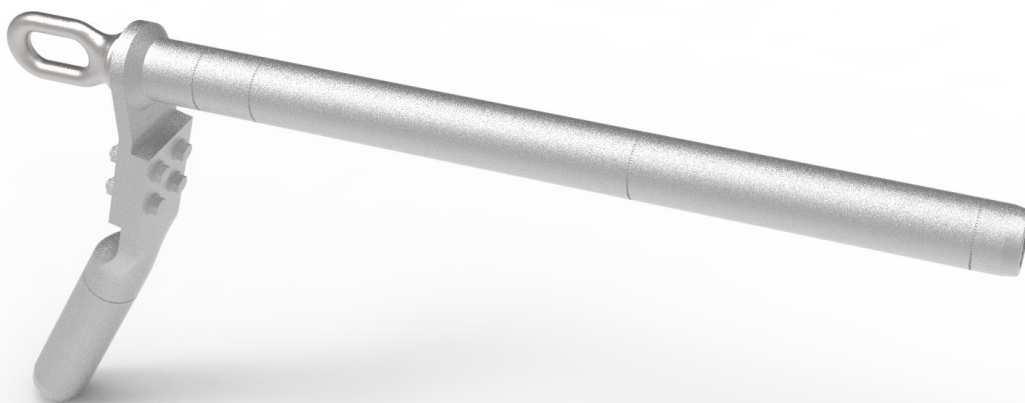




HIGH-TEMPERATURE SOLUTIONS

FOR LSCC CONDUCTORS

ABOUT PLP

PLP protects the world's most critical connections by creating stronger and more reliable networks. Our precision-engineered solutions are trusted by energy and communications providers worldwide to perform better and last longer. With offices and manufacturing facilities in over 20 countries, PLP works as a united global corporation, delivering high-quality products and unparalleled service to customers around the world.

PLP has been an industry leader in the design, testing, and production of critical hardware solutions for High-Temperature Low-Sag conductors (HTLS) since 1999. The unique nature of the core materials used by many HTLS conductors requires the extra protection provided by PLP's precision-engineered designs.

In the U.S. and around the world, PLP has experienced engineering personnel and world-class laboratory facilities to ensure that our products meet the industry specifications and special requirements needed for high-temperature operations.



CONTENTS

HIGH-TEMPERATURE SOLUTIONS FOR LSCC CONDUCTORS

Products for LSCC Conductors.....	4
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COMPRESSION PRODUCTS

Compression Dead-End Jumper.....	10
Compression Splice	11

SUSPENSION & SUPPORT

ARMOR-GRIP® Suspension (AGS)	12
ARMOR-GRIP Suspension: Fittings	14
ARMOR-GRIP Suspension: Double.....	19
ARMOR-GRIP Suspension: Double Fittings.....	23
ARMOR-GRIP Support (AGS).....	25
CUSHION-GRIP® Suspension.....	27
CUSHION-GRIP Suspension: Fittings	29
CUSHION-GRIP Support (CGS).....	35

MOTION CONTROL

CUSHION-GRIP® Twin Spacer	36
CUSHION-GRIP® Spacer Damper.....	37
VORTX™ Vibration Damper	38

REPAIR PRODUCTS

Protector Rods	40
Armor Rods.....	42
Conductor Splices.....	44
Splice/Dead-End Shunt.....	46
Transmission Line String Hardware.....	47

PRODUCTS FOR LSCC CONDUCTORS

LSCC Designation	LSCC 135 mm ²	LSCC 155 mm ²	LSCC 170 mm ²	LSCC 222 mm ²	LSCC 230 mm ²	LSCC 282 mm ²
Conductor Diameter mm	14.40	15.35	16.00	18.18	18.31	20.50
Conductor Diameter in	0.567	0.604	0.630	0.716	0.721	0.807
ARMOR-GRIP® Suspension For line angles between 0° & 30°	AGS-5104	AGS-5106	AGS-5108	AGS-5112	AGS-5112	AGS-5116
ARMOR-GRIP® Suspension: (EHV) 345kV and above	NA	NA	NA	NA	NA	NA
ARMOR-GRIP® Suspension: Double For line angles between 30° & 60°	AGS-5805	AGS-5807	AGS-5809	AGS-5813	AGS-5813	AGS-5817
ARMOR-GRIP® Suspension: Double (EHV) 345 kV and above	NA	NA	NA	NA	NA	NA
ARMOR-GRIP® Support	AGS-5204	AGS-5206	AGS-5208	AGS-5212	AGS-5212	AGS-5216
CUSHION-GRIP® Suspension	CGS-1095HT	CGS-1095HT	CGS-1096HT	CGS-1096HT	CGS-1096HT	CGS-1096HT
CUSHION-GRIP® Support	CGS-2100HT	CGS-2100HT	CGS-2101HT	CGS-2101HT	CGS-2101HT	CGS-2101HT
CUSHION-GRIP® Twin Spacer, 18" Spacing	NA	NA	NA	CGTS-0102HT	CGTS-0102HT	CGTS-0104HT
CUSHION-GRIP® Spacer Damper (Tri Bundle)	NA	NA	NA	NA	CGSDB-34519HT	CGSDB-34521HT
CUSHION-GRIP® Spacer Damper (Quad Bundle)	NA	NA	NA	CGSDB-44518HT	CGSDB-44519HT	CGSDB-44521HT
VORTX™ Vibration Damper (for placement on AGS or AGS Support Rods)	VSD-2025	VSD-2025	VSD-2032	VSD-2032	VSD-2532	VSD-2540
VORTX™ Vibration Damper (for placement on Protector Rods)	VSD-2025	VSD-2025	VSD-2025	VSD-2032	VSD-2532	VSD-2532
Protector Rods (230kV and lower)	PR-0141	PR-0142	PR-0144	PR-0146	PR-0146	PR-0148
Protector Rods (EHV)	NA	NA	NA	NA	NA	NA
Compression Splice for LSCC Conductor	3280098	3280098	3280122	3280146	Contact PLP	Contact PLP

PRODUCTS FOR LSCC CONDUCTORS CONTINUED

LSCC Designation	LSCC 135 mm ²	LSCC 155 mm ²	LSCC 170 mm ²	LSCC 222 mm ²	LSCC 230 mm ²	LSCC 282 mm ²
Conductor Diameter mm	14.40	15.35	16.00	18.18	18.31	20.50
Conductor Diameter in	0.567	0.604	0.630	0.716	0.721	0.807
Compression Dead-end for LSCC Conductor	3280096	3280096	3280120	3280144	Contact PLP	Contact PLP
Armor Rods	AR-0124	AR-0125	AR-0126	AR-0130	AR-0130	AR-0132
Armor Rods (EHV) 345kV and above	NA	NA	NA	NA	NA	NA
Conductor Splice	LS-0134	LS-0136	LS-0137	LS-0140	LS-0140	LS-0143
Conductor Splice (EHV)	NA	NA	NA	NA	NA	NA

LSCC Designation	LSCC 315 mm ²	LSCC 319 mm ²	LSCC 367 mm ²	LSCC 398 mm ²	LSCC 420 mm ²	LSCC 422 mm ²
Conductor Diameter mm	21.60	31.74	23.55	24.40	25.10	25.04
Conductor Diameter in	0.850	0.856	0.927	0.961	0.988	0.986
ARMOR-GRIP® Suspension For line angles between 0° & 30°	AGS-5118	AGS-5118	AGS-5122	AGS-5123	AGSS-5125	AGS-5124
ARMOR-GRIP® Suspension: (EHV) 345kV and above	NA	NA	AGS-5501	AGS-5502	AGS-5504	AGS-5503
ARMOR-GRIP® Suspension: Double For line angles between 30° & 60°	AGS-5819	AGS-5819	AGS-5823	AGS-5824	AGS-5826	AGS-5825
ARMOR-GRIP® Suspension: Double (EHV) 345 kV and above	NA	NA	AGS-5856	AGS-5857	AGS-5859	AGS-5858
ARMOR-GRIP® Support	AGS-5218	AGS-5218	AGS-5222	AGS-5223	AGS-5225	AGS-5224
CUSHION-GRIP® Suspension	CGS-1096HT	CGS-1096HT	CGS-1097HT	CGS-1097HT	CGS-1096HT	CGS-1097HT
CUSHION-GRIP® Support	CGS-2101HT	CGS-2101HT	CGS-2102HT	CGS-2102HT	CGS-2101HT	CGS-2102HT
CUSHION-GRIP® Twin Spacer, 18" Spacing	CGTS-0105HT	CGTS-0105HT	CGTS-0107HT	CGTS-0108HT	CGTS-0108HT	CGTS-0108HT
CUSHION-GRIP® Spacer Damper (Tri Bundle)	CGSDB-34522HT	CGSDB-34522HT	CGSDB-34524HT	CGSDB-34525HT	CGSDB-34525HT	CGSDB-34525HT
CUSHION-GRIP® Spacer Damper (Quad Bundle)	CGSDB-44522HT	CGSDB-44522HT	CGSDB-44524HT	CGSDB-44525HT	CGSDB-44525HT	CGSDB-44525HT

PRODUCTS FOR LSCC CONDUCTORS CONTINUED

LSCC Designation	LSCC 315 mm ²	LSCC 319 mm ²	LSCC 367 mm ²	LSCC 398 mm ²	LSCC 420 mm ²	LSCC 422 mm ²
Conductor Diameter mm	21.60	31.74	23.55	24.40	25.10	25.04
Conductor Diameter in	0.850	0.856	0.927	0.961	0.988	0.986
VORTX™ Vibration Damper (for placement on AGS or AGS Support Rods)	VSD-2540	VSD-2540	VSD-3540	VSD-3540	VSD-4040	VSD-4040
VORTX™ Vibration Damper (for placement on Protector Rods)	VSD-2532	VSD-2532	VSD-3532	VS-3540	VSD-4040	VSD-4040
Protector Rods (230kV and lower)	PR-0150	PR-0150	PR-0151	PR-0152	PR-0152	PR-0152
Protector Rods (EHV)	NA	NA	PR-0151E	PR-0152E	PR-0152E	PR-01512E
Compression Splice for LSCC Conductor	Contact PLP	3280578	3280482	Contact PLP	3280735	3280734
Compression Dead-End for LSCC Conductor	Contact PLP	3280576	3280480	Contact PLP	3280733	3280732
Armor Rods	AR-0134	AR-0134	AR-0135	AR-0136	AR-0137	AR-0136
Armor Rods (EHV) 345 kV and above	NA	NA	NA	NA	AR-0500	AR-0500
Conductor Splice	NA	LS-0145	LS-0146	LS-0147	LS-0148	LS-0148
Conductor Splice (EHV)	NA	NA	NA	NA	NA	NA

LSCC Designation	LSCC 430 mm ²	LSCC 464 mm ²	LSCC 512 mm ²	LSCC 520 mm ²	LSCC 546 mm ²
Conductor Diameter mm	25.14	26.39	27.70	28.14	28.62
Conductor Diameter in	0.990	1.039	1.091	1.108	1.127
ARMOR-GRIP® Suspension For line angles between 0° & 30°	AGS-5125	AGS-5127	AGS-5130	AGS-5130	AGS-5131
ARMOR-GRIP® Suspension: (EHV) 345kV and above	AGS-5504	AGS-5506	AGS-5509	AGS-5509	AGS-5510
ARMOR-GRIP® Suspension: Double For line angles between 30° & 60°	AGS-5826	AGS-5828	AGS-5831	AGS-5831	AGS-5832

PRODUCTS FOR LSCC CONDUCTORS CONTINUED

LSCC Designation	LSCC 430 mm ²	LSCC 464 mm ²	LSCC 512 mm ²	LSCC 520 mm ²	LSCC 546 mm ²
Conductor Diameter mm	25.14	26.39	27.70	28.14	28.62
Conductor Diameter in	0.990	1.039	1.091	1.108	1.127
ARMOR-GRIP® Suspension: Double (EHV) 345 kV and above	AGS-5859	AGS-5861	AGS-5864	AGS-5864	AGS-5865
ARMOR-GRIP® Support	AGS-5225	AGS-5227	AGS-5230	AGS-5230	AGS-5231
CUSHION-GRIP® Suspension	CGS-1097HT	CGS-1097HT	CGS-1097HT	CGS-1097HT	CGS-1097HT
CUSHION-GRIP® Support	CGS-2102HT	CGS-2102HT	CGS-2102HT	CGS-2102HT	CGS-2102HT
CUSHION-GRIP® Twin Spacer, 18" Spacing	CGTS-0109HT	CGTS-0110HT	CGTS-0111HT	CGTS-0112HT	CGTS-0112HT
CUSHION-GRIP® Spacer Damper (Tri Bundle)	CGSDB-34526HT	CGSDB-34527HT	CGSDB-34528HT	CGSDB-34529HT	CGSDB-34529HT
CUSHION-GRIP® Spacer Damper (Quad Bundle)	CGSDB-44526HT	CGSDB-44527HT	CGSDB-44528HT	CGSDB-44529HT	CGSDB-44529HT
VORTX™ Vibration Damper (for placement on AGS or AGS Support Rods)	VSD-4040	VSD-4050	VSD-4050	VSD-4050	VSD-4050
VORTX™ Vibration Damper (for placement on Protector Rods)	VSD-4040	VSD-4040	VSD-4040	VSD-4050	VSD-4050
Protector Rods (230kV and lower)	PR-0152	PR-0154	PR-0155	PR-0156	PR-0156
Protector Rods (EHV)	PR-0152E	PR-0154E	PR-0155E	PR-0156E	PR-0156E
Compression Splice for LSCC Conductor	Contact PLP	Contact PLP	Contact PLP	Contact PLP	3281298
Compression Dead-End for LSCC Conductor	Contact PLP	Contact PLP	Contact PLP	Contact PLP	3281296
Armor Rods	AR-0137	AR-0138	AR-0140	AR-0141	AR-0141
Armor Rods (EHV) 345kV and above	AR-0500	AR-0501	AR-0503	AR-0504	AR-0504
Conductor Splice	LS-0148	LS-0149	LS-0150	LS-0151	LS-0151
Conductor Splice (EHV)	NA	NA	NA	LSMS4854	LSMS4854

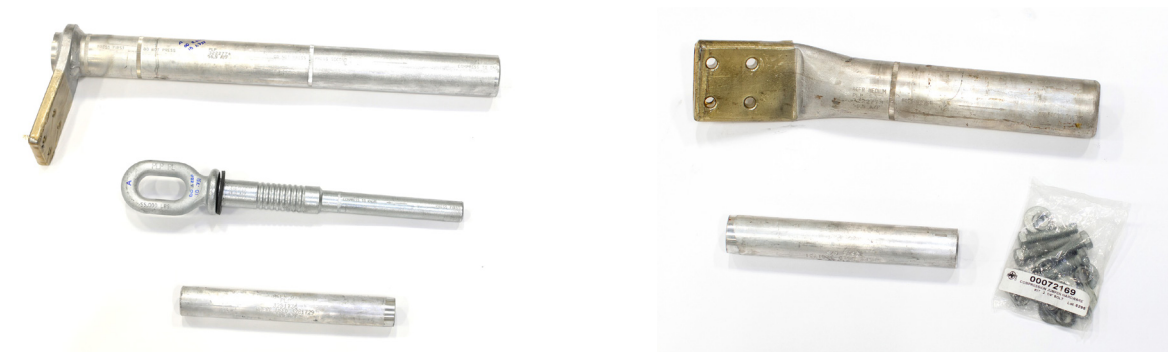
PRODUCTS FOR LSCC CONDUCTORS CONTINUED

LSCC Designation	LSCC 550 mm ²	LSCC 577 mm ²	LSCC 709 mm ²	LSCC 735 mm ²
Conductor Diameter mm	28.71	29.10	32.09	32.75
Conductor Diameter in	1.130	1.244	1.263	1.289
ARMOR-GRIP® Suspension For line angles between 0° & 30°	AGS-5131	AGS-5136	AGS-5137	AGS-5138
ARMOR-GRIP® Suspension: (EHV) 345kV and above	AGS-5510	AGS-5515	AGS-5516	AGS-5517
ARMOR-GRIP® Suspension: Double For line angles between 30° & 60°	AGS-5832	AGS-5837	AGS-5838	AGS-5839
ARMOR-GRIP® Suspension: Double (EHV) 345 kV and above	AGS-5865	AGS-5870	AGS-5871	AGS-5872
ARMOR-GRIP® Support	AGS-5231	AGS-5236	AGS-5237	AGS-5238
CUSHION-GRIP® Suspension	CGS-1097HT	CGS-1098HT	CGS-1098HT	CGS-1098HT
CUSHION-GRIP® Support	CGS-2102HT	CGS-2103HT	CGS-2103HT	CGS-2103HT
CUSHION-GRIP® Twin Spacer, 18" Spacing	CGTS-0113HT	CGTS-0115HT	CGTS-0115HT	CGTS-0116HT
CUSHION-GRIP® Spacer Damper (Tri Bundle)	CGSDB-34529HT	CGSDB-34532HT	CGSDB-34532HT	CGSDB-34533HT
CUSHION-GRIP® Spacer Damper (Quad Bundle)	CGSDB-44529HT	CGSDB-44532HT	CGSDB-44532HT	CGSDB-44533HT
VORTX™ Vibration Damper (for placement on AGS or AGS Support Rods)	VSD-4050	VSD-4061	VSD-4061	VSD-4061
VORTX™ Vibration Damper (for placement on Protector Rods)	VSD-4050	VSD-4050	VSD-4050	VSD-4050
Protector Rods (230kV and lower)	PR-0156	PR-0158	PR-0158	PR-0158
Protector Rods (EHV)	PR-0156E	PR-0158E	PR-0158E	PR-0158E
Compression Splice for LSCC Conductor	3222780	Contact PLP	Contact PLP	3281754

PRODUCTS FOR LSCC CONDUCTORS CONTINUED

LSCC Designation	LSCC 550 mm ²	LSCC 577 mm ²	LSCC 709 mm ²	LSCC 735 mm ²
Conductor Diameter mm	28.71	29.10	32.09	32.75
Conductor Diameter in	1.130	1.244	1.263	1.289
Compression Dead-End for LSCC Conductor	3222772	Contact PLP	Contact PLP	3281752
Armor Rods	AR-0141	AR-0142	AR-0144	AR-0145
Armor Rods (EHV) 345kV and above	AR-0504	AR-0505	AR-0507	AR-0508
Conductor Splice	LS-0152	LS-0152	NA	NA
Conductor Splice (EHV)	NA	LSMS8338	LSMS8338	LSMS8338

COMPRESSION DEAD-END JUMPER ASSEMBLY

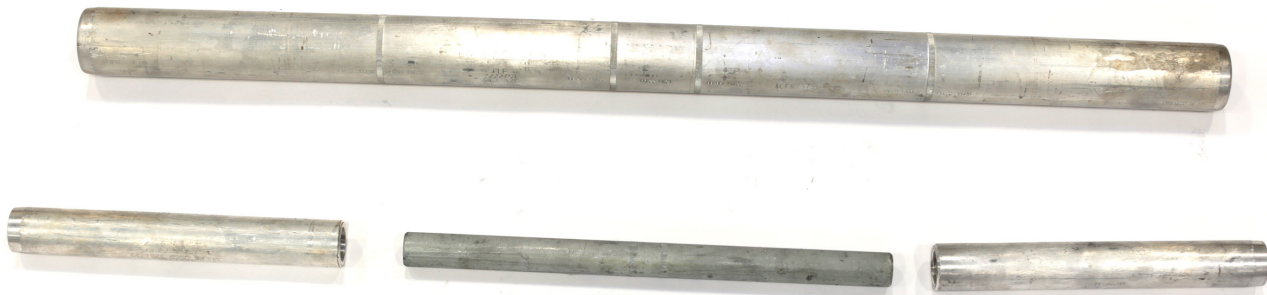


Ordering Information

Catalog Number	LSCC Designation	Diameter	
		in	mm
3223072	LSCC 222 mm ²	0.716	18.18
3223078	LSCC 282 mm ²	0.807	20.50
3223084	LSCC 315 mm ²	0.850	21.60
3223084	LSCC 319 mm ²	0.856	21.74
3223090	LSCC 422 mm ²	0.986	25.04
3223096	LSCC 520 mm ²	1.108	28.14
3223102	LSCC 546 mm ²	1.127	28.62
3223108	LSCC 735 mm ²	1.289	32.75

NOTE: For additional sizes, contact PLP.

COMPRESSION SPLICE

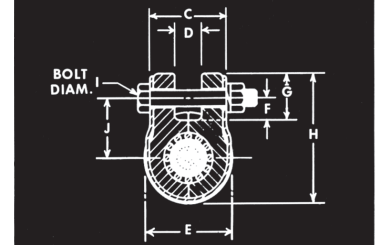
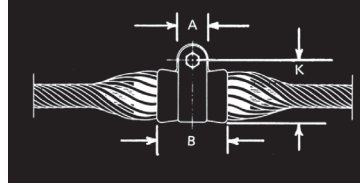
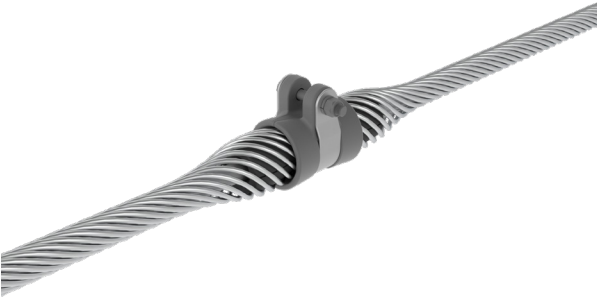


Ordering Information

Catalog Number	LSCC Designation	Diameter	
		in	mm
3223075	LSCC 222 mm ²	0.716	18.18
3223081	LSCC 282 mm ²	0.807	20.50
3223087	LSCC 315 mm ²	0.850	21.60
3223087	LSCC 319 mm ²	0.856	21.74
3223093	LSCC 422 mm ²	0.986	25.04
3223099	LSCC 520 mm ²	1.108	28.14
3223105	LSCC 546 mm ²	1.127	28.62
3223111	LSCC 735 mm ²	1.289	32.75

NOTE: For additional sizes, contact PLP.

ARMOR-GRIP® SUSPENSION (AGS)



Specifications

Conductor Range		Dimension											Vertical Ultimate Strength
		in (mm)											
in (mm)		A	B	C	D	E	F	G	H	I	J	K	lb (kN)
Minimum	Maximum												
0.543 (13.8)	0.645 (16.4)	1-3/4 (44.5)	3-1/2 (88.9)	2-5/32 (53.2)	21/32 (16.7)	21/32 (16.7)	2-5/8 (66.7)	1-1/32 (29.2)	4-3/16 (106.4)	5/8 (15.9)	1-15/16 (49.2)	3-1/4 (82.6)	10,000 (44.5)
0.646 (16.4)	0.750 (19.1)	1-3/4 (44.5)	3-3/4 (95.3)	2-1/4 (57.2)	3/4 (19.1)	2-13/16 (71.4)	1 (25.4)	1-7/8 (47.6)	4-7/16 (112.7)	5/8 (15.9)	2-5/32 (54.8)	3-9/16 (90.5)	15,000 (66.7)
0.751 (19.1)	0.907 (23.0)	2 (50.8)	4-17/32 (115.1)	2-11/16 (68.3)	7/8 (22.2)	3-5/16 (84.1)	1 (25.4)	2 (50.8)	5 (127.0)	5/8 (15.9)	2-11/32 (59.5)	4 (101.6)	20,000 (89.0)
0.908 (23.1)	1.005 (25.5)	2 (50.8)	5 (127.0)	2-15/16 (74.6)	7/8 (22.2)	3-11/16 (93.7)	1 (25.4)	2 (50.8)	5-3/8 (136.5)	5/8 (15.9)	2-17/32 (64.3)	4-3/8 (111.1)	20,000 (89.0)
1.006 (25.6)	1.208 (30.7)	2-1/4 (57.2)	5-1/2 (139.7)	3-1/2 (88.9)	1-3/16 (30.2)	4-5/32 (105.6)	1 (25.4)	2-1/8 (54.0)	5-29/32 (150.0)	5/8 (15.9)	2-45/64 (68.7)	4-25/32 (121.4)	25,000 (111.2)
1.209 (30.7)	1.355 (34.4)	2-1/4 (57.2)	6 (152.4)	3-5/8 (92.1)	1-1/4 (31.8)	4-13/16 (122.2)	1-1/4 (31.8)	2-3/8 (60.3)	6-11/16 (169.9)	3/4 (19.1)	3-5/32 (80.2)	5-9/16 (141.3)	25,000 (111.2)
1.356 (34.4)	1.557 (39.5)	2-1/4 (57.2)	6-1/2 (165.1)	4-1/8 (104.8)	1-3/8 (34.9)	5-1/16 (128.6)	1-1/8 (28.6)	2-1/4 (57.2)	6-5/8 (168.3)	3/4 (19.1)	2-31/32 (75.4)	5-1/2 (139.7)	25,000 (111.2)
1.558 (39.6)	1.882 (47.8)	2-1/2 (63.5)	7 (177.8)	4-11/16 (119.1)	2-1/4 (57.2)	5-19/32 (142.1)	1-1/8 (28.6)	2-3/8 (60.3)	7-1/4 (184.2)	3/4 (19.1)	3-3/16 (81.0)	6 (152.4)	25,000 (111.2)
1.883 (47.8)	2.333 (56.7)	2-1/2 (63.5)	7-1/2 (190.5)	5-7/32 (132.6)	2-13/32 (61.1)	6-1/16 (154.0)	1-3/16 (27.8)	2-7/16 (61.9)	7-25/32 (197.6)	3/4 (19.1)	3-1/2 (88.9)	6-17/32 (165.9)	30,000 (133.4) (2)

NOTE: ARMOR-GRIP® Suspension (AGS) Rod length and diameter for individual sizes can be taken from the catalog number tables.

ARMOR-GRIP® SUSPENSION (AGS)

Ordering Information

Catalog Number		Conductor Diameter Range		AGS® Rods						Hardware Sets per Carton	AGS Rods & Hardware Weight per Carton	Color Code
Standard	EHV (345kV & Above)	in (mm)		Length		Rod Diameter		Rods per Set	Sets per Carton			
		Minimum	Maximum	in	m	in	mm				lb (kg)	
AGS-5107	N/A	0.607 (15.4)	0.619 (15.7)	46	1.17	0.182	4.6	11	18	18	56 (25.4)	Purple
AGS-5108	N/A	0.620 (15.7)	0.645 (16.4)	50	1.27	0.182	4.6	12	18	18	61 (27.7)	Red
AGS-5109	N/A	0.646 (16.4)	0.673 (17.1)	54	1.37	0.204	5.2	11	15	15	60 (27.2)	Blue
AGS-5110	N/A	0.674 (17.1)	0.690 (17.5)	54	1.37	0.204	5.2	11	15	15	61 (27.7)	Green
AGS-5111	N/A	0.691 (17.6)	0.710 (18.0)	54	1.37	0.204	5.2	12	15	15	64 (29.0)	Yellow
AGS-5112	N/A	0.711 (18.1)	0.731 (18.6)	55	1.40	0.204	5.2	12	15	15	65 (29.5)	Black
AGS-5113	N/A	0.732 (18.6)	0.750 (19.1)	56	1.42	0.204	5.2	12	15	15	66 (29.9)	White
AGS-5114	N/A	0.751 (19.1)	0.768 (19.5)	60	1.52	0.250	6.4	10	12	12	68 (30.8)	Brown
AGS-5115	N/A	0.769 (19.5)	0.795 (20.2)	60	1.52	0.250	6.4	11	12	12	68 (30.8)	Orange
AGS-5116	N/A	0.796 (20.2)	0.824 (20.9)	61	1.55	0.250	6.4	11	12	12	73 (33.1)	Purple
AGS-5117	N/A	0.825 (21.0)	0.845 (21.5)	64	1.63	0.250	6.4	11	12	12	76 (34.5)	Red
AGS-5118	N/A	0.846 (21.5)	0.870 (22.1)	64	1.63	0.250	6.4	11	12	12	76 (34.5)	Blue
AGS-5122	AGS-5501	0.921 (23.4)	0.937 (23.8)	66	1.68	0.250	6.4	12	9	9	81 (36.7)	Black
AGS-5125	AGS-5504	0.987 (25.1)	1.005 (25.5)	69	1.75	0.250	6.4	13	9	9	87 (39.5)	Orange
AGS-5130	AGS-5509	1.091 (27.7)	1.118 (28.4)	82	2.08	0.31	7.9	12	6	6	78 (35.4)	Yellow
AGS-5134	AGS-5513	1.176 (29.9)	1.208 (30.7)	82	2.08	0.31	7.9	12	6	6	79 (35.8)	Orange
AGS-5139	AGS-5518	1.315 (33.4)	1.355 (34.4)	88	2.24	0.365	9.3	12	3	3	58 (26.3)	Yellow
AGS-5144	AGS-5523	1.478 (37.5)	1.516 (38.5)	88	2.24	0.365	9.3	13	3	3	64 (29.0)	Purple
AGS-5147	AGS-5526	1.580 (40.1)	1.612 (40.9)	100	2.54	0.365	9.3	14	3	3	78 (35.4)	Green
AGS-5152	AGS-5531	1.753 (44.5)	1.790 (45.5)	100	2.54	0.365	9.3	15	3	3	83 (37.6)	Orange

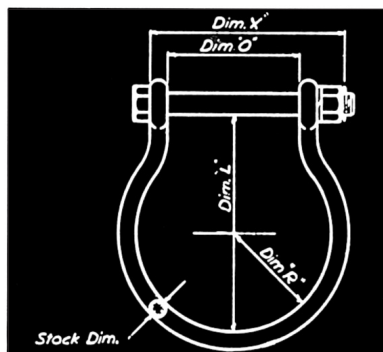
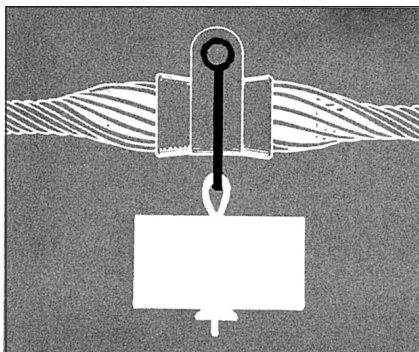
NOTE: Add SE to catalog number to add Socket Eye. **Example:** (AGS-5130SE).

Add YC to catalog number to add Y-Clevis Eye. **Example:** (AGS-5130YC).

Add CE to catalog number to add Clevis Eye. **Example:** (AGS-5130CE).

ARMOR-GRIP® SUSPENSION (AGS) FITTINGS

Hold Down Weight Shackles



Ordering Information

For Hold Down Weight Shackles, order directly from:

Hughes Brothers, Inc.
210 North 13th Street
P.O. Box 191
Seward, Nebraska 68424
(402) 643 2991

Price and delivery information available from Hughes Brothers, Inc. upon request.

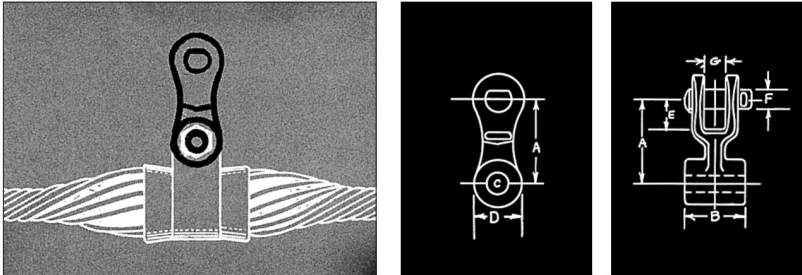
ARMOR-GRIP® Suspension Conductor Range		Hughes Brothers Stock Number†	Bolt Diameter	Stock Dim.	Dim. “X”	Dim. “O”	Dim. “L”	Dim. “R”	Maximum Hold Down Weight	
in (mm)			in (mm)							lb (kN)
Minimum	Maximum									
0.482 (12.2)	0.750 (19.1)	1888.2	5/8 (15.9)	1/2 (12.7)	4-3/8 (111.1)	2-3/8 (60.3)	4-7/8 (123.8)	1-7/8 (47.6)	300 (136.1)	
0.751 (19.1)	0.907 (23.0)	1888.3	5/8 (15.9)	1/2 (12.7)	4-3/4 (130.2)	2-3/4 (69.9)	5-3/8 (136.5)	2-3/8 (60.3)	300 (136.1)	
0.908 (23.1)	1.005 (25.6)	1888.4	5/8 (15.9)	1/2 (12.7)	5-1/8 (130.2)	3-1/8 (79.4)	5-1/2 (139.7)	2-1/2 (63.5)	300 (136.1)	
1.006 (25.6)	1.208 (30.7)	1888.5	5/8 (15.9)	1/2 (12.7)	5-3/4 (146.1)	3-3/4 (95.3)	6-1/8 (155.6)	2-3/4 (69.9)	300 (136.1)	
1.209 (30.7)	1.355 (34.4)	1888.6	3/4 (19.1)	5/8 (15.9)	6 (152.4)	3-3/4 (95.3)	6-1/4 (158.8)	3 (76.2)	800 (362.8)	
1.356 (34.4)	1.557 (39.5)	1888.7	3/4 (19.1)	5/8 (15.9)	6-1/2 (165.1)	4-1/4 (108.0)	6-1/2 (165.1)	3 (76.2)	800 (362.8)	
1.558 (39.6)	1.828 (46.4)	1888.8	3/4 (19.1)	5/8 (15.9)	7-1/8 (181.0)	4-7/8 (123.8)	7-1/4 (184.2)	3-1/4 (82.6)	800 (362.8)	

† Each assembly consists of a shackle body and hex-head bolt, lockwasher, nut, and Cotter Key.

* SPECIAL PRODUCT sold by Hughes Brothers, Inc., Seward, Nebraska.

ARMOR-GRIP® SUSPENSION (AGS) FITTINGS

Clevis Eye

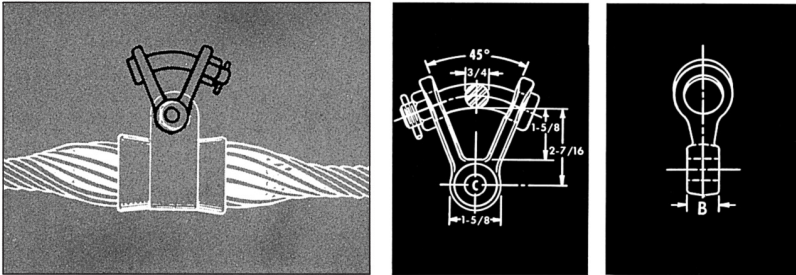


Ordering Information

Catalog Number	Conductor Diameter Range		General Dimensions							Vertical Ultimate Strength	Weight per 100 units
	in (mm)		A	B	C	D	E	F	G		
	Minimum	Maximum	in (mm)							lb (kN)	lb (kg)
CE-5259	0.272 (6.9)	0.750 (19.1)	3-1/8 (79.4)	1/2 (12.7)	11/16 (17.5)	1-1/2 (38.1)	1-1/2 (38.1)	5/8 (15.9)	13/16 (20.6)	15,000 (66.7)	104 (47.2)
CE-5261	0.751 (19.1)	1.005 (25.5)	3-1/8 (79.4)	3/4 (19.1)	11/16 (17.5)	1-1/2 (38.1)	1-1/2 (38.1)	5/8 (15.9)	13/16 (20.6)	20,000 (89.0)	104 (47.2)
CE-5105	1.006 (25.6)	1.557 (39.5)	3-1/8 (79.4)	1-1/16 (27.0)	13/16 (20.6)	1-1/2 (38.1)	1-1/2 (38.1)	5/8 (15.9)	13/16 (20.6)	25,000 (111.2)	178 (80.7)
CE-5106	1.558 (39.6)	2.233 (56.7)	3-1/8 (79.4)	2-1/8 (54.0)	13/16 (20.6)	1-1/2 (38.1)	1-1/2 (38.1)	5/8 (15.9)	13/16 (20.6)	25,000 (111.2)	178 (80.7)

ARMOR-GRIP® SUSPENSION (AGS) FITTINGS

Y-Clevis Eye

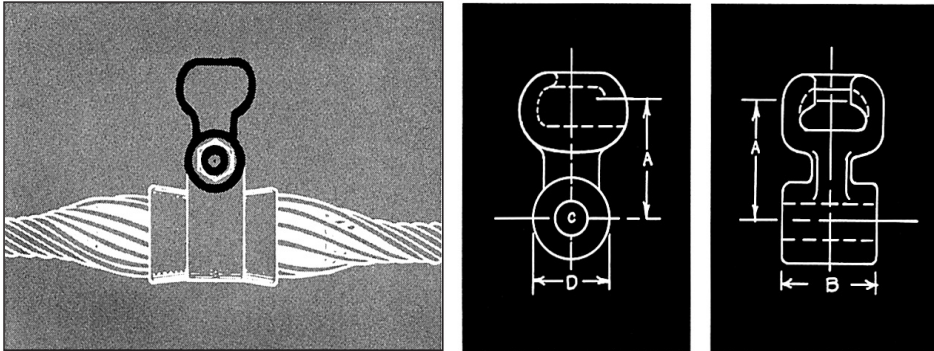


Ordering Information

Catalog Number	Conductor Diameter Range		General Dimensions		Vertical Ultimate Strength
			A	B	
	in (mm)		in (mm)		lb (kN)
	Minimum	Maximum			
YC-5206	0.272 (6.9)	0.750 (19.1)	5/8 (15.9)	11/16 (17.5)	15,000 (66.7)
YC-5207	0.751 (19.1)	1.005 (25.5)	3/4 (19.1)	11/16 (17.5)	20,000 (89.0)
YC-5209	1.006 (25.6)	1.557 (39.5)	1-1/16 (27.0)	13/16 (20.6)	25,000 (111.2)
YC-5211	1.558 (39.6)	2.233 (56.7)	2-1/8 (54.0)	13/16 (20.6)	25,000 (111.2)

ARMOR-GRIP® SUSPENSION (AGS) FITTINGS

Socket Eye



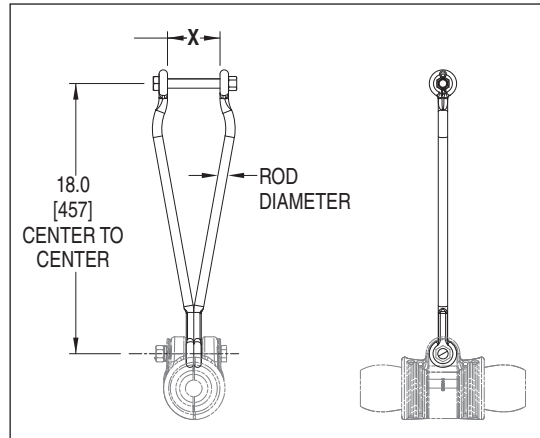
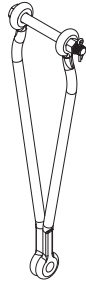
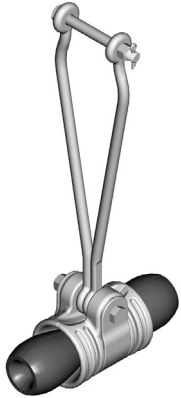
Ordering Information

Catalog Number	Conductor Diameter Range		General Dimensions				Vertical Ultimate Strength	Weight per 100 units
			A	B	C	D		
	in (mm)		in (mm)				lb (kN)	lb (kg)
	Minimum	Maximum						
SE-5150	0.272 (6.9)	0.750 (19.1)	2-5/16 (58.7)	1/2 (12.7)	11/16 (17.5)	1-1/2 (38.1)	15,000 (66.7)	165 (74.8)
SE-5152	0.751 (19.1)	1.005 (25.5)	2-5/16 (58.7)	3/4 (19.1)	11/16 (17.5)	1-1/2 (38.1)	25,000 (111.2)	165 (74.8)
SE-5154	1.006 (25.6)	1.557 (39.5)	2-5/16 (58.7)	1-1/16 (27.0)	13/16 (20.6)	1-1/2 (38.1)	25,000 (111.2)	178 (80.7)
SE-5155	1.558 (39.6)	2.233 (56.7)	2-5/16 (58.7)	2-1/8 (54.0)	13/16 (20.6)	1-1/2 (38.1)	30,000 (133.4)	178 (80.7)

NOTE: The options above are all for use with insulators per ANSI class spec C-29.2-71 52-3 and 52-5. For other options see the Transmission Line String Hardware Catalog.

ARMOR-GRIP® SUSPENSION (AGS) FITTINGS

Vertical Building Link



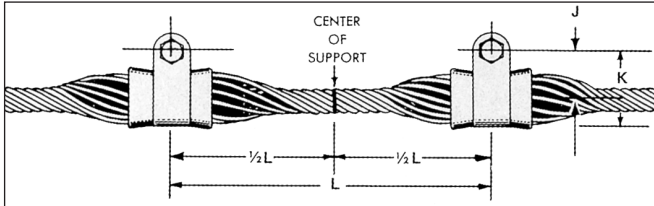
X = This dimension is sized appropriately for the corresponding ARMOR-GRIP® Suspension (AGS) unit. Dimensions of the AGS unit can be found on page 12.

Catalog Number	Conductor Diameter Range		Rod Diameter	Bolt Diameter	Center to Center	Rated Strength (per Sub-Conductor)
	in (mm)		in (mm)			lb (kN)
	Minimum	Maximum				
VBL-04	0.751 (19.0)	0.907 (23.0)	5/8 (15.8)	5/8 (15.8)	18 (457)	20,000 (88.9)
VBL-05	0.908 (23.0)	1.005 (25.5)	5/8 (15.8)	5/8 (15.8)	18 (457)	20,000 (88.9)
VBL-06	1.006 (25.5)	1.208 (30.6)	5/8 (15.8)	5/8 (15.8)	18 (457)	25,000 (111.2)
VBL-07	1.209 (30.6)	1.355 (34.4)	3/4 (19.0)	3/4 (19.0)	18 (457)	30,000 (133.4)
VBL-08	1.356 (34.4)	1.557 (39.5)	3/4 (19.0)	3/4 (19.0)	18 (457)	30,000 (133.4)
VBL-09	1.558 (39.5)	1.882 (47.8)	3/4 (19.0)	3/4 (19.0)	18 (457)	30,000 (133.4)
VBL-10	1.883 (47.8)	2.233 (56.7)	3/4 (19.0)	3/4 (19.0)	18 (457)	30,000 (133.4)

Also available in 12" vertical spacing. Add -12 to catalog number (**Example:** VBL-06-12).

Each assembly consists of two links, one bolt for top AGS, one lock washer and one locknut.

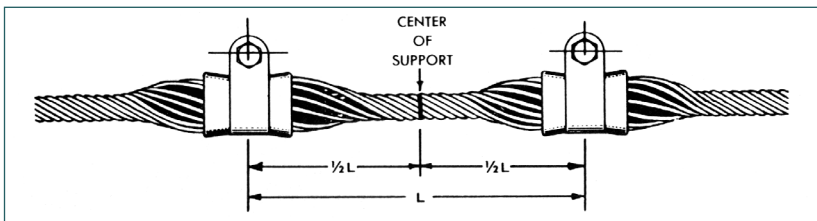
ARMOR-GRIP® SUSPENSION (AGS) DOUBLE



Specifications

Conductor Range		Dimensions			Vertical Ultimate Strength
		J	K	L	
in (mm)		in (mm)			lb (kN)
Minimum	Maximum				
0.543 (13.8)	0.619 (15.7)	1-15/16 (25.4)	3-1/4 (76.2)	12 (304.8)	20,000 (88.9)
0.620 (15.7)	0.645 (16.4)	1-15/16 (25.4)	3-1/4 (76.2)	18 (457.2)	20,000 (88.9)
0.646 (16.4)	0.750 (19.1)	2-5/32 (54.8)	3-9/16 (90.5)	18 (457.2)	30,000 (133.4)
0.751 (19.1)	0.907 (23.0)	2-11/32 (59.5)	4 (101.6)	18 (457.2)	40,000 (177.9)
0.908 (23.1)	1.005 (25.5)	2-17/32 (64.3)	4-3/8 (111.1)	22 (558.8)	40,000 (177.9)
1.006 (25.6)	1.208 (30.7)	2-45/64 (68.7)	4-25/32 (121.4)	26 (660.4)	50,000 (222.4)
1.209 (30.7)	1.355 (34.4)	3-5/32 (80.2)	5-9/16 (141.3)	29 (736.6)	50,000 (222.4)
1.356 (34.4)	1.557 (39.5)	2-31/32 (75.4)	5-1/2 (139.7)	32 (812.8)	50,000 (222.4)
1.558 (39.6)	1.882 (47.8)	3-3/16 (81.0)	6 (152.4)	37 (939.8)	50,000 (222.4)
1.883 (47.8)	2.233 (56.6)	3-1/2 (88.9)	6-17/32 (152.4)	42 (1066.8)	60,000 (266.8)

ARMOR-GRIP® SUSPENSION (AGS) DOUBLE



For Line Angles Between 30° and 60°

Catalog Number		Conductor Diameter Range		AGS® Rods				Hardware Sets per Carton	Rod & Hardware per Carton	Color Code
Standard	EHV (345kV and above)			Length	Rod	Rods per Set	Sets per Carton			
		in (mm)							in (m)	
		Minimum	Maximum						lb (kg)	
AGS-5808	N/A	0.607 (15.4)	0.619 (15.7)	58 (1.5)	0.182 (4.6)	11	18	36	92 (41.7)	Purple
AGS-5809	N/A	0.620 (15.7)	0.645 (16.4)	66 (1.7)	0.182 (4.6)	12	18	36	92 (41.7)	Red
AGS-5810	N/A	0.646 (16.4)	0.673 (17.1)	72 (1.8)	0.204 (5.2)	11	15	30	98 (44.5)	Blue
AGS-5811	N/A	0.674 (17.1)	0.690 (17.5)	72 (1.8)	0.204 (5.2)	11	15	30	100 (45.4)	Green
AGS-5812	N/A	0.691 (17.6)	0.710 (18.1)	72 (1.8)	0.204 (5.2)	12	15	30	105 (47.6)	Yellow
AGS-5813	N/A	0.711 (18.1)	0.731 (18.6)	72 (1.8)	0.204 (5.2)	12	15	30	105 (47.6)	Black
AGS-5814	N/A	0.732 (18.6)	0.750 (19.1)	72 (1.8)	0.204 (5.2)	10	12	30	105 (47.6)	White
AGS-5815	N/A	0.751 (19.1)	0.768 (19.5)	78 (2.0)	0.25 (6.4)	11	12	24	110 (49.9)	Brown
AGS-5816	N/A	0.769 (19.5)	0.795 (20.2)	78 (2.0)	0.25 (6.4)	11	12	24	110 (49.9)	Orange
AGS-5817	N/A	0.796 (20.2)	0.824 (20.9)	78 (2.0)	0.25 (6.4)	11	12	24	114 (51.7)	Purple
AGS-5818	N/A	0.825 (21.0)	0.845 (21.5)	82 (2.1)	0.25 (6.4)	11	12	24	119 (53.4)	Red
AGS-5819	N/A	0.846 (21.5)	0.870 (22.1)	82 (2.1)	0.25 (6.4)	11	12	24	119 (53.4)	Blue
AGS-5820	N/A	0.871 (22.1)	0.893 (22.7)	82 (2.1)	0.25 (6.4)	11	12	24	126 (57.2)	Green
AGS-5821	N/A	0.894 (22.7)	0.907 (23.0)	82 (2.1)	0.25 (6.4)	12	12	24	126 (57.2)	Green
AGS-5822	N/A	0.908 (23.1)	0.920 (23.4)	90 (2.3)	0.25 (6.4)	12	9	18	133 (60.3)	Yellow
AGS-5823	AGS-5856	0.921 (23.4)	0.937 (23.8)	90 (2.3)	0.25 (6.4)	12	9	18	110 (49.9)	Black

Thermal Rating: The ARMOR-GRIP® Suspension (AGS) Double is designed for 200°C continuous conductor temperature.

ARMOR-GRIP® SUSPENSION (AGS) DOUBLE CONTINUED

For Line Angles Between 30° and 60°

Catalog Number		Conductor Diameter Range		AGS® Rods				Hardware Sets per Carton	Rod & Hardware per Carton	Color Code
Standard	EHV (345kV and above)			Length	Rod	Rods per Set	Sets per Carton		lb (kg)	
		in (mm)	in (mm)							
		Minimum	Maximum	in (m)						
AGS-5824	N/A	0.938 (23.8)	0.962 (24.4)	90 (2.3)	0.25 (6.4)	12	9	18	110 (49.9)	White
AGS-5825	N/A	0.963 (24.4)	0.986 (25.0)	90 (2.3)	0.25 (6.4)	13	9	18	115 (52.2)	Brown
AGS-5826	AGS-5859	0.987 (25.1)	1.005 (25.5)	90 (2.3)	0.25 (6.4)	13	9	18	114 (51.7)	Orange
AGS-5827	N/A	1.006 (25.6)	1.022 (26.0)	108 (2.7)	0.31 (7.9)	11	6	12	117 (53.1)	Purple
AGS-5828	N/A	1.023 (26.0)	1.040 (26.4)	108 (2.7)	0.31 (7.9)	11	6	12	117 (53.1)	Red
AGS-5829	N/A	1.041 (26.4)	1.074 (27.3)	108 (2.7)	0.31 (7.9)	11	6	12	117 (53.1)	Blue
AGS-5830	N/A	1.075 (27.3)	1.090 (27.7)	108 (2.7)	0.31 (7.9)	12	6	12	122 (55.3)	Green
AGS-5831	AGS-5864	1.091 (27.7)	1.118 (28.4)	108 (2.7)	0.31 (7.9)	12	6	12	119 (53.4)	Yellow
AGS-5832	N/A	1.119 (28.4)	1.136 (28.9)	108 (2.7)	0.31 (7.9)	12	6	12	123 (55.8)	Black
AGS-5833	N/A	1.137 (28.9)	1.152 (29.3)	108 (2.7)	0.31 (7.9)	12	6	12	123 (55.8)	White
AGS-5834	N/A	1.153 (29.3)	1.175 (29.9)	108 (2.7)	0.31 (7.9)	12	6	12	123 (55.8)	Brown
AGS-5835	AGS-5868	1.176 (29.9)	1.208 (30.7)	108 (2.7)	0.31 (7.9)	12	6	12	119 (53.4)	Orange
AGS-5836	N/A	1.209 (30.7)	1.226 (31.1)	117 (3.0)	0.37 (9.3)	11	3	6	86 (39.0)	Purple
AGS-5837	N/A	1.227 (31.2)	1.259 (32.0)	117 (3.0)	0.37 (9.3)	11	3	6	86 (39.0)	Red
AGS-5838	N/A	1.260 (32.0)	1.286 (32.7)	117 (3.0)	0.37 (9.3)	12	3	6	90 (40.8)	Blue
AGS-5839	N/A	1.287 (32.7)	1.314 (33.4)	117 (3.0)	0.37 (9.3)	12	3	6	90 (40.8)	Green
AGS-5840	AGS-5873	1.315 (33.4)	1.355 (34.4)	117 (3.0)	0.37 (9.3)	12	3	6	126 (57.16)	Yellow
AGS-5841	N/A	1.356 (34.4)	1.394 (35.4)	120 (3.0)	0.37 (9.3)	12	3	6	96 (43.5)	Black
AGS-5842	N/A	1.395 (35.4)	1.416 (36.0)	120 (3.0)	0.37 (9.3)	13	3	6	100 (45.4)	White
AGS-5843	N/A	1.417 (36.0)	1.442 (36.6)	120 (3.0)	0.37 (9.3)	13	3	6	100 (45.4)	Brown
AGS-5844	N/A	1.443 (36.7)	1.477 (37.5)	120 (3.0)	0.37 (9.3)	13	3	6	100 (45.4)	Orange

Thermal Rating: The ARMOR-GRIP® Suspension Double is designed for 200°C continuous conductor temperature.

**ARMOR-GRIP® SUSPENSION (AGS) DOUBLE** CONTINUED

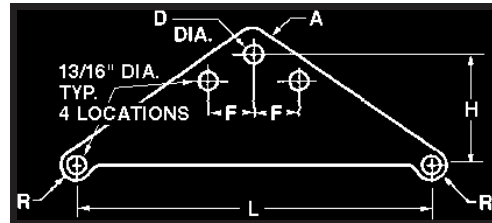
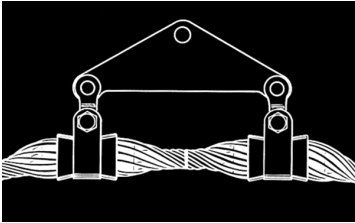
For Line Angles Between 30° and 60°

Catalog Number		Conductor Diameter Range		AGS® Rods				Hardware Sets per Carton	Rod & Hardware per Carton	Color Code
Standard	EHV (345kV and above)			Length	Rod	Rods per Set	Sets per Carton			
		in (mm)	in (mm)							
		Minimum	Maximum	in (m)					lb (kg)	
AGS-5845	AGS-5878	1.478 (37.5)	1.516 (38.5)	120 (3.0)	0.37 (9.3)	13	3	6	100 (45.4)	Purple
AGS-5846	N/A	1.517 (38.5)	1.557 (39.5)	120 (3.0)	0.37 (9.3)	13	3	6	100 (45.4)	Red
AGS-5847	N/A	1.558 (39.6)	1.579 (40.1)	137 (3.5)	0.37 (9.3)	14	3	6	125 (56.7)	Blue
AGS-5848	AGS-5881	1.580 (40.1)	1.612 (40.9)	137 (3.5)	0.37 (9.3)	14	3	6	125 (56.7)	Green
AGS-5849	N/A	1.613 (41.0)	1.650 (41.9)	137 (3.5)	0.37 (9.3)	14	3	6	126 (57.2)	Yellow
AGS-5850	N/A	1.651 (41.9)	1.688 (42.9)	137 (3.5)	0.37 (9.3)	15	3	6	131 (59.4)	Black
AGS-5851	N/A	1.689 (42.9)	1.711 (43.5)	137 (3.5)	0.37 (9.3)	15	3	6	131 (59.4)	White
AGS-5852	N/A	1.712 (43.5)	1.752 (44.5)	137 (3.5)	0.37 (9.3)	15	3	6	131 (59.4)	Brown
AGS-5853	AGS-5886	1.753 (44.5)	1.790 (45.5)	137 (3.5)	0.37 (9.3)	15	3	6	131 (59.4)	Orange
AGS-5854	N/A	1.791 (43.5)	1.828 (44.5)	137 (3.5)	0.37 (9.3)	15	3	6	131 (59.4)	Purple

Thermal Rating: The ARMOR-GRIP® Suspension Double is designed for 200°C continuous conductor temperature.

ARMOR-GRIP® SUSPENSION (AGS) DOUBLE FITTINGS

Yoke Plate

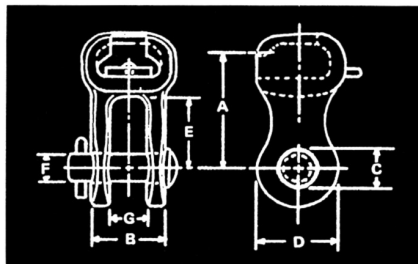
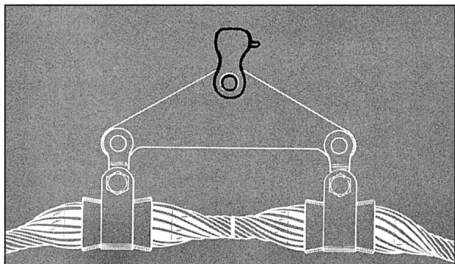


Ordering Information

Catalog Number	Dimensions						Plate Thickness	Ultimate Strength
	L	H	D	R	A	F		
	in (mm)						in (mm)	lb (kN)
YP-5907	12 (304.8)	4 (101.6)	13/16 (20.6)	13/16 (20.6)	1 (25.4)	-	1/2 (2.7)	30,000 (133.4)
YP-5908	18 (457.2)	6-1/4 (158.8)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	3-1/2 (88.9)	5/8 (15.9)	40,000 (177.9)
YP-5909	22 (558.8)	7-1/4 (184.2)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	4-3/16 (106.4)	5/8 (15.9)	40,000 (177.9)
YP-5910	26 (660.4)	8-1/2 (215.9)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	4-15/16 (125.4)	3/4 (19.1)	50,000 (222.4)
YP-5911	29 (736.6)	9-1/2 (241.3)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	5-1/2 (139.7)	3/4 (19.1)	50,000 (222.4)
YP-5912	32 (812.8)	10-1/2 (266.7)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	6-1/8 (155.6)	3/4 (19.1)	50,000 (222.4)
YP-5913	37 (939.8)	11-3/4 (298.5)	1 (25.4)	15/16 (23.8)	1-1/4 (31.8)	7-1/16 (179.4)	3/4 (19.1)	50,000 (222.4)

ARMOR-GRIP® SUSPENSION (AGS) DOUBLE FITTINGS

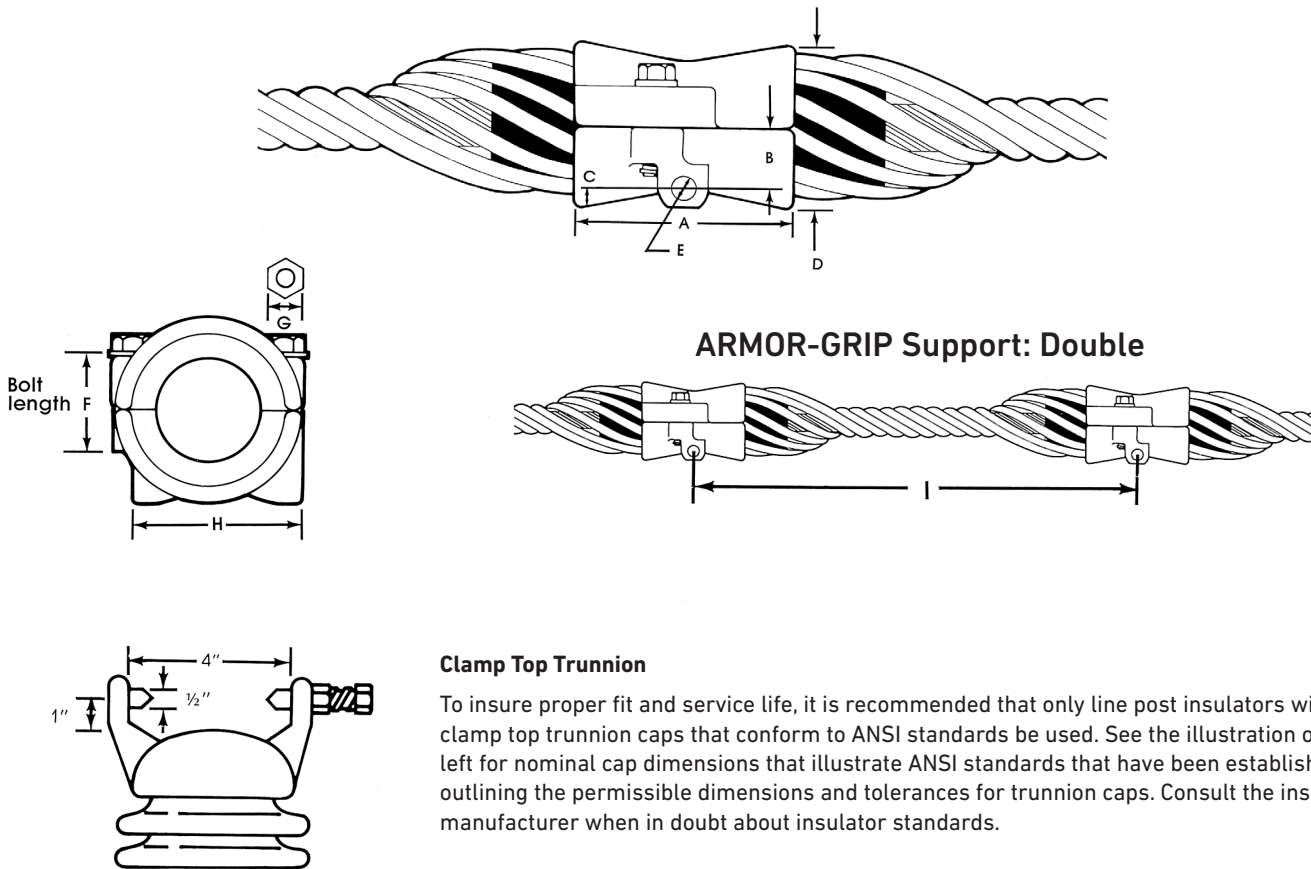
Socket Clevis



Ordering Information

Catalog Number	General Dimensions							Ultimate Strength	For Use with Specific Strength Insulators	
	A	B	C	D	E	F	G		lb (kN)	
	in (mm)							lb (kN)	Minimum	Maximum
SC-5194	2-5/8 (66.7)	1-9/16 (39.7)	11/16 (17.5)	1-3/4 (44.5)	1-5/8 (41.3)	5/8 (15.9)	13/16 (20.6)	30,000 (133.4)	15,000 (66.7)	30,000 (133.4)
SC-50	3-1/4 (82.6)	-	-	2-3/16 (55.6)	2-1/16 (52.4)	7/8 (22.2)	1-1/8 (28.6)	50,000 (222.4)	36,000 (160.1)	50,000 (222.4)

ARMOR-GRIP® SUPPORT (AGS)



Specifications

Conductor Diameter Range		Dimensions								
in (mm)		in (mm)								
Minimum	Maximum	A	B	C	D	E	F	G	H	I
0.646 (16.4)	0.750 (19.5)	3-3/4 (95.3)	5/8 (15.9)	53/64 (21.0)	2-3/4 (69.9)	19/32 (15.1)	2 (50.8)	3/4 (19.1)	3-7/8 (98.4)	18 (457.2)
0.751 (19.5)	0.907 (23.0)	4-1/2 (95.3)	3/4 (19.1)	27/32 (21.4)	3-13/64 (81.4)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	18 (457.2)
0.908 (23.0)	1.005 (25.5)	5 (127.0)	1-1/8 (28.6)	21/32 (16.7)	3-19/32 (91.3)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	22 (558.8)
1.006 (25.5)	1.208 (30.7)	5-1/2 (139.7)	1-5/16 (33.3)	13/16 (20.6)	4-3/16 (106.4)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	26 (660.4)
1.209 (30.7)	1.355 (34.4)	6 (152.4)	1-1/2 (38.1)	13/16 (20.6)	4-5/8 (117.5)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	29 (736.6)
1.356 (34.4)	1.557 (39.5)	6-1/2 (165.1)	1-5/8 (41.3)	29/32 (23.0)	5-7/64 (129.8)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	32 (812.8)
1.558 (39.5)	1.828 (46.4)	7 (177.8)	1-15/16 (49.2)	49/64 (19.4)	5-13/32 (137.3)	19/32 (15.1)	2-1/4 (57.2)	3/4 (19.1)	3-7/8 (98.4)	37 (939.8)

The dimensions above are approximates for design information. Consult ANSI specification C29.7-1977 for exact dimensions.

ARMOR-GRIP® SUPPORT (AGS)



Ordering Information

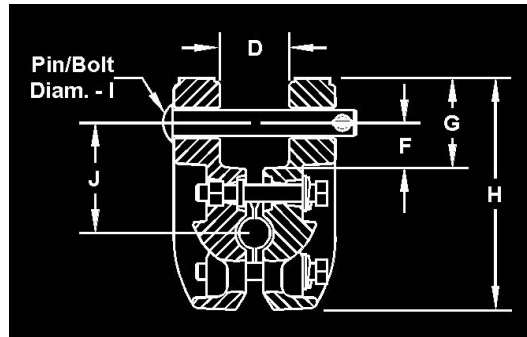
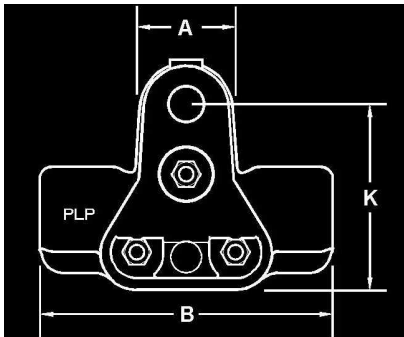
Catalog Number	Conductor Diameter Range		AGS® Rods				AGS Hardware Sets per Carton	AGS Rods & Hardware per Carton	Color Code
			Length	Rod Diameter	Rods per Set	Sets per Carton			
	in (mm)							lb (kg)	
	Minimum	Maximum		in (m)					
AGS-5207	0.607 (15.4)	0.619 (15.7)	34 (0.86)	0.182 (4.6)	11	18	18	55 (24.9)	Purple
AGS-5208	0.62 (15.7)	0.645 (16.4)	38 (0.97)	0.182 (4.6)	12	18	18	58 (26.3)	Red
AGS-5209	0.646 (16.4)	0.673 (17.1)	41 (1.04)	0.204 (5.2)	11	15	15	61 (27.7)	Blue
AGS-5210	0.674 (17.1)	0.69 (17.5)	41 (1.04)	0.204 (5.2)	11	15	15	61 (27.7)	Green
AGS-5211	0.691 (17.6)	0.71 (18.0)	41 (1.04)	0.204 (5.2)	12	15	15	63 (28.6)	Yellow
AGS-5212	0.711 (18.1)	0.731 (18.6)	41 (1.04)	0.204 (5.2)	12	15	15	63 (28.6)	Black
AGS-5213	0.732 (18.6)	0.775 (19.1)	41 (1.04)	0.204 (5.2)	12	15	15	63 (28.6)	White
AGS-5214	0.751 (19.1)	0.768 (19.5)	45 (1.14)	0.25 (6.4)	10	12	12	65 (29.5)	Brown
AGS-5215	0.769 (19.5)	0.795 (20.2)	45 (1.14)	0.25 (6.4)	11	12	12	68 (30.8)	Orange
AGS-5216	0.796 (20.2)	0.824 (20.9)	45 (1.14)	0.25 (6.4)	11	12	12	68 (30.8)	Purple
AGS-5217	0.825 (21.0)	0.845 (21.5)	48 (1.22)	0.25 (6.4)	11	12	12	70 (31.8)	Red
AGS-5218	0.846 (21.5)	0.87 (22.1)	48 (1.22)	0.25 (6.4)	11	12	12	70 (31.7)	Blue

Right-hand lay standard.

Explanatory Notes:

- (1) Reference general dimensional information for physical dimensions other than length.
- (3) ARMOR-GRIP® Suspension (AGS) weights listed are approximate and include packaging.
- (4) An ARMOR-GRIP® Support (AGS) unit is comprised of a set of rods with a matched hardware assembly. The rods and assemblies are packaged in separate but corresponding cartons.

CUSHION-GRIP® SUSPENSION (CGS)



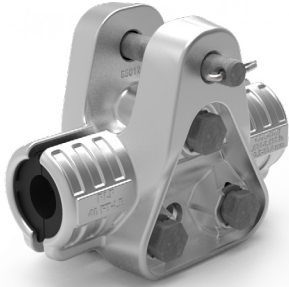
Specifications

Catalog Number	Dimensions									
	in (mm)									
	A	B	D		F	G	H	I	J	K
			Minimum	Maximum						
CGS-1095HT	2.00 (51)	6.5 (165)	0.80 (20.3)	1.20 (30.5)	1.00 (25.4)	2.00 (51)	4.85 (123)	5/8 (15.9)	2.40 (61)	3.85 (98)
CGS-1096HT	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)
CGS-1097HT	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)
CGS-1098HT	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-1120HT - CGS-1128HT	2.50 (63.5)	9.20 (234)	1.25 (32.8)	1.80 (45.7)	1.25 (32.8)	2.50 (63.5)	7.60 (193)	5/8 (15.9)	3.50 (89)	6.35 (161.3)

See diagram above for CGS dimensions for assistance in choosing the appropriate mating hardware part numbers.



CUSHION-GRIP® SUSPENSION (CGS)



Ordering Information

Catalog Number	Conductor Diameter Range		Weight	Carton Quantity	Vertical Ultimate Load
	in (mm)				
	Minimum	Maximum	lb (kg)	Units	lb (kN)
CGS-1095HT	0.312 (7.9)	0.608 (15.4)	2.5 (1.1)	10	15,000 (67)
CGS-1096HT	0.609 (15.5)	0.883 (22.4)	4 (1.8)	3	25,000 (111.2)
CGS-1097HT	0.884 (22.5)	1.196 (30.4)	5.5 (2.5)		
CGS-1098HT	1.197 (30.4)	1.545 (39.2)	6.7 (3.0)		
CGS-1120HT	1.546 (39.2)	1.569 (39.8)	9.5 (4.3)	3	30,000 (133.4)
CGS-1121HT	1.570 (39.8)	1.639 (41.6)			
CGS-1122HT	1.640 (41.7)	1.707 (43.3)			
CGS-1123HT	1.708 (43.4)	1.770 (45.0)			
CGS-1124HT	1.772 (45.0)	1.833 (46.5)			
CGS-1125HT	1.834 (46.6)	1.892 (48.0)			
CGS-1126HT	1.893 (48.1)	1.948 (49.5)			
CGS-1127HT	1.949 (49.5)	2.001 (50.8)			
CGS-1128HT	2.002 (50.8)	2.052 (52.1)			

NOTE: Add CE, YC or SE to catalog number to include Clevis-Eye, Y-Clevis or Socket-Eye (**Example:** CGS-1097HTSE for Socket-Eye). For bolt, nut and cotter in place of pin, add BNK to catalog number (**Example:** CGS-1087HTBNK)

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

Hold Down Weight Shackles



Ordering Information

For Hold Down Weight Shackles, order directly from:

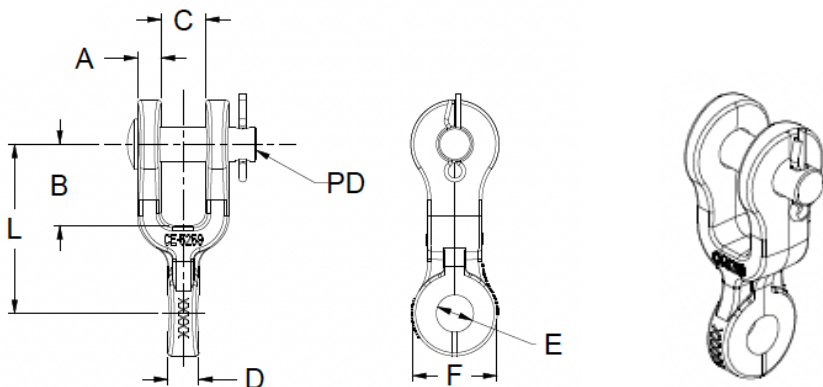
Hughes Brothers, Inc.
210 North 13th Street
P.O. Box 191
Seward, Nebraska 68424
(402) 643 2991

Price and delivery information available from Hughes Brothers, Inc. upon request.

Conductor Range		Hughes Brothers	Hubbell
in (mm)			
Minimum	Maximum		
0.609 (15.5)	1.196 (30.4)	1888.5	88016 - 2000
1.197 (30.4)	1.545 (39.2)	1888.8	88018 - 2000
1.546 (39.3)	2.052 (52.1)	1888.8	N/A

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

Clevis Eye

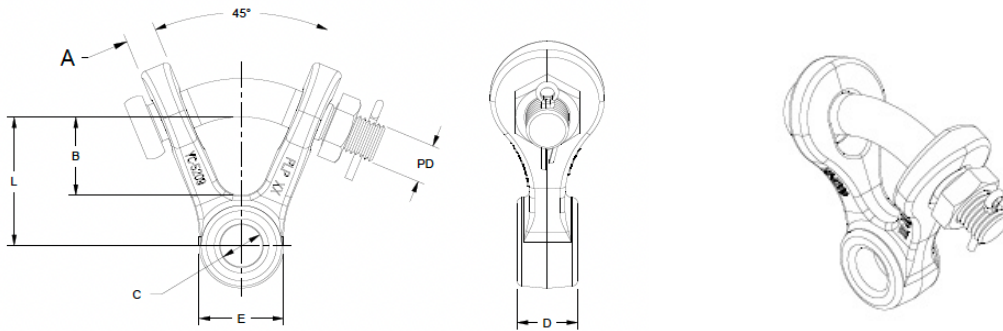


Ordering Information

Catalog Number	General Dimensions								Vertical Ultimate Strength	Weight per 100 units
	A	B	C	D	E	F	L	PD		
	in (mm)									
CE-5105	7/16 (11.2)	1-1/2 (38.1)	13/16 (20.6)	1-1/16 (26.9)	13/16 (20.6)	1-1/2 (38.1)	3-1/8 (79.4)	5/8 (16)	25,000 (111.2)	178 (47.6)
CE-5259 (for CGS-1095)	7/16 (11.2)	1-1/2 (38.1)	13/16 (20.6)	1/2 (12.7)	11/16 (17.5)	1-1/2 (38.1)	3-1/8 (79.4)	5/8 (16)	15,000 (66.7)	104 (47.2)
CE-5107 (for CGS-1096, 1097, 1098)	7/16 (11.2)	1-1/2 (38.1)	13/16 (20.6)	1 (25.4)	11/16 (17.5)	1-1/2 (38.1)	3-1/8 (79.4)	5/8 (16)	25,000 (111.2)	125 (56.7)

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

Y-Clevis Eye

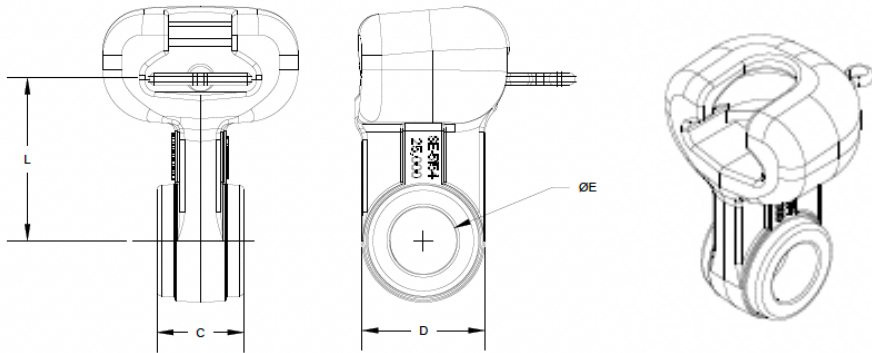


Ordering Information

Catalog Number	General Dimensions							Vertical Ultimate Strength	Weight per 100 units
	A	B	C	D	E	L	PD		
	in (mm)							lb (kN)	lb (kg)
YC-5212	19/32 (15)	1-1/2 (38.1)	11/16 (17.5)	1 (25.4)	1-5/8 (41.3)	2-1/2 (63.5)	3/4 (19)	25,000 (111.2)	2.03 (0.92)
YC-5206	19/32 (15)	1-3/4 (44.5)	11/16 (17.5)	5/8 (15.9)	1-5/8 (41.3)	2-19/32 (66)	3/4 (19)	15,000 (67.7)	1.9 (0.86)

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

Socket Eye



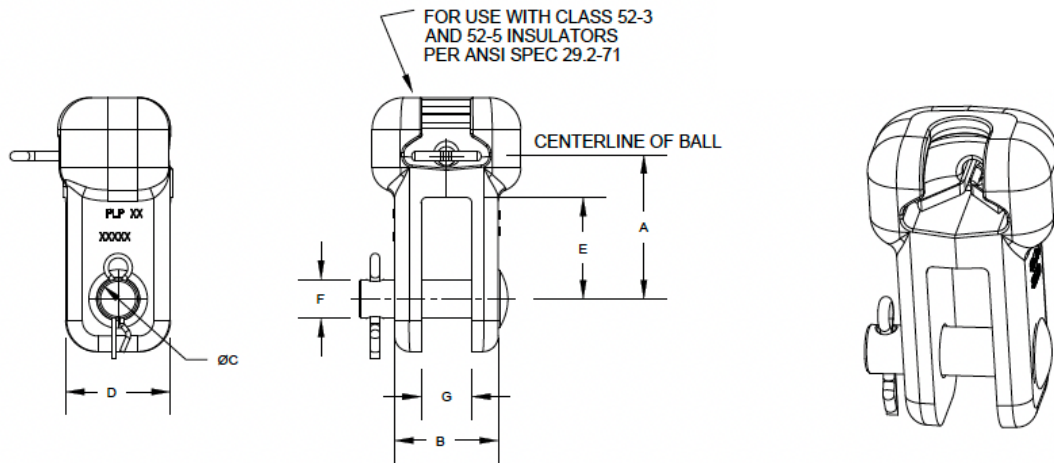
Ordering Information

Catalog Number	General Dimensions				Vertical Ultimate Strength	Weight per 100 units	For use with Insulators ANSI Class SPEC C-29.2-71
	C	D	E	L			
	in (mm)				lb (kN)	lb (kg)	
SE-5150 (for CGS-1095)	1/2 (12.7)	1-3/4 (44.5)	11/16 (17.5)	2-5/16 (58.8)	15,000 (67.7)	165 (75)	52-3 & 52-5
SE-5156 (for CGS-1096, 1097, 1098)	1 (25.4)	1-1/2 (38.1)	11/16 (17.5)	1-15/16 (52.3)	25,000 (111.2)	144 (65)	
SE-5157 (for CGS-1120 - 1127)	1-1/8 (28.6)	1-3/4 (44.5)	11/16 (17.5)	2-1/16 (52.3)	30,000 (133.5)	168 (76)	

NOTE: The options above are all for use with insulators per ANSI class SPEC C-29.2-71 52-3 and 52-5. For other options see the Transmission Line String Hardware Catalog.

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

Socket Clevis



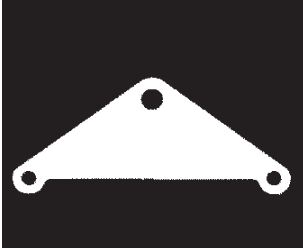
Ordering Information

Catalog Number	General Dimensions							Vertical Ultimate Strength	Weight per 100 units	For use with Insulators ANSI Class SPEC C-29.2-71
	A	B	C	D	E	F	G			
	in (mm)							lb (kN)	lb (kg)	
SC-5194	2-5/8 (66.7)	1-9/16 (39.7)	11/16 (17.5)	1-3/4 (44.5)	1-5/8 (41.3)	5/8 (15.9)	13/16 (20.6)	30,000 (133.5)	200 (90.7)	52-3 & 52-5

NOTE: The options above are all for use with insulators per ANSI class spec C-29.2-71 52-3 and 52-5. For other options see the Transmission Line String Hardware Catalog.

CUSHION-GRIP® SUSPENSION (CGS) FITTINGS

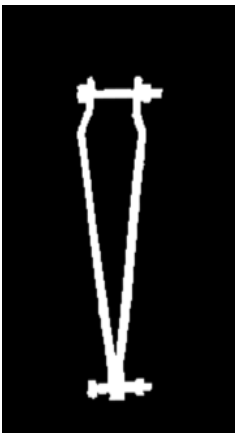
Yoke Plate



Ordering Information

Catalog Number	Dimensions						Plate Thickness	Ultimate Strength
	L	H	D	R	A	F		
	in (mm)						in (mm)	lb (kN)
YP-5907	12 (304.8)	4 (101.6)	13/16 (20.6)	13/16 (20.6)	1 (25.4)	-	1/2 (2.7)	30,000 (133.4)

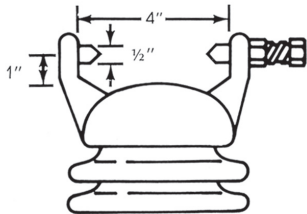
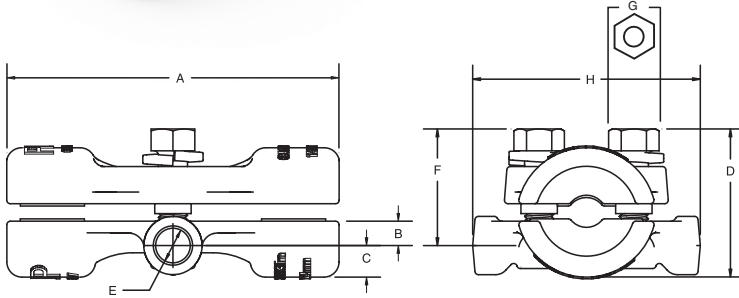
Vertical Bundle Links



Ordering Information

Catalog Number	Conductor Diameter Range		Rod Diameter	Bolt Diameter	Center to Center	Rated Strength (per Sub-Conductor)
	in (mm)		in (mm)			lb (kN)
	Minimum	Maximum				
VBLMS11244 (12")	0.751 (19.0)	0.907 (23.0)	5/8 (15.8)	5/8 (15.8)	18 (457)	30,000 (133.5)
VBLMS11302 (18")	0.908 (23.0)	1.005 (25.5)	5/8 (15.8)	5/8 (15.8)	18 (457)	40,000 (177.9)

CUSHION-GRIP® SUPPORT (CGS)



Clamp Top Trunnion

To insure proper fit and service life, it is recommended that only line post insulators with clamp top trunnion caps that conform to ANSI standards be used. See the illustration on the left for nominal cap dimensions that illustrate ANSI standards that have been established outlining the permissible dimensions and tolerances for trunnion caps. Consult the insulator manufacturer when in doubt about insulator standards.

Specifications

Catalog Number	Dimensions							
	A	B	C	D	E	F	G	H
	in (mm)							
CGS-2101HT	5.7 (144.8)	0.45 (11.4)	0.55 (14.0)	2.4 (61.0)	0.595 (15.1)	2 (50.8)	3/4 (19.1)	3-7/8 (98.4)
CGS-2102HT	6.4 (162.6)	0.75 (19.1)	0.55 (14.0)	3 (76.2)	0.595 (15.1)	2 (50.8)	3/4 (19.1)	3-7/8 (98.4)
CGS-2103HT	6.5 (165.1)	0.75 (19.1)	0.88 (22.4)	3.4 (86.4)	0.595 (15.1)	2.4 (61.0)	3/4 (19.1)	3-7/8 (98.4)

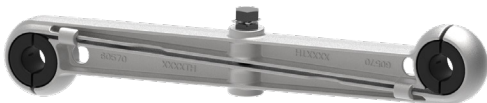
The dimensions above are approximates for design information. Consult ANSI specification C29.7-1977 for exact dimensions.

Ordering Information

Catalog Number	Conductor Range		Nominal Conductor Sizes	Weight/Unit	Standard Carton Quantity
	in (mm)			lb (kg)	
	Minimum	Maximum			
CGS-2101HT	0.564 (14.3)	0.883 (22.4)	226 Kcmil to 477 Kcmil	2.40 (1.1)	3
CGS-2102HT	0.884 (22.4)	1.196 (30.4)	556 Kcmil to 954 Kcmil	3.50 (1.6)	3
CGS-2103HT	1.197 (30.4)	1.504 (38.2)	954 Kcmil to 1590 Kcmil	5.00 (2.3)	3

CUSHION-GRIP® TWIN SPACER

The CUSHION-GRIP Twin Spacer is simple to install and is shipped fully assembled (no loose parts). The break-away bolt provides a clear indication that the proper installation torque has been achieved (no special tools required). Conductor spacing is 18" (457 mm), but also available in 13" (330 mm) spacing.



Thermal Rating: 200°C Continuous

Ordering Information

Catalog Number	Conductor Diameter Range	
	in (mm)	
	Minimum	Maximum
CGTS-0101HT	0.673 (17.1)	0.713 (18.1)
CGTS-0102HT	0.714 (18.1)	0.752 (19.1)
CGTS-0103HT	0.753 (19.1)	0.791 (20.1)
CGTS-0104HT	0.792 (20.1)	0.831 (21.1)
CGTS-0105HT	0.832 (21.1)	0.87 (22.1)
CGTS-0106HT	0.871 (22.1)	0.909 (23.1)
CGTS-0107HT	0.91 (23.1)	0.949 (24.1)
CGTS-0108HT	0.95 (24.1)	0.988 (25.1)
CGTS-0109HT	0.989 (25.1)	1.028 (26.1)
CGTS-0110HT	1.029 (26.1)	1.067 (27.1)
CGTS-0111HT	1.068 (27.1)	1.106 (28.1)
CGTS-0112HT	1.107 (28.1)	1.146 (29.1)
CGTS-0113HT	1.147 (29.1)	1.185 (30.1)
CGTS-0114HT	1.186 (30.1)	1.224 (31.1)
CGTS-0115HT	1.225 (31.1)	1.264 (32.1)

Catalog Number	Conductor Diameter Range	
	in (mm)	
	Minimum	Maximum
CGTS-0116HT	1.265 (32.1)	1.303 (33.1)
CGTS-0117HT	1.304 (33.1)	1.345 (34.2)
CGTS-0118HT	1.346 (34.2)	1.382 (35.1)
CGTS-0119HT	1.383 (35.1)	1.421 (36.1)
CGTS-0120HT	1.422 (36.1)	1.461 (37.1)
CGTS-0121HT	1.462 (37.1)	1.5 (38.1)
CGTS-0122HT	1.501 (38.1)	1.539 (39.1)
CGTS-0123HT	1.54 (39.1)	1.579 (40.1)
CGTS-0124HT	1.58 (40.1)	1.618 (41.1)
CGTS-0125HT	1.619 (41.1)	1.657 (42.1)
CGTS-0126HT	1.658 (42.1)	1.697 (43.1)
CGTS-0127HT	1.698 (43.1)	1.736 (44.1)
CGTS-0128HT	1.737 (44.1)	1.776 (45.1)
CGTS-0129HT	1.777 (45.1)	1.821 (46.3)

For 13 inch spacing, add -13 to catalog number (**Example:** CGTS-0112HT-13)

CUSHION-GRIP® SPACER DAMPER

For standard 18" (457 mm) sub-conductor spacing the catalog numbers are: **CGSDB-X45YZHT**

Where X is 3 for Tri, 4 for Quad, 6 for Hex, and YZ is taken from the conductor range table below.

Example: CGSDB-34529HT is a High Temperature Spacer Damper for a Tri Bundle of conductors within a diameter range of 1.107" to 1.146" (28 - 29 mm).



Ordering Information

YZ	Conductor Range	
	in (mm)	
	Minimum	Maximum
18	0.673 (17)	0.713 (18)
19	0.714 (18)	0.752 (19)
20	0.753 (19)	0.791 (20)
21	0.792 (20)	0.831 (21)
22	0.832 (21)	0.870 (22)
23	0.871 (22)	0.909 (23)
24	0.910 (23)	0.949 (24)
25	0.950 (24)	0.988 (25)
26	0.989 (25)	1.028 (26)
27	1.029 (26)	1.067 (27)
28	1.068 (27)	1.106 (28)
29	1.107 (28)	1.146 (29)
30	1.147 (29)	1.185 (30)
31	1.186 (30)	1.224 (31)
32	1.225 (31)	1.264 (32)

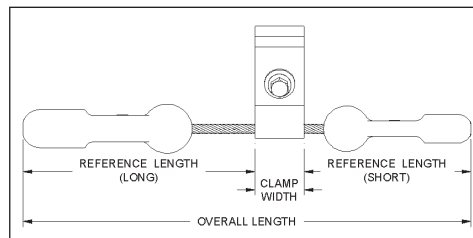
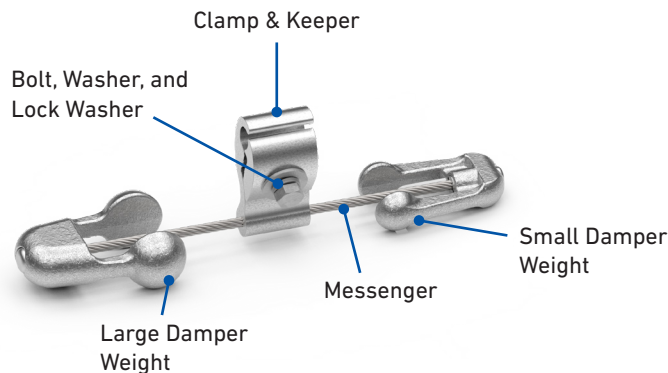
YZ	Conductor Range	
	in (mm)	
	Minimum	Maximum
33	1.265 (32)	1.303 (33)
34	1.304 (33)	1.345 (34)
35	1.346 (34)	1.382 (35)
36	1.383 (35)	1.421 (36)
37	1.422 (36)	1.461 (37)
38	1.462 (37)	1.500 (38)
39	1.501 (38)	1.539 (39)
40	1.540 (39)	1.579 (40)
41	1.580 (40)	1.618 (41)
42	1.619 (41)	1.657 (42)
43	1.658 (42)	1.697 (43)
44	1.698 (43)	1.736 (44)
45	1.737 (44)	1.776 (45)
46	1.777 (45)	1.821 (46)



Catalog Number	Description
00071004	CGSD-200 Spacer Damper installation tool

Contact PLP for other sub-conductor spacings and configurations.

VORTX™ VIBRATION DAMPER



Thermal Rating: 250°C when applied over AGS Rods or Protector Rods

Ordering Information

VORTX™ Vibration Damper Catalog Number

VSD
VORTX
(Stockbridge)
Damper

- **XX**
(Section 1)
Weight Combination
(20, 25, 35, 40, 52, 55)
Based on appropriate impedance
for respective conductor or cable.

- **XX**
(Section 2)
Clamp Code
(16, 20, 25, 32, 40, 50, 61)
Represents the top end
of the clamp range or maximum
accepted diameter in millimeters

- **X**
(Section 3)
Include "B" only for optional
design with break-away bolt.

Catalog Number Example: VSD-4032B

VORTX Damper with a weight combination of 40, a clamp code of 32, and a break-away bolt.

Section 1

Weight Combination Code Number ¹	Conductors		Shield Wire	
	ACCR, LSCC, and ACSS Range		Galvanized Steel and Alumoweld Range	
	in (mm)			
	Minimum	Maximum	Minimum	Maximum
20	0.473 (12.0)	0.720 (18.2)	0.401 (10.2)	0.486 (12.3)
25	0.721 (18.3)	0.857 (21.8)	0.487 (12.4)	0.650 (16.5)
35	0.859 (21.9)	0.983 (24.9)	N/A	N/A
40	0.984 (25.0)	1.335 (33.9)	N/A	N/A
52	1.261 (32.1)	1.762 (44.7)	N/A	N/A
55	1.602 (40.7)	1.929 (49)	N/A	N/A

¹Final selection for weight combination at merging ranges are determined from conductor type and tension.

VSD55 designed for twin bundle 500kV AC Applications and EHV DC. Contact PLP Technical support for final recommendation.

VORTX™ VIBRATION DAMPER

Section 2

Bolt Size and Torque Information						
Clamp Code	Clamp Range		Bolt Thread Size	Wrench Size	Torque	
	in (mm)			in (mm)	N-m	ft-lb
	Minimum	Maximum				
16	0.483 (12.3)	0.612 (15.5)	M12	3/4 (19)	41	30
20	0.612 (15.5)	0.786 (20.0)	M12	3/4 (19)	41	30
25	0.786 (20.0)	0.983 (25.0)	M12	3/4 (19)	41	30
32	0.983 (25.0)	1.261 (32.0)	M12	3/4 (19)	54	40
40	1.261 (32.0)	1.579 (40.1)	M12	3/4 (19)	54	40
50	1.579 (40.1)	1.970 (50.0)	M12	3/4 (19)	54	40
61	1.970 (50.0)	2.422 (61.5)	M12	3/4 (19)	54	40

PROTECTOR RODS



Protector Rods provide a layer of mechanical protection and reinforcement for accessory items such as VORTX Dampers that clamp onto a cable. PLP recommends the use of Protector Rods for all VORTX Dampers that clamp onto a cable. PLP recommends the use of Protector Rods for all VORTX Damper placements on composite core conductors and OPGW if not otherwise on rods. Standard Protector Rods are designed for line voltages of 230 kV and lower. For higher voltage applications, Parrot Bill rod end treatment can be provided - contact PLP for details.

Ordering Information

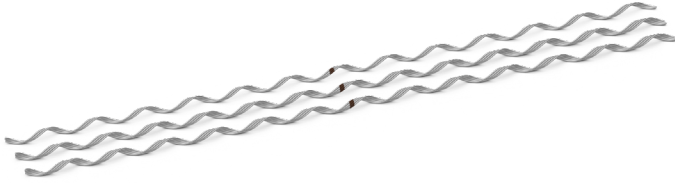
Catalog Number	Number EHV	Conductor Diameter Range		Rod Diameter	Rods per Set	Color Code	Units per Carton	Carton Weight
		in (mm)						lb (kg)
		Minimum	Maximum	in (mm)				
PR-0135	N/A	0.378 (9.6)	0.423 (10.7)	0.121 (3.1)	11	Yellow	50	10 (4.5)
PR-0137	N/A	0.424 (10.8)	0.475 (12.1)	0.121 (3.1)	12	Brown	50	10 (4.5)
PR-0139	N/A	0.476 (12.1)	0.533 (13.5)	0.121 (3.1)	13	Blue	50	14 (6.4)
PR-0141	N/A	0.534 (13.6)	0.585 (14.8)	0.121 (3.1)	14	Green	50	14 (6.4)
PR-0142	N/A	0.586 (14.9)	0.618 (15.6)	0.146 (3.7)	13	Orange	50	21 (9.5)
PR-0144	N/A	0.619 (15.7)	0.667 (16.9)	0.146 (3.7)	14	Purple	50	21 (9.5)
PR-0146	N/A	0.668 (17.0)	0.722 (18.3)	0.146 (3.7)	15	Red	50	29 (13.2)
PR-0148	N/A	0.723 (18.4)	0.816 (20.3)	0.146 (3.7)	16	Black	50	29 (13.2)
PR-0150	N/A	0.817 (20.8)	0.898 (22.7)	0.146 (3.7)	17	White	50	31 (14.1)
PR-0151	N/A	0.899 (22.8)	0.954 (24.2)	0.167 (4.2)	17	Yellow	50	47 (21.3)

PROTECTOR RODS CONTINUED

Ordering Information

Catalog Number	Number EHV	Conductor Diameter Range		Rod Diameter	Rods per Set	Color Code	Units per Carton	Carton Weight
		in (mm)						lb (kg)
		Minimum	Maximum	in (mm)				
PR-0152	N/A	0.955 (24.2)	1.019 (25.8)	0.182 (4.6)	16	Brown	25	29 (13.2)
PR-0154	N/A	1.020 (25.9)	1.064 (27.0)	0.182 (4.6)	17	Blue	25	29 (13.2)
PR-0155	N/A	1.065 (27.1)	1.098 (27.8)	0.204 (5.2)	16	Green	25	36 (16.3)
PR-0156	PR-0156E	1.099 (27.9)	1.181 (29.9)	0.25 (6.4)	14	Orange	25	48 (21.8)
PR-0158	PR-0158E	1.182 (30.0)	1.298 (32.9)	0.25 (6.4)	15	Purple	25	51 (23.1)
PR-0160	PR-0160E	1.299 (33.0)	1.415 (35.9)	0.25 (6.4)	16	Blue	20	44 (20.0)
PR-0162	PR-0162E	1.416 (36.0)	1.543 (39.2)	0.25 (6.4)	17	Yellow	20	48 (21.8)
PR-0163	PR-0163E	1.544 (39.2)	1.685 (42.8)	0.25 (6.4)	19	Brown	15	40 (18.1)
PR-0164	PR-0164E	1.686 (42.8)	1.840 (46.7)	0.25 (6.4)	20	Blue	15	42 (19.0)

ARMOR RODS



Ordering Information

Catalog Number		Conductor Diameter Range		Maximum Damaged Strands	Length	Rod Diameter	Rods per Set	Color Code	Units per Carton	Carton Weight
Standard	EHV (345 kV and above)									in (mm)
		Minimum	Maximum							
AR-0124	N/A	0.552 (14.0)	0.585 (14.9)	5	60 (1.52)	0.182 (4.6)	11	Red	25	46 (20.9)
AR-0125	N/A	0.586 (14.9)	0.606 (15.4)	5	62 (1.57)	0.182 (4.6)	12	Black	25	52 (23.6)
AR-0126	N/A	0.607 (15.4)	0.630 (16.0)	5	64 (1.63)	0.182 (4.6)	12	Purple	25	54 (24.5)
AR-0127	N/A	0.631 (16.0)	0.655 (16.6)	5	64 (1.63)	0.182 (4.6)	12	Yellow	25	54 (24.5)
AR-0128	N/A	0.656 (16.6)	0.679 (17.2)	5	66 (1.68)	0.182 (4.6)	13	Brown	18	43 (19.5)
AR-0129	N/A	0.680 (17.3)	0.703 (17.9)	5	68 (1.73)	0.204 (5.2)	12	Blue	18	52 (23.6)
AR-0130	N/A	0.704 (17.9)	0.740 (18.8)	5	72 (1.83)	0.204 (5.2)	12	Green	18	54 (24.5)
AR-0131	N/A	0.741 (18.8)	0.782 (19.9)	5	72 (1.83)	0.204 (5.2)	13	Orange	18	59 (26.8)
AR-0134	N/A	0.846 (21.5)	0.907 (23.0)	5	78 (1.98)	0.25 (6.4)	12	Blue	15	74 (33.6)
AR-0135	N/A	0.908 (23.1)	0.929 (23.6)	5	80 (2.03)	0.25 (6.4)	13	Green	12	66 (29.9)
AR-0137	AR-0500	0.977 (24.8)	1.016 (25.8)	5	92 (2.34)	0.31 (7.9)	11	Yellow	9	50 (22.7)
AR-0141	AR-0504	1.099 (27.9)	1.139 (28.9)	5	100 (2.54)	0.31 (7.9)	12	Orange	6	62 (28.1)
AR-0143	AR-0506	1.162 (29.5)	1.208 (30.7)	7	100 (2.54)	0.31 (7.9)	13	Red	6	69 (31.3)

To meet the corona onset and RIV requirements for most extra-high-voltage applications, PARROT-BILL® Ends are to be used instead of the standard ball-end rods. Consult the Factory for an engineering recommendation.

ARMOR RODS CONTINUED

Ordering Information

Catalog Number		Conductor Diameter Range		Maximum Damaged Strands	Length	Rod Diameter	Rods per Set	Color Code	Units per Carton	Carton Weight
Standard	EHV (345 kV and above)									
		Minimum	Maximum							
AR-0146	AR-0509	1.328 (33.7)	1.39 (35.3)	7	100 (2.54)	0.365 (9.3)	13	Yellow	3	45 (20.4)
AR-0163	AR-0511	1.441 (36.6)	1.508 (38.3)	7	100 (2.54)	0.436 (11.1)	12	Blue	3	58 (26.3)
AR-0165	AR-0513	1.579 (40.1)	1.651 (41.9)	9	100 (2.54)	0.436 (11.1)	13	Orange	3	60 (27.2)
AR-0167	AR-0516	1.729 (43.9)	1.809 (45.9)	9	100 (2.54)	0.436 (11.1)	14	Red	3	64 (29.0)
AR-0324	N/A	0.552 (14.0)	0.585 (14.9)	5	72 (1.83)	0.182 (4.6)	11	Red	25	55 (24.9)
AR-0325	N/A	0.586 (14.9)	0.606 (15.4)	5	74 (1.88)	0.182 (4.6)	12	Black	25	61 (27.7)
AR-0326	N/A	0.607 (15.4)	0.630 (16.0)	5	76 (1.93)	0.182 (4.6)	12	Purple	25	63 (28.6)
AR-0327	N/A	0.631 (16.0)	0.655 (16.6)	5	76 (1.93)	0.182 (4.6)	12	Yellow	25	63 (28.6)
AR-0328	N/A	0.656 (16.6)	0.679 (17.2)	5	78 (1.98)	0.182 (4.6)	13	Brown	18	51 (23.1)
AR-0329	N/A	0.680 (17.3)	0.703 (17.9)	5	80 (2.03)	0.204 (5.2)	12	Blue	18	60 (27.2)

To meet the corona onset and RIV requirements for most extra-high-voltage applications, PARROT-BILL® Ends are to be used instead of the standard ball-end rods. Consult the Factory for an engineering recommendation.

CONDUCTOR SPLICES



Ordering Information

Catalog Number		Conductor Diameter Range		Length	Rod Diameter	Number of Subsets	Color Code	Units per Carton	Carton Weight
Standard	EHV (345 kV and above)								in (mm)
		Minimum	Maximum	in (m)	in (mm)				
LS-0134	N/A	0.545 (13.8)	0.567 (14.4)	52 (1.32)	0.17 (4.3)	3	Red	25	33 (15.0)
LS-0135	N/A	0.568 (14.4)	0.594 (15.1)	61 (1.55)	0.18 (4.6)	3	Blue	25	48 (21.8)
LS-0136	N/A	0.595 (15.1)	0.618 (15.7)	63 (1.60)	0.18 (4.6)	3	Purple	25	50 (22.7)
LS-0137	N/A	0.619 (15.7)	0.644 (16.4)	67 (1.70)	0.18 (4.6)	3	Yellow	25	58 (26.3)
LS-0138	N/A	0.645 (16.4)	0.671 (17.0)	69 (1.75)	0.20 (5.1)	3	Brown	25	66 (30.0)
LS-0139	N/A	0.672 (17.1)	0.700 (17.8)	70 (1.78)	0.20 (5.1)	3	Orange	25	68 (30.8)
LS-0140	N/A	0.701 (17.8)	0.729 (18.5)	77 (1.96)	0.25 (6.4)	3	Green	15	62 (28.1)
LS-0141	N/A	0.730 (18.6)	0.760 (22.5)	79 (2.01)	0.25 (6.4)	3	Black	15	64 (29.0)
LS-0145	N/A	0.851 (21.6)	0.886 (22.5)	99 (2.51)	0.25 (6.4)	4	Orange	3	23 (10.4)
LS-0146	N/A	0.887 (22.5)	0.929 (23.6)	105 (2.67)	0.31 (7.9)	3	Orange	3	31 (14.1)
LS-0148	N/A	0.969 (24.6)	1.008 (25.6)	111 (2.82)	0.31 (7.9)	4	Yellow	3	37 (16.8)
LS-0151	LSMS4854	1.092 (27.7)	1.136 (28.9)	137 (3.48)	0.365 (9.3)	4	Purple	3	59 (26.8)
LS-0153	LSMS7955	1.184 (28.9)	1.232 (30.1)	143 (3.63)	0.365 (9.3)	4	Blue	3	63 (28.6)
LS-0155	LSMS7956	1.300 (33.0)	1.353 (34.4)	165 (4.19)	0.436 (11.1)	4	Yellow	3	101 (45.8)
LS-0158	LSMS14203	1.468 (37.3)	1.528 (38.8)	178 (4.52)	0.436 (11.1)	4	White	3	103 (46.7)
LS-0160	LSMS11411	1.592 (40.4)	1.657 (42.1)	193 (4.90)	0.468 (11.9)	4	Purple	3	128 (58.0)

CONDUCTOR SPLICES CONTINUED

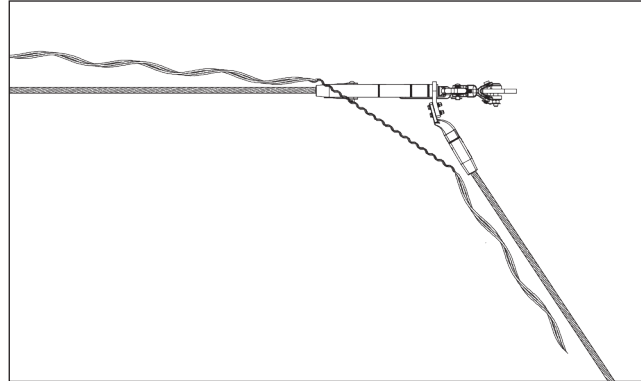
Ordering Information

Catalog Number		Conductor Diameter Range		Length	Rod Diameter	Number of Subsets	Color Code	Units per Carton	Carton Weight
Standard	EHV (345 kV and above)								in (mm)
		Minimum	Maximum	in (m)	in (mm)				
LS-0140	N/A	0.701 (17.8)	0.729 (18.5)	77 (1.96)	0.25 (6.4)	3	Green	15	62 (28.1)
LS-0141	N/A	0.730 (18.6)	0.760 (22.5)	79 (2.01)	0.25 (6.4)	3	Black	15	64 (29.0)
LS-0145	N/A	0.851 (21.6)	0.886 (22.5)	99 (2.51)	0.25 (6.4)	4	Orange	3	23 (10.4)
LS-0146	N/A	0.887 (22.5)	0.929 (23.6)	105 (2.67)	0.31 (7.9)	3	Orange	3	31 (14.1)
LS-0148	N/A	0.969 (24.6)	1.008 (25.6)	111 (2.82)	0.31 (7.9)	4	Yellow	3	37 (16.8)
LS-0151	LSMS4854	1.092 (27.7)	1.136 (28.9)	137 (3.48)	0.365 (9.3)	4	Purple	3	59 (26.8)
LS-0153	LSMS7955	1.184 (28.9)	1.232 (30.1)	143 (3.63)	0.365 (9.3)	4	Blue	3	63 (28.6)
LS-0155	LSMS7956	1.300 (33.0)	1.353 (34.4)	165 (4.19)	0.436 (11.1)	4	Yellow	3	101 (45.8)
LS-0158	LSMS14203	1.468 (37.3)	1.528 (38.8)	178 (4.52)	0.436 (11.1)	4	White	3	103 (46.7)
LS-0160	LSMS11411	1.592 (40.4)	1.657 (42.1)	193 (4.90)	0.468 (11.9)	4	Purple	3	128 (58.0)
LSMS10726	LSMS10726	1.724 (43.8)	1.788 (45.4)	207 (5.26)	0.496 (12.6)	4	Pink	1	86 (39.0)

SPLICE/DEAD-END SHUNT



Splice Application



Dead-End Application

Ordering Information

Catalog Number	Conductor Diameter Range		Wire Size	Rods per Set (sub-set)	Length	Maximum Splice Length	Color Code	EHV
	in (mm)							
	Minimum	Maximum						
SDES-0001	0.701 (17.8)	0.729 (18.5)	0.25 (6.4)	10 (2-2-3-3)	108 (2.74)	20 (0.51)	Green	
SDES-0002	0.730 (18.6)	0.760 (19.3)	0.25 (6.4)	10 (2-2-2-2-2)	123 (3.12)	30 (0.76)	Black	
SDES-0006	0.851 (21.6)	0.886 (22.5)	0.25 (6.4)	12 (3-3-3-3)	138 (3.51)	32 (0.81)	Black	
SDES-0008	0.918 (23.3)	0.968 (24.6)	0.31 (7.9)	11 (2-2-2-2-3)	148 (3.76)	32 (0.81)	White	
SDES-0009	0.969 (24.6)	1.008 (25.6)	0.31 (7.9)	11 (2-3-3-3)	151 (3.84)	34 (0.86)	Yellow	
SDES-0012	1.092 (27.7)	1.136 (28.9)	0.365 (9.3)	11 (2-2-2-2-3)	183 (4.65)	40 (1.02)	Green	Y
SDES-0014	1.184 (30.1)	1.232 (31.3)	0.436 (11.1)	10 (2-2-3-3)	216 (5.49)	42 (1.07)	Blue	Y
SDES-0016	1.30 (33.0)	1.35 (34.4)	0.436 (11.1)	11 (2-3-3-3)	220 (5.59)	45 (1.14)	Yellow	Y
SDES-0019	1.468 (37.2)	1.528 (38.8)	0.436 (11.1)	12 (3-3-3-3)	228 (5.79)	45 (1.14)	White	Y
SDES-0021	1.592 (40.4)	1.657 (42.1)	0.468 (11.9)	12 (3-3-3-3)	261 (6.63)	45 (1.14)	Purple	Y
SDES-0022	1.740 44.1	1.810 45.9	0.365 9.3	16 (2-2-3-3-3-3)	250 6.35	45 1.14	Purple	Y

TRANSMISSION LINE STRING HARDWARE

General Information

PLP manufactures string hardware components for a variety of suspension and dead-end applications. PLP provides all standard transmission line components for attachments to the tower, insulator, and suspension unit, for a variety of load ratings and requirements. Please contact your local PLP office for information about products in your country.





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