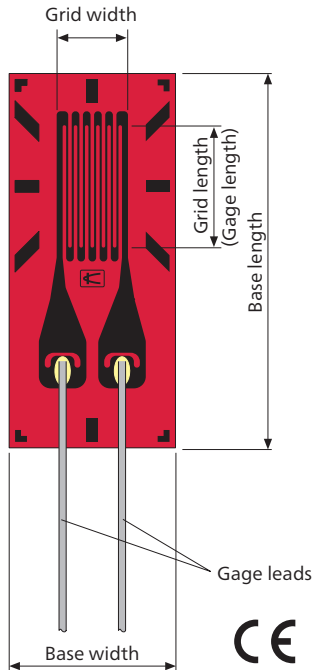




General-purpose Foil Strain Gages (KFGS)

● 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


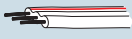


	Operating Temperature after Curing the Adhesive
CC-33A	-196 to 120°C
CC-35	-30 to 120°C
CC-36	-30 to 100°C
EP-340	-55 to 150°C
PC-600	-196 to 150°C

* 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.

■ 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
			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.

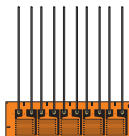


*The above picture is KFGS-2-120-C16-11.

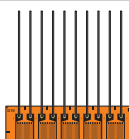
KFGS-2-120-C15-11	●	2	0.8	5.2	3	
KFGS-2-120-C15-16	●					
KFGS-2-120-C15-23	●					
KFGS-2-120-C15-27	●					
KFGS-2-120-C16-11	●	2	0.8	5.2	3	
KFGS-2-120-C16-16	●					
KFGS-2-120-C16-23	●					
KFGS-2-120-C16-27	●					

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 = 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.

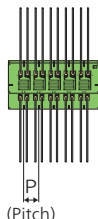


P = 3 mm for gage length 2 mm
P = 2 mm for gage length 1 mm
*The above picture is KFGS-2-120-D19-16 N10C2.

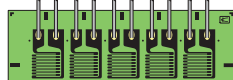
KFGS-2-120-D9-11	●	2	2.2	17	5	5 gages/pkg
KFGS-2-120-D9-16	●					
KFGS-2-120-D9-23	●					
KFGS-2-120-D9-27	●					
KFGS-1-120-D9-11	●	1	1.4	12	4	5 gages/pkg
KFGS-1-120-D9-16	●					
KFGS-1-120-D9-23	●					
KFGS-1-120-D9-27	●					
KFGS-2-120-D19-11	●	2	2.5	17	5	5 gages/pkg
KFGS-2-120-D19-16	●					
KFGS-2-120-D19-23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

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

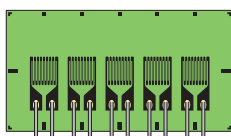
Resistance: 120 Ω
Gage factor: Approx. 2.1
Pre-attached type: 2 polyester-coated copper wires (10 cm) + the specified lead-wire cable



P = 2 mm
*The above picture is KFGS-1-120-D39-23 N10C2.



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	●					

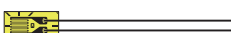
Uniaxial 60Ω gages

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.



*The above picture is KFGS-2-60-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	●					