


Products A-Z » Test & measurements » Interactive Guide to Strain Measurement Technology » Strain gages

 Product Support

Contact information for:

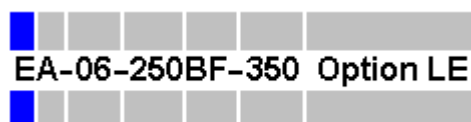
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Standard Gage Designation System

The following Strain Gage Designation System applies to all general-purpose Micro-Measurements gages.

Carrier Matrix (Backing)



E ■ Open-faced general-purpose gage with tough, flexible cast **polyimide** backing. Various options are available, including lead connection features and protective encapsulation.

CE ■ Flexible gages with a cast polyimide backing and encapsulation featuring large, rugged, copper-coated solder tabs. This construction provides optimum capability for direct leadwire attachment.

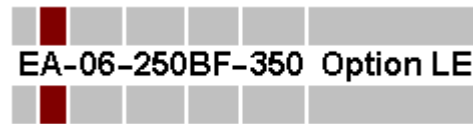
N2 ■ The 'N2' matrix provides an open-faced gage on a thin, high-performance laminated polyimide film backing.

S2 ■ Gage grid and solder tabs fully encapsulated in a thin, flexible, laminated polyimide film. Provided with large [0.030 in (0.75 mm)] solder pads for ease of leadwire attachment.

W ■ Provides a gage fully encapsulated in **glass-fiber-reinforced epoxy-phenolic resin**. High-endurance leadwires.

- S** ■ Full encapsulation identical to the W matrix, but with solder dot connections instead of leadwires.

Foil Alloy



- A Alloy** ■ Constantan alloy in self-temperature-compensated form.
- P Alloy** ■ Annealed constantan. Used for high-elongation or post-yield gages.
- D Alloy** ■ Isoelastic alloy. High gage factor and high fatigue life.
- K Alloy** ■ A nickel-chromium alloy (similar to Karma) used for high-performance self-temperature-compensated gages.

Self-Temperature Compensation



The S-T-C number is the approximate [thermal expansion coefficient in ppm/deg F of the structural material](#) on which the gage is to be used. The following S-T-C numbers are available:

- A Alloy** 00, 03, 05, 06, 09, 13, 15, 18
P Alloy 08
K Alloy 00, 03, 05, 06, 09, 13, 15

Gages with S-T-C's of 30, 40, or 50 are available as [Special-Purpose Gages](#) .

The **D Alloy** is not available in self-temperature-compensated form. 'DY' is used instead.

Active Gage Length



The active gage length in mils [0.001 in (0.0254 mm)].

Grid & Tab Geometry



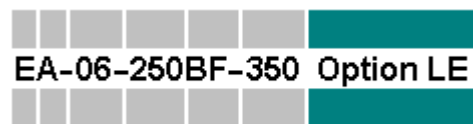
Unique for each grid and tab geometry.

Resistance



Nominal resistance of the gage in ohms.

Standard Optional Features



Most of the following options apply to the EA- or ED-Series gages:

Option W ■ Integral printed circuit terminal, polyimide encapsulation.

Option E ■ Polyimide encapsulation, leaving a portion of solder tab exposed.

Option SE ■ Solder dots plus polyimide encapsulation.

Option L ■ Preattached, soft, formable copper leads.

Option LE ■ Leads plus polyimide encapsulation.

Option P ■ Preattached leadwire cables and encapsulation.

Option P2 ■ Preattached leadwire cables for CEA-Series gages.

