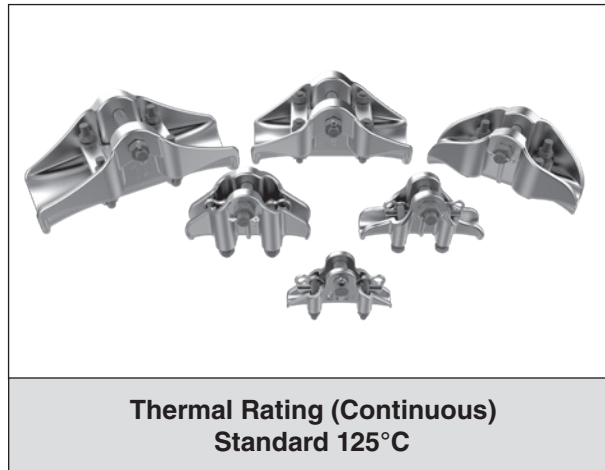
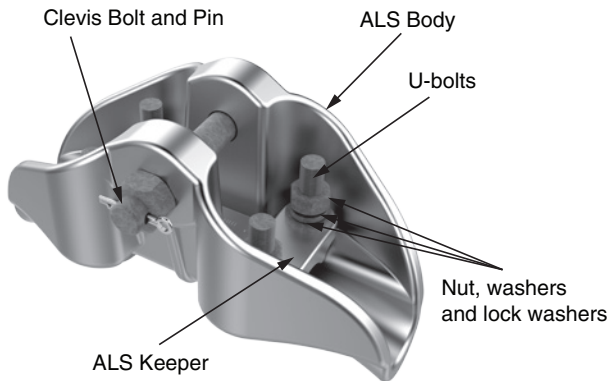




Aluminum Suspension (ALS) Clamp

NOMENCLATURE



GENERAL RECOMMENDATIONS

Aluminum Suspension (ALS) Clamps are intended for use on all aluminum-based conductors. PLP recommends placing Armor Rods over the conductor at suspension points to minimize the static and dynamic stresses at the ends of the clamp as well as extend the life of the conductor. The standard ALS Clamps are designed for continuous conductor operating temperatures up to 125°C (150°C for two-hour emergencies).

Vertical Ultimate Strength:

The vertical ultimate strength of each Aluminum Suspension Clamp is listed on the table (next page).

Slip load:

When initially installed, the ALS Clamp has a slip load that ranges between X to X of the conductor's rated breaking strength (RBS).

Line angle:

The maximum recommended line angle for an Aluminum Suspension Clamp is 30° as a single suspension and 60° in a double configuration utilizing a yoke plate and clevis eyes.

Features and Benefits:

- The ALS Clamp is shipped assembled, with no loose parts. All fasteners are factory-installed to eliminate lost hardware in the field.
- Aluminum alloy body and keeper
- Galvanized steel hardware
- Stainless steel cotter pin
- Compatible with standard attachment hardware
- ALS-122, ALS-181, and ALS-236 are designed for EHV applications. Please contact PLP for additional details.

SAFETY CONSIDERATIONS

1. This product is intended for a single (one-time) use and for the specified application. All components, may be reused if in good condition. **CAUTION: DO NOT MODIFY OR REUSE THE RODS UNDER ANY CIRCUMSTANCES.**
2. This product is intended for use by trained craftspeople only. This product **SHOULD NOT BE USED** by anyone who is not familiar with and trained in the use of it.
3. When working in the area of energized lines with this product, **EXTRA CARE** should be taken to prevent accidental electrical contact.
4. For **PROPER PERFORMANCE AND PERSONAL SAFETY** be sure to select the proper size Aluminum Suspension Clamp before application.
5. To ensure proper performance, this product should be stored in cartons under cover and handled carefully.

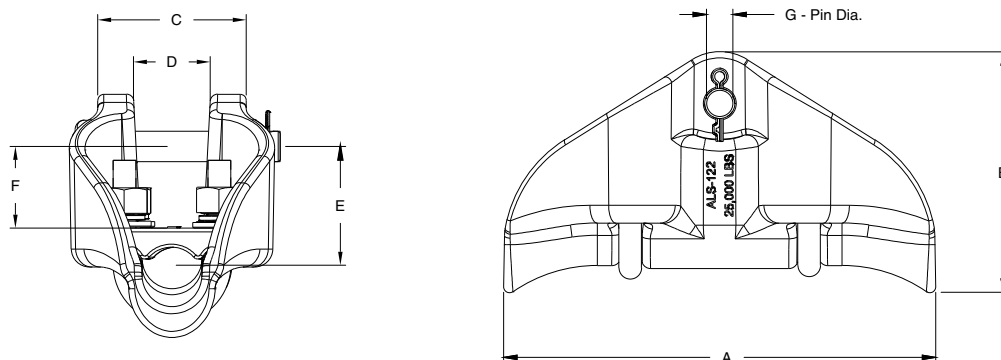
Aluminum Suspension (ALS) Clamp

ORDERING INFORMATION

Catalog Number	Conductor Range in (mm)		Nominal Conductor Size	Weight lb (kg)	Standard Carton Quantity	Vertical Ultimate Load
	Min	Max				
ALS-47	0.2 (5.1)	0.469 (11.9)	#4-2/0	.9 (.4)	3	5,000 lbf
ALS-67	0.47 (11.9)	0.669 (17)	3/0-266.8	1.5 (.7)	3	10,000 lbf
ALS-91	0.67 (17)	0.909 (23.1)	336.4-556.5	2.35 (1)	3	15,000 lbf
ALS-122BNK	0.91 (23.1)	1.22 (31)	556.5-1033.5	4.65 (2.1)	3	25,000 lbf
ALS-181BNK	1.221 (31)	1.81 (46)	1033.5-2312	5.45 (2.5)	3	25,000 lbf
ALS-236BNK	1.811 (46)	2.36 (60)	2515	6.85 (3.1)	3	25,000 lbf

NOTE: Can be supplied with bolt/nut/cotter in place of clevis pin and cotter key. The largest three sizes are only available with BNK hardware.

DIMENSIONAL INFORMATION



Conductor Range in (mm)		Dimensions- in (mm)								Vertical Ultimate Load
Min	Max	A	B	C	D	E	F		G - Pin Dia.	
							Min	Max		
0.2 (5.1)	0.469 (11.9)	5.0 (127)	3.1 (78)	1.9 (48.3)	0.75 (19)	1.2 (30.5)	.94 (23.9)	1.2 (30.5)	5/8 (15.9)	5,000 lbf
0.47 (11.9)	0.669 (17)	6.5 (165)	3.7 (95)	2.4 (61)	0.85 (21.6)	1.9 (48.3)	1.2 (30.5)	1.4 (36.1)	5/8 (15.9)	10,000 lbf
0.67 (17)	0.909 (23.1)	6.5 (165)	4 (101)	2.1 (53.3)	1.05 (26.7)	2.3 (58.4)	.98 (24.9)	1.2 (30.5)	5/8 (15.9)	15,000 lbf
0.91 (23.1)	1.22 (31)	9.0 (228)	5.0 (127)	3 (76.2)	1.5 (38.1)	2.5 (63.5)	1.34 (34)	1.65 (41.9)	5/8 (15.9)	25,000 lbf
1.221 (31)	1.81 (46)	9.8 (249)	5.4 (136)	3.3 (83.8)	2.0 (50.3)	2.5 (64.5)	.83 (21)	1.42 (36)	5/8 (15.9)	25,000 lbf
1.811 (46)	2.36 (60)	12 (305)	6.2 (157)	4.1 (104)	2.6 (66)	3.1 (78.7)	1.08 (27.5)	1.63 (41.5)	5/8 (15.9)	25,000 lbf

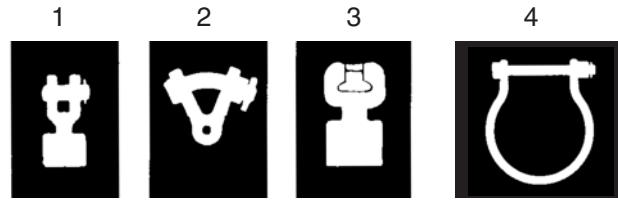


Aluminum Suspension (ALS) Clamp

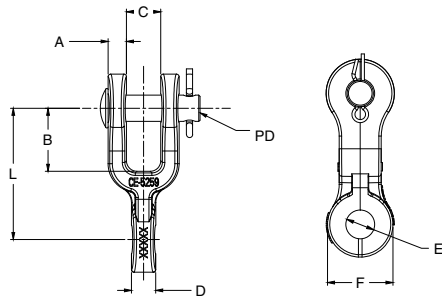
ALS HARDWARE and FITTINGS

Shown below are the Clevis Eye, Y-Clevis Eye, Socket Eye, Socket Clevis, Yoke Plate, Vertical Bundle Links and Hold-Down Shackles that can be used in conjunction with the Aluminum Suspension Clamps.

NOTE: See Section 8 – Transmission Line String Hardware for detailed dimensions of other string hardware components.



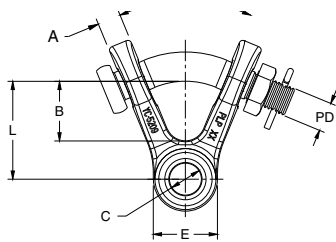
ALS Clevis Eye



Conductor Range	Hughes Brothers
0.2"-0.47"	1888.2
0.47"-0.67"	1888.3
0.67"-0.91"	1888.4
0.91"-1.81"	1888.5
1.81"-2.36"	1888.13

Catalog Number	ALS Clamp	Dimensions- in (mm)								Ultimate Strength (lbf)	Wt. Per 100 Units (lbs)
		A	B	C	D	E	F	L	PD		
CE-9025	ALS-47/ALS-67	1/2 (12.7)	1-1/4 (32)	7/8 (22.2)	5/8 (15.9)	11/16 (17.5)	1-21/32 (42)	2-7/8 (73)	5/8 (16)	15,000	101
CE-9026	ALS-91	1/2 (12.7)	1-1/4 (32)	7/8 (22.2)	3/4 (19)	11/16 (17.5)	1-21/32 (42)	2-7/8 (73)	5/8 (16)	25,000	106
CE-9027	ALS-122BNK	1/2 (12.7)	1-1/4 (32)	7/8 (22.2)	1-1/4 (32)	11/16 (17.5)	1-21/32 (42)	2-7/8 (73)	5/8 (16)	25,000	127
CE-9028	ALS-181BNK	1/2 (12.7)	1-1/4 (32)	7/8 (22.2)	1-3/4 (44.5)	11/16 (17.5)	1-21/32 (42)	2-7/8 (73)	5/8 (16)	25,000	146
CE-9029	ALS-236BNK	1/2 (12.7)	1-1/4 (32)	7/8 (22.2)	2-1/4 (57.2)	11/16 (17.5)	1-21/32 (42)	2-7/8 (73)	5/8 (16)	25,000	164

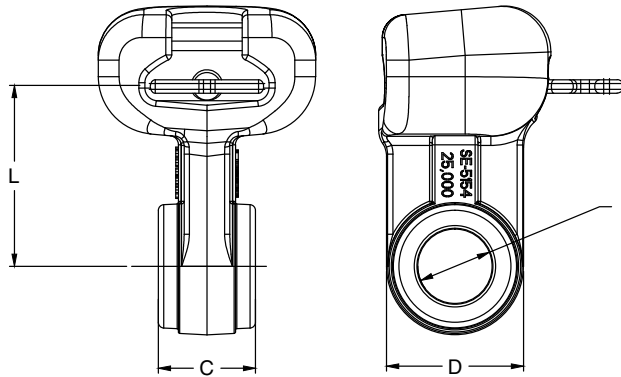
ALS Y-Clevis Eye



Catalog Number	ALS Clamp	Dimensions- in (mm)							Ultimate Strength (lbf)	Wt. Per 100 Units (lbs)
		A	B	C	D	E	L	PD		
YC-9030	ALS-47/ALS-67	19/32 (15)	1-5/8 (41.3)	11/16 (17.5)	5/8 (15.9)	1-7/10 (43.2)	2-7/16 (61.9)	3/4 (19)	15,000	120
YC-9031	ALS-91	19/32 (15)	1-5/8 (41.3)	11/16 (17.5)	3/4 (19)	1-7/10 (43.2)	2-7/16 (61.9)	3/4 (19)	25,000	130
YC-9032	ALS-122BNK	19/32 (15)	1-5/8 (41.3)	11/16 (17.5)	1-1/4 (32)	1-7/10 (43.2)	2-7/16 (61.9)	3/4 (19)	25,000	150
YC-9033	ALS-181BNK	19/32 (15)	1-5/8 (41.3)	11/16 (17.5)	1-3/4 (44.5)	1-7/10 (43.2)	2-7/16 (61.9)	3/4 (19)	25,000	170
YC-9034	ALS-236BNK	19/32 (15)	1-5/8 (41.3)	11/16 (17.5)	2-1/4 (57.2)	1-7/10 (43.2)	2-7/16 (61.9)	3/4 (19)	30,000	190

Aluminum Suspension (ALS) Clamp

ALS Socket Eye



Catalog Number	ALS Clamp	Dimensions- in (mm)				Ultimate Strength (lbf)	Wt. Per 100 Units (lbs)	ANSI Class Spec
		C	D	E	L			
SE-9020	ALS-47/ALS-67	5/8 (15.9)	1-25/32 (45)	11/16 (17.5)	1-11/16 (43)	30,000	145	52-3 & 52-5
SE-9021	ALS-91	3/4 (19.1)	1-25/32 (45)	11/16 (17.5)	1-11/16 (43)	30,000	151	
SE-9022	ALS-122BNK	1-1/4 (31.8)	1-25/32 (45)	11/16 (17.5)	1-11/16 (43)	30,000	176	
SE-9023	ALS-181BNK	1-3/4 (44.5)	1-25/32 (45)	11/16 (17.5)	1-11/16 (43)	30,000	201	
SE-9024	ALS-236BNK	2-1/4 (57.2)	1-25/32 (45)	11/16 (17.5)	1-11/16 (43)	30,000	224	