



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

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

High elongation

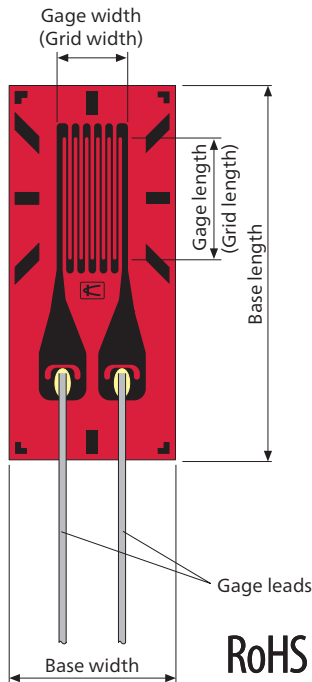
Non-magneto
resistiveHydrogen gas
BendingWith protector
Embedded

Crack

Adhesive
Coating agentCustom-
designed

General-purpose Foil Strain Gages (KFGS)

● General-purpose Foil Strain Gages KFGS NEW



The KFGS series gages use polyimide resin for the base that is approx. 13 µm thick. It ensures excellent flexibility. The outstanding moisture proof enables the KFGS gages to operate effectively both indoors and outdoors. Unless directly exposed to water droplets, no coating treatment is required.

Applicable Adhesives

	Operating Temperature after Curing the Adhesive
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-600	-196 to 150°C

* For vinyl-coated cables, the operating temperature is -10 to 80°C.

Notes on pre-attached lead-wire cables

- Standard color of the 2-wire cable pre-attached to uniaxial gages is red (R). If desired, allows a white, green, yellow or black cable to be pre-attached.
- Standard stripe of the 3-wire cable pre-attached to uniaxial gages is a red stripe. If desired, allows a blue or yellow stripe to be pre-attached.
- 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.

RoHS

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

Type	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
Length	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,D4,D9, D16,D17,D19, D28,D39	C1,C2,C3, C15,C16, D1,D2,D4,D9, D16,D17,D19, D28,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 temp.	-196 to 150°C		-10 to 80°C				-100 to 150°C	
Remarks	Twisted for ≥50 cm (There are exceptions.)		L-6 L-9 for ≥6 m		L-7 L-10 for ≥6 m		L-11	L-12

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

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](#)

KFGS-5-120-D17-11 With a vinyl-coated flat 3-wire cable 5 m long → [KFGS-5-120-D17-11 L5M3S](#)

KFGS-5-120-C1-11 With a mid-temperature 3-wire cable 5 m long → [KFGS-5-120-C1-11 R5M3](#)

KFGS-5-120-D17-11 With a mid-temperature 2-wire cable 5 m long → [KFGS-5-120-D17-11 R5M2](#)

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

For the types of lead-wire cables, see pages 1-15 and 1-16.

General-purpose Foil Strain Gages (KFGS)

Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	

Uniaxial

Resistance: 120 Ω
Gage factor: Approx. 2.1

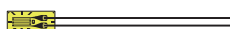
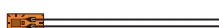
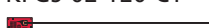
Common steel

Stainless steel

Aluminum alloy

Magnesium alloy

(Base color stands for different linear expansion.)

KFGS-30-120-C1  *The above picture is KFGS-30-120-C1-11.	KFGS-30-120-C1-11		30	3.3	37	5.2	
	KFGS-30-120-C1-16						
	KFGS-30-120-C1-23						
	KFGS-30-120-C1-27						
KFGS-20-120-C1  *The above picture is KFGS-20-120-C1-16.	KFGS-20-120-C1-11		20	5	28	8	
	KFGS-20-120-C1-16						
	KFGS-20-120-C1-23						
	KFGS-20-120-C1-27						
KFGS-10-120-C1  *The above picture is KFGS-10-120-C1-23.	KFGS-10-120-C1-11		10	3	16	5.2	
	KFGS-10-120-C1-16						
	KFGS-10-120-C1-23						
	KFGS-10-120-C1-27						
KFGS-6-120-C1  *The above picture is KFGS-6-120-C1-27.	KFGS-6-120-C1-11		6	1.7	10	3.4	
	KFGS-6-120-C1-16						
	KFGS-6-120-C1-23						
	KFGS-6-120-C1-27						
KFGS-5-120-C1  *The above picture is KFGS-5-120-C1-11.	KFGS-5-120-C1-5		5	1.4	9.4	2.8	For wood
	KFGS-5-120-C1-11						
	KFGS-5-120-C1-16						
	KFGS-5-120-C1-23						
	KFGS-5-120-C1-27						
KFGS-4N-120-C1  *The above picture is KFGS-4N-120-C1-16.	KFGS-4N-120-C1-11		4	0.7	8	1.4	
	KFGS-4N-120-C1-16						
	KFGS-4N-120-C1-23						
	KFGS-4N-120-C1-27						
KFGS-3-120-C1  *The above picture is KFGS-3-120-C1-23.	KFGS-3-120-C1-11		3	1.3	7.4	2.8	
	KFGS-3-120-C1-16						
	KFGS-3-120-C1-23						
	KFGS-3-120-C1-27						
KFGS-2-120-C1  *The above picture is KFGS-2-120-C1-27.	KFGS-2-120-C1-5		2	1.2	6.3	2.8	For wood
	KFGS-2-120-C1-11						
	KFGS-2-120-C1-16						
	KFGS-2-120-C1-23						
	KFGS-2-120-C1-27						
KFGS-2N-120-C1  *The above picture is KFGS-2N-120-C1-11.	KFGS-2N-120-C1-11		2	0.84	5.3	1.4	
	KFGS-2N-120-C1-16						
	KFGS-2N-120-C1-23						
	KFGS-2N-120-C1-27						
KFGS-1-120-C1  *The above picture is KFGS-1-120-C1-16.	KFGS-1-120-C1-11		1	1.1	4.8	2.4	
	KFGS-1-120-C1-16						
	KFGS-1-120-C1-23						
	KFGS-1-120-C1-27						
KFGS-1N-120-C1  *The above picture is KFGS-1N-120-C1-23.	KFGS-1N-120-C1-11		1	0.65	4.2	1.4	
	KFGS-1N-120-C1-16						
	KFGS-1N-120-C1-23						
	KFGS-1N-120-C1-27						
KFGS-03-120-C1  *The above picture is KFGS-03-120-C1-27.	KFGS-03-120-C1-11		0.3	1.4	3.5	2.4	
	KFGS-03-120-C1-16						
	KFGS-03-120-C1-23						
	KFGS-03-120-C1-27						
KFGS-02-120-C1  *The above picture is KFGS-02-120-C1-11.	KFGS-02-120-C1-11		0.2	1.4	3.3	2.4	
	KFGS-02-120-C1-16						
	KFGS-02-120-C1-23						
	KFGS-02-120-C1-27						

General-purpose Foil Strain Gages (KFGS)



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Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material
PCB
Plastics

Ultra-small strain
High temp.
Low temp.

High elongation

Non-
magnetoiresistive

Hydrogen gas
Bending

With protector
Embedded

Crack

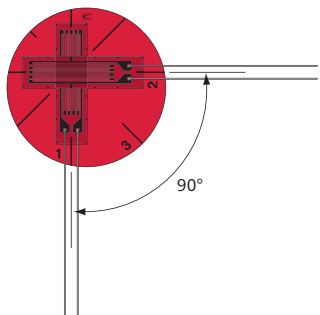
Adhesive
Coating agent

Custom-
designed

Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	

Biaxial, 0°/90° stacked rosette

Resistance: 120 Ω
Gage factor: Approx. 2.1

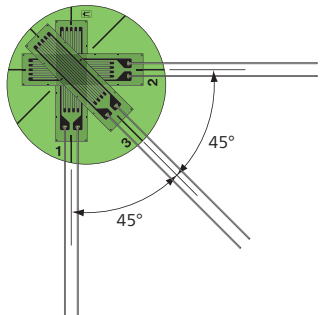


*The above picture is KFGS-10-120-D16-11.

KFGS-10-120-D16-11	●	10	3	φ21	
KFGS-10-120-D16-16	●				
KFGS-10-120-D16-23	●				
KFGS-10-120-D16-27	●				
KFGS-5-120-D16-11	●	5	1.4	φ11	
KFGS-5-120-D16-16	●				
KFGS-5-120-D16-23	●				
KFGS-5-120-D16-27	●				
KFGS-3-120-D16-11	●	3	1.3	φ10	
KFGS-3-120-D16-16	●				
KFGS-3-120-D16-23	●				
KFGS-3-120-D16-27	●				
KFGS-2-120-D16-11	●	2	1.2	φ8	
KFGS-2-120-D16-16	●				
KFGS-2-120-D16-23	●				
KFGS-2-120-D16-27	●				
KFGS-1-120-D16-11	●	1	1.1	φ5	
KFGS-1-120-D16-16	●				
KFGS-1-120-D16-23	●				
KFGS-1-120-D16-27	●				

Triaxial, 0°/90°/45° stacked rosette (For stress analysis)

Resistance: 120 Ω
Gage factor: Approx. 2.1

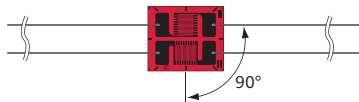


*The above picture is KFGS-10-120-D17-23.

KFGS-10-120-D17-11	●	10	3	φ21	
KFGS-10-120-D17-16	●				
KFGS-10-120-D17-23	●				
KFGS-10-120-D17-27	●				
KFGS-5-120-D17-11	●	5	1.4	φ11	
KFGS-5-120-D17-16	●				
KFGS-5-120-D17-23	●				
KFGS-5-120-D17-27	●				
KFGS-3-120-D17-11	●	3	1.3	φ10	
KFGS-3-120-D17-16	●				
KFGS-3-120-D17-23	●				
KFGS-3-120-D17-27	●				
KFGS-2-120-D17-11	●	2	1.2	φ8	
KFGS-2-120-D17-16	●				
KFGS-2-120-D17-23	●				
KFGS-2-120-D17-27	●				
KFGS-1-120-D17-11	●	1	1.1	φ5	
KFGS-1-120-D17-16	●				
KFGS-1-120-D17-23	●				
KFGS-1-120-D17-27	●				

Biaxial, 0°/90° plane arrangement

Resistance: 120 Ω
Gage factor: Approx. 2.1

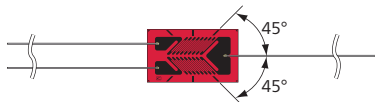


*The above picture is KFGS-2-120-D1-11.

KFGS-2-120-D1-11	●	2	3.2	10	8.5	
KFGS-2-120-D1-16	●					
KFGS-2-120-D1-23	●					
KFGS-2-120-D1-27	●					

Biaxial, 0°/90° plane arrangement (For torque measurement)

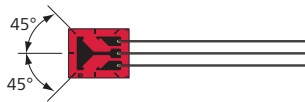
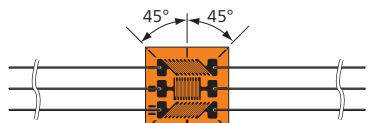
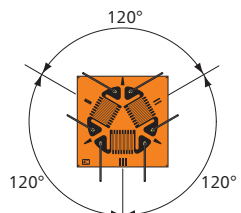
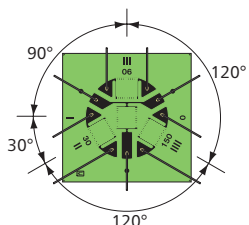
Resistance: 120 Ω
Gage factor: Approx. 2.1



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

KFGS-2-120-D2-11	●	2	3.4	12	7	
KFGS-2-120-D2-16	●					
KFGS-2-120-D2-23	●					
KFGS-2-120-D2-27	●					

General-purpose Foil Strain Gages (KFGS)

Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	
Biaxial, 0°/90° 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	●					
	KFGS-2-120-D31-23	●					
	KFGS-2-120-D31-27	●					
*The above picture is KFGS-2-120-D31-11.							
Triaxial, 0°/90°/45° 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	●					
	KFGS-2-120-D3-23	●					
	KFGS-2-120-D3-27	●					
*The above picture is KFGS-2-120-D3-16.							
Triaxial, 0°/120°/240° 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	●					
	KFGS-2-120-D4-23	●					
	KFGS-2-120-D4-27	●					
	KFGS-1-120-D4-11	●	1	1.7	7	7	
	KFGS-1-120-D4-16	●					
	KFGS-1-120-D4-23	●					
	KFGS-1-120-D4-27	●					
*The above picture is KFGS-2-120-D4-16.							
Quadraxial, 0°/30°/90°/150° 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	●					
	KFGS-2-120-D6-23	●					
	KFGS-2-120-D6-27	●					
*The above picture is KFGS-2-120-D6-23.							
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	●					
	KFGS-1-120-C2-23	●					
	KFGS-1-120-C2-27	●					
*The above picture is KFGS-1-120-C2-27.							
	KFGS-1-120-C3-11	●	1	1.8	5.5	2.7	
	KFGS-1-120-C3-16	●					
	KFGS-1-120-C3-23	●					
	KFGS-1-120-C3-27	●					
*The above picture is KFGS-1-120-C3-27.							



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Waterproof

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PlasticsUltra-small strain
High temp.
Low temp.

High elongation

Non-magnetoresistive

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Embedded

Crack

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Coating agent

Custom-designed

General-purpose Foil Strain Gages (KFGS)



Strain Gages

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Lead-wire cable

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Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	

Uniaxial (For shearing strain measurement)

Resistance: 120 Ω
Gage factor: Approx. 2.1

Torque measurement is possible by using C15 and C16 in combination.



*The above picture is KFGS-2-120-C15-11.

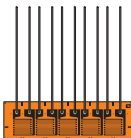
KFGS-2-120-C15-11	●	2	0.8	5.2	3	
KFGS-2-120-C15-16	●					
KFGS-2-120-C15-23	●					
KFGS-2-120-C15-27	●					
KFGS-2-120-C16-11	●	2	0.8	5.2	3	
KFGS-2-120-C16-16	●					
KFGS-2-120-C16-23	●					
KFGS-2-120-C16-27	●					



*The above picture is KFGS-2-120-C16-11.

Uniaxial 5-element (For concentrated stress measurement)

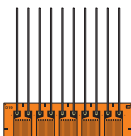
Resistance: 120 Ω
Gage factor: Approx. 2.1
Pre-attached type: 2 polyester-coated copper wires (10 cm) + the specified lead-wire cable



P
(Pitch)
P = 3 mm for gage length 2 mm
P = 2 mm for gage length 1 mm

*The above picture is KFGS-2-120-D9-16 N10C2.

KFGS-2-120-D9-11	●	2	2.2	17	5	5 gages/pkg
KFGS-2-120-D9-16	●					
KFGS-2-120-D9-23	●					
KFGS-2-120-D9-27	●					
KFGS-1-120-D9-11	●	1	1.4	12	4	5 gages/pkg
KFGS-1-120-D9-16	●					
KFGS-1-120-D9-23	●					
KFGS-1-120-D9-27	●					
KFGS-2-120-D19-11	●	2	2.5	17	5	5 gages/pkg
KFGS-2-120-D19-16	●					
KFGS-2-120-D19-23	●					
KFGS-2-120-D19-27	●					
KFGS-1-120-D19-11	●	1	1.5	12	4	5 gages/pkg
KFGS-1-120-D19-16	●					
KFGS-1-120-D19-23	●					
KFGS-1-120-D19-27	●					

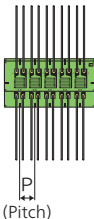


P
(Pitch)
P = 3 mm for gage length 2 mm
P = 2 mm for gage length 1 mm

*The above picture is KFGS-2-120-D19-16 N10C2.

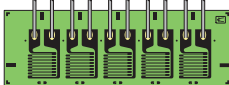
Biaxial 5-element, stacked rosette (For concentrated stress measurement)

Resistance: 120 Ω
Gage factor: Approx. 2.1
Pre-attached type: 2 polyester-coated copper wires (10 cm) + the specified lead-wire cable



P = 2 mm
P
(Pitch)

Upper-side gage pattern



Lower-side gage pattern

KFGS-1-120-D39-11	●	1	1.4 (1.5)	12	6.4	Figures in () are for lower-side gage patterns. 5 gages/pkg
KFGS-1-120-D39-16	●					
KFGS-1-120-D39-23	●					
KFGS-1-120-D39-27	●					

*The above picture is KFGS-1-120-D39-23 N10C2.

Uniaxial 60Ω gages

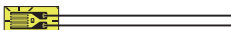
Resistance: 60 Ω
Gage factor: Approx. 2.1

Use 2 gages in parallel connection. (Bending compensation is possible.)



*The above picture is KFGS-5-60-C1-27.

KFGS-5-60-C1-11	●	5	2	10	3.4	
KFGS-5-60-C1-16	●					
KFGS-5-60-C1-23	●					
KFGS-5-60-C1-27	●					
KFGS-2-60-C1-11	●	2	2.3	7.2	3.7	
KFGS-2-60-C1-16	●					
KFGS-2-60-C1-23	●					
KFGS-2-60-C1-27	●					



*The above picture is KFGS-2-60-C1-27.

10 gages/ pkg unless otherwise specified.



Outline

Lead-wire cable

General

Waterproof

Concrete

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

High elongation

Non-
magnetoresistiveHydrogen gas
BendingWith protector
Embedded

Crack

Adhesive
Coating agentCustom-
designed

General-purpose Foil Strain Gages (KFGS)

Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	

Uniaxial 350Ω gages

Resistance: 350 Ω
Gage factor: Approx. 2.1

KFGS-5-350-C1-11	●	5	2	9.4	4.2
KFGS-5-350-C1-16	●				
KFGS-5-350-C1-23	●				
KFGS-5-350-C1-27	●				

*The above picture is KFGS-5-350-C1-11.

KFGS-3-350-C1-11	●	3	2	7.4	4.2
KFGS-3-350-C1-16	●				
KFGS-3-350-C1-23	●				
KFGS-3-350-C1-27	●				

*The above picture is KFGS-3-350-C1-11.

KFGS-2-350-C1-11	●	2	2	6.3	4.2
KFGS-2-350-C1-16	●				
KFGS-2-350-C1-23	●				
KFGS-2-350-C1-27	●				

*The above picture is KFGS-2-350-C1-11.

KFGS-1-350-C1-11	●	1	2	4.8	3.4
KFGS-1-350-C1-16	●				
KFGS-1-350-C1-23	●				
KFGS-1-350-C1-27	●				

*The above picture is KFGS-1-350-C1-11.

Biaxial 350Ω gages, 0°/90° stacked rosette

Resistance: 350 Ω
Gage factor: Approx. 2.1

KFGS-5-350-D16-11	●	5	2	φ11
KFGS-5-350-D16-16	●			
KFGS-5-350-D16-23	●			
KFGS-5-350-D16-27	●			

KFGS-3-350-D16-11	●	3	2	φ10
KFGS-3-350-D16-16	●			
KFGS-3-350-D16-23	●			
KFGS-3-350-D16-27	●			
KFGS-2-350-D16-11	●	2	2	φ10
KFGS-2-350-D16-16	●			
KFGS-2-350-D16-23	●			
KFGS-2-350-D16-27	●			
KFGS-1-350-D16-11	●	1	1.8	φ8
KFGS-1-350-D16-16	●			
KFGS-1-350-D16-23	●			
KFGS-1-350-D16-27	●			

*The above picture is KFGS-5-350-D16-16.

Triaxial 350Ω gages, 0°/90°/45° stacked rosette

Resistance: 350 Ω
Gage factor: Approx. 2.1

KFGS-5-350-D17-11	●	5	2	φ11
KFGS-5-350-D17-16	●			
KFGS-5-350-D17-23	●			
KFGS-5-350-D17-27	●			

KFGS-3-350-D17-11	●	3	2	φ10
KFGS-3-350-D17-16	●			
KFGS-3-350-D17-23	●			
KFGS-3-350-D17-27	●			
KFGS-2-350-D17-11	●	2	2	φ10
KFGS-2-350-D17-16	●			
KFGS-2-350-D17-23	●			
KFGS-2-350-D17-27	●			
KFGS-1-350-D17-11	●	1	1.8	φ8
KFGS-1-350-D17-16	●			
KFGS-1-350-D17-23	●			
KFGS-1-350-D17-27	●			

*The above picture is KFGS-5-350-D17-27.

General-purpose Foil Strain Gages (KFGS)



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material
PCB
Plastics

Ultra-small strain
High temp.
Low temp.

High elongation

Non-magneto
resistive

Hydrogen gas
Bending

With protector
Embedded

Crack

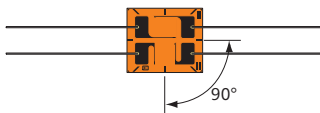
Adhesive
Coating agent

Custom-
designed

Patterns Gage Resistance, Gage Factors	Models	Base Color	Dimensions (mm)				Remarks
			Gage (Grid)		Base		
			Length	Width	Length	Width	

Biaxial 350Ω gages, 0°/90° plane arrangement

Resistance: 350 Ω
Gage factor: Approx. 2.1

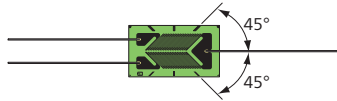


KFGS-2-350-D1-11	●	2	3	10	8.5
KFGS-2-350-D1-16	●				
KFGS-2-350-D1-23	●				
KFGS-2-350-D1-27	●				

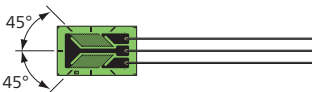
*The above picture is KFGS-2-350-D1-16.

Biaxial 350Ω gages 0°/90° plane arrangement (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	●				
KFGS-2-350-D2-23	●				
KFGS-2-350-D2-27	●				



KFGS-2-350-D31-11	●	2	3	10.5	6.5
KFGS-2-350-D31-16	●				
KFGS-2-350-D31-23	●				
KFGS-2-350-D31-27	●				

*The above picture is KFGS-2-350-D31-23.

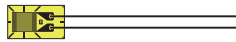
Uniaxial 500Ω gages (For making transducers)

Resistance: 500 Ω
Gage factor: Approx. 2.1



KFGS-5-500-C1-11	●	5	3.5	11	4.9
KFGS-5-500-C1-16	●				
KFGS-5-500-C1-23	●				
KFGS-5-500-C1-27	●				

*The above picture is KFGS-5-500-C1-27.

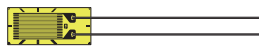


KFGS-2-500-C1-11	●	2	2.6	7.5	4.4
KFGS-2-500-C1-16	●				
KFGS-2-500-C1-23	●				
KFGS-2-500-C1-27	●				

*The above picture is KFGS-2-500-C1-27.

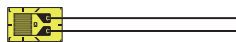
Uniaxial 1000Ω gages (For making transducers)

Resistance: 1000 Ω
Gage factor: Approx. 2.1



KFGS-5-1K-C1-11	●	5	3.5	11	4.9
KFGS-5-1K-C1-16	●				
KFGS-5-1K-C1-23	●				
KFGS-5-1K-C1-27	●				

*The above picture is KFGS-5-1K-C1-27.



KFGS-2-1K-C1-11	●	2	3	7.2	4.5
KFGS-2-1K-C1-16	●				
KFGS-2-1K-C1-23	●				
KFGS-2-1K-C1-27	●				

*The above picture is KFGS-2-1K-C1-27.

General-purpose Foil Strain Gages (KFGS)

Patterns

Gage Resistance, Gage Factors

Models

Base Color

Dimensions (mm)

Gage (Grid)

LengthWidth

Base

LengthWidth

Remarks

●KFGS Series Foil Strain Gages with Gage Terminal

NEW

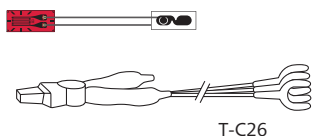
Uniaxial

Resistance: 120 Ω

Gage factor: Approx. 2.1

RoHS

KFGS 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.



T-C26

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

*The above picture is KFGS-2-120-C1-11 T-F7.

Applicable Adhesives

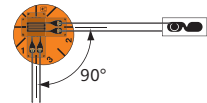
	Operating Temp. after Curing the Adhesive		Operating Temp. after Curing the Adhesive
CC-36	-30 to 100°C	CC-35	-30 to 120°C
CC-33A	-196 to 120°C	EP-340	-55 to 120°C

KFGS-2-120-C1-11 T-F7	●	2	1.2	6.3	2.8	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-2-120-C1-16 T-F7	●					
KFGS-2-120-C1-23 T-F7	●					
KFGS-1-120-C1-11 T-F7	●	1	1.1	4.8	2.4	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-1-120-C1-16 T-F7	●					
KFGS-1-120-C1-23 T-F7	●					

Biaxial, 0°/90° stacked rosette

Resistance: 120 Ω

Gage factor: Approx. 2.1



90°

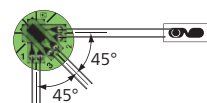
*The above picture is KFGS-2-120-D16-16 T-F7.

KFGS-2-120-D16-11 T-F7	●	2	1.2	φ8	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-2-120-D16-16 T-F7	●				
KFGS-2-120-D16-23 T-F7	●				
KFGS-1-120-D16-11 T-F7	●	1	1.1	φ5	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-1-120-D16-16 T-F7	●				
KFGS-1-120-D16-23 T-F7	●				

Triaxial, 0°/90°/45° stacked rosette

Resistance: 120 Ω

Gage factor: Approx. 2.1



45°

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

KFGS-2-120-D17-11 T-F7	●	2	1.2	φ8	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-2-120-D17-16 T-F7	●				
KFGS-2-120-D17-23 T-F7	●				
KFGS-1-120-D17-11 T-F7	●	1	1.1	φ5	φ0.14 Polyester-coated copper cable 15 mm long
KFGS-1-120-D17-16 T-F7	●				
KFGS-1-120-D17-23 T-F7	●				

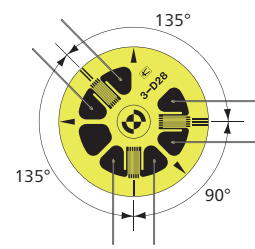
●KFGS Series Foil Strain Gages for Boring Method

NEW

Triaxial, 0°/135°/90° RoHS plane arrangement

Resistance: 120 Ω

Gage factor: Approx. 2.1



135°

135°

90°

For KFGS gages with the lead-wire cable pre-attached, see page 1-18.

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

Designed to measure residual stress released by the boring method.

Applicable Adhesives

	Operating Temp. after Curing the Adhesive		Operating Temp. after Curing the Adhesive
CC-33A	-196 to 120°C	EP-340	-55 to 150°C
CC-35	-30 to 120°C	PC-600	-196 to 150°C
CC-36	-30 to 100°C		

KFGS-3-120-D28-11	●	3	2	φ19.8	Diameter of gage center φ10.8
KFGS-3-120-D28-16	●				
KFGS-3-120-D28-23	●				
KFGS-3-120-D28-27	●	1.5	1.3	φ12	Diameter of gage center φ5.5
KFGS-1.5-120-D28-11	●				
KFGS-1.5-120-D28-16	●				
KFGS-1.5-120-D28-23	●				
KFGS-1.5-120-D28-27	●				



Outline

Lead-wire cable

General

Waterproof

Concrete

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

High elongation

Non-
magnetoresistiveHydrogen gas
BendingWith protector
Embedded

Crack

Adhesive
Coating agentCustom-
designed