

General-purpose Foil Strain Gages KFR

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

●KFR Series Foil Strain Gages

The KFR series foil strain gages are durable and easy-to-use high-grade strain gages. The gage element is sandwiched between heat-resistant polyimide base and cover, thereby letting them exhibit high performance in a wide temperature range.

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

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

* 3-wire system is available only for gage lengths of 2 mm and 5mm

Types	Polyester-coated 2-wire copper cable	Polyester-coated 3-wire copper cable*	Vinyl-coated flat 2-wire cable		Vinyl-coated flat 3-wire cable		Middle-temperature 2-wire cable	Middle-temperature 3-wire cable
Length	C1, D25		C1	D25	C1	D25	C1, D25	
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
Opng. temp. range	-196 to 150°C		-10 to 80°C				-100 to 150°C	
Remarks	Twisted for 50 cm or longer		L-6, L-9 for 6 m or longer		L-7, L-10 for 6 m or longer		L-11	L-12

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

When ordering, suffix the lead wire cable code to the model number with a space in between. (Except for 02N, D9 & D19)

E.g. KFR-5-120-C1-11 for the gage with a polyester-coated 3-wire copper cable 30 cm long → [KFR-5-120-C1-11 N30C3](#)

KFR-5-120-D25-11 for the gage with a vinyl-coated flat 3-wire cable 5 m long → [KFR-5-120-D25-11 L5M3S](#)

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

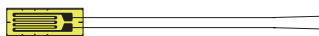
Uniaxial

Resistance: 120 Ω

Gage factor: Approx. 2.1 (KFR 02N: Approx. 1.9)

Except for KFR-02N, these KFR series gages are also available with the gage resistance of 350Ω.

The size is slightly different from 120Ω gages.



KFR-5-120-C1-11				
KFR-5-120-C1-16	5	2.5	10	3.7
KFR-5-120-C1-23				
KFR-2-120-C1-11				
KFR-2-120-C1-16	2	2.5	6	3.7
KFR-2-120-C1-23				
KFR-1-120-C1-11				
KFR-1-120-C1-16	1	1.5	4	2.7
KFR-1-120-C1-23				
KFR-05-120-C1-11				
KFR-05-120-C1-16	0.5	1.4	3.3	2.7
KFR-05-120-C1-23				
KFR-02-120-C1-11				
KFR-02-120-C1-16	0.2	1	2.5	2.2
KFR-02-120-C1-23				
KFR-02N-120-C1-11 N10C2				
KFR-02N-120-C1-16 N10C2	0.2	0.9	1.6	1.2
KFR-02N-120-C1-23 N10C2				

*Figure is KFR-5-120-C1-11

With polyester-coated copper wires, 0.1 mm diameter by 10 cm long each

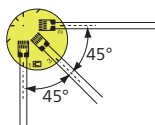
Triaxial 0°/90°/45°

Resistance: 120 Ω

Gage factor: Approx. 2.1

These KFR series gages are also available with the gage resistance of 350Ω.

The size is slightly different from 120Ω gages.



*Figure is KFR-1-120-D25-11

KFR-1-120-D25-11				
KFR-1-120-D25-16	1	1.5	φ8	A min. qty 5 PC.
KFR-1-120-D25-23				
KFR-05-120-D25-11				
KFR-05-120-D25-16	0.5	1.4	φ7.5	A min. qty 5 PC.
KFR-05-120-D25-23				

A min. qty 10 PC.

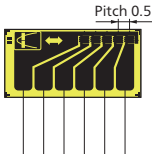
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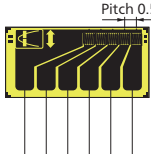
Uniaxial 5-element, for concentrated stress measurement

Resistance: 120 Ω

Gage factor: Approx. 1.95



D9



D19

Note : When measuring with dynamic strain instruments and signal conditioners, this results in 1 measurement for each element. Measurement using 2 elements or more at the same time is not possible.

Note : Since the gage resistance is 120±15Ω (deviation among 5-element is 5Ω), each element requires an external resistor with the same resistance when connected to the measuring instrument.

KFR-015-120-D9-11 N10C2	0.15	0.34	6	3	P (Pitch) 0.5 mm A min. qty 5 PC.
KFR-015-120-D9-16 N10C2					
KFR-015-120-D9-23 N10C2					

KFR-015-120-D19-11 N10C2	0.15	0.45	6	3	P (Pitch) 0.5 mm A min. qty 5 PC.
KFR-015-120-D19-16 N10C2					
KFR-015-120-D19-23 N10C2					

*Figure is KFR-015-120-D9-11 N10C2 (Left)

*Figure is KFR-015-120-D19-11 N10C2(Right)

*Figure is KFR-015-120-D9-11 N10C2 (Left)
 *Figure is KFR-015-120-D19-11 N10C2(Right)

