

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

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

Applicable adhesives

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

WATERPROOF STRAIN GAUGES

Gauge pattern	Basic type	Gauge size		Backing		Resistance Ω																																																																																																																
		L	W	L	W																																																																																																																	
<p>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.</p> <p>Single element : WFLA 0.08mm² integral vinyl leadwire Total leadwire resistance per meter : 0.44Ω 2-wire system</p> <p>WFLA-3-11-1LDBB-F WFLA-3-350-11-1LDBB-F</p> <p>3-wire system WFLA-6-11-3LDBTB-F Red stripe (independent)</p> <p>0°/90° 2-element stacked Rosette WFC 3-wire system Red stripe (1st axis) Black stripe (2nd axis) WFC-6-11-3LDBTB-F</p> <p>0°/45°/90° 3-element stacked Rosette WFRA 2-wire system Red (1st axis) Green (3rd axis) White (2nd axis) WFRA-3-11-1LDBB-F</p> <p>3-wire system Red stripe (1st axis) Blue stripe (3rd axis) Black stripe (2nd axis) WFRA-6-11-3LDBTB-F</p>	<p>CE</p> <p>Example of type number designation WFLA - 3 - 350 - 11 - 3LDBB-F ↑ ↑ ↑ ↑ ↑ Basic gauge type Gauge length Gauge resistance (blank for 120Ω) Self-temperature-compensation number Length in meter and the specified integral leadwire with CE compliant</p> <p>2-wire system Single element</p> <table border="1"> <tr> <td>WFLA-3</td> <td>-</td> <td>LDBB-F</td> <td>3</td> <td>1.7</td> <td>17</td> <td>8</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFLA-3-</td> <td>350</td> <td>-</td> <td>filled with</td> <td>3</td> <td>3.2</td> <td>17</td> <td>8</td> <td>1.5</td> </tr> <tr> <td>WFLA-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.2</td> <td>25</td> <td>11</td> <td>1.5</td> </tr> </table> <p>0°/90° 2-element Rosette Stacked</p> <table border="1"> <tr> <td>WFC-3</td> <td>-</td> <td>LDBB-F</td> <td>3</td> <td>1.7</td> <td>19</td> <td>16</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFC-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.3</td> <td>25</td> <td>21</td> <td>1.5</td> </tr> </table> <p>0°/45°/90° 3-element Rosette Stacked</p> <table border="1"> <tr> <td>WFRA-3</td> <td>-</td> <td>LDBB-F</td> <td>3</td> <td>1.7</td> <td>19</td> <td>16</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFRA-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.3</td> <td>25</td> <td>21</td> <td>1.5</td> </tr> </table> <p>Minimum order is 10 gauges or more.</p> <p>3-wire system Quarter bridge 3-wire system is usable to avoid an unexpected effect of resistance change with temperature.</p> <p>Single element</p> <table border="1"> <tr> <td>WFLA-3</td> <td>-</td> <td>LDBTB-F</td> <td>3</td> <td>1.7</td> <td>17.0</td> <td>8</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFLA-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.2</td> <td>25.0</td> <td>11</td> <td>1.5</td> </tr> </table> <p>0°/90° 2-element Stacked</p> <table border="1"> <tr> <td>WFC-3</td> <td>-</td> <td>LDBTB-F</td> <td>3</td> <td>1.7</td> <td>19</td> <td>16</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFC-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.3</td> <td>25</td> <td>21</td> <td>1.5</td> </tr> </table> <p>0°/45°/90° 3-element Rosette Stacked</p> <table border="1"> <tr> <td>WFRA-3</td> <td>-</td> <td>LDBTB-F</td> <td>3</td> <td>1.7</td> <td>19</td> <td>16</td> <td>1.5</td> <td>120</td> </tr> <tr> <td>WFRA-6</td> <td></td> <td>length</td> <td></td> <td>6</td> <td>2.3</td> <td>25</td> <td>21</td> <td>1.5</td> </tr> </table> <p>Minimum order is 10 gauges or more.</p>	WFLA-3	-	LDBB-F	3	1.7	17	8	1.5	120	WFLA-3-	350	-	filled with	3	3.2	17	8	1.5	WFLA-6		length		6	2.2	25	11	1.5	WFC-3	-	LDBB-F	3	1.7	19	16	1.5	120	WFC-6		length		6	2.3	25	21	1.5	WFRA-3	-	LDBB-F	3	1.7	19	16	1.5	120	WFRA-6		length		6	2.3	25	21	1.5	WFLA-3	-	LDBTB-F	3	1.7	17.0	8	1.5	120	WFLA-6		length		6	2.2	25.0	11	1.5	WFC-3	-	LDBTB-F	3	1.7	19	16	1.5	120	WFC-6		length		6	2.3	25	21	1.5	WFRA-3	-	LDBTB-F	3	1.7	19	16	1.5	120	WFRA-6		length		6	2.3	25	21	1.5
WFLA-3	-	LDBB-F	3	1.7	17	8	1.5	120																																																																																																														
WFLA-3-	350	-	filled with	3	3.2	17	8	1.5																																																																																																														
WFLA-6		length		6	2.2	25	11	1.5																																																																																																														
WFC-3	-	LDBB-F	3	1.7	19	16	1.5	120																																																																																																														
WFC-6		length		6	2.3	25	21	1.5																																																																																																														
WFRA-3	-	LDBB-F	3	1.7	19	16	1.5	120																																																																																																														
WFRA-6		length		6	2.3	25	21	1.5																																																																																																														
WFLA-3	-	LDBTB-F	3	1.7	17.0	8	1.5	120																																																																																																														
WFLA-6		length		6	2.2	25.0	11	1.5																																																																																																														
WFC-3	-	LDBTB-F	3	1.7	19	16	1.5	120																																																																																																														
WFC-6		length		6	2.3	25	21	1.5																																																																																																														
WFRA-3	-	LDBTB-F	3	1.7	19	16	1.5	120																																																																																																														
WFRA-6		length		6	2.3	25	21	1.5																																																																																																														