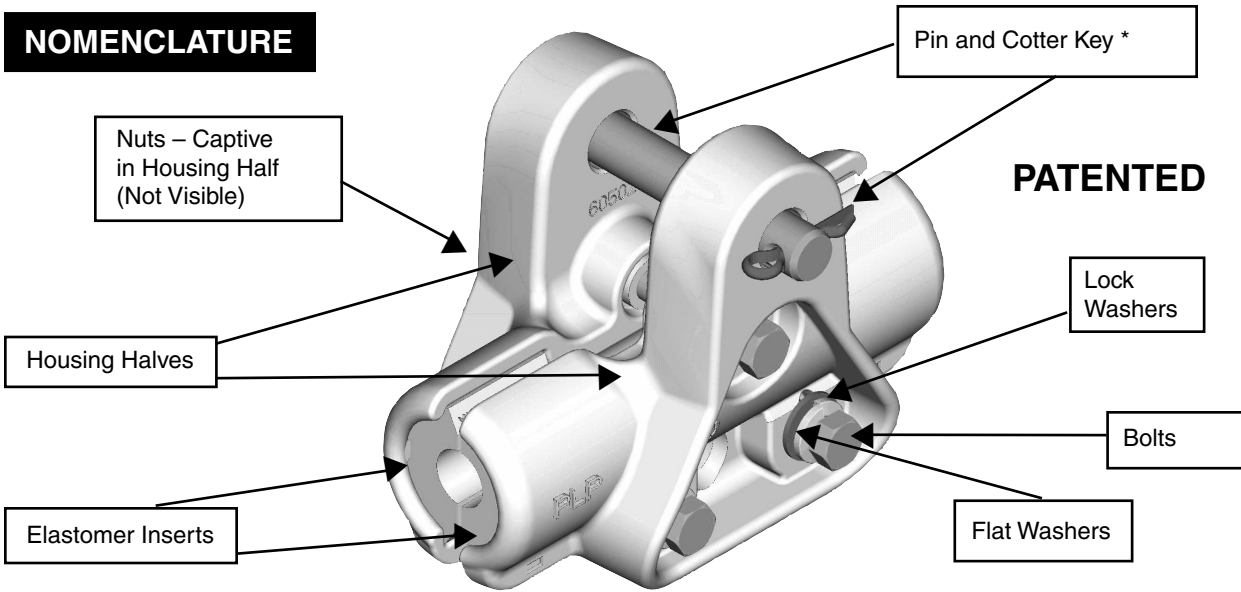


PREFORMED LINE PRODUCTS

CUSHION-GRIP™ SUSPENSION



GENERAL RECOMMENDATIONS

CUSHION-GRIP Suspensions are intended for use on all aluminum based conductors, and are designed to reduce the static and dynamic stresses at the support point, so that the conductor is protected against the effects of oscillations. The conductor is cushioned by field proven, integral elastomer inserts, which guard against abrasion, wear, and fatigue.

The level of protection provided by the CUSHION-GRIP Suspension is comparable to a bolted clamp over armor rods. This equates to a reduction in bending strain as high as 50% as compared to bare conductor in a bolted clamp. This reduction in bending strain can be directly related to an increase in overall conductor life.

Features and Benefits:

- The CUSHION-GRIP Suspension is shipped assembled with no loose parts. All fasteners are factory installed to eliminate lost hardware in the field.
- Labor Savings – To install the CUSHION-GRIP Suspension simply spread the body halves, place over the conductor, and tighten bolts.
- Integral Cushions – minimize conductor bending

stresses at critical entry locations.

- Compatible with standard attachment hardware.
- Designed for EHV applications – corona free in bundled 345 kV applications.
- Easy Hot Stick application – Lower captive fasteners act as hinge to facilitate hot stick application.
- Can be supplied with a bolt/nut/cotter in place of the suspension pin and cotter*.

VERTICAL ULTIMATE LOAD. The vertical ultimate load of the CUSHION-GRIP Suspension is 25,000# (111 kN).

SLIP LOAD. When initially installed, the CGS has a slip load that ranges between 10% to 15% of the conductor's rated breaking strength (RBS).

LINE ANGLE. The maximum recommended line angle for a CUSHION-GRIP Suspension is 30° as a single suspension and 60° in a double configuration utilizing a yoke plate.

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CUSHION-GRIP™ SUSPENSION



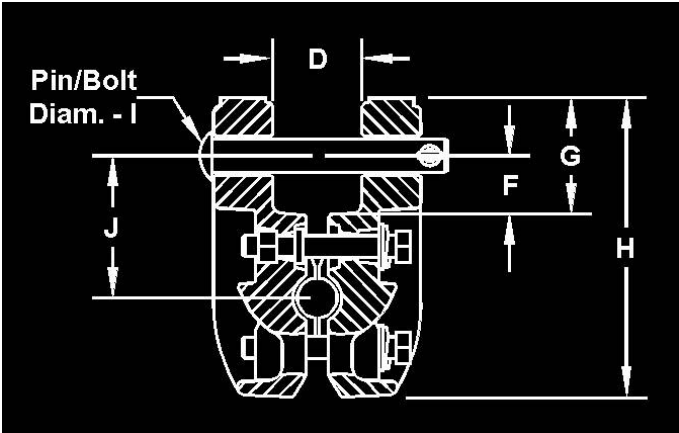
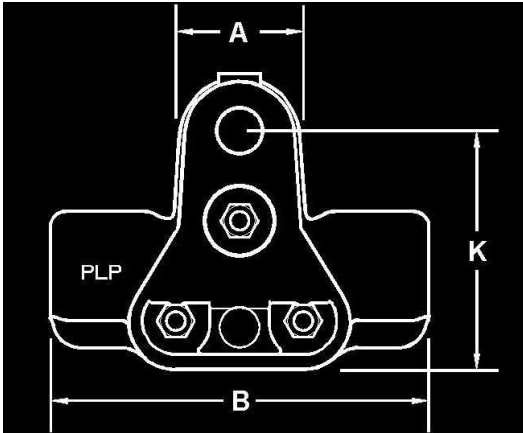
Catalog Number	Conductor Range - Inches (mm)		Nominal Conductor Size	Height Inches (mm)	Width Inches (mm)		Length Inches (mm)	Weight Pounds (kg)	Standard Carton Quantity	Vertical Ultimate Load
	Min	Max			Min	Max				
CGS-1100	0.609 (15.5)	0.660 (16.8)	266.8; 18/1, 26/7 266.8; 19w AAC	5.30 (135 mm)	3.30 (84 mm)	3.85 (98 mm)	6.85 (169 mm)	4.00 (1.8 kg)	3 units	25,000 lbs. (111 kN)
CGS-1101	0.661 (16.8)	0.709 (18.0)	336.4; 19w, 37w AAC 336.4; 18/1							
CGS-1102	0.710 (18.0)	0.755 (19.2)	336.4; 26/7, 30/7 397.5; 19w AAC 397.5; 18/1							
CGS-1103	0.756 (19.2)	0.799 (20.3)	397.5; 26/7 477; 19w, 37w AAC 397.5; 19w AAC							
CGS-1104	0.800 (20.3)	0.842 (21.4)	397.5; 30/7 477; 18/1							
CGS-1105	0.843 (21.4)	0.883 (22.4)	477; 24/7, 26/7, 30/7, 19 AAC 556.5; 19w, 37w, 61w AAC 556.5; 36/1, 18/1							
CGS-1106	0.880 (22.4)	0.931 (23.6)	556.5; 24/7, 26/7 636; 37w, 61w AAC	6.00 (152 mm)	3.30 (84 mm)	3.85 (98 mm)	7.55 (192 mm)	5.5 (2.5 kg)	3 units	
CGS-1107	0.932 (23.7)	0.980 (24.9)	636; 18/1, 24/7, 54/7 605; 24/5, 54/7							
CGS-1108	0.981 (24.9)	1.027 (26.1)	636; 26/7, 30/19 795; 37w AAC							
CGS-1109	1.028 (26.1)	1.072 (27.2)	795; 61w AAC 795; 36/1, 45/7							
CGS-1110	1.073 (27.3)	1.115 (28.3)	795; 24/7, 26/7, 54/7 795; 37w AAC 900; 37w, 61w AAC							
CGS-1111	1.116 (28.3)	1.156 (29.4)	954; 37w, 61w AAC 795; 30/19 954; 36/1							
CGS-1112	1.157 (29.4)	1.196 (30.4)	954; 45/7, 54/7 1033.5; 37w, 61w AAC 1033.5; 36/1	6.25 (159 mm)	3.30 (84 mm)	3.85 (98 mm)	8.60 (218 mm)	6.7 (3.0 kg)	3 units	
CGS-1113	1.178 (29.9)	1.237 (31.4)	954; 37w AAC 1033.5; 45/7							
CGS-1114	1.238 (31.4)	1.294 (32.9)	1033.5; 54/7 1192.5; 61w AAC 1113; 45/7, 54/19							
CGS-1115	1.295 (32.9)	1.349 (34.3)	1272; 61w AAC 1192.5; 45/7, 54/19 1272; 45/7							
CGS-1116	1.350 (34.3)	1.401 (35.6)	1272; 54/7 1351.5; 45/7 1431; 61w AAC							
CGS-1117	1.402 (35.6)	1.451 (36.9)	1351.5; 54/19 1431; 45/7 1590; 61w AAC							
CGS-1118	1.452 (36.9)	1.499 (38.1)	1590; 91w AAC 1431; 54/19	1.500 (38.1)	1.545 (39.2)	1590; 45/7, 54/19				
CGS-1119	1.500 (38.1)	1.545 (39.2)	1590; 45/7, 54/19							

PREFORMED LINE PRODUCTS

CUSHION-GRIP™ SUSPENSION



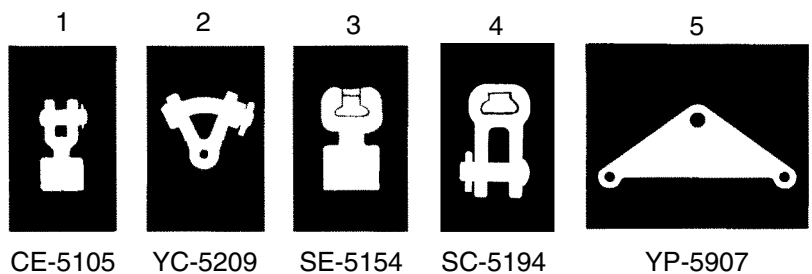
DIMENSIONAL TABLES



DIMENSIONS – INCHES (mm)		DIMENSIONS – INCHES (mm)									
Min	Max.	A	B	D		F	G	H	I	J	K
				Min	Max						
0.609 (15.5)	0.883 (22.4)	2.25 (57)	6.85 (174)	1.15 (29.2)	1.70 (43.2)	1.00 (25.4)	2.00 (51)	5.30 (135)	5/8 (15.9)	2.60 (66)	4.30 (109)
0.884 (22.5)	1.196 (30.4)	2.25 (57)	7.55 (192)	1.15 (29.2)	1.70 (43.2)	1.00 (25.4)	2.00 (51)	6.00 (152)	5/8 (15.9)	2.70 (69)	4.95 (126)
1.178 (29.9)	1.545 (39.2)	2.25 (57)	8.60 (218)	1.15 (29.2)	1.70 (43.2)	1.00 (25.4)	2.00 (51)	6.25 (159)	5/8 (15.9)	2.90 (74)	5.20 (132)

CGS HARDWARE & FITTINGS

Shown below are the Clevis Eye (1), Y-Clevis Eye (2), Socket Eye (3), Socket Clevis (4), and Yoke Plate that can be used in conjunction with the CUSHION-GRIP™ Suspension. See diagram above for CGS dimensions for assistance in choosing the appropriate mating hardware part numbers.



CE-5105 YC-5209 SE-5154 SC-5194 YP-5907