

Product Data Sheet



HFP-35-125-ZPW

HFP Series > High Temperature Bondable Strain Gages

Maximum operating temperature: 1900°F (1038°C)

Description: Wire resistance strain gages constructed of platinum/tungsten alloy.

Features: Excellent high temperature oxidation resistance, and low, stable temperature

coefficients of resistance.

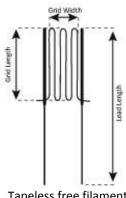
Uses: Widely used for test and failure analysis in aerospace and automotive applications.

AVAILABLE IN THE FOLLOWING CONFIGURATIONS

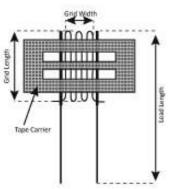
Application Methods

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

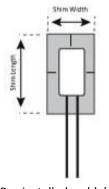
Weldable gages are attached to the component using a capacitive fine-spot welder.



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
HFP-12-063-SPW	Dynamic	120 Ohms	4.0	.063"	.015"	.003" Platinum/Nickel	2.75"	Straight	50-510
HFP-12-125-SPW	Dynamic	120 Ohms	4.0	.125"	.040"	.003" Platinum/Nickel	2.75"	Straight	50-511
HFP-35-125-SPW	Dynamic	350 Ohms	4.0	.125"	.120"	.003" Platinum/Nickel	2.75"	Straight	50-512
HFP-35-250-LPW	Dynamic	350 Ohms	4.0	.250"	.140"	.003" Platinum/Nickel	2.75"	Straight	50-513

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



CUSTOM OPTIONS TABLE

Gage Resista	ince	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						
	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 <u>sales</u> department for more information.

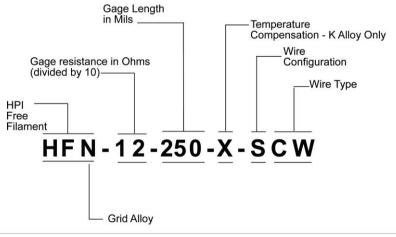
Tape Carrier: Fiberglass reinforced Teflon with silicone adhesive. Shelf life: 9 months (adhesive)

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)

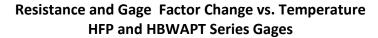
Grid wire:
30° angle at weld

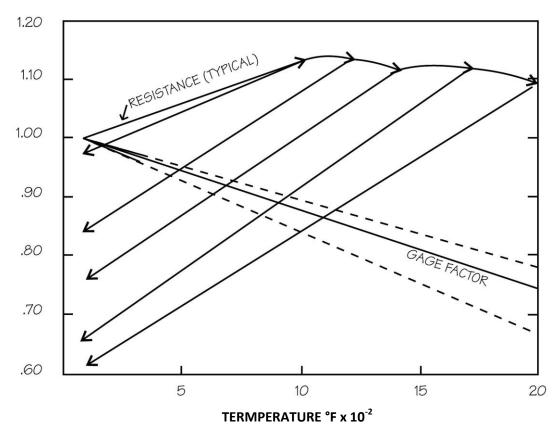
Part Number Designation Code:





ENGINEERING DATA:





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