

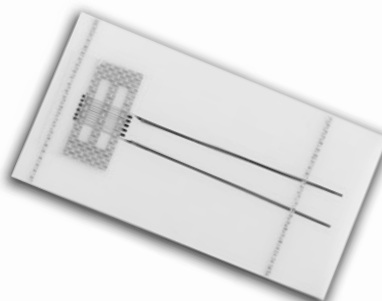
Special Use Sensors—High-Temperature Strain Gages

FEATURES

- Measurement range to 2100°F (1150°C)
- Free-filament Kanthal alloy grids for bonding with ceramic adhesives
- Linear and Tee-rosette patterns

ZC-Series strain gages are etched Kanthal (Fe-Cr-Al alloy) foil grids in free-filament form for high-temperature applications. They are bonded with either ceramic adhesives, or by the use of flame spray.

ZC-Series strain gages cannot be self-temperature compensated, and a dummy compensating gage must be used for minimizing of thermally induced apparent strain (thermal output). Several patterns are available with built-in compensating grids.



RoHS
COMPLIANT

ZC-Series strain gages are supplied with a removable high-temperature carrier for gage handling during installation. All patterns have 1 in (25.4 mm) Nichrome ribbon leads spot welded to the gage tabs for leadwire attachment.

GAGE PATTERN		GAGE DESIGNATION	RES. IN OHMS
Not actual size shown. Enlarged when necessary for definition.			
DIMENSIONS	inch millimeter		

G1262				Square linear pattern.	
					
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	ZC-NC-G1262-120	120
0.062	0.150	0.076	0.076		
1.57	3.81	1.93	1.93		
MATRIX SIZE	N/A				

G1263 				Wide linear pattern.	
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	ZC-NC-G1263-120	120
0.100	0.248	0.179	0.179		
2.54	6.30	4.55	4.55		
MATRIX SIZE	N/A				

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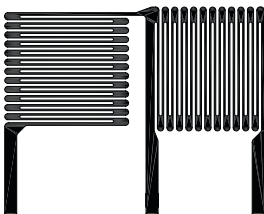
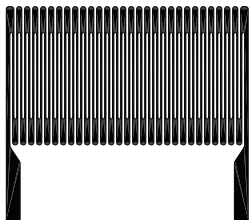
GAGE PATTERN				GAGE DESIGNATION	RES. IN OHMS
Not actual size shown. Enlarged when necessary for definition.					
DIMENSIONS			inch millimeter		

G1264 				Linear pattern with inactive temperature-compensating grid.	
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	ZC-NC-G1264-120	120
0.100	0.310	0.179	0.430		
2.54	7.87	4.55	10.92		
MATRIX SIZE	N/A				

G1265 				Linear pattern.	
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	ZC-NC-G1265-120	120
0.138	0.300	0.138	0.138		
3.51	7.62	3.51	3.51		
MATRIX SIZE	N/A				

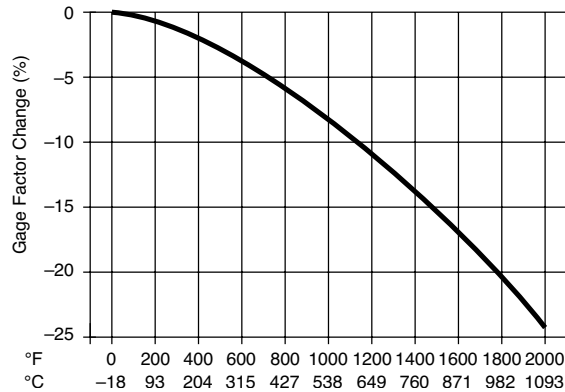
G1266 G1272 				Linear pattern. Higher resistance linear pattern.	
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH	ZC-NC-G1266-120 ZC-NC-G1272-350	120 350
0.200	0.380	0.135	0.135		
5.08	9.65	3.43	3.43		
MATRIX SIZE	N/A				

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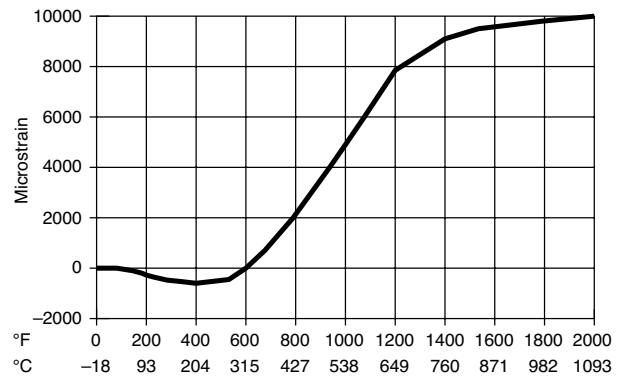
GAGE PATTERN				GAGE DESIGNATION	RES. IN OHMS
Not actual size shown. Enlarged when necessary for definition.					
DIMENSIONS			inch millimeter		
G1267 				Linear pattern with inactive temperature-compensating grid.	
				ZC-NC-G1267-120	120
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH		
0.200	0.503	0.134	0.442		
5.08	12.78	3.40	11.23		
MATRIX SIZE	N/A				
G1269 G1275 				Tee-rosette pattern in half-bridge configuration.	
				ZC-NC-G1269-200 ZC-NC-G1275-350	120 350
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH		
0.125	0.278	0.150	0.346		
3.18	7.06	3.81	8.79		
MATRIX SIZE	N/A				
G1270 				Higher resistance linear pattern.	
				ZC-NC-G1270-350	350
GAGE LENGTH	OVERALL LENGTH	GRID WIDTH	OVERALL WIDTH		
0.100	0.250	0.280	0.300		
2.54	6.35	7.11	7.62		
MATRIX SIZE	N/A				

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GAGE FACTOR VARIATION WITH TEMPERATURE FOR ZC-SERIES GAGE



TYPICAL APPARENT STRAIN ZC-SERIES GAGE ON TITANIUM WITH H CEMENT



APPARENT STRAIN/THERMAL OUTPUT FOR LINEAR GRID WITH TEMPERATURE COMPENSATING DUMMY GRID ON TITANIUM (GAGE TYPE: ZC-NC-G1267-120)

