




# HIGH TEMPERATURE STRAIN GAUGES series ZF

Operating temperature range  
 -20°C  +300°C  
 Temperature compensation range  
 +10°C  +100°C



Suffix code for temperature compensation materials  
 -11: Mild steel -17: Stainless steel -23: Aluminium 

Backing colors are all the same with different materials For ordering, the above suffix code should be added to the basic gauge type.

Applicable adhesives	NP-50B	-20 ~ +300°C
	C-1/EB-2	-20 ~ +200°C
	CN	-20 ~ +120°C

## HIGH TEMPERATURE USE

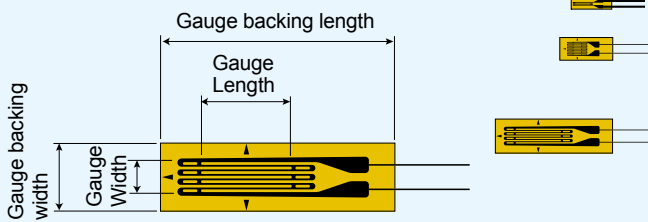
Gauge pattern	Basic type	Gauge size		Backing		Resistance Ω
		L	W	L	W	

These strain gauges are designed for measurement in high temperature up to 300°C. It utilizes specially designed Ni-Cr alloy foil for the grid and polyimide resin for the gauge backing. Owing to the construction, the strain gauges are successfully used for measurement in high temperature.



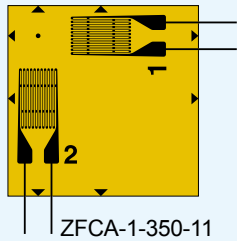
Each package contains 10 gauges.

### Single element : ZFLA

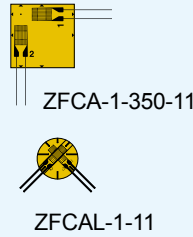


ZFLK-2-11	2	0.5	5.4	1.4	120
ZFLA-1-11	1	1.8	7	3	120
ZFLA-3-11	3	1.8	10.5	3.5	120
ZFLA-6-11	6	2.5	15.5	4.5	120
ZFLA-3-60-11	3	0.7	7.7	2.6	60
ZFLA-1-350-11	1	1.7	6.6	3.2	350
ZFLA-3-350-11	3	3.2	10.2	5.2	350
ZFLA-6-350-11	6	2.8	16	5.3	350

### 0°/90° 2-element Rosette



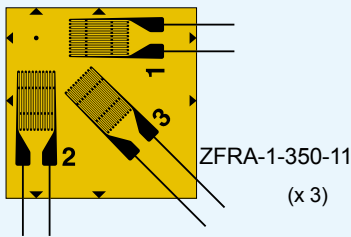
Plane : ZFCA  
 Stacked : ZFCAL



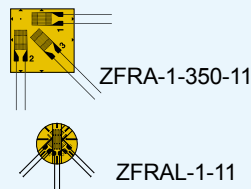
Each package contains 10 gauges.

Plane type					
ZFCA-1-350-11	1	1.7	8.5	8.5	350
ZFCA-3-350-11	3	1.4	10.5	10.5	350
Stacked type					
ZFCAL-1-11	1	1.1	φ 5.4		120

### 0°/45°/90° 3-element Rosette



Plane : ZFRA  
 Stacked : ZFRAL



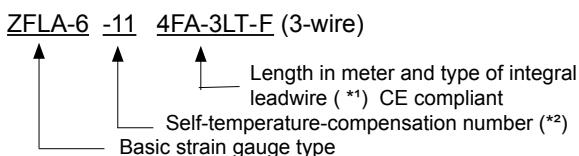
Each package contains 10 gauges.

Plane type					
ZFRA-1-350-11	1	1.7	8.5	8.5	350
ZFRA-3-350-11	3	1.4	10.5	10.5	350
Stacked type					
ZFRAL-1-11	1	1.1	φ 5.4		120

Recommendable integral leadwire for ZF series

Application	Leadwires	Operating temperature (°C)	Leadwire code exemplified
High temperature	3-wire twisted FEP 6FA_LT-F (No Tetra-Etch required for surface) 3-wire twisted FEP 6FB_LT-F	-269~ +200	ZFLA-3-350-11-6FA3LT-F ZFLA-3-350-11-6FB3LT-F
	3-wire twisted PTFE 4FA_LT-F 3-wire twisted PTFE 4FB_LT-F	-269~ +260 For short term use, +300°C is available.	ZFLA-3-350-11-4FA3LT-F ZFLA-3-350-11-4FB3LT-F

Example of type number designation.



\*1: Not mentioned for gauges without integral leadwire.

\*2: ZF-series gauges are available for self-temperature-compensation with -11 (Mild steel of 11ppm/°C)

For the following numbers, contact TML.  
 -17: Stainless steel, Copper alloy (17ppm/°C)  
 -23: Aluminium (23ppm/°C)