

# L2A and C2A Series

Leaded and Cabled Strain Gages for General-Purpose Applications

Product Overview



## Leaded and Cabled Strain Gages for General-Purpose Applications

Micro-Measurements L2A Series strain gages with ribbon leads and C2A Series strain gages with pre-attached cables are both designed to save time and money..

### Features and Benefits

- Pre-attached leads or cables simplify gage installation and ensure dependable installations, particularly in difficult locations on components or in the field
- Strain gage grids are protected with polyimide encapsulation
- With pre-leaded L2A Series, soldering to strain gage tabs is not required
- With C2A Series, direct connection to test instrumentation allows faster gage installation

### A Variety of Gage Types

- Uniaxial
- Tee-rosette
- Rectangular rosette
- Stacked rosette
- Shear/torque gages

### GAGE LISTINGS — Dimensions in inches (mm). ES = Each Section, CP = Complete Pattern

Gage Pattern (Shown at 1X Size)	Gage Length	Grid Width	Overall Length	Overall Width	Matrix Length	Matrix Width	Gage Designation (XX = STC Number)	Resistance in Ohms
<b>015LW</b>	0.015 (0.38)	0.020 (0.50)	0.052 (1.32)	0.034 (0.86)	0.075 (1.90)	0.054 (1.37)	C2A-XX-015LW-120 L2A-XX-015LW-120	120 ±0.6% 120 ±0.6%
Very small uniaxial gage								
<b>031LW</b>	0.031 (0.79)	0.070 (1.79)	0.159 (4.04)	0.080 (2.03)	0.231 (5.87)	0.140 (3.56)	L2A-XX-031LW-120 L2A-XX-031LW-350 C2A-XX-031LW-120 C2A-XX-031LW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
Small general-purpose uniaxial gage								
<b>031WW</b>	0.031 ES (0.79) ES	0.070 ES (1.79) ES	0.206 CP (0.23) CP	0.227 CP (5.77) CP	0.278 CP (7.06) CP	0.315 CP (8.00) CP	L2A-XX-031WW-120 L2A-XX-031WW-350 C2A-XX-031WW-120 C2A-XX-031WW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
Small stacked rectangular rosette								
<b>G1350</b>	0.040 ES (1.0) ES	0.045 ES (1.14) ES	0.144 CP (3.73) CP	0.147 CP (3.73) CP	0.20 CP (5.1) CP	0.20 CP (5.1) CP	L2A-XX-G1350-120/SP70 C2A-XX-G1350-120/SP70 C2K-XX-G1350-350/SP70*	120 ±0.6% 120 ±0.6% 350 ±0.8%
Small stacked rosette with circular trim designed for applications on printed circuit boards								
<b>062LR</b>	0.062 (1.57)	0.050 (1.27)	0.185 (4.7)	0.260 (6.6)	0.277 (7.04)	0.410 (10.41)	L2A-XX-062LR-120 L2A-XX-062LR-350 C2A-XX-062LR-120 C2A-XX-062LR-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
Small rectangular single-plane rosette								
<b>062LT</b>	0.062 (1.57)	0.070 (1.78)	0.164 (4.17)	0.170 (4.32)	0.210 (5.33)	0.230 (5.84)	L2A-XX-062LT-120 L2A-XX-062LT-350 C2A-XX-062LT-120 C2A-XX-062LT-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
General-purpose 90° tee rosette								
<b>062LV</b>	0.062 ES (1.52) ES	0.050 ES (1.27) ES	0.214 CP (5.44) CP	0.215 CP (5.46) CP	0.255 CP (6.48) CP	0.265 CP (6.73) CP	L2A-XX-062LV-120 C2A-XX-062LV-120 C2A-XX-062LV-350	120 ±0.6% 120 ±0.6% 350 ±0.6%
Two-element 90° shear/torque gage								
<b>062LW</b>	0.062 (1.57)	0.050 (1.27)	0.175 (4.45)	0.080 (2.03)	0.252 (6.40)	0.140 (3.56)	L2A-XX-062LW-120 L2A-XX-062LW-350 C2A-XX-062LW-120 C2A-XX-062LW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
Widely used general-purpose uniaxial gage								
<b>062WW</b>	0.062 ES (1.57) ES	0.050 ES (1.27) ES	0.180 CP (4.57) CP	0.235 CP (6.0) CP	0.262 CP (7.16) CP	0.323 CP (8.20) CP	L2A-XX-062WW-120 L2A-XX-062WW-350 C2A-XX-062WW-120 C2A-XX-062WW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
Stacked rectangular rosette								

\* C2K = higher resistance K-Foil version

## L2A Model Specifications

**Carrier Matrix:** Provides an encapsulated gage with *pre-wired ribbon leads* on a thin, high-performance laminated polyimide film backing.

**Leadwires:** 1.2 in (30 mm) long, 0.016 in (0.4 mm) wide, and 0.002 in (0.05 mm) thick nickel-clad copper ribbon attached with +430°F (+220°C) lead-free solder.

**Temperature Range:** -100°F to +250°F (-75°C to +120°C)

**Strain Range:** ±3%

**Fatigue Life:** 10<sup>5</sup> cycles at ±1700 microstrain; 10<sup>6</sup> cycles at ±1500 microstrain

## C2A Model Specifications

**Carrier Matrix:** Provides an encapsulated gage *pre-cabled* on a thin, high-performance laminated polyimide film backing.

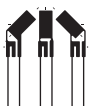
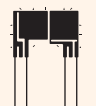


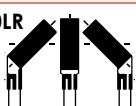


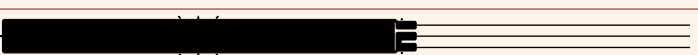
**Cables:** Stranded 26-AWG tinned-copper wire, 3-conductor flat cable with vinyl insulation; transition between gage and cable of 25 mm 34-AWG wires with enamel insulation and +430°F (+220°C) lead-free solder. Standard cable length of 9.8 ft. (3 m); other lengths are available upon request.

**Temperature Range:** -60°F to +180°F (-50°C to +80 °C)

**Strain Range:** ±3%

**Fatigue Life:** 10<sup>5</sup> cycles at ±1700 microstrain; 10<sup>6</sup> cycles at ±1500 microstrain

### GAGE LISTINGS — Dimensions in inches (mm). ES = Each Section, CP = Complete Pattern

Gage Pattern (Shown at 1X Size)	Gage Length	Overall Length	Grid Width	Overall Width	Matrix Width	Matrix Length	Gage Designation (XX = STC Number)	Resistance in Ohms
	0.125 (3.18)	0.070 (1.78)	0.245 (6.22)	0.415 (10.54)	0.290 (7.37)	0.475 (12.06)	L2A-XX-125LR-120 L2A-XX-125LR-350	120 ±0.6% 350 ±0.6%
	Small rectangular single-plane rosette							C2A-XX-125LR-120 C2A-XX-125LR-350
	0.125 (3.18)	0.150 (3.81)	0.243 (6.17)	0.340 (8.64)	0.290 (7.37)	0.400 (10.16)	L2A-XX-125LT-120 L2A-XX-125LT-350	120 ±0.6% 350 ±0.6%
	General-purpose 90° tee rosette							C2A-XX-125LT-120 C2A-XX-125LT-350
	0.125 (3.18)	0.070 (1.78)	0.238 (6.05)	0.080 (2.03)	0.315 (8.00)	0.140 (3.56)	L2A-XX-125LW-120 L2A-XX-125LW-350	120 ±0.6% 350 ±0.6%
	Widely used general-purpose uniaxial gage							C2A-XX-125LW-120 C2A-XX-125LW-350
	0.125 ES (3.18) ES	0.070 ES (1.78) ES	0.241 CP (6.12) CP	0.280 CP (7.11) CP	0.309 CP (7.85) CP	0.375 CP (9.53) CP	L2A-XX-125WW-120 L2A-XX-125WW-350	120 ±0.6% 350 ±0.6%
	Stacked rectangular rosette							C2A-XX-125WW-120 C2A-XX-125WW-350
	0.250 ES (6.35) ES	0.100 ES (2.54) ES	0.373 CP (9.47) CP	0.655 CP (16.64) CP	0.420 CP (10.67) CP	0.715 CP (18.16) CP	L2A-XX-250LR-120 L2A-XX-250LR-350	120 ±0.6% 350 ±0.6%
	Small rectangular single-plane rosette							C2A-XX-250LR-120 C2A-XX-250LR-350
	0.250 (6.35)	0.100 (2.54)	0.363 (9.22)	0.100 (2.54)	0.440 (11.18)	0.160 (4.06)	L2A-XX-250LW-120 L2A-XX-250LW-350	120 ±0.6% 350 ±0.6%
	Widely used general-purpose uniaxial gage							C2A-XX-250LW-120 C2A-XX-250LW-350
	0.250 ES (6.35) ES	0.100 ES (2.54) ES	0.362 CP (9.19) CP	0.375 CP (9.53) CP	0.418 CP (10.62) CP	0.477 CP (12.12) CP	L2A-XX-250WW-120 L2A-XX-250WW-350	120 ±0.6% 350 ±0.6%
	Stacked rectangular rosette							C2A-XX-250WW-120 C2A-XX-250WW-350
 shown horizontally	2.00 (50.80)	0.175 (4.45)	2.155 (54.74)	0.175 (4.45)	2.232 (56.69)	0.235 (5.97)	C2A-XX-20CLW-120 C2A-XX-20CLW-350	120 ±0.6% 350 ±0.6%
	Large uniaxial gage for use on concrete							



## Sales Contact

[mm@vpgsensors.com](mailto:mm@vpgsensors.com)

[micro-measurements.com](http://micro-measurements.com)

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