EP-180 Normal temperature to 50°C

A min. qty 5 PC.

Options Dedicated gage terminal

Model	Dimensions	Base material	Conductor material	Remarks
T-F29	Outer: ϕ6 Inner: ϕ2.5	Glass epoxy	Copper foil	For bolt gages

T-F29

Models	Grid Length	Grid Width	Base	Remarks
KFG-3-120-C20-11	3	app. 6	11.5	ϕ1.9 Bore diameter 2
KFG-1.5-120-C20-11	1.5	app.6	5	ϕ1.9 Bore diameter 2

A min. qty 10 PC.