

## ε FLM/ WFLM-Series Metal Backing Strain Gauges

### CONCRETE USE

These strain gauges have thin stainless steel backings which prevent the penetration of moisture from the reverse sides. This construction is aimed for successful strain measurement on concrete surface. The WFLM gauges have moisture proofing over-coating and integral leadwire in addition to the stainless steel backing. It is intended for long term measurement or measurement on underwater-curing concrete.

Operating temperature range -20 ~ + 80°C	Applicable adhesives PS - 20 ~ + 80°C
Temperature compensation range + 10 ~ + 80°C	

Please specify the type number as shown in the example below.

**FLM -30 -11 -2LJCT**

Objective material for temperature compensation (coefficient of linear thermal expansion  $\times 10^{-6}/^{\circ}\text{C}$ )  
-11: Concrete

Gauge pattern	Type	Gauge size(mm)		Backing size(mm)			Resist- ance $\Omega$	
		Length	Width	Length	Width	Thickness		
<ul style="list-style-type: none"> <li>Single axis</li> </ul> <p>FLM-60-11 <math>\mathcal{Q}(\times 1/2)</math></p> <p>Minimum order quantity is 10 strain gauges. These strain gauges are available with integral leadwires attached. (made to order)</p>	Single axis	FLM-30-11	30	0.5	60	18	0.12	120
		FLM-60-11	60	0.7	90	18	0.12	120
<ul style="list-style-type: none"> <li>Waterproof Type Single axis</li> </ul> <p>0.09mm<sup>2</sup> 3-wire twisted cross-linked polyethylene integral leadwire of 2m -2LJQTA Total leadwire resistance per meter : 0.4<math>\Omega</math> NB: Integral leadwire length longer than 2m is available.</p>	Waterproof type Single axis	WFLM-30-11	30	0.5	60	18	4	120
		WFLM-60-11	60	0.7	90	18	4	120
<p>3-wire system</p> <p>WFLM-60-11-2LJQTA <math>\mathcal{Q}(\times 1/2)</math></p> <p>Minimum order quantity is 10 strain gauges.</p>								