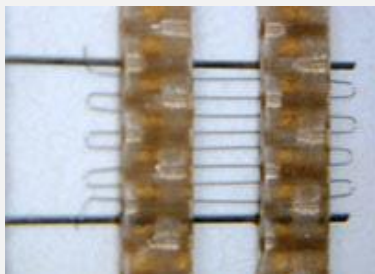


Product Data Sheet



HFN-12-125-SCW

HFN Series > High Temperature Bondable Strain Gages

Maximum operating temperature: 1600°F (871°C)

Description: Wire resistance strain gages constructed of Nichrome V alloy wire.

Features: High fatigue strength and excellent oxidation resistance.

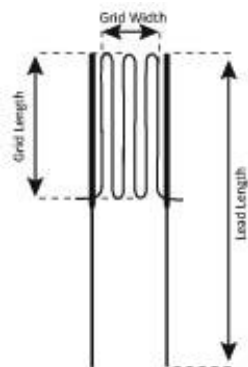
Uses: Recommended for dynamic stress measurements on turbine blades and engines, exhaust systems, and power plant applications.

AVAILABLE IN THE FOLLOWING CONFIGURATIONS

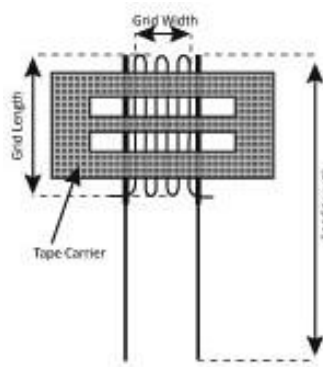
Application Methods

Free filament gages are bonded to components using flame sprayed rod or powder, or with a ceramic cement application.

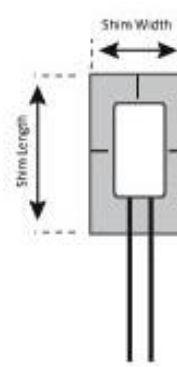
Weldable gages are attached to the component using a capacitive fine-spot welder.



Tapeless free filament gage with lead wires



Free filament gage with temporary tape carrier



Pre-installed weldable strain gage

For more info about weldable strain gages, please see our High Temperature Weldable data sheets.

STANDARD PART NUMBERS

Standard Part Numbers	Strain Type	Gage Resistance (nominal)	Gage Factor (nominal)	Grid Length	Grid Width	Lead Wire	Lead Length	Lead Type	Specification Drawing
HFN-12-063-SCW	Dynamic	120 Ohms	2.0	.063"	.080"	.003" Chromel A ²	2.75"	Straight	50-501
HFN-12-125-SCW	Dynamic	120 Ohms	2.0	.130"	.055"	.003" Chromel A ²	2.75"	Straight	50-502
HFN-12-250-SCW	Dynamic	120 Ohms	2.0	.250"	.030"	.003" Chromel A ²	2.75"	Straight	50-503
HFN-35-250-SCW	Dynamic	350 Ohms	2.0	.250"	.110"	.003" Chromel A ²	2.75"	Straight	50-504

Standard gage configurations can be customized for individual application needs. Please see the following options table for custom orders; then consult our [sales](#) and/or engineering department to confirm availability and compatibility with your application.



CUSTOM OPTIONS TABLE

Gage Resistance	Grid Length	Lead Length
12 – 120 Ohms	063 – 1/16"	Standard – 2.75"
35 – 350 Ohms	125 – 1/8"	Custom – 2.75" – 12"
	250 – 1/4"	
Lead Wire Configurations		
SPW	0.003" Platinum-Nickel	
LPW	0.005" PT 10 RHO	
SCW	0.003" Chromel A ²	
LCW	0.005" Chromel A	
SNR	0.003" x 0.015" NiChrome Ribbon	
SMW	0.003" Moleculoy Wire	
SHW	0.003" Hoskins 875	
LHW	0.005" Hoskins 875	
ISMW	0.003" Moleculoy wire – inboard configuration with straight lead wire	
ICMW	0.003" Moleculoy wire – inboard configuration with convoluted lead wire	

Packaging: Strain gages are supplied on glass slides, and sold in packages of 5.

Lead Wires: Standard design is a straight, 2.75" length lead. For custom lead lengths and configurations, please consult the Custom Options Table.

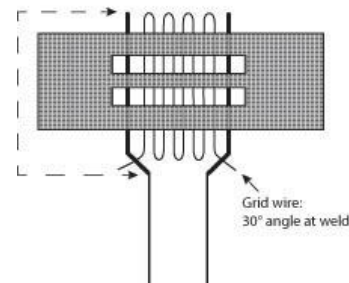
Lead Configurations: High fatigue Z-type leads can be custom ordered for most gages. Consult our [sales](#) department for more information.

Tape Carrier: Fiberglass reinforced Teflon with silicone adhesive. Shelf life: 9 months (adhesive)

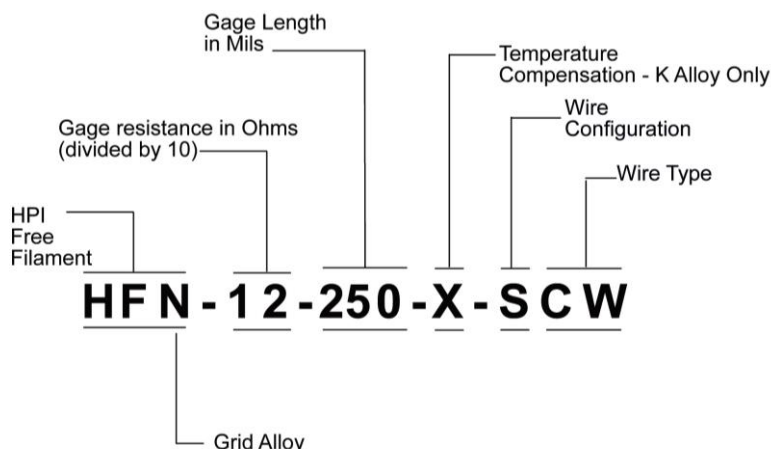
Fatigue Life (nominal): 1×10^6 cycles at $\pm 750\mu"/"$ at room temperature.

Z-LEAD CONFIGURATION

Wire in this area is flattened to .0015" and angled for better stability for long leads (to prevent twisting and rolling)



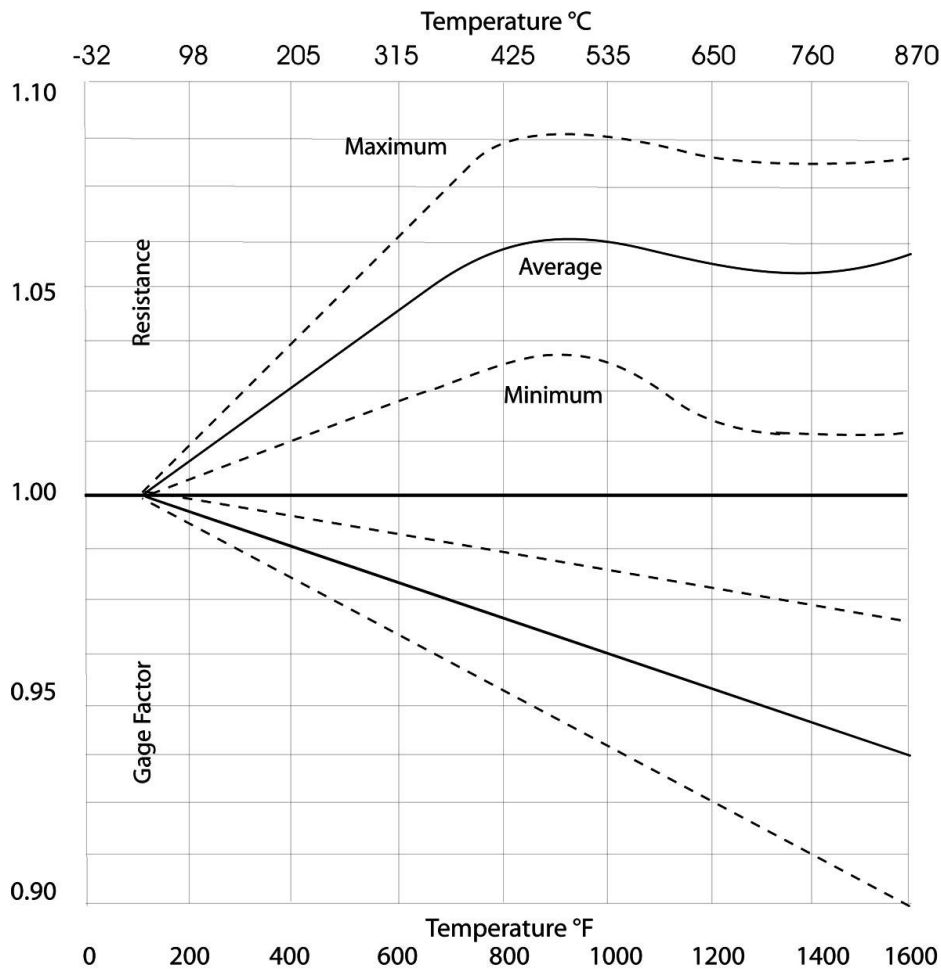
Part Number Designation Code:





ENGINEERING DATA:

**Resistance and Gage Factor Change vs. Temperature
 HFN and HBWANV Series Gages**



For current pricing on strain gages and installation products, please contact our [Sales Dept.](#) or 978-772-6963