Pattern, Gage Resistance, Gage Factor	Model	Dimensions (mm)				Remarks
		Grid		Base		
		Length	Width	Length	Width	

●KFGT Series Foil Strain Gages with Temperature Sensor

Uniaxial 3-wire system

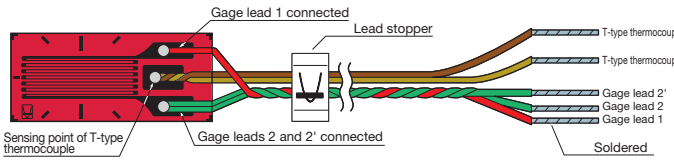
Polyester-coated copper leadwires 1 m long each
Resistance: 120Ω, Gage factor: Approx. 2.1
Temperature sensor : T-type thermocouple,
Accuracy : Within 1.5 ˚C

The KFGT gages are foil strain gages incorporating a T-type thermocouple for simultaneous measurement of strain and temperature. They ensure not only efficient strain measurement under environments where temperature change or temperature gradient necessitates simultaneous measurement of strain and temperature but also highly precise compensation of thermally-induced apparent strain. It is recommended to use KYOWA data logger UCAM-60B as a mating instrument.

Applicable Adhesives and Operating Temperature Range after Curing

CC-33A : -10~120˚C　　CC-35 : -10~120˚C
CC-36 : -10~100˚C　　EP-34B : -10~120˚C

KFGT-5-120-C1-11 N1M3	5	2.1	10	4.5	Standard accessories: Leadwire stopper to prevent the gage from damaging Pre-attached leadwires 1-m long Extension leadwires are optonally available. Aminimum quantity 5 piece
KFGT-5-120-C1-16 N1M3					
KFGT-5-120-C1-23 N1M3					
KFGT-5-120-C1-27 N1M3					
KFGT-2-120-C1-11 N1M3	2	1.8	7	4.5	
KFGT-2-120-C1-16 N1M3					
KFGT-2-120-C1-23 N1M3					
KFGT-2-120-C1-27 N1M3					



※Figure is KFGT-5-120-C1-11 N1M3

Options　Extension Leadwire Cables

Model	Dimensions (mm)			Quantity per Case	Remarks
	Length	Width	Thickness		
NT-1M	1000	7.2	1.2	5	With gage terminal T-F25
NT-2M	2000				
NT-4M	4000				

●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 : -196~150˚C　　CC-33A : -196~120˚C　　CC-35 : -30~120˚C
CC-36 : -30~100˚C　　EP-34B : -55~150˚C

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

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

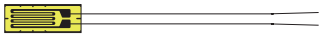
Type / Length	Polyester-coated 2-wire copper cable	Polyester-coated 3-wire copper cable※	Vinyl-coated flat 2-wire cable		Vinyl-coated flat 3-wire cable		Middle-temperature 2-wire cable	Middle-temperature 3-wire cable
	C1,D25		C1	D25	C1	D25	C1,D25	
2 cm	N2C2	N2C3						
3	N3C2	N3C3						
4	N4C2	N4C3						
5	N5C2	N5C3						
10	N10C2	N10C3						
15	N15C2	N15C3	L15C2R	L15C2S	L15C3R	L15C3S	R15C2	R15C3
30	N30C2	N30C3	L30C2R	L30C2S	L30C3R	L30C3S	R30C2	R30C3
50	N50C2	N50C3	L50C2R	L50C2S	L50C3R	L50C3S	R50C2	R50C3
1 m	N1M2	N1M3	L1M2R	L1M2S	L1M3R	L1M3S	R1M2	R1M3
2			L2M2R	L2M2S	L2M3R	L2M3S	R2M2	R2M3
3			L3M2R	L3M2S	L3M3R	L3M3S	R3M2	R3M3
4			L4M2R	L4M2S	L4M3R	L4M3S	R4M2	R4M3
5			L5M2R	L5M2S	L5M3R	L5M3S	R5M2	R5M3
6			L6M2R	L6M2S	L6M3R	L6M3S	R6M2	R6M3
7			L7M2R	L7M2S	L7M3R	L7M3S	R7M2	R7M3
8			L8M2R	L8M2S	L8M3R	L8M3S	R8M2	R8M3
9			L9M2R	L9M2S	L9M3R	L9M3S	R9M2	R9M3
10			L10M2R	L10M2S	L10M3R	L10M3S	R10M2	R10M3
15			L15M2R	L15M2S	L15M3R	L15M3S	R15M2	R15M3
20			L20M2R	L20M2S	L20M3R	L20M3S	R20M2	R20M3
25			L25M2R	L25M2S	L25M3R	L25M3S	R25M2	R25M3
30 m			L30M2R	L30M2S	L30M3R	L30M3S	R30M2	R30M3
Oprg. temp. range	-196 to 150˚C		-10 to 80˚C				-100 to 150˚C	
Remarks	Twisted for 50 cm and 1 m long		L-6, L-9 for 6 m or longer		L-7, L-10 for 6 m or longer		L-11	L-12

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

Examples : 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 leadwire cable code is suffixed, the gage is delivered with gage leads only (silver-clad copper wires 25 mm long).

Uniaxial

Resistance : 120Ω, Gage factor: Approx. 2.1 (approx. 1.9 with KFR-02N)



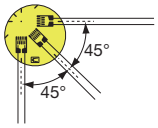
※Figure is KFR-5-120-C1-11

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.

Pattern, Gage Resistance, Gage Factor	Model	Dimensions (mm) Grid Length	Grid Width	Base Length	Base Width	Remarks
	KFR-5-120-C1-11	5	2.5	10	3.7	
	KFR-5-120-C1-16					
	KFR-5-120-C1-23					
	KFR-2-120-C1-11	2	2.5	6	3.7	
	KFR-2-120-C1-16					
	KFR-2-120-C1-23					
	KFR-1-120-C1-11	1	1.5	4	2.7	
	KFR-1-120-C1-16					
	KFR-1-120-C1-23					
	KFR-05-120-C1-11	0.5	1.4	3.3	2.7	
	KFR-05-120-C1-16					
	KFR-05-120-C1-23					
	KFR-02-120-C1-11	0.2	1	2.5	2.2	
	KFR-02-120-C1-16					
	KFR-02-120-C1-23					
	KFR-02N-120-C1-11 N10C2	0.2	0.9	1.6	1.2	With polyester-coated copper wires, 0.1 mm diameter by 10 cm long each
	KFR-02N-120-C1-16 N10C2					
	KFR-02N-120-C1-23 N10C2					

Triaxial 0°/90°/45°

Resistance : 120Ω, Gage factor: Approx. 2.1



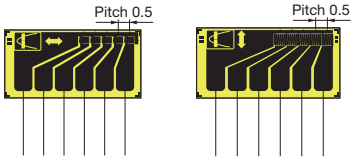
※Figure is KFR-1-120-D25-11

These KFR series gages are also available with the gage resistance of 350Ω.
The size is slightly different from 120Ω gages.

Pattern, Gage Resistance, Gage Factor	Model	Dimensions (mm) Grid Length	Grid Width	Base	Remarks
	KFR-1-120-D25-11	1	1.5	ϕ8	A minimum quantity 5 piece
	KFR-1-120-D25-16				
	KFR-1-120-D25-23				
	KFR-05-120-D25-11	0.5	1.4	ϕ7.5	A minimum quantity 5 piece
	KFR-05-120-D25-16				
	KFR-05-120-D25-23				

Uniaxial 5-element, for concentrated stress measurement

Resistance : 120Ω, Gage factor: Approx. 1.95



D9 D19

For further information please contact:
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www.testmachines.com.au

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

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

Pattern, Gage Resistance, Gage Factor	Model	Dimensions (mm) Grid Length	Grid Width	Base Length	Base Width	Remarks
	KFR-015-120-D9-11 N10C2	0.15	0.34	6	3	P (Pich) 0.5 mm A minimum quantity 5 piece
	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 (Pich) 0.5 mm A minimum quantity 5 piece
	KFR-015-120-D19-16 N10C2					
	KFR-015-120-D19-23 N10C2					

A minimum quantity 10 piece