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.