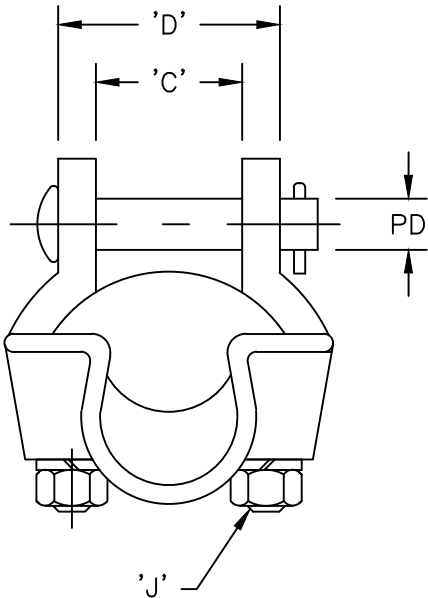
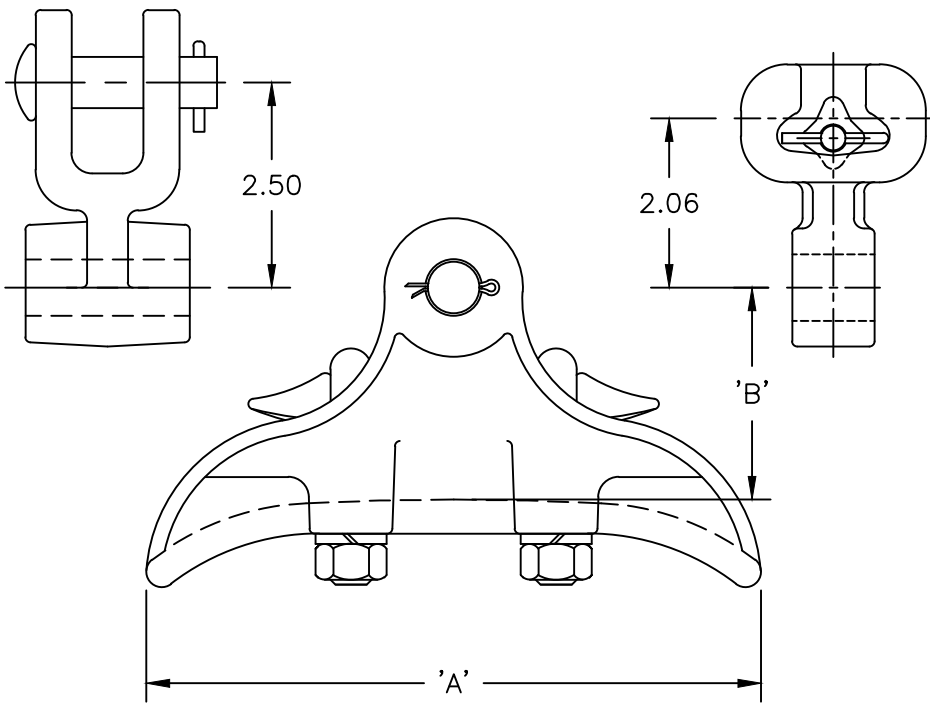


CATALOG NUMBER	TYPE OF FITTING	CLAMPING RANGE		DIMENSION IN INCHES						ULTIMATE STRENGTH IN LBS.	APPROX. SHIP WT. LBS. EA.
		MIN.	MAX.	A	B	C	D	J	PD		
HAS-85-S HAS-85-C HAS-85-N	SOCKET CLEVIS NONE	.40	.85	7.50	2.56	1.12	1.84	.50	.63	18,000	3.35 3.35 2.10
HAS-104-S HAS-104-C HAS-104-N	SOCKET CLEVIS NONE	.50	1.04	8.12	2.75	1.25	1.97	.50	.63	25,000	3.75 3.75 2.50
HAS-118-S HAS-118-C HAS-118-N	SOCKET CLEVIS NONE	.70	1.18	8.00	2.75	1.34	2.41	.50	.63	25,000	4.95 4.65 3.25
HAS-129-S HAS-129-C HAS-129-N	SOCKET CLEVIS NONE	.90	1.29	8.91	3.06	1.50	2.44	.50	.63	25,000	4.50 4.50 3.10
HAS-139-S HAS-139-C HAS-139-N	SOCKET CLEVIS NONE	.90	1.39	8.88	3.00	1.62	2.56	.50	.63	25,000	4.60 4.60 3.25
HAS-147-S HAS-147-C HAS-147-N	SOCKET CLEVIS NONE	1.00	1.47	9.19	3.12	1.72	2.64	.50	.63	25,000	5.00 5.00 3.50
HAS-162-S HAS-162-C HAS-162-N	SOCKET CLEVIS NONE	1.10	1.62	9.50	3.08	1.78	2.78	.50	.63	25,000	5.25 5.25 3.75
HAS-182-S HAS-182-C HAS-182-N	SOCKET CLEVIS NONE	1.25	1.82	10.00	3.37	2.06	3.00	.50	.63	25,000	6.80 7.00 5.00
HAS-204-S HAS-204-C HAS-204-N	SOCKET CLEVIS NONE	1.40	2.04	10.50	3.53	2.17	3.12	.50	.63	25,000	6.50 6.50 4.90
HAS-227-S HAS-227-C HAS-227-N	SOCKET CLEVIS NONE	1.75	2.27	11.00	3.88	2.41	3.47	.62	.63	25,000	10.00 10.00 8.00
HAS-252-S HAS-252-C HAS-252-N	SOCKET CLEVIS NONE	2.00	2.52	12.00	4.25	2.69	3.81	.62	.63	30,000 25,000 30,000	11.50 11.50 9.85
HAS-250-16S HAS-250-16C HAS-250-16N	SOCKET CLEVIS NONE	2.00	2.50	16.00	4.50	2.62	-	.62	.75	30,000	13.75 13.75 11.50

CATALOG NUMBER	TYPE OF FITTING	CLAMPING RANGE		DIMENSION IN INCHES						ULTIMATE STRENGTH IN LBS.	APPROX. SHIP WT. LBS. EA.
		MIN.	MAX.	A	B	C	D	J	PD		
HAS-280-S HAS-280-C HAS-280-N	SOCKET CLEVIS NONE	2.40	2.80	14.00	4.88	3.00	4.50	.62	.75	30,000 25,000 40,000	12.30 12.30 10.65
HAS-62-S HAS-62-C HAS-62-N	SOCKET CLEVIS NONE	.20	.62	6.75	2.28	.91	1.72	.50	.63	17,000	2.85 2.85 1..90
HAS-293-S HAS-293-C HAS-293-N	SOCKET CLEVIS NONE	2.55	2.93	15.00	5.00	3.12	-	.62	.75	30,000 25,000 30,000	
HAS-182-S-BP HAS-182-C-BP HAS-182-N-BP	SOCKET CLEVIS NONE	1.25	1.82	10.00	3.25	1.94	-	.62	.63	25,000	
HAS-252-S-BPA HAS-252-C-BPA HAS-252-N-BPA	SOCKET CLEVIS NONE	2.00	2.52	12.00	4.25	2.69	3.81	.75	.63	30,000 25,000 30,000	11.5 11.5 9.85
HAS-139-S-DP HAS-139-C-DP HAS-139-N-DP	SOCKET CLEVIS NONE	.90	1.39	8.75	3.12	1.53	2.41	.62	.63	25,000	5.10 5.10 3.60
HAS-213-S-DP-1 HAS-213-C-DP-1 HAS-213-N-DP-1	SOCKET CLEVIS NONE	1.40	2.13	10.50	3.62	2.25	3.25	.62	.63	25,000	9.00 9.00 7.50
HAS-213-S-DP-2 HAS-213-C-DP-2 HAS-213-N-DP-2	SOCKET CLEVIS NONE	1.40	2.13	10.50	3.62	2.25	3.25	.62	.63	25,000	9.00 9.00 7.50
HAS-325-S HAS-325-C HAS-325-N	SOCKET CLEVIS NONE	2.78	3.25	18.00	5.38	3.50	5.00	.62	1.00	60,000	
HAS-213-S HAS-213-C HAS-213-N	SOCKET CLEVIS NONE	1.40	2.13	10.50	3.62	2.25	3.25	.62	.63	25,000	9.00 9.00 7.50
HAS-213-S-DP HAS-213-C-DP HAS-213-N-DP	SOCKET CLEVIS NONE	1.40	2.13	10.50	3.62	2.25	3.25	.62	.63	25,000	9.00 9.00 7.50
HAS-182-30-S HAS-182-30-C HAS-182-30-N	SOCKET CLEVIS NONE	1.25	1.82	10.00	3.17	2.06	2.88	.50	.63	30,000	5.75 5.75 4.25



SPECIFICATIONS:

ALUMINUM SUSPENSION CLAMPS ARE RECOMMENDED FOR ACSR WITH PREFORMED STRAIGHT OR TAPERED ARMOR RODS. LINERS ARE NOT REQUIRED.

CLAMP BODIES AND KEEPERS ARE OF HIGH STRENGTH ALUMINUM ALLOY, HEAT TREATED. SOCKETS AND CLEVISES ARE 654512 DUCTILE IRON, HOT DIP GALVANIZED. BOLTS, NUTS, LOCKWASHERS AND PINS ARE HOT DIP GALVANIZED STEEL. COTTER PINS IN SOCKET ARE H/D BRONZE, OTHERS ARE S/S #302.

NOTES:
FOR CABLE APPLICATION OF SUSPENSION CLAMPS SEE DRAWING C-4168, SHEET NUMBERS 1,2,3,4, AND 5.

CLAMP MAY BE FURNISHED WITH 5/8-11 GALVANIZED STEEL BOLT AND NUT WITH #302 STAINLESS STEEL COTTER PIN WHEN SPECIFIED BY CUSTOMER. EXAMPLE, ADD 'BNK' TO STANDARD CATALOG NUMBER.

'BPA' SUFFIX REQUIRES MEETING BONNEVILLE POWER'S SPECIFICATIONS.

'HL' SUFFIX REQUIRES: S/S CLEVIS PIN, ALUMINUM U-BOLTS, WAXED ALUMINUM NUTS AND ALUMINUM LOCKWASHER. (HAWAIIAN LIGHTING)

'CFE' SUFFIX REQUIRES: DATE CODE ON BODY CASTING

THE HAS-213-SERIES IS IDENTIFIED BY A COLOR SPRAYED ON THE BACK SIDE (U-SECTION) OF ALL U-BOLTS:

S
HAS-213-C (NO COLOR). HAS-213-C-DP (RED).
N

S
HAS-213-C-DP-1 (WHITE).HAS-213-C-DP-2 (BLUE).
N

"CVN" SUFFIX CLAMPS INDICATE THE HARDWARE WILL BE GALVANIZED PER CSA G164 AND THE CLEVIS BOLT SHALL MEET CSA C83 LEVEL 1 CHARPY IMPACT RESULTS (ABSORPTION LEVELS OF 20 JOULES AT -20°C).

"LUB" SUFFIX REQUIRES LONGER U-BOLT FOR ATTACHMENT OF BONDING/GROUNDING TERMINAL

66333	8/11/16	WJI	WJI	ANDERSON TOLERANCE CHART	 HUBBELL® POWER SYSTEMS
EC #	DATE	CHG BY	RESP ENG		
DESC OF DWG: ADDED NOTE ON "CVN" SUFFIX ADD LUB SUFFIX NOTE UPDATE B DIM FOR HAS182- DELETE SHEETS 2 THRU 6 -- REASON (S) FOR CHANGE: -- DISPOSITION OF MAT'L: --				CONFIDENTIAL: THIS DRAWING AND ITS CONTENTS ARE CONFIDENTIAL AND THE EXCLUSIVE PROPERTY OF HUBBELL POWER SYSTEMS. NO PUBLICATION, DISTRIBUTION OR COPIES MAY BE MADE WITHOUT THE WRITTEN CONSENT OF HUBBELL POWER SYSTEMS. HUBBELL POWER SYSTEMS UNPUBLISHED ALL RIGHTS RESERVED UNDER THE COPYRIGHT LAWS.	TITLE HIGH STR. AL. SUSP. CLAMP
SIZE C	DWG NO. C-4167	CAT / PART / ASSY NO. SEE CHART			REV 44
DO NOT SCALE THIS DRAWING	DRN BY MAJ	DATE 10/11/00	SHEET 1 OF 1		