

# WATERPROOF STRAIN GAUGES

## series WF



Operating temperature range  
0°C +80°C

Temperature compensation range  
+10°C +80°C

Suffix code for temperature compensation materials

-11: Mild steel -17: Stainless steel -23: Aluminium

Applicable adhesives

CN	0 ~ +80°C
P-2	0 ~ +80°C
EB-2	0 ~ +80°C

For ordering, the above suffix code should be added to the basic gauge type.

## WATERPROOF STRAIN GAUGES

### Gauge pattern

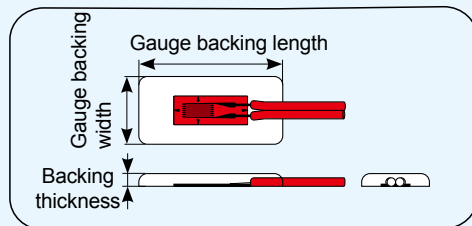
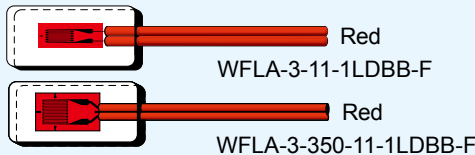
These gauges eliminate the need for moisture-proofing coating, which is sometimes troublesome in a field test. They have an integral vinyl leadwire, and whole area of the strain gauges and the leadwire junction are coated with epoxy resin. The coating is transparent and flexible, so the positioning and bonding works are very easy. By merely bonding the gauges with CN or P-2 adhesive, outdoor or underwater measurement for a short-term becomes possible. These gauges are also effective in omitting primary coating in case of applying a multi-layer coating.

### Single element : WFLA

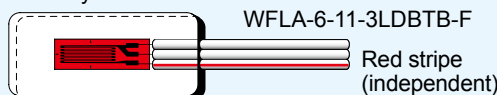
0.08mm<sup>2</sup> integral vinyl leadwire

Total leadwire resistance per meter : 0.44Ω

2-wire system

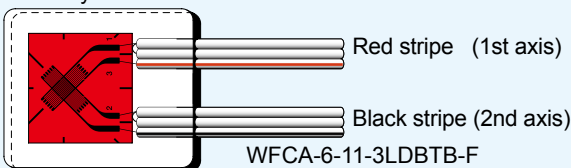


3-wire system



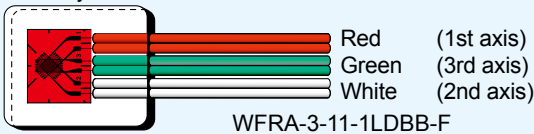
### 0°/90° 2-element stacked Rosette WFLA

3-wire system

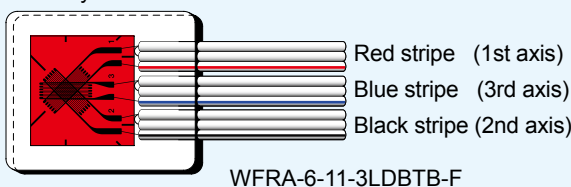


### 0°/45°/90° 3-element stacked Rosette WFLA

2-wire system



3-wire system



CE

Example of type number designation

WFLA-3-350-11-3LDBB-F

↑ Length in meter and the specified integral leadwire with CE compliant  
↑ Self-temperature-compensation number  
↑ Gauge resistance (blank for 120Ω)  
↑ Gauge length  
↑ Basic gauge type

### 2-wire system

Single element

WFLA-3	-LDBB-F	3	1.7	17	8	1.5	120
WFLA-3-350	- filled with length	3	3.2	17	8	1.5	350
WFLA-6		6	2.2	25	11	1.5	120

### 0°/90° 2-element Rosette Stacked

WFLA-3	-LDBB-F	3	1.7	19	16	1.5	120
WFLA-6	- filled with length	6	2.3	25	21	1.5	120

### 0°/45°/90° 3-element Rosette Stacked

WFLA-3	-LDBB-F	3	1.7	19	16	1.5	120
WFLA-6	- filled with length	6	2.3	25	21	1.5	120

Minimum order is 10 gauges or more.

### 3-wire system

Quarter bridge 3-wire system is usable to avoid an unexpected effect of resistance change with temperature.

Single element

WFLA-3	-LDBTB-F	3	1.7	17.0	8	1.5	120
WFLA-6	- filled with length	6	2.2	25.0	11	1.5	120

### 0°/90° 2-element Stacked

WFLA-3	-LDBTB-F	3	1.7	19	16	1.5	120
WFLA-6	- filled with length	6	2.3	25	21	1.5	120

### 0°/45°/90° 3-element Rosette Stacked

WFLA-3	-LDBTB-F	3	1.7	19	16	1.5	120
WFLA-6	- filled with length	6	2.3	25	21	1.5	120

Minimum order is 10 gauges or more.