

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
015LW 	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							
031LW 	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							
031WW 	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							
G1350 	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							
062LR 	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							
062LT 	0.062 (1.57)	0.070 (1.78)	0.164 (4.17)	0.170 (4.32)	0.210 (5.33)	0.290 (7.37)	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							
062LV 	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							
062LW 	0.062 (1.57)	0.050 (1.27)	0.175 (4.45)	0.080 (2.03)	0.252 (6.40)	0.252 (6.40)	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							
062WW 	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: 10⁵ cycles at ±1700 microstrain; 10⁶ cycles at ±1500 microstrain

C2A Model Specifications




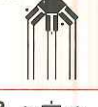
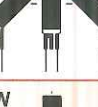
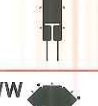
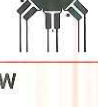
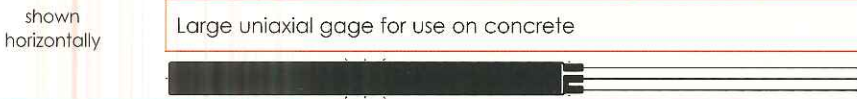
Carrier Matrix: Provides an encapsulated gage *pre-cabled* on a thin, high-performance laminated polyimide film backing.

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: 10⁵ cycles at ±1700 microstrain; 10⁶ 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 C2A-XX-125LR-120 C2A-XX-125LR-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Small rectangular single-plane rosette							
	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 C2A-XX-125LT-120 C2A-XX-125LT-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	General-purpose 90° tee rosette							
	0.125 (3.18)	0.070 (1.78)	0.238 (6.05)	0.080 (2.03)	0.315 (8.00)	0.170 (4.32)	L2A-XX-125LW-120 L2A-XX-125LW-350 C2A-XX-125LW-120 C2A-XX-125LW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Widely used general-purpose uniaxial gage							
	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 C2A-XX-125WW-120 C2A-XX-125WW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Stacked rectangular rosette							
	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 C2A-XX-250LR-120 C2A-XX-250LR-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Small rectangular single-plane rosette							
	0.250 (6.35)	0.100 (2.54)	0.363 (9.22)	0.100 (2.54)	0.440 (11.18)	0.170 (4.32)	L2A-XX-250LW-120 L2A-XX-250LW-350 C2A-XX-250LW-120 C2A-XX-250LW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Widely used general-purpose uniaxial gage							
	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 C2A-XX-250WW-120 C2A-XX-250WW-350	120 ±0.6% 350 ±0.6% 120 ±0.6% 350 ±0.6%
	Stacked rectangular rosette							
	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							