

HIGH TEMPERATURE STRAIN GAUGES series ZF

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.

Operating temperature range

-20°C

Temperature compensation range

+300°C

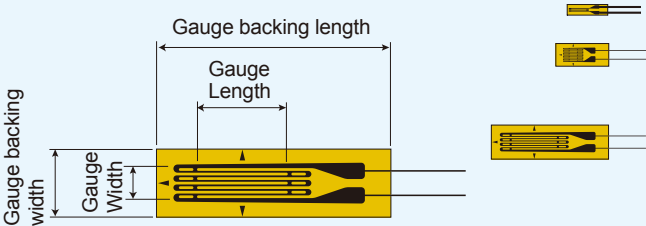
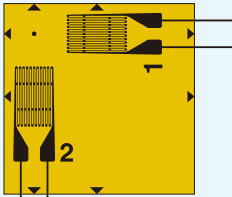
+10°C +100°C

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. Single element : ZFLA 	M metal C ceramic						
		Each package contains 10 gauges.					
		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
		Each package contains 10 gauges.					
0°/90° 2-element Rosette  ZFCA-1-350-11 (x 3)	Plane : ZFCA Stacked : ZFCAL  ZFCA-1-350-11  ZFCAL-1-11						
		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
		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							

Recommendable integral leadwire for ZF series

Application	Leadwires	Operating temperature (°C)	Leadwire code exemplified
General use (temperature unchanged during measurement)	Paralleled vinyl LJC-F	-20 ~ +80	ZFLA-3-350-11-3LJC-F
General use	3-wire paralleled vinyl LJCT-F	-20 ~ +80	ZFLA-3-350-11-3LJCT-F
Waterproof	3-wire twisted cross-linked vinyl LJRTA-F	-20 ~ +100	ZFLA-3-350-11-3LJRTA-F
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.

ZFLA-5 -11 -4FA-3L/-3LT-F (2-wire/3-wire)

Length in meter and type of integral leadwire (*)

Self-temperature-compensation number (*)

Basic strain gauge type

*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)