



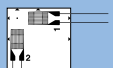
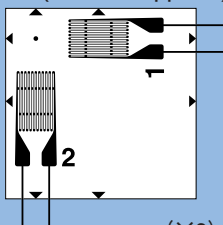
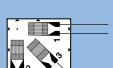

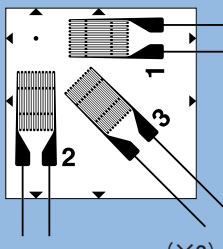
HIGH TEMPERATURE series "ZF" STRAIN GAUGE



Compatible adhesive & Operational temperature
 NP-50 : -20~+300°C
 C-1 : -20~+200°C CN : -20~+120°C

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

GENERAL USE

Gauge pattern	Type	Gauge size		Backing		Resistance in Ω	
		L	W	L	W		
<p>This is a foil gauge having a polyimide resin backing. Owing to the use of Ni-Cr alloy and special grid design for the strain sensing element, creep characteristics in high temperature has been much improved.</p> <p>●Single-element (G.F. 2.1 approx.)</p>  <p>ZFLA-1 ZFLK-2</p>  <p>ZFLA-6</p> <p>●90° 2-element Cross (G.F. 2.1 approx.)</p> <p>Plane type</p>  <p>ZFCA-1-350</p>  <p>(X3)</p> <p>●45°/90° 3-element Rosette (G.F. 2.1 approx.)</p> <p>Plane type</p>  <p>ZFRA-1-350</p> <p>Stacked type</p>  <p>ZFCAL-1 ZFRAL-1</p>  <p>(X3)</p>	Single-element	ZFLK-2-11	2	0.5	5.4	1.4	120
	ZFLA-1-11	1	1.8	7.0	3.0	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	
	Single-element 350 Ω	ZFLA-1-350-11	1	1.7	6.6	3.2	350
	ZFLA-3-350-11	3	3.2	10.2	5.1	350	
	ZFLA-6-350-11	6	2.8	16.0	5.5	350	
	90° 2-element Cross, Plane type 350 Ω	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	1.0	φ 5.4		120	
45°/90° 3-element Rosette, Plane type 350 Ω	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	1.0	φ 5.4		120	

L : length W : width (Unit : mm)

For self-temperature-compensated (S-T-C) gauge, other linear thermal expansion coefficient is also available such as for stainless steel and aluminium alloy.

Each package contains 10 gauges.

Leadwire-integrated ZF series (made-to-order)

Operational temperature range varies with different materials of lead wire outer sheath. Before use, be sure the temperature range for lead wire.

Lead wires	Operational temperature range	Gauge type exemplified	Colors of Lead wire
2-wire Parallel vinyl wire	-20~+80°C	L : ZFLA-3-350-11-3LJC	Grey
3-wire Parallel vinyl wire	-20~+80°C	LT : ZFLA-3-350-11-3LJCT	Blue stripe
Crosslinked vinyl sheath wire	-10~+100°C	LJRT : ZFLA-3-350-11-3LJRTA	Red-Green-Black
3-wire strand FEP sheath wire	-269~+200°C	6F : ZFLA-3-350-11-6FA-3LT	Red-Green-Blue (7-core 0.18mm-dia.)
		6F : ZFLA-3-350-11-6FB-3LT	Red-Green-Blue (Single-core 0.2mm-dia.)
3-wire strand PTFE sheath wire	-269~+260°C (+300°C usable for short time measurement)	4F : ZFLA-3-350-11-4FA-3LT	Red-Black-White (7-core 0.16mm-dia.)
		4F : ZFLA-3-350-11-4FB-3LT	Red-Black-White (Single-core 0.2mm-dia.)

* Red is independent wire.