

# Low-temperature Gages (KFLB)

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

## ●KFLB Series Low-temperature Foil Strain Gages

### RoHS

The gage element is made of NiCr alloy, which exhibits excellent characteristics under low-temperature environments and is sandwiched between polyimide films. Thus, the KFLB series gages are suitable for strain measurement of tanks and vessels containing low-temperature liquids such as LNG and LPG.

When ordering, suffix the lead-wire cable code (see table at the right) to the model number with a space in between.

E.g.  
KFLB-5-120-C1-11 with a fluoroplastic-coated high/low-temperature 3-wire cable 5 m long pre-attached

→ [KFLB-5-120-C1-11 F5M3](#)

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

### Applicable Adhesives

	Operating Temp. after Curing the Adhesive
EP-270	-269 to 30°C
PC-600	-269 to 150°C
CC-33A	-196 to 120°C

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

For other lead-wire cable lengths, contact us.

Type	2 polyester-coated copper wires	3 polyester-coated copper wires	Mid-temperature 2-wire cable	Mid-temperature 3-wire cable	Fluoroplastic-coated high/low-temp. 3-wire cable
Length	C1, D25				
15 cm	N15C2	N15C3	R15C2	R15C3	F15C3
30 cm	N30C2	N30C3	R30C2	R30C3	F30C3
1 m	N1M2	N1M3	R1M2	R1M3	F1M3
3 m	—	—	R3M2	R3M3	F3M3
5 m	—	—	R5M2	R5M3	F5M3
Operating temp.	-196 to 150°C		-100 to 150°C		-196 to 150°C*1
Remarks	Twisted for ≥ 50 cm		L-11*2	L-12*2	L-3*2

\*1 -196°C: Because the gage leads are polyester-coated copper wires.

\*2 For the lead-wire gages with R type or F type glass-cloth tape, see page 1-15.

## Uniaxial 350 Ω gages

Resistance: 350 Ω

Gage factor: Approx. 2.0



\*The above picture is KFLB-30-350-C1-5.

10 gages/ pkg

KFLB-30-350-C1-5

KFLB-30-350-C1-11

30 2.7

36 5.2

10 gages/ pkg

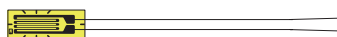
Mainly for lumber

Mainly for concrete

## Uniaxial

Resistance: 120 Ω

Gage factor: Approx. 2.0



\*The above picture is KFLB-5-120-C1-11.

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

KFLB-5-120-C1-11

KFLB-5-120-C1-16

KFLB-5-120-C1-23

KFLB-2-120-C1-11

KFLB-2-120-C1-16

KFLB-2-120-C1-23

KFLB-1-120-C1-11

KFLB-1-120-C1-16

KFLB-1-120-C1-23

KFLB-05-120-C1-11

KFLB-05-120-C1-16

KFLB-05-120-C1-23

KFLB-02-120-C1-11

KFLB-02-120-C1-16

KFLB-02-120-C1-23

5 2.5

10 3.7

10 gages/ pkg

2 2.5

6 3.7

10 gages/ pkg

1 1.5

4 2.7

10 gages/ pkg

0.5 1.4

3.3 2.7

10 gages/ pkg

0.2 1

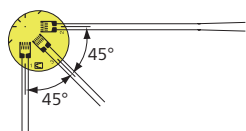
2.5 2.2

10 gages/ pkg

## Triaxial, 0°/90°/45°

Resistance: 120 Ω

Gage factor: Approx. 2.0



\*The above picture is KFLB-1-120-D25-11.

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

KFLB-1-120-D25-11

KFLB-1-120-D25-16

KFLB-1-120-D25-23

KFLB-05-120-D25-11

KFLB-05-120-D25-16

KFLB-05-120-D25-23

1 1.5

φ8

5 gages/ pkg

0.5 1.4

φ7.5

5 gages/ pkg



Strain Gages

Outline

Lead-wire cable

General

Waterproof

Concrete

Composite material  
PCB  
Plastics

Ultra-small strain  
High temp.  
Low temp.

High elongation

Non-  
magnetoresistive

Hydrogen gas  
Bending

With protector  
Embedded

Crack

Adhesive  
Coating agent

Custom-  
designed