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Pictorial Index

SUSPENSION PRODUCTS

HIBUS® Suspensions for Conductors

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HIBUS[®] Suspension for Conductors

The HIBUS clamp is designed to reduce static and dynamic stress at the attachment point on transmission conductors without the use of armor rods or line guards. Rated for 250°C operation, the HIBUS clamp has a specially formulated bushing material for high temperature conductors. The hinged concept on the suspension configuration provides self-alignment of the housing halves. All hardware is captive except for the mounting pin.

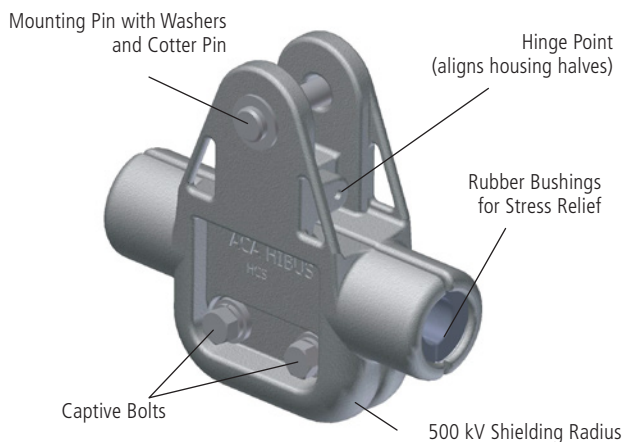
Test results have shown that the unique bushing system significantly reduces the bending strain level produced by the effects of Aeolian vibration as compared to standard clamps using armor rods or line guards. This proven level of performance eliminates the need for any type of attachment using rods. Test reports available include corona test, high temperature profile, standard and high temperature slip, ultimate strength, and catastrophic conductor failure impact strength.



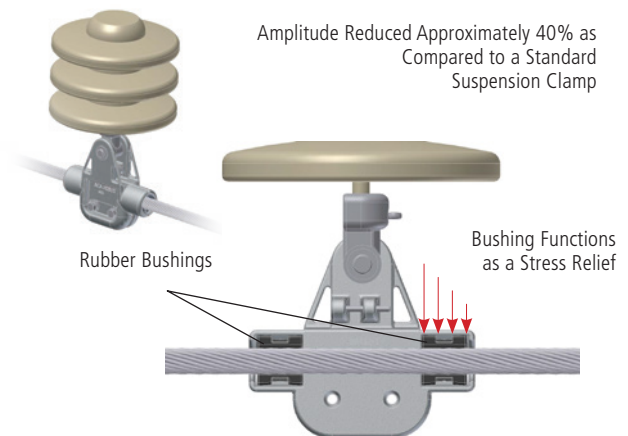
Features

- Suitable for all ACSR and ACSS conductors
- Self-aligning housing halves
- Stress relief bushings reduce bending strain 40%
- Aluminum clamp body with captive stainless steel mounting bolts
- Galvanized steel mounting pin with two washers and cotter pin for added security
- Optional bolt, nut, and cotter pin (“BNC” suffix) available on some sizes. Contact AFL for availability.
- Optional Live-line Attachment Tool available
- Line angles up to 30° for single unit, up to 60° for two units
- Rated for 500 kV applications
- Rated for 250°C high temperature applications (with special bushings)

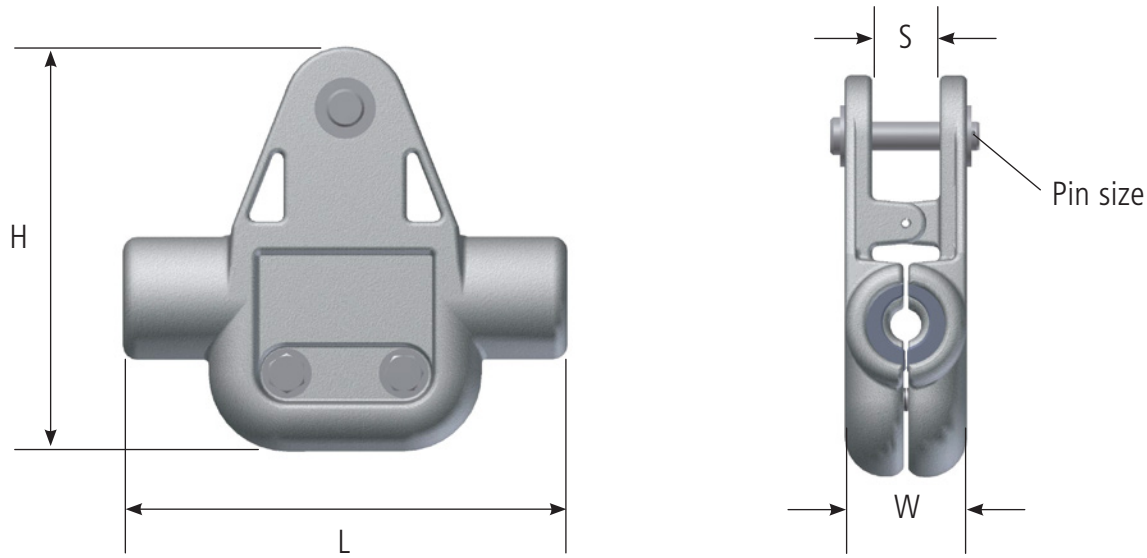
Components



Configuration



HIBUS® Suspension for Conductors (cont.)



Standard Conductors—ACSR, AAC, AAAC, ACAR
 HiTemp® Conductors—ACSS, HS285

AFL NO.		RANGE (in.)		RANGE (mm)		LENGTH (L)	HEIGHT (H)	WIDTH (W)	CLEVIS WIDTH (S)	WEIGHT (lbs)	VERT. LOAD RATING (lbs)	PIN/BOLT SIZE (in.)
STANDARD	HITEMP®	MIN	MAX	MIN	MAX							
HCS710	HCSHT710	0.710	0.755	18.0	19.2	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS756	HCSHT756	0.756	0.799	19.2	20.3	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS800	HCSHT800	0.800	0.842	20.3	21.4	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS843	HCSHT843	0.843	0.883	21.4	22.4	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS880	HCSHT880	0.880	0.931	22.4	23.6	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS932	HCSHT932	0.932	0.980	23.7	24.9	9.5"	8.6"	2.6"	1.5"	7.5	25,000	0.625" x 3.25"
HCS981	HCSHT981	0.981	1.027	24.9	26.1	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1028	HCSHT1028	1.028	1.072	26.1	27.2	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1073	HCSHT1073	1.073	1.115	27.3	28.3	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1116	HCSHT1116	1.116	1.156	28.3	29.4	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1157	HCSHT1157	1.157	1.196	29.4	30.4	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1197	HCSHT1197	1.197	1.237	30.4	31.4	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1238	HCSHT1238	1.238	1.294	31.4	32.9	9.5"	8.8"	2.9"	1.5"	7.8	25,000	0.625" x 3.25"
HCS1295	HCSHT1295	1.295	1.349	32.9	34.3	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1350	HCSHT1350	1.350	1.401	34.3	35.6	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1402	HCSHT1402	1.402	1.451	35.6	36.9	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1452	HCSHT1452	1.452	1.499	36.9	38.1	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1500	HCSHT1500	1.500	1.545	38.1	39.2	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1546	HCSHT1546	1.546	1.569	39.3	39.9	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1570	HCSHT1570	1.570	1.639	39.9	41.6	10.0"	9.6"	3.3"	1.5"	8.1	25,000	0.625" x 3.25"
HCS1640BNC*	HCS1640BNC*	1.640	1.707	41.7	43.4	10.9"	10.4"	3.8"	1.5"	9.7	30,000	0.750" x 4.00"
HCS1708BNC*	HCS1708BNC*	1.708	1.771	43.4	45.0	10.9"	10.4"	3.8"	1.5"	9.7	30,000	0.750" x 4.00"
HCS1772BNC*	HCS1772BNC*	1.772	1.833	45.0	46.6	10.9"	10.4"	3.8"	1.5"	9.7	30,000	0.750" x 4.00"
HCS1834BNC*	HCS1834BNC*	1.834	1.892	46.6	48.1	10.9"	10.4"	3.8"	1.5"	9.7	30,000	0.750" x 4.00"

* NOTE: Standard clevis pin not available for these sizes. These sizes come standard with bolt, nut, cotter pin attachment hardware.

HIBUS® Suspension for Conductors (cont.)

Ordering Information

HCSHT

HCS = HIBUS Series Conductor Suspension
 HCSHT = HIBUS Series Conductor Suspension
 for high temperature applications

1073

Conductor Range Code

LL

Blank = No Live-line
 Attachment Point
 LL = Include Live-line
 Attachment Point

BNC

Blank = Clevis Pin and Cotter Pin Attachment
 BNC = Bolt, Nut, Cotter Pin Attachment

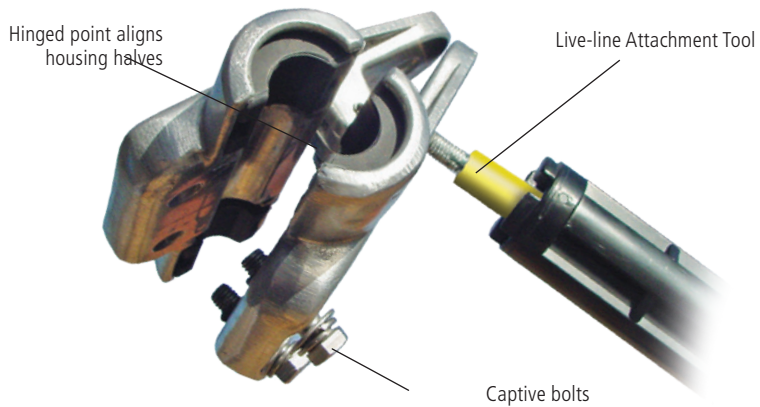
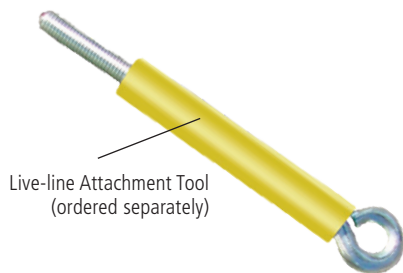
(Note: limited availability for BNC, contact AFL)

Ordering Example: HCSHT1073LL

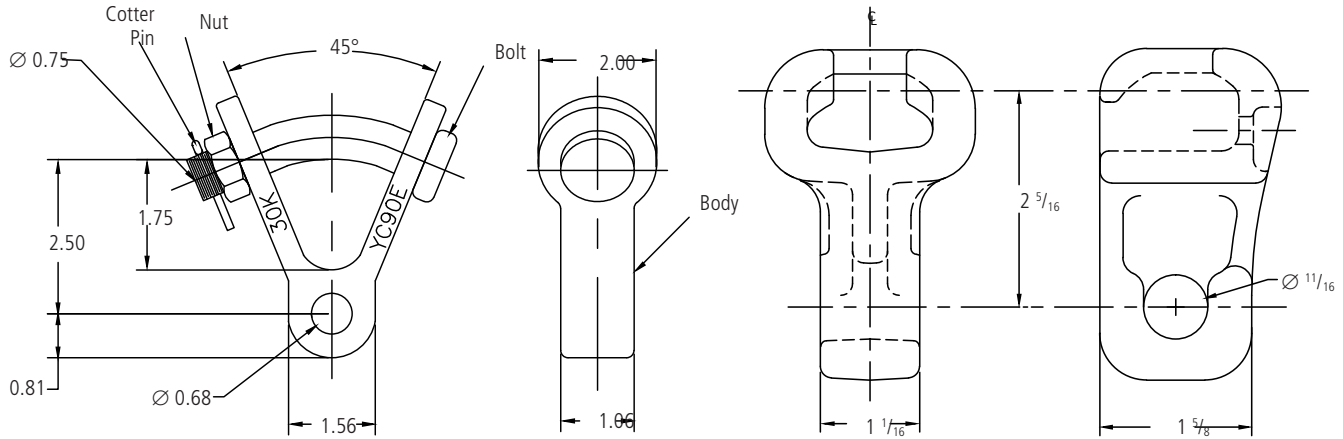
HIBUS Series Conductor Suspension, 1.073-1.115 range, rated for 250°C high temperature application and including a Live-line Attachment Point.

Ordering Information—Accessories

DESCRIPTION	AFL NO.
Live-line Attachment Tool (order separately)	HIBUS-LLT

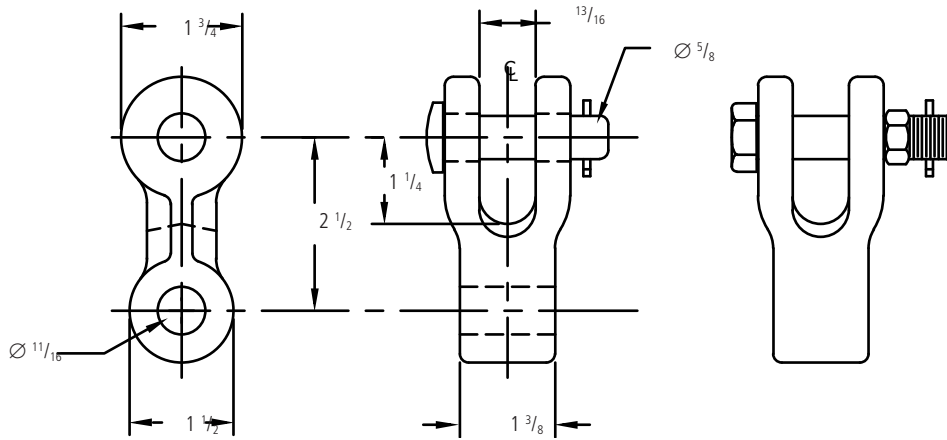


HIBUS Suspension for Conductors—Hardware (cont.)



**Y-Clevis Eye 90°
(YC90E)**

**Standard Socket Eye
(SE)**



**Standard Clevis Eye
(SCE)**

**Bolt, Nut,
Cotter Style**

Ordering Information

AFL NO.	ULTIMATE STRENGTH (lbs.)	APPROX. WEIGHT EACH (lbs.)	MATERIAL
YC90E-688-1062	30,000	2.7	Body—Ductile Iron Bolt, Nut—Forged Steel Cotter Pin—Stainless Steel
SE-1062	30,000	1.17	Hot Dip Galvanized Ductile Iron
SCE-55-1375	30,000	1.58	Hot Dip Galvanized Ductile Iron