



Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

KFGS

General-purpose Foil Strain Gages

In pursuit of the world's highest standard of quality, our strain gages are available in a variety of gage lengths and patterns for use in a wide range of applications. They use a polyimide resin base approximately 14 μm thick and offer superior flexibility.

They have excellent humidity resistance for use when measuring indoors and in the field.

For information on lead wires and how to order, refer to page 1-17.

Models

Operating Temperature

Operating Temperature	Applicable Adhesives
-196 to 120°C	CC-33A
-30 to 120°C	CC-35
-30 to 100°C	CC-36
-55 to 150°C	EP-340
-196 to 150°C	PC-600

Patterns, Gage Resistance, Gage Factor	Model	Dimensions(mm)				Remarks
		Gage(Grid)		Base		
		Length	Width	Length	Width	
Uniaxial Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-30-120-C1-11	30	3.3	37	5.2	
	KFGS-30-120-C1-16	30	3.3	37	5.2	
	KFGS-30-120-C1-23	30	3.3	37	5.2	
	KFGS-30-120-C1-27	30	3.3	37	5.2	
	KFGS-20-120-C1-11	20	5	28	8	
	KFGS-20-120-C1-16	20	5	28	8	
	KFGS-20-120-C1-23	20	5	28	8	
	KFGS-20-120-C1-27	20	5	28	8	
	KFGS-10-120-C1-11	10	3	16	5.2	
	KFGS-10-120-C1-16	10	3	16	5.2	
	KFGS-10-120-C1-23	10	3	16	5.2	
	KFGS-10-120-C1-27	10	3	16	5.2	
	KFGS-6-120-C1-11	6	1.7	10	3.4	
	KFGS-6-120-C1-16	6	1.7	10	3.4	
	KFGS-6-120-C1-23	6	1.7	10	3.4	
	KFGS-6-120-C1-27	6	1.7	10	3.4	
	KFGS-5-120-C1-5	5	1.4	9.4	2.8	
	KFGS-5-120-C1-11	5	1.4	9.4	2.8	
	KFGS-5-120-C1-16	5	1.4	9.4	2.8	
	KFGS-5-120-C1-23	5	1.4	9.4	2.8	
	KFGS-5-120-C1-27	5	1.4	9.4	2.8	
	KFGS-4N-120-C1-11	4	0.7	8	1.4	
	KFGS-4N-120-C1-16	4	0.7	8	1.4	
	KFGS-4N-120-C1-23	4	0.7	8	1.4	
	KFGS-4N-120-C1-27	4	0.7	8	1.4	
	KFGS-3-120-C1-11	3	1.3	7.4	2.8	
	KFGS-3-120-C1-16	3	1.3	7.4	2.8	
	KFGS-3-120-C1-23	3	1.3	7.4	2.8	
	KFGS-3-120-C1-27	3	1.3	7.4	2.8	
	KFGS-2-120-C1-5	2	1.2	6.3	2.8	
	KFGS-2-120-C1-11	2	1.2	6.3	2.8	
	KFGS-2-120-C1-16	2	1.2	6.3	2.8	
	KFGS-2-120-C1-23	2	1.2	6.3	2.8	
	KFGS-2-120-C1-27	2	1.2	6.3	2.8	
	KFGS-2N-120-C1-11	2	0.84	5.3	1.4	
	KFGS-2N-120-C1-16	2	0.84	5.3	1.4	
	KFGS-2N-120-C1-23	2	0.84	5.3	1.4	
	KFGS-2N-120-C1-27	2	0.84	5.3	1.4	
	KFGS-1-120-C1-11	1	1.1	4.8	2.4	
	KFGS-1-120-C1-16	1	1.1	4.8	2.4	
	KFGS-1-120-C1-23	1	1.1	4.8	2.4	
	KFGS-1-120-C1-27	1	1.1	4.8	2.4	
	KFGS-1N-120-C1-11	1	0.65	4.2	1.4	
	KFGS-1N-120-C1-16	1	0.65	4.2	1.4	
	KFGS-1N-120-C1-23	1	0.65	4.2	1.4	
	KFGS-1N-120-C1-27	1	0.65	4.2	1.4	
	KFGS-03-120-C1-11	0.3	1.4	3.5	2.4	
	KFGS-03-120-C1-16	0.3	1.4	3.5	2.4	
	KFGS-03-120-C1-23	0.3	1.4	3.5	2.4	
	KFGS-03-120-C1-27	0.3	1.4	3.5	2.4	
	KFGS-02-120-C1-11	0.2	1.4	3.3	2.4	
	KFGS-02-120-C1-16	0.2	1.4	3.3	2.4	
	KFGS-02-120-C1-23	0.2	1.4	3.3	2.4	
	KFGS-02-120-C1-27	0.2	1.4	3.3	2.4	

*The above picture is KFGS-5-120-C1-11.

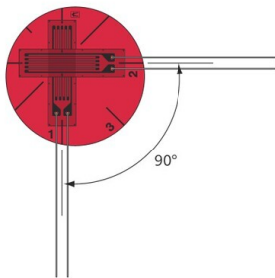
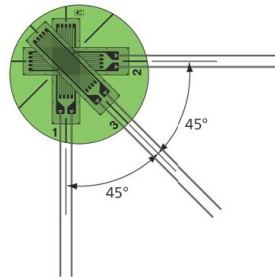
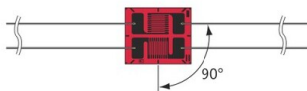
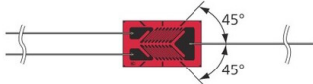
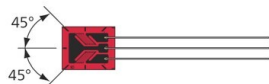
*The above picture is KFGS-5-120-C1-11.



Strain Gage

Load Cell

Pressure
SensorAcceleration
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SensorComponent
Force
SensorAutomotive
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Engineering
Sensor

Patterns, Gage Resistance, Gage Factor	Model	Dimensions(mm)				Remarks
		Gage(Grid)		Base		
		Length	Width	Length	Width	
Biaxial, stacked rosette Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-10-120-D16-11	10	3	φ21		
	KFGS-10-120-D16-16	10	3	φ21		
	KFGS-10-120-D16-23	10	3	φ21		
	KFGS-10-120-D16-27	10	3	φ21		
	KFGS-5-120-D16-11	5	1.4	φ11		
	KFGS-5-120-D16-16	5	1.4	φ11		
	KFGS-5-120-D16-23	5	1.4	φ11		
	KFGS-5-120-D16-27	5	1.4	φ11		
	KFGS-3-120-D16-11	3	1.3	φ10		
	KFGS-3-120-D16-16	3	1.3	φ10		
	KFGS-3-120-D16-23	3	1.3	φ10		
	KFGS-3-120-D16-27	3	1.3	φ10		
	KFGS-2-120-D16-11	2	1.2	φ8		
	KFGS-2-120-D16-16	2	1.2	φ8		
	KFGS-2-120-D16-23	2	1.2	φ8		
	KFGS-2-120-D16-27	2	1.2	φ8		
	KFGS-1-120-D16-11	1	1.1	φ5		
	KFGS-1-120-D16-16	1	1.1	φ5		
KFGS-1-120-D16-23	1	1.1	φ5			
KFGS-1-120-D16-27	1	1.1	φ5			
Triaxial, stacked rosette (For stress analysis) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-10-120-D17-11	10	3	φ21		
	KFGS-10-120-D17-16	10	3	φ21		
	KFGS-10-120-D17-23	10	3	φ21		
	KFGS-10-120-D17-27	10	3	φ21		
	KFGS-5-120-D17-11	5	1.4	φ11		
	KFGS-5-120-D17-16	5	1.4	φ11		
	KFGS-5-120-D17-23	5	1.4	φ11		
	KFGS-5-120-D17-27	5	1.4	φ11		
	KFGS-3-120-D17-11	3	1.3	φ10		
	KFGS-3-120-D17-16	3	1.3	φ10		
	KFGS-3-120-D17-23	3	1.3	φ10		
	KFGS-3-120-D17-27	3	1.3	φ10		
	KFGS-2-120-D17-11	2	1.2	φ8		
	KFGS-2-120-D17-16	2	1.2	φ8		
	KFGS-2-120-D17-23	2	1.2	φ8		
	KFGS-2-120-D17-27	2	1.2	φ8		
	KFGS-1-120-D17-11	1	1.1	φ5		
	KFGS-1-120-D17-16	1	1.1	φ5		
KFGS-1-120-D17-23	1	1.1	φ5			
KFGS-1-120-D17-27	1	1.1	φ5			
Biaxial, plane arrangement Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D1-11	2	3.2	10	8.5	
	KFGS-2-120-D1-16	2	3.2	10	8.5	
	KFGS-2-120-D1-23	2	3.2	10	8.5	
	KFGS-2-120-D1-27	2	3.2	10	8.5	
Biaxial, plane arrangement (For torque measurement) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D2-11	2	3.4	12	7	
	KFGS-2-120-D2-16	2	3.4	12	7	
	KFGS-2-120-D2-23	2	3.4	12	7	
	KFGS-2-120-D2-27	2	3.4	12	7	
Biaxial, plane arrangement (For torque measurement) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D31-11	2	1.2	8	6.5	
	KFGS-2-120-D31-16	2	1.2	8	6.5	
	KFGS-2-120-D31-23	2	1.2	8	6.5	
	KFGS-2-120-D31-27	2	1.2	8	6.5	

*The above picture is KFGS-10-120-D16-11.

*The above picture is KFGS-2-120-D17-23.

*The above picture is KFGS-2-120-D1-11.

*The above picture is KFGS-2-120-D2-11.

*The above picture is KFGS-2-120-D31-11.



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

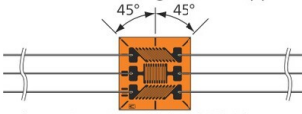
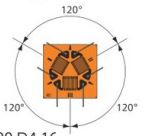
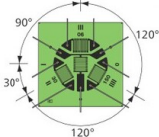
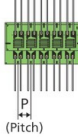
Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

Patterns, Gage Resistance, Gage Factor	Model	Dimensions(mm)				Remarks
		Gage(Grid)		Base		
		Length	Width	Length	Width	
Triaxial, plane arrangement Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D3-11	2	3.6	11	11	
	KFGS-2-120-D3-16	2	3.6	11	11	
	KFGS-2-120-D3-23	2	3.6	11	11	
	KFGS-2-120-D3-27	2	3.6	11	11	
Triaxial, plane arrangement Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D4-11	2	3.4	12	12	
	KFGS-2-120-D4-16	2	3.4	12	12	
	KFGS-2-120-D4-23	2	3.4	12	12	
	KFGS-2-120-D4-27	2	3.4	12	12	
	KFGS-1-120-D4-11	1	1.7	7	7	
	KFGS-1-120-D4-16	1	1.7	7	7	
	KFGS-1-120-D4-23	1	1.7	7	7	
	KFGS-1-120-D4-27	1	1.7	7	7	
Quadriaxial, plane arrangement Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D6-11	2	3.1	17	17	
	KFGS-2-120-D6-16	2	3.1	17	17	
	KFGS-2-120-D6-23	2	3.1	17	17	
	KFGS-2-120-D6-27	2	3.1	17	17	
Uniaxial, with lead wires from both ends Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-1-120-C2-11	1	1.8	5.6	3	
	KFGS-1-120-C2-16	1	1.8	5.6	3	
	KFGS-1-120-C2-23	1	1.8	5.6	3	
	KFGS-1-120-C2-27	1	1.8	5.6	3	
	KFGS-1-120-C3-11	1	1.8	5.5	2.7	
	KFGS-1-120-C3-16	1	1.8	5.5	2.7	
	KFGS-1-120-C3-23	1	1.8	5.5	2.7	
	KFGS-1-120-C3-27	1	1.8	5.5	2.7	
Uniaxial (Measurement for shearing strain) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-C15-11	2	0.8	5.2	3	Torque measurement is possible by using C15 and C16 in combination.
	KFGS-2-120-C15-16	2	0.8	5.2	3	
	KFGS-2-120-C15-23	2	0.8	5.2	3	
	KFGS-2-120-C15-27	2	0.8	5.2	3	
	KFGS-2-120-C16-11	2	0.8	5.2	3	
	KFGS-2-120-C16-16	2	0.8	5.2	3	
	KFGS-2-120-C16-23	2	0.8	5.2	3	
	KFGS-2-120-C16-27	2	0.8	5.2	3	
Uniaxial 5-element (Measurement for concentrated stress) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-2-120-D9-11	2	2.2	17	5	P (Pitch): 3 mm 5 gages/pkg
	KFGS-2-120-D9-16	2	2.2	17	5	
	KFGS-2-120-D9-23	2	2.2	17	5	
	KFGS-2-120-D9-27	2	2.2	17	5	
	KFGS-1-120-D9-11	1	1.4	12	4	P (Pitch): 2 mm 5 gages/pkg
	KFGS-1-120-D9-16	1	1.4	12	4	
	KFGS-1-120-D9-23	1	1.4	12	4	
	KFGS-1-120-D9-27	1	1.4	12	4	
	KFGS-2-120-D19-11	2	2.5	17	5	P (Pitch): 3 mm 5 gages/pkg
	KFGS-2-120-D19-16	2	2.5	17	5	
	KFGS-2-120-D19-23	2	2.5	17	5	
	KFGS-2-120-D19-27	2	2.5	17	5	
	KFGS-1-120-D19-11	1	1.5	12	4	P (Pitch): 2 mm 5 gages/pkg
	KFGS-1-120-D19-16	1	1.5	12	4	
	KFGS-1-120-D19-23	1	1.5	12	4	
	KFGS-1-120-D19-27	1	1.5	12	4	
Biaxial 5-element, stacked rosette (Measurement for concentrated stress) Resistance: 120 Ω Gage factor: Approx. 2.1 	KFGS-1-120-D39-11	1	1.4 (1.5)	12	6.4	P (Pitch): 2 mm Figures in () are for lower-side gage patterns. 5 gages/pkg
	KFGS-1-120-D39-16	1	1.4 (1.5)	12	6.4	
	KFGS-1-120-D39-23	1	1.4 (1.5)	12	6.4	
	KFGS-1-120-D39-27	1	1.4 (1.5)	12	6.4	

Patterns, Gage Resistance, Gage Factor	Model	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	
Uniaxial (Measurement for corner part) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-3NE-120-C1-11	3	0.7	5.9	1.4	
	KFGS-3NE-120-C1-16	3	0.7	5.9	1.4	
	KFGS-3NE-120-C1-23	3	0.7	5.9	1.4	
	KFGS-3NE-120-C1-27	3	0.7	5.9	1.4	
	KFGS-2NE-120-C1-11	2	0.84	4.9	1.4	
	KFGS-2NE-120-C1-16	2	0.84	4.9	1.4	
	KFGS-2NE-120-C1-23	2	0.84	4.9	1.4	
	KFGS-2NE-120-C1-27	2	0.84	4.9	1.4	
	KFGS-1NE-120-C1-11	1	0.65	3.9	1.4	
	KFGS-1NE-120-C1-16	1	0.65	3.9	1.4	
	KFGS-1NE-120-C1-23	1	0.65	3.9	1.4	
	KFGS-1NE-120-C1-27	1	0.65	3.9	1.4	
*The above picture is KFGS-2NE-120-C1-11.						
Uniaxial, 60 Ω Resistance: 60 Ω, Gage factor: Approx. 2.1	KFGS-5-60-C1-11	5	2	10	3.4	Using for Active quarter-bridge (Dual series gages)
	KFGS-5-60-C1-16	5	2	10	3.4	
	KFGS-5-60-C1-23	5	2	10	3.4	
	KFGS-5-60-C1-27	5	2	10	3.4	
	KFGS-2-60-C1-11	2	2.3	7.2	3.7	
	KFGS-2-60-C1-16	2	2.3	7.2	3.7	
	KFGS-2-60-C1-23	2	2.3	7.2	3.7	
	KFGS-2-60-C1-27	2	2.3	7.2	3.7	
*The above picture is KFGS-2-60-C1-27.						
Uniaxial, 350 Ω Resistance: 350 Ω Gage factor: Approx. 2.1	KFGS-5-350-C1-11	5	2	9.4	4.2	
	KFGS-5-350-C1-16	5	2	9.4	4.2	
	KFGS-5-350-C1-23	5	2	9.4	4.2	
	KFGS-5-350-C1-27	5	2	9.4	4.2	
	KFGS-3-350-C1-11	3	2	7.4	4.2	
	KFGS-3-350-C1-16	3	2	7.4	4.2	
	KFGS-3-350-C1-23	3	2	7.4	4.2	
	KFGS-3-350-C1-27	3	2	7.4	4.2	
	KFGS-2-350-C1-11	2	2	6.3	4.2	
	KFGS-2-350-C1-16	2	2	6.3	4.2	
	KFGS-2-350-C1-23	2	2	6.3	4.2	
	KFGS-2-350-C1-27	2	2	6.3	4.2	
	KFGS-1-350-C1-11	1	2	4.8	3.4	
	KFGS-1-350-C1-16	1	2	4.8	3.4	
	KFGS-1-350-C1-23	1	2	4.8	3.4	
	KFGS-1-350-C1-27	1	2	4.8	3.4	
*The above picture is KFGS-5-350-C1-11.						
Biaxial, stacked rosette 350 Ω Resistance: 350 Ω Gage factor: Approx. 2.1	KFGS-5-350-D16-11	5	2	φ11		
	KFGS-5-350-D16-16	5	2	φ11		
	KFGS-5-350-D16-23	5	2	φ11		
	KFGS-5-350-D16-27	5	2	φ11		
	KFGS-3-350-D16-11	3	2	φ10		
	KFGS-3-350-D16-16	3	2	φ10		
	KFGS-3-350-D16-23	3	2	φ10		
	KFGS-3-350-D16-27	3	2	φ10		
	KFGS-2-350-D16-11	2	2	φ10		
	KFGS-2-350-D16-16	2	2	φ10		
	KFGS-2-350-D16-23	2	2	φ10		
	KFGS-2-350-D16-27	2	2	φ10		
	KFGS-1-350-D16-11	1	1.8	φ8		
	KFGS-1-350-D16-16	1	1.8	φ8		
	KFGS-1-350-D16-23	1	1.8	φ8		
	KFGS-1-350-D16-27	1	1.8	φ8		
*The above picture is KFGS-5-350-D16-16.						
Triaxial, stacked rosette 350 Ω Resistance: 350 Ω Gage factor: Approx. 2.1	KFGS-5-350-D17-11	5	2	φ11		
	KFGS-5-350-D17-16	5	2	φ11		
	KFGS-5-350-D17-23	5	2	φ11		
	KFGS-5-350-D17-27	5	2	φ11		
	KFGS-3-350-D17-11	3	2	φ10		
	KFGS-3-350-D17-16	3	2	φ10		
	KFGS-3-350-D17-23	3	2	φ10		
	KFGS-3-350-D17-27	3	2	φ10		
	KFGS-2-350-D17-11	2	2	φ10		
	KFGS-2-350-D17-16	2	2	φ10		
	KFGS-2-350-D17-23	2	2	φ10		
	KFGS-2-350-D17-27	2	2	φ10		
	KFGS-1-350-D17-11	1	1.8	φ8		
	KFGS-1-350-D17-16	1	1.8	φ8		
	KFGS-1-350-D17-23	1	1.8	φ8		
	KFGS-1-350-D17-27	1	1.8	φ8		
*The above picture is KFGS-5-350-D17-27.						

*10 gages/pkg unless otherwise specified.

1
-14

Sensor



Strain Gage

Load Cell

Pressure
Sensor

Acceleration
Sensor

Torque
Sensor

Displacement
Sensor

Component
Force
Sensor

Automotive
Sensor

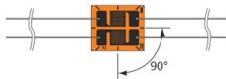
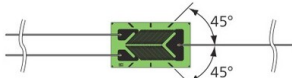
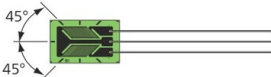
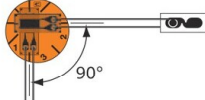
Civil
Engineering
Sensor



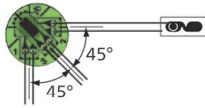
Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

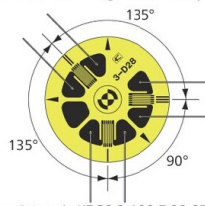
Patterns, Gage Resistance, Gage Factor	Model	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	
Biaxial, plane arrangement 350 Ω Resistance: 350 Ω Gage factor: Approx. 2.1 	KFGS-2-350-D1-11	2	3	10	8.5	
	KFGS-2-350-D1-16	2	3	10	8.5	
	KFGS-2-350-D1-23	2	3	10	8.5	
	KFGS-2-350-D1-27	2	3	10	8.5	
*The above picture is KFGS-2-350-D1-16.						
Biaxial, plane arrangement 350 Ω (For torque measurement) Resistance: 350 Ω Gage factor: Approx. 2.1 	KFGS-2-350-D2-11	2	4	12	6.8	
	KFGS-2-350-D2-16	2	4	12	6.8	
	KFGS-2-350-D2-23	2	4	12	6.8	
	KFGS-2-350-D2-27	2	4	12	6.8	
	KFGS-2-350-D31-11	2	3	10.5	6.5	
	KFGS-2-350-D31-16	2	3	10.5	6.5	
	KFGS-2-350-D31-23	2	3	10.5	6.5	
	KFGS-2-350-D31-27	2	3	10.5	6.5	
*The above picture is KFGS-2-350-D2-23.						
 Uniaxial, 500 Ω (For making transducers) Resistance: 500 Ω , Gage factor: Approx. 2.1	KFGS-5-500-C1-11	5	3.5	11	4.9	
	KFGS-5-500-C1-16	5	3.5	11	4.9	
	KFGS-5-500-C1-23	5	3.5	11	4.9	
	KFGS-5-500-C1-27	5	3.5	11	4.9	
 Uniaxial, 1000 Ω (For making transducers) Resistance: 1000 Ω , Gage factor: Approx. 2.1	KFGS-2-500-C1-11	2	2.6	7.5	4.4	
	KFGS-2-500-C1-16	2	2.6	7.5	4.4	
	KFGS-2-500-C1-23	2	2.6	7.5	4.4	
	KFGS-2-500-C1-27	2	2.6	7.5	4.4	
 Uniaxial, 1000 Ω (For making transducers) Resistance: 1000 Ω , Gage factor: Approx. 2.1	KFGS-5-1K-C1-11	5	3.5	11	4.9	
	KFGS-5-1K-C1-16	5	3.5	11	4.9	
	KFGS-5-1K-C1-23	5	3.5	11	4.9	
	KFGS-5-1K-C1-27	5	3.5	11	4.9	
 Uniaxial, 1000 Ω (For making transducers) Resistance: 1000 Ω , Gage factor: Approx. 2.1	KFGS-2-1K-C1-11	2	3	7.2	4.5	
	KFGS-2-1K-C1-16	2	3	7.2	4.5	
	KFGS-2-1K-C1-23	2	3	7.2	4.5	
	KFGS-2-1K-C1-27	2	3	7.2	4.5	
 Uniaxial, with gage terminal (For residual stress measurement) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-2-120-C1-11 T-F7	2	1.2	6.3	2.8	A clip-equipped dedicated cable available.
	KFGS-2-120-C1-16 T-F7	2	1.2	6.3	2.8	
	KFGS-2-120-C1-23 T-F7	2	1.2	6.3	2.8	
	KFGS-1-120-C1-11 T-F7	1	1.1	4.8	2.4	
	KFGS-1-120-C1-16 T-F7	1	1.1	4.8	2.4	
	KFGS-1-120-C1-23 T-F7	1	1.1	4.8	2.4	
*The above picture is KFGS-2-120-C1-11 T-F7.						
 Biaxial, stacked rosette with gage terminal (For residual stress measurement) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-2-120-D16-11 T-F7	2	1.2	$\phi 8$		A clip-equipped dedicated cable available.
	KFGS-2-120-D16-16 T-F7	2	1.2	$\phi 8$		
	KFGS-2-120-D16-23 T-F7	2	1.2	$\phi 8$		
	KFGS-1-120-D16-11 T-F7	1	1.1	$\phi 5$		
	KFGS-1-120-D16-16 T-F7	1	1.1	$\phi 5$		
	KFGS-1-120-D16-23 T-F7	1	1.1	$\phi 5$		
*The above picture is KFGS-2-120-D16-16 T-F7.						

Patterns, Gage Resistance, Gage Factor	Model	Dimensions (mm)				Remarks
		Gage (Grid)		Base		
		Length	Width	Length	Width	
Triaxial, stacked rosette with gage terminal (For residual stress measurement) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-2-120-D17-11 T-F7	2	1.2	φ8		A clip-equipped dedicated cable available.
	KFGS-2-120-D17-16 T-F7	2	1.2	φ8		
	KFGS-2-120-D17-23 T-F7	2	1.2	φ8		
	KFGS-1-120-D17-11 T-F7	1	1.1	φ5		
	KFGS-1-120-D17-16 T-F7	1	1.1	φ5		
	KFGS-1-120-D17-23 T-F7	1	1.1	φ5		



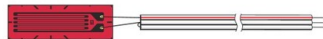
*The above picture is KFGS-2-120-D17-23 T-F7.

Triaxial, plane arrangement (For boring method) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-3-120-D28-11	3	2	ϕ 19.8		Diameter of gage center ϕ 10.8
	KFGS-3-120-D28-16	3	2	ϕ 19.8		
	KFGS-3-120-D28-23	3	2	ϕ 19.8		
	KFGS-3-120-D28-27	3	2	ϕ 19.8		
	KFGS-1.5-120-D28-11	1.5	1.3	ϕ 12		Diameter of gage center ϕ 5.5
	KFGS-1.5-120-D28-16	1.5	1.3	ϕ 12		
	KFGS-1.5-120-D28-23	1.5	1.3	ϕ 12		
	KFGS-1.5-120-D28-27	1.5	1.3	ϕ 12		



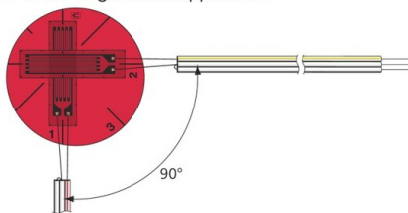
*The above picture is KFGS-3-120-D28-27.

Uniaxial (For concrete) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-30-120-C1-11	30	3.3	37	5.2	
	KFGS-20-120-C1-11	20	5	28	8	
	KFGS-10-120-C1-11	10	3	16	5.2	



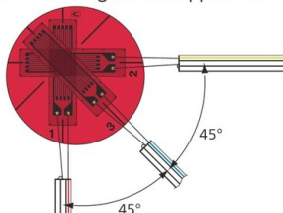
*The above picture is KFGS-10-120-C1-11 L1M3R.

Biaxial, stacked rosette (For concrete) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-10-120-D16-11	10	3	ϕ 21	
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*The above picture is KFGS-10-120-D16-11 L1M3S.

Triaxial, stacked rosette (For concrete) Resistance: 120 Ω Gage factor: Approx. 2.1	KFGS-10-120-D17-11	10	3	ϕ 21	
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*The above picture is KFGS-10-120-D17-11 L1M3S.

1-16

Sensor



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

*10 gages/ pkg unless otherwise specified.

1-16



Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

■Types, lengths and codes of lead-wire cables pre-attached to KFGS

	2 polyester-coated copper wires	3 polyester-coated copper wires	Vinyl-coated flat 2-wire cables 		Vinyl-coated flat 3-wire cables 		Mid-temperature 2-wire cables 	Mid-temperature 3-wire cables 
	C1,C2,C3, C15,C16, D1,D2,D3, D4,D6,D9, D16,D17, D19,D28, D31,D39	C1,C2,C3, C15,C16, D1,D4,D9, D16,D17, D19,D28, D39	C1,C2,C3, C15,C16, D9,D19	D1,D4,D16, D17, D28, D39	C1,C2,C3, C15,C16, D2,D9, D19,D31	D1,D4, D16,D17, D28,D39	C1,C2,C3, C15,C16, D1,D9,D16, D17,D19, D39	C1,C2,C3, C15,C16, D1,D2,D9, D16,D17, D19,D31, D39
15 cm	N15C2	N15C3	L15C2R	L15C2S	L15C3R	L15C3S	R15C2	R15C3
30 cm	N30C2	N30C3	L30C2R	L30C2S	L30C3R	L30C3S	R30C2	R30C3
1 m	N1M2	N1M3	L1M2R	L1M2S	L1M3R	L1M3S	R1M2	R1M3
3 m	–	–	L3M2R	L3M2S	L3M3R	L3M3S	R3M2	R3M3
5 m	–	–	L5M2R	L5M2S	L5M3R	L5M3S	R5M2	R5M3
Operating Temperature	–196 to 150°C	–196 to 150°C	–10 to 80°C	–10 to 80°C	–10 to 80°C	–10 to 80°C	–100 to 150°C	–100 to 150°C
Remarks	Twisted for ≥50 cm (There are exceptions.)	Twisted for ≥50 cm (There are exceptions.)	L-6 L-9 for ≥ 6 m	L-6 L-9 for ≥ 6 m	L-7 L-10 for ≥ 6 m	L-7 L-10 for ≥ 6 m	L-11 ¹	L-12 ¹

*For other lead-wire cable lengths, contact us.

*Notes on pre-attached lead-wire cables

• In the case of a biaxial gage and triaxial gage, 2-wire cables are color-coded with red, white and green stripes for 0°, 90° and 45°, respectively and 3-wire cables, with red, yellow and blue stripes for 0°, 90° and 45°, respectively. The letter code is S in common.

*In the case of D9, D19 and D39 type, 2 polyester-coated copper wires (10 cm) + the specified lead-wire cable.

*1 The wire section of R-type is sandwiched or wrapped with the glass-cloth tape for insulation and reinforcement. (Refer to P.1-49)

■Clip-equipped Dedicated Cable T-C26 (Optional Accessories)

Dedicated cable for KFGS T-F7 (Vinyl-coated, 2 m long)

*When the clip-equipped dedicated cable is used, the operating temperature of KFGS T-F7 is –10 to 80°C.



■How to order

When ordering, specify the model of the strain gage and the code of the lead-wire cable with a space in between.

E.g. KFGS-5-120-C1-11 With 2 polyester-coated copper wires 15 cm long→ **KFGS-5-120-C1-11 N15C2**KFGS-5-120-C1-11 With a vinyl-coated flat 2-wire cable 5 m long→ **KFGS-5-120-C1-11 L5M2R**

If no lead-wire cable code is suffixed, the gage is delivered with gage leads only. (Silver-covered copper wires 25 mm long)

T-F7 type: Polyester-coated copper wire 15 mm long

*10 gages/pkg unless otherwise specified.