



PREFORMED LINE PRODUCTS
The connection you can count on.

Provides superior protection
for Twisted Pair Conductors


CUSHION-GRIP® T2 SUSPENSION & SUPPORT FOR TWISTED PAIR CONDUCTOR



 COMMUNICATIONS

 ENERGY

 SPECIAL INDUSTRIES

 SOLAR



CUSHION-GRIP® T2 SUSPENSION & SUPPORT for Twisted Pair Conductor

Designed for better performance than the wing bolted clamper



Field Proven Concept

Since 1998, the cushion concept has been field proven for new construction and for aluminum strand damage repair at many utilities where Twisted Pair (T2 and VR) conductors have been used to reduce motion associated with aeolian vibration and galloping.

Laboratory Tested

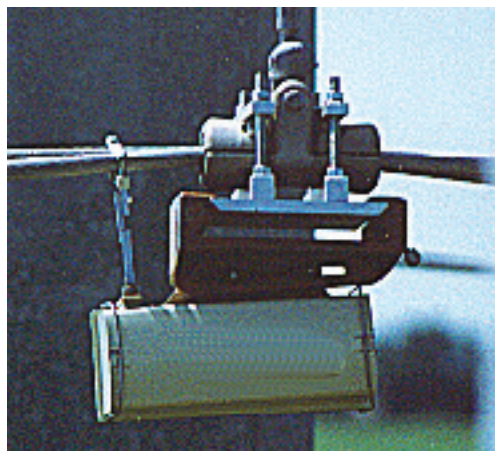
A 90' span of 477 kcmil (Hawk) Twisted Pair conductor was vibrated in the PLP laboratory at a peak-to-peak vertical conductor amplitude of 0.4" at a frequency of 28 Hertz. Bending strain (microstrain) was measured using strain gauges at the ends of the keeper portion of a conventional bolted clamp and a CUSHION-GRIP Twisted Pair Suspension Clamp. The results are shown in the table below.

Specifications

Material:

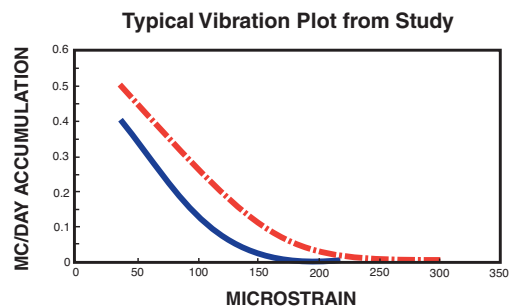
- Body Halves - High strength aluminum alloy (base of supports are galvanized steel)
- Vertical Strength - See Catalog Tables
- Thermal Rating - Designed for up to 125°C continuous conductor operation (150°C two hour emergency)
- Slip Load - 10% to 15% of conductor rated breaking strength (RBS)
- Line Angle - 30° in single configuration
- 60° in double configuration
- TACSR/VR2 – Designed for up to 210° C continuous operation (240° 2 hour emergency)

Suspension Clamp Type	Avg. Strain Level (micro in/in) T2 Cond 1	Avg. Strain Level (micro in/in) T2 Cond 2
Conventional Clamp	495	385
CUSHION-GRIP® Clamp for T2	245	220
% Improvement Over Conventional Clamp	51%	43%



Field Tested

Numerous field vibration studies have been conducted to demonstrate the reduction in conductor bending stress with the CUSHION-GRIP Suspension.



- CUSHION-GRIP® Clamp
- - - Standard Clamp

115 kv Line
Tension: Approximately 24% of RBS
Span Length: 1004 feet

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CUSHION-GRIP Suspension

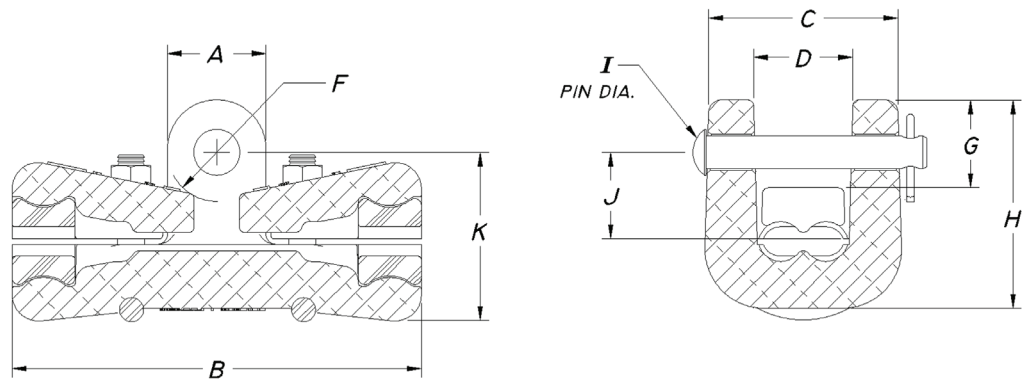
Suspension for Twisted Pair Conductor

For use on Twisted Pair configurations of ACSR, Compacted ACSR, Aluminum Alloy All-Aluminum, AWAC® Compacted All-Aluminum, and TACSR/VR2

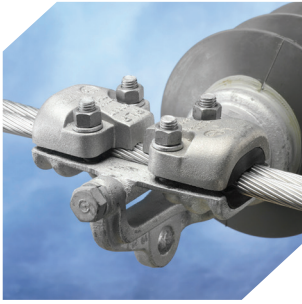
Catalog Number	Conductor Range	Optional Fittings			Ultimate Vertical Strength
		Clevis Eye	Y Clevis Eye	Socket Eye	
CCT2-0003	2 x 0.250 - 2 x 0.447	CE-5261	YC-5207	SE-5152	10,000#
CCT2-0004	2 x 0.448 - 2 x 0.642	CE-5261	YC-5207	SE-5152	15,000#
CCT2-0005	2 x 0.684 - 2 x 0.858	CE-5105	YC-5209	SE-5154	20,000#
CCT2-0006	2 x 0.859 - 2 x 1.108	CE-5106	YC-5211	SE-5155	25,000#
CCT2-0007	2 x 1.109 - 2 x 1.259	CE-5106	YC-5211	SE-5155	30,000#

NOTE: For high temperature (HT) version, add HT to the catalog number (Example - CCT2-0003HT)

Dimensional Tables



Catalog Number	Conductor Range	A In.	B In.	C In.	D In.	F In.	G In.	H In.	Clevis Pin (Dia) I In.	J In.	K In.	Weight Lbs.	Ultimate Vertical Strength
CCT2-0003	2x0.250-2x0.447	1.60	6.00	2.50	1.40	1.00	1.60	3.00	5/8	1.45	2.10	2.2	10,000#
CCT2-0004	2x0.448-2x0.642	1.75	7.00	3.50	1.40	0.80	1.65	3.75	5/8	1.60	2.80	5.1	15,000#
CCT2-0005	2x0.684-2x0.858	1.85	7.75	4.25	1.80	0.95	1.90	4.25	5/8	1.65	3.30	6.5	20,000#
CCT2-0006	2x0.859-2x1.108	2.25	8.00	4.25	2.25	0.95	2.10	4.50	5/8	1.70	3.25	6.7	25,000#
CCT2-0007	2x1.109-2x1.259	2.50	9.04	4.40	2.65	1.25	2.25	5.48	3/4	2.25	4.23	10.5	30,000#



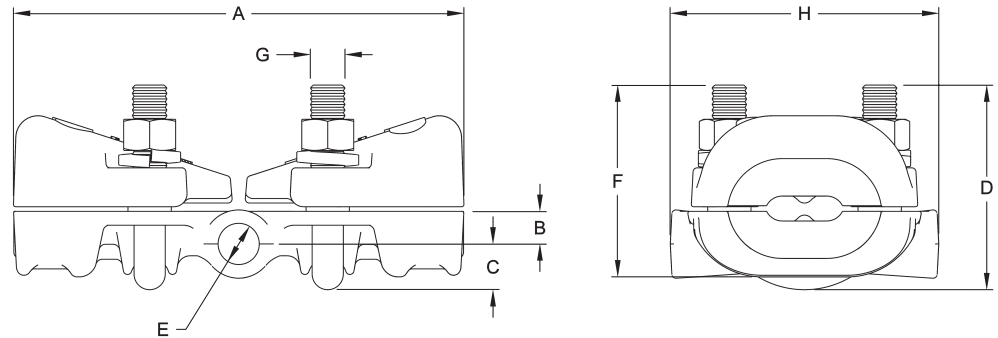
CUSHION-GRIP Support

Support for Twisted Pair Conductor

Catalog Number	Conductor Range Inches (mm)		Nominal Conductor Sizes Max	Weight/Unit Pounds (kg)	Standard Carton Quantity
	Min	Max			
CCT2-0103	2 x 0.250 (2 x 6.4)	2 x 0.447 (2 x 11.4)	2 x #4 to 2 x 2/0	2.85 (1.3)	12
CCT2-0104	2 x 0.477 (2 x 11.4)	2 x 0.642 (2 x 16.3)	2 x 2/0 to 2 x 266.8 kcmil	4.75 (2.2)	12
CCT2-0106	2 x 0.684 (2 x 18.3)	2 x 0.858 (2 x 21.8)	2 x 336 to 2 x 477 kcmil	7.30 (3.3)	12
CCT2-0105	2 x 0.859 (2 x 21.8)	2 x 1.108 (2 x 28.1)	2 x 477 to 2 x 795 kcmil	7.60 (3.5)	12

NOTE: For high temperature (HT) version, add HT to the catalog number (Example - CCT2-0106HT)

Dimensional Information



Catalog Number	Dimensions (Inches)							
	A	B	C	D	E	F	G	H
CCT2-0103	5-1/2	3/8	1/2	2-3/8	0.595	2-1/4	3/8	3-7/8
CCT2-0104	6-1/2	1/2	3/4	3	0.595	2-3/4	1/2	3-7/8
CCT2-0106	7-1/4	7/8	3/4	3-5/8	0.595	3-1/2	1/2	3-7/8
CCT2-0105	7-1/2	7/8	1	3-5/8	0.595	3-1/2	1/2	3-7/8



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