

SOLO HD® COMPRESSION ACCESSORIES

Single-Die Solution for ACSR, ACSS and ACSS/TW Conductors

Product Catalog

Founded in 1984, AFL is an international manufacturer providing end-to-end solutions to the energy, service provider, enterprise, hyperscale and industrial markets as well as several emerging markets.

AFL's products are in use in over 130 countries and include fiber optic cable and hardware, transmission and substation accessories, outside plant equipment, connectivity, test and inspection equipment, fusion splicers and training.

AFL also offers a wide variety of services supporting data center, enterprise, wireless and outside plant applications.

AFL is dedicated to bringing our customers a quality product as well as delivering superior value.



COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

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Introduction

General

AFL has led in the development of aluminum conductor accessories since the late 1890s. More than 120 years of continuous research, development and field experience have resulted in AFL's superior accessory products.

Complete Compression Solution

AFL has the industry's most complete line of compression accessories — dead ends, jumper terminals, joints, T-taps, repair sleeves and terminal connectors — designed to operate, regardless of the electrical load, at a temperature lower than that of the conductor. AFL has seven different compression configurations to suit all of your needs:

- HiTemp[®] Compression System
- Quick Compress Single Die System
- ACCC HiTemp Compression System
- Standard Compression Two Die System
- ACCR 3M Composite HiTemp Two Die System
- Solo HD Compression Accessories

NEW! Solo HD Compression System

The Solo HD Compression System is a significant technological breakthrough for users of compression-style connectors on ACSR and ACSS conductors. Solo HD is an innovative new compression product line designed to improve field installation practices and reduce installation times. The Solo HD compression system is simple, versatile and typically requires half the time than any conventional two die compression system.

Additional benefits of the Solo HD system include:

- Fewer compressions per unit required over any standard two-die compression system in the market
- One single compression die set through the complete installation, eliminating die changes, setups and steel hex die upkeep
- Full tension system with a tensile rating greater than 95% of the conductor-rated breaking strength (RBS)
- Splices capable of traveling over sheaves or blocks without suffering performance losses, allowing a single setup to pay off more than one reel of conductor
- No filler compound needed, eliminating the guesswork associated with filling the proper amount of compound and installation time
- Available for use on ACSR, ACSS, ACSR/TW and ACSS/TW applications with typical operating temperatures up to 250°C
- No new training or tooling required

The Solo HD compression system is the perfect solution to provide quick turnaround on new and existing projects, plus its capacity to accept multiple conductors decreases the number of compression SKUs at the warehouse and in the field thereby reducing the inventory budget required to maintain the electrical grid.









Solo HD[®] Compression Dead End for ACSR and ACSS Conductors, Eye and Clevis Type, Single Tongue

This Dead End Assembly is specifically designed for use on both ACSR and ACSS conductors. The body of the Solo HD Dead End is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid,

void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost half when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each deadend assembly comes with terminal and aluminum hardware.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

• No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.

Joints Travel Over Sheaves

Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools
 By using the same compression pumps
 and presses, AFL does not require the
 need for a large investment in both the
 tools and training.





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Solo HD[®] Compression Dead End for ACSR and ACSS Conductors, Eye and Clevis Type, Single Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

For a clevis application substitute the E for a C: **SDES-AS**: EYE TERMINATION **SDCS-AS**: CLEVIS TERMINATION

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDES-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Dead End installation instructions INS-ACA116 on page 44.

	CONDUCTORS						
		SIZE	STR	AND	DIAMETER		
CAIALUG NU.	ACSK AND ACSS	KCMIL	AL	ST	DIAMETER		
SDES-AS109HT	WOODCOCK	336.4	22	7	0.701	20AH	
SDES-AS113HT	LINNET	336.4	26	7	0.720	20AH	
SDES-AS114HT	ORIOLE	336.4	30	7	0.741	20AH	
SDES-AS185HT	CHICKADEE	397.5	18	1	0.743	20AH	
SDES-AS115HT	PTARMIGAN	397.5	20	7	0.752	20AH	
SDES-AS116HT	BRANT	397.5	24	7	0.772	20AH	
SDES-AS117HT	IBIS	397.5	26	7	0.783	20AH	
SDES-AS118HT	LARK	397.5	30	7	0.806	20AH	
SDES-AS186HT	PELICAN	477.0	18	1	0.814	24AH	
SDES-AS119HT	TAILORBIRD	477.0	20	7	0.823	20AH	
SDES-AS120HT	FLICKER	477.0	24	7	0.846	24AH	
SDES-AS121HT	HAWK	477.0	26	7	0.858	24AH	
SDES-AS122HT	HEN	477.0	30	7	0.883	24AH	
SDES-AS187HT	OSPREY	556.5	18	1	0.879	24AH	
SDES-AS123HT	SAPSUCKER	556.5	22	7	0.901	24AH	
SDES-AS124HT	PARAKEET	556.5	24	7	0.914	24AH	
SDES-AS125HT	DOVE	556.5	26	7	0.927	27AH	
SDES-AS126HT	EAGLE	556.5	30	7	0.953	27AH	
SDES-AS127HT	PEACOCK	605.0	24	7	0.953	27AH	
SDES-AS128HT	SQUAB	605.0	26	7	0.966	27AH	
SDES-AS130HT	WOOD/DUCK	605.0	30	7	0.994	27AH	
SDES-AS129HT	TEAL	605.0	30	19	0.994	27AH	
SDES-AS188HT	SWIFT	636.0	36	1	0.930	27AH	
SDES-AS189HT	KINGBIRD	636.0	18	1	0.940	27AH	
SDES-AS131HT	GOLDFINCH	636.0	22	7	0.963	27AH	
SDES-AS132HT	ROOK	636.0	24	7	0.977	27AH	
SDES-AS133HT	GROSBEAK	636.0	26	7	0.990	27AH	
SDES-AS182HT	SCOTER	636.0	30	7	1.019	27AH	
SDES-AS134HT	EGRET	636.0	30	19	1.019	27AH	

continued

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Solo HD[®] Compression Dead End for ACSR and ACSS Conductors, Eye and Clevis Type, Single Tongue

	CONDUCTORS							
AFL NO.		SIZE	ST	RAND	DIAMETER			
	ACSK AND ACSS	KCMIL	AL	ST	DIAMETER	HEX DIES		
SDES-AS135HT	FLAMINGO	666.6	24	7	1.000	27AH		
SDES-AS183HT	GANNET	666.6	26	7	1.014	27AH		
SDES-AS136HT	STILT	715.5	24	7	1.036	30AH		
SDES-AS137HT	STARLING	715.5	26	7	1.051	30AH		
SDES-AS138HT	REDWING	715.5	30	19	1.081	30AH		
SDES-AS190HT	COOT	795.0	36	1	1.040	30AH		
SDES-AS141HT	CUCKOO	795.0	24	7	1.092	30AH		
SDES-AS142HT	DRAKE	795.0	26	7	1.108	30AH		
SDES-AS144HT	MACAW	795.0	42	7	1.055	30AH		
SDES-AS140HT	TERN	795.0	45	7	1.063	30AH		
SDES-AS141HT	CONDOR	795.0	54	7	1.092	30AH		
SDES-AS143HT	MALLARD	795.0	30	19	1.14	30AH		
SDES-AS145HT	RUDDY	900.0	45	7	1.131	30AH		
SDES-AS146HT	CANARY	900.0	54	7	1.162	30AH		
SDES-AS191HT	CATBIRD	954.0	36	1	1.14	30AH		
SDES-AS147HT	CORNCRAKE	954.0	20	7	1.165	30AH		
SDES-AS184HT	REDBIRD	954.0	24	7	1.196	30AH		
SDES-AS148HT	RAIL	954.0	45	7	1.165	30AH		
SDES-AS149HT	TOWHEE	954.0	48	7	1.175	30AH		
SDES-AS150HT	CARDINAL	954.0	54	7	1.196	30AH		
SDES-AS151HT	CANVASBACK	954.0	30	19	1.248	34AH		
SDES-AS192HT	TANAGER	1033.5	36	1	1.186	30AH		
SDES-AS153HT	SNOWBIRD	1033.5	42	7	1.203	34AH		
SDES-AS152HT	ORTOLAN	1033.5	45	7	1.212	34AH		
SDES-AS154HT	CURLEW	1033.5	54	7	1.245	34AH		
SDES-AS155HT	BLUEJAY	1113.0	45	7	1.259	34AH		
SDES-AS157HT	FINCH	1113.0	54	19	1.293	34AH		
SDES-AS158HT	BUNTING	1192.5	45	7	1.302	34AH		
SDES-AS159HT	GRACKLE	1192.5	54	19	1.338	36AH		
SDES-AS161HT	BITTERN	1272.0	45	7	1.345	36AH		
SDES-AS162HT	DIVER	1272.0	48	7	1.357	36AH		
SDES-AS163HT	PHEASANT	1272.0	54	19	1.382	36AH		
SDES-AS164HT	DIPPER	1351.5	45	7	1.386	36AH		
SDES-AS166HT	MARTIN	1351.5	54	19	1.424	38AH		
SDES-AS167HT	BOBOLINK	1431.0	45	7	1.427	38AH		
SDES-AS169HT	PLOVER	1431.0	54	19	1.465	38AH		
SDES-AS170HT	NUTHATCH	1510.0	45	7	1.466	38AH		
SDES-AS172HT	PARROT	1510.0	54	19	1.505	40AH		
SDES-AS171HT	RATITE	1590.0	42	7	1.492	40AH		
SDES-AS173HT	LAPWING	1590.0	45	7	1.504	40AH		
SDES-AS174HT	FALCON	1590.0	54	19	1.544	40AH		
SDES-AS175HT	CHUKAR	1780.0	84	19	1.602	42AH		
SDES-AS176HT	MOCKINGBIRD	2034.5	72	7	1.681	42AH		
SDES-AS177HT	ROADRUNNER	2057.0	76	19	1.700	42AH		
SDES-AS178HT	BLUEBIRD	2156.0	84	19	1.762	44AH		
SDES-AS179HT	KIWI	2167.0	72	7	1.735	44AH		
SDES-AS180HT	THRASHER	2312.0	76	19	1.802	44AH		
SDES-AS181HT	JOREE	2515.0	76	19	1.880	48AH		

Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Eye and Clevis Type, Double Tongue

This Double Tongue Dead End Assembly is specifically designed for ACSR and ACSS conductor. The body of the Solo HD Dead Ends are fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost ½ when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with two 15° terminals and aluminum hardware.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

• No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.

Joints Travel Over Sheaves

Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools By using the same compression pumps and presses, AFL does not require the need for a large investment in both the tools and training.





1 (800) 866-7385

Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Eye and Clevis Type, Double Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

For a clevis application substitute the E for a C: **SDED-AS**: EYE TERMINATION **SDCD-AS**: CLEVIS TERMINATION

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV) For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDED-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Dead End installation instructions INS-ACA116 on page 44.

		A 1 1 1 A 1 A 1 A 1 A 1 A 4				
		SIZE	STR	AND	DIAMETED	
CAIALUG NU.	ACSK AND ACSS	KCMIL	AL	ST	DIAWEIEK	
SDED-AS109HT	WOODCOCK	336.4	22	7	0.701	20AH
SDED-AS113HT	LINNET	336.4	26	7	0.720	20AH
SDED-AS114HT	ORIOLE	336.4	30	7	0.741	20AH
SDED-AS185HT	CHICKADEE	397.5	18	1	0.743	20AH
SDED-AS115HT	PTARMIGAN	397.5	20	7	0.752	20AH
SDED-AS116HT	BRANT	397.5	24	7	0.772	20AH
SDED-AS117HT	IBIS	397.5	26	7	0.783	20AH
SDED-AS118HT	LARK	397.5	30	7	0.806	20AH
SDED-AS186HT	PELICAN	477.0	18	1	0.814	24AH
SDED-AS119HT	TAILORBIRD	477.0	20	7	0.823	20AH
SDED-AS120HT	FLICKER	477.0	24	7	0.846	24AH
SDED-AS121HT	HAWK	477.0	26	7	0.858	24AH
SDED-AS122HT	HEN	477.0	30	7	0.883	24AH
SDED-AS187HT	OSPREY	556.5	18	1	0.879	24AH
SDED-AS123HT	SAPSUCKER	556.5	22	7	0.901	24AH
SDED-AS124HT	PARAKEET	556.5	24	7	0.914	24AH
SDED-AS125HT	DOVE	556.5	26	7	0.927	27AH
SDED-AS126HT	EAGLE	556.5	30	7	0.953	27AH
SDED-AS127HT	PEACOCK	605.0	24	7	0.953	27AH
SDED-AS128HT	SQUAB	605.0	26	7	0.966	27AH
SDED-AS130HT	WOOD/DUCK	605.0	30	7	0.994	27AH
SDED-AS129HT	TEAL	605.0	30	19	0.994	27AH
SDED-AS188HT	SWIFT	636.0	36	1	0.930	27AH
SDED-AS189HT	KINGBIRD	636.0	18	1	0.940	27AH
SDED-AS131HT	GOLDFINCH	636.0	22	7	0.963	27AH
SDED-AS132HT	ROOK	636.0	24	7	0.977	27AH
SDED-AS133HT	GROSBEAK	636.0	26	7	0.990	27AH
SDED-AS182HT	SCOTER	636.0	30	7	1.019	27AH
SDED-AS134HT	EGRET	636.0	30	19	1.019	27AH

continued

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Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Eye and Clevis Type, Double Tongue

			CONDUCTORS				
AFL NO.		SIZE	STI	RAND	DIAMETED		
	ACSR AND ACSS	KCMIL	AL	ST	DIAIVIETER	HEX DIES	
SDED-AS135HT	FLAMINGO	666.6	24	7	1.000	27AH	
SDED-AS183HT	GANNET	666.6	26	7	1.014	27AH	
SDED-AS136HT	STILT	715.5	24	7	1.036	30AH	
SDED-AS137HT	STARLING	715.5	26	7	1.051	30AH	
SDED-AS138HT	REDWING	715.5	30	19	1.081	30AH	
SDED-AS190HT	COOT	795.0	36	1	1.040	30AH	
SDED-AS141HT	CUCKOO	795.0	24	7	1.092	30AH	
SDED-AS142HT	DRAKE	795.0	26	7	1.108	30AH	
SDED-AS144HT	MACAW	795.0	42	7	1.055	30AH	
SDED-AS140HT	TERN	795.0	45	7	1.063	30AH	
SDED-AS141HT	CONDOR	795.0.0	54	7	1.092	30AH	
SDED-AS143HT	MALLARD	795	30	19	1.140	30AH	
SDED-AS145HT	RUDDY	900.0	45	7	1.131	30AH	
SDED-AS146HT	CANARY	900.0	54	7	1.162	30AH	
SDED-AS191HT	CATBIRD	954.0	36	1	1.140	30AH	
SDED-AS147HT	CORNCRAKE	954.0	20	7	1.165	30AH	
SDED-AS184HT	REDBIRD	954.0	24	7	1.196	30AH	
SDED-AS148HT	RAIL	954.0	45	7	1.165	30AH	
SDED-AS149HT	TOWHEE	954.0	48	7	1.175	30AH	
SDED-AS150HT	CARDINAL	954.0	54	7	1.196	30AH	
SDED-AS151HT	CANVASBACK	954.0	30	19	1.248	34AH	
SDED-AS192HT	TANAGER	1033.5	36	1	1.186	30AH	
SDED-AS153HT	SNOWBIRD	1033.5	42	7	1.203	34AH	
SDED-AS152HT	ORTOLAN	1033.5	45	7	1.212	34AH	
SDED-AS154HT	CURLEW	1033.5	54	7	1.245	34AH	
SDED-AS155HT	BLUEJAY	1113.0	45	7	1.259	34AH	
SDED-AS157HT	FINCH	1113.0	54	19	1.293	34AH	
SDED-AS158HT	BUNTING	1192.5	45	7	1.302	34AH	
SDED-AS159HT	GRACKLE	1192.5	54	19	1.338	36AH	
SDED-AS161HT	BITTERN	1272.0	45	7	1.345	36AH	
SDED-AS162HT	DIVER	1272.0	48	7	1.357	36AH	
SDED-AS163HT	PHEASANT	1272.0	54	19	1.382	36AH	
SDED-AS164HT	DIPPER	1351.5	45	7	1.386	36AH	
SDED-AS166HT	MARTIN	1351.5	54	19	1.424	38AH	
SDED-AS167HT	BOBOLINK	1431.0	45	7	1.427	38AH	
SDED-AS169HT	PLOVER	1431.0	54	19	1.465	38AH	
SDED-AS170HT	NUTHATCH	1510.0	45	7	1.466	38AH	
SDED-AS172HT	PARROT	1510.0	54	19	1.505	40AH	
SDED-AS171HT	RATITE	1590.0	42	7	1.492	40AH	
SDFD-AS173HT	LAPWING	1590.0	45	7	1.504	40AH	
SDED-AS174HT	FALCON	1590.0	54	19	1.544	40AH	
SDED-AS175HT	CHUKAR	1780.0	84	19	1.602	42AH	
SDED-AS176HT	MOCKINGBIRD	2034.5	72	7	1.681	42AH	
SDED-AS177HT	ROADRUNNER	2057.0	76	, 19	1 700	42AH	
SDED-AS178HT	BIUFRIRD	2156.0	84	19	1,762	44AH	
SDED-AS179HT	KIWI	2167.0	72	7	1 735	44AH	
SDED-AS180HT	THRASHER	2312.0	76	19	1.802	44AH	
SDED-AS181HT	JOREE	2515.0	76	19	1,880	48AH	



Solo HD Replacement Compression Dead End for ACSR and ACSS Conductors, SDESR Series



The Solo HD Replacement Dead Ends are used to replace damaged conductor and dead ends at the end of a span. They are designed for fast and easy installation, requiring only the AH compression die set. By using a high strength alloy, the compression length has been shortened for less compression bites, while maintaining a minimum 95% of the ASTM rated strength. The replacement dead end does not require filler compound, eliminating an installation step.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV." Each dead end assembly comes with terminal and aluminum hardware, unless no terminal (NT) is used in the part number. The tongue and terminal pad are constructed with a 15° angle, which permits a terminal connector to be bolted in the straight or 30° position.

The end tapers of all compression accessories are supplied with a high voltage finish for die size sections 30AH and above.

Ordering Instructions

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

Step 4: Determine Length of Span Removal (XX)

Determine the length of existing dead end and/or conductor (XX) that will be cut out, to the nearest inch (Maximum 60").

Step 5: Assemble Catalog Number



Example:

A replacement compression dead end for 795 Drake conductor with no terminal, EHV finish and a <u>removed conductor length of 24 inches</u>, the complete catalog number is:

SDES-AS142HT<u>R24</u>NTEHV

Notes:

- 1. Assembly Catalog Number includes one aluminum body, one terminal, and one eye/core grip.
- 2. Installation Instructions for Compression Joints (INS-ACA116) are on page 44 in this catalog.
- 3. For more information on die selection and ordering instructions, see Tools and Equipment section of the AFL Transmission and Distribution catalog.

		CONDUC	TOR		DIMENSION			
ASSEMBLY		SIZE	ZE STRANDING		DIAMETER	ALUMINUM	G	
CAINEOG NOMBER	ACSK AND ACSS	KCMIL	AL	ST	IN		IN	ММ
SDES-AS109HTRXX	WOODCOCK	336.4	22	7	0.701	20AH	13.2	335
SDES-AS113HTRXX	LINNET	336.4	26	7	0.720	20AH	13.5	343
SDES-AS114HTRXX	ORIOLE	336.4	30	7	0.741	20AH	13.8	351
SDES-AS185HTRXX	CHICKADEE	397.5	18	1	0.743	20AH	13.8	351
SDES-AS115HTRXX	PTARMIGAN	397.5	20	7	0.752	20AH	13.8	351
SDES-AS116HTRXX	BRANT	397.5	24	7	0.772	20AH	13.9	353
SDES-AS117HTRXX	IBIS	397.5	26	7	0.783	20AH	13.9	353
SDES-AS118HTRXX	LARK	397.5	30	7	0.806	20AH	13.9	353
SDES-AS186HTRXX	PELICAN	477.0	18	1	0.814	24AH	14.6	371
SDES-AS119HTRXX	TAILORBIRD	477.0	20	7	0.823	20AH	14.5	368
SDES-AS120HTRXX	FLICKER	477.0	24	7	0.846	24AH	14.3	363
SDES-AS121HTRXX	HAWK	477.0	26	7	0.858	24AH	14.6	371
SDES-AS122HTRXX	HEN	477.0	30	7	0.883	24AH	14.3	363
SDES-AS187HTRXX	OSPREY	556.5	18	1	0.879	24AH	13.4	340

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Solo HD Replacement Compression Dead End for ACSS and ACSR Conductors, SDESR Series

		CONDUC	TOR		DIMENSION			
ASSEMBLY		SIZE STRANDING			DIAMETER		(i
CATALOG NUMBER	ACSR AND ACSS	КСМІІ	AL	ST	IN	HEX DIES SIZE	IN	MM
SDES-AS123HTRXX	SAPSUCKER	556.5	22	7	0.901	24AH	14.1	358
SDES-AS124HTRXX	PARAKEET	556.5	24	7	0.914	24AH	14.6	371
SDES-AS125HTRXX	DOVE	556.5	26	7	0.927	27AH	14.9	378
SDES-AS126HTRXX	FAGLE	556.5	30	7	0.953	27AH	15.1	384
SDES-AS127HTRXX	PEACOCK	605.0	24	7	0.953	27AH	15.1	384
SDES-AS128HTRXX	SOLIAB	605.0	26	7	0.966	27AH	15.1	384
SDES-AS130HTRXX	WOOD DUCK	605.0	30	7	0.994	27AH	15.1	384
SDES-AS129HTRXX	ΤΕΔΙ	605.0	30	19	0.994	27AH	15.1	384
SDES-AS188HTRXX	SWIET	636.0	36	1	0.930	27/11 27ΔH	15.1	384
SDES-AS189HTRXX	KINGBIRD	636.0	18	1	0.940	27/11 274H	15.1	384
SDES-AS131HTRXX	GOLDEINCH	636.0	22	7	0.963	27AH	15.1	386
SDES-AS132HTRXX	RUUK	636.0	24	7	0.905	2744	15.2	391
SDES-AS132HTRXX	GROSBEAK	636.0	24	7	0.990	27AH	15.9	404
	SCOTER	636.0	30	7	1 019	2744	15.9	404
	FGRET	636.0	30	10	1.019	2741	15.9	404
SDES-AS135HTRXX	FLAMINGO	666.6	24	7	1.019	27AH	15.9	301
	GANNET	666.6	24	7	1.000	2741	15.4	/17
	STILT	715 5	20	7	1.014	20AH	16.4	417
		715.5	24	7	1.050	20AU	16.4	417
	PEDWING	715.5	20	10	1.001	20AU	16.4	417
	COOT	715.5	36	19	1.081	20AU	16.4	417
	CUCKOO	795.0	24	1	1.040		16.4	417
		795.0	24	7	1.092	20AH	10.4	417
		795.0	20	7	1.100		16.5	419
	TEDNI	795.0	42	7	1.055	20AU	16.5	201
		795.0	43 E4	7	1.003		15.4	391 417
		795.0	20	10	1.092	20AH	10.4	417
	RUDDY	795.0	30 //E	7	1.140	20AU	16.0	4J2
	CANADY	900.0	4J E /	7	1.131	20AU	16.2	411
		900.0	26	1	1.102	20AU	16.1	427
	CODICDAVE	954.0	20	7	1.140	20AU	16.1	409
		954.0	20	7	1.105	20AU	16.1	409
	DAII	954.0	24 //5	7	1.190	20AU	16.1	409
	TOWHEE	954.0	45	7	1.105	30VH	10.1	409
		954.0	40 57	7	1.175	30VH	20.6	523
		954.0	20	10	1.130	24AU	10.1	125
		1022 5	36	13	1.240	20AU	19.1	463
		1033.5	/2	7	1.180	34AH	18.2	402
		1055.5	42	7	1.205	24AU	17.4	402
		1033.5	54	7	1.212	24411	10.4	442
		1112.0	04 45	7	1.243	24AH	10.2	402
		1112.0	40	10	1.209	34AU	12.1	434
SDES-ASIS/HIKAX		1102 5)4 //E	19	1.293	24AH	10.1	400
SDES-ASISOHIKAA		1192.0	40 54	/	1.302	26AU	10.1	400
SDES-ASISSHIKAA		1192.0)4 //E	19	1.330		10.1	400
		1272.0	40	7	1.343	26AU	17.0	432
		1272.0	40 E /	10	1.337	26AU	10.1	432
	DIPPER	1351 5	J4 ⊿5	7	1 386	364H	18.4	467
	DITTLI	1551.5	+J	/	1.500	50711	10.4	-07

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Solo HD Replacement Compression Dead End for ACSS and ACSR Conductors, SDESR Series

		CONDUC	TOR		DIME	NSION		
ASSEMBLY		SIZE	STRAM	IDING	DIAMETER	ALUMINUM	G	
	ACSK AND ACSS	KCMIL	AL	ST	IN		IN	ММ
SDES-AS166HTRXX	MARTIN	1351.5	54	19	1.424	38AH	19.5	495
SDES-AS167HTRXX	BOBOLINK	1431.0	45	7	1.427	38AH	19.5	495
SDES-AS169HTRXX	PLOVER	1431.0	54	19	1.465	38AH	19.5	495
SDES-AS170HTRXX	NUTHATCH	1510.0	45	7	1.466	38AH	19.5	495
SDES-AS172HTRXX	PARROT	1510.0	54	19	1.505	40AH	19.5	495
SDES-AS171HTRXX	RATITE	1590.0	42	7	1.492	40AH	19.5	495
SDES-AS173HTRXX	LAPWING	1590.0	45	7	1.504	40AH	19.5	495
SDES-AS174HTRXX	FALCON	1590.0	54	19	1.544	40AH	20.4	518
SDES-AS175HTRXX	CHUKAR	1780.0	84	19	1.602	42AH	20.1	511
SDES-AS176HTRXX	MOCKINGBIRD	2034.5	72	7	1.681	42AH	20.1	511
SDES-AS177HTRXX	ROADRUNNER	2057.0	76	19	1.700	42AH	20.1	511
SDES-AS178HTRXX	BLUEBIRD	2156.0	84	19	1.762	44AH	21.1	536
SDES-AS179HTRXX	KIWI	2167.0	72	7	1.735	44AH	20.4	518
SDES-AS180HTRXX	THRASHER	2312.0	76	19	1.802	44AH	18.9	480
SDES-AS181HTRXX	JOREE	2515.0	76	19	1.880	48AH	19.1	485



Solo HD[®] Compression Joint for ACSR and ACSS Conductor, Full Tension

The SDCJ-AS Series Compression Joint Assembly is specifically designed for ACSR and ACSS conductors. The Solo HD Compression Joint is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost half when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Compression Joints are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each compression joint assembly comes with an aluminum joint and a steel sleeve.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish.

Benefits

Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

• Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector Assembly can be used for both ACSS and ACSR type conductors, eliminating the need for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools By using the same compression pumps and presses, AFL does not require the need for a large investment in both the tools and training.

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Solo HD[®] Compression Joint for ACSR and ACSS Conductor, Full Tension

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDCJ-AS142HT**

EHV Finish

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Joint installation instructions ACA117 on page 60.

		SIZE	STR	AND		
CAIALOG NO.	ACSK AND ACSS	KCMIL	AL	ST	DIAWETEK	
SDCJ-AS109HT	WOODCOCK	336.4	22	7	0.701	20AH
SDCJ-AS113HT	LINNET	336.4	26	7	0.720	20AH
SDCJ-AS114HT	ORIOLE	336.4	30	7	0.741	20AH
SDCJ-AS185HT	CHICKADEE	397.5	18	1	0.743	20AH
SDCJ-AS115HT	PTARMIGAN	397.5	20	7	0.752	20AH
SDCJ-AS116HT	BRANT	397.5	24	7	0.772	20AH
SDCJ-AS117HT	IBIS	397.5	26	7	0.783	20AH
SDCJ-AS118HT	LARK	397.5	30	7	0.806	20AH
SDCJ-AS186HT	PELICAN	477.0	18	1	0.814	24AH
SDCJ-AS119HT	TAILORBIRD	477.0	20	7	0.823	20AH
SDCJ-AS120HT	FLICKER	477.0	24	7	0.846	24AH
SDCJ-AS121HT	HAWK	477.0	26	7	0.858	24AH
SDCJ-AS122HT	HEN	477.0	30	7	0.883	24AH
SDCJ-AS187HT	OSPREY	556.5	18	1	0.879	24AH
SDCJ-AS123HT	SAPSUCKER	556.5	22	7	0.901	24AH
SDCJ-AS124HT	PARAKEET	556.5	24	7	0.914	24AH
SDCJ-AS125HT	DOVE	556.5	26	7	0.927	27AH
SDCJ-AS126HT	EAGLE	556.5	30	7	0.953	27AH
SDCJ-AS127HT	PEACOCK	605.0	24	7	0.953	27AH
SDCJ-AS128HT	SQUAB	605.0	26	7	0.966	27AH
SDCJ-AS130HT	WOOD DUCK	605.0	30	7	0.994	27AH
SDCJ-AS129HT	TEAL	605.0	30	19	0.994	27AH
SDCJ-AS188HT	SWIFT	636.0	36	1	0.930	27AH
SDCJ-AS189HT	KINGBIRD	636.0	18	1	0.940	27AH
SDCJ-AS131HT	GOLDFINCH	636.0	22	7	0.963	27AH
SDCJ-AS132HT	ROOK	636.0	24	7	0.977	27AH
SDCJ-AS133HT	GROSBEAK	636.0	26	7	0.990	27AH
SDCJ-AS182HT	SCOTER	636.0	30	7	1.019	27AH
SDCJ-AS134HT	EGRET	636.0	30	19	1.019	27AH

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Solo HD[®] Compression Joint for ACSR and ACSS Conductor, Full Tension

	CONDUCTORS						
AFL NO.		SIZE	STR	AND	DIAMETED		
	ACSK AND ACSS	KCMIL	AL	ST	DIAIVIETER		
SDCJ-AS135HT	FLAMINGO	666.6	24	7	1.000	27AH	
SDCJ-AS183HT	GANNET	666.6	26	7	1.014	27AH	
SDCJ-AS136HT	STILT	715.5	24	7	1.036	30AH	
SDCJ-AS137HT	STARLING	715.5	26	7	1.051	30AH	
SDCJ-AS138HT	REDWING	715.5	30	19	1.081	30AH	
SDCJ-AS190HT	COOT	795.0	36	1	1.040	30AH	
SDCJ-AS141HT	CUCKOO	795.0	24	7	1.092	30AH	
SDCJ-AS142HT	DRAKE	795.0	26	7	1.108	30AH	
SDCJ-AS144HT	MACAW	795.0	42	7	1.055	30AH	
SDCJ-AS140HT	TERN	795.0	45	7	1.063	30AH	
SDCJ-AS141HT	CONDOR	795.0	54	7	1.092	30AH	
SDCJ-AS143HT	MALLARD	795.0	30	19	1.140	30AH	
SDCJ-AS145HT	RUDDY	900.0	45	7	1.131	30AH	
SDCJ-AS146HT	CANARY	900.0	54	7	1.162	30AH	
SDCJ-AS191HT	CATBIRD	954.0	36	1	1.140	30AH	
SDCJ-AS147HT	CORNCRAKE	954.0	20	7	1.165	30AH	
SDCJ-AS184HT	REDBIRD	954.0	24	7	1.196	30AH	
SDCJ-AS148HT	RAIL	954.0	45	7	1.165	30AH	
SDCJ-AS149HT	TOWHEE	954.0	48	7	1.175	30AH	
SDCJ-AS150HT	CARDINAL	954.0	54	7	1.196	30AH	
SDCJ-AS151HT	CANVASBACK	954.0	30	19	1.248	34AH	
SDCJ-AS192HT	TANAGER	1033.5	36	1	1.186	30AH	
SDCJ-AS153HT	SNOWBIRD	1033.5	42	7	1.203	34AH	
SDCJ-AS152HT	ORTOLAN	1033.5	45	7	1.212	34AH	
SDCJ-AS154HT	CURLEW	1033.5	54	7	1.245	34AH	
SDCJ-AS155HT	BLUEJAY	1113.0	45	7	1.259	34AH	
SDCJ-AS157HT	FINCH	1113.0	54	19	1.293	34AH	
SDCJ-AS158HT	BUNTING	1192.5	45	7	1.302	34AH	
SDCJ-AS159HT	GRACKLE	1192.5	54	19	1.338	36AH	
SDCJ-AS161HT	BITTERN	1272.0	45	7	1.345	36AH	
SDCJ-AS162HT	DIVER	1272.0	48	7	1.357	36AH	
SDCJ-AS163HT	PHEASANT	1272.0	54	19	1.382	36AH	
SDCJ-AS164HT	DIPPER	1351.5	45	7	1.386	36AH	
SDCJ-AS166HT	MARTIN	1351.5	54	19	1.424	38AH	
SDCJ-AS167HT	BOBOLINK	1431.0	45	7	1.427	38AH	
SDCJ-AS169HT	PLOVER	1431.0	54	19	1.465	38AH	
SDCJ-AS170HT	NUTHATCH	1510.0	45	7	1.466	38AH	
SDCJ-AS172HT	PARROT	1510.0	54	19	1.505	40AH	
SDCJ-AS171HT	RATITE	1590.0	42	7	1.492	40AH	
SDCJ-AS173HT	LAPWING	1590.0	45	7	1.504	40AH	
SDCJ-AS174HT	FALCON	1590.0	54	19	1.544	40AH	
SDCJ-AS175HT	CHUKAR	1780.0	84	19	1.602	42AH	
SDCJ-AS176HT	MOCKINGBIRD	2034.5	72	7	1.681	42AH	
SDCJ-AS177HT	ROADRUNNER	2057.0	76	19	1.700	42AH	
SDCJ-AS178HT	BLUEBIRD	2156.0	84	19	1.762	44AH	
SDCJ-AS179HT	KIWI	2167.0	72	7	1.735	44AH	
SDCJ-AS180HT	THRASHER	2312.0	76	19	1.802	44AH	
SDCJ-AS181HT	JOREE	2515.0	76	19	1.880	48AH	



Solo HD Replacement Compression Joint for ACSR and ACSS Conductors, SDCJR Series



The Solo HD Replacement Joints are used to replace damaged conductor and removed splices in midspan. They are designed for fast and easy installation, requiring only the AH compression die set. By using a high strength alloy, the compression length has been shortened for less compression bites, while maintaining a minimum 95% of the ASTM rated strength. The replacement joint does not require filler compound, eliminating an installation step.

The end tapers of all compression accessories are supplied with a high voltage finish for die size sections 30AH and above.

Ordering Instructions

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Determine Length of Span Removal (XX)

Determine the length of existing splice and/or conductor (XX) that will be cut out, to the nearest inch (Maximum 60").

Step 3: Assemble Catalog Number

Catalog Number

Example:

A replacement compression joint for 795 Drake conductor with a <u>removed conductor length of 24 inches</u>, the complete catalog number is: **SDCJ-AS142HTR24**

SDCJ-AS142

Removed Conductor

Length (XX)

Notes:

- 1. Assembly Catalog Number includes one aluminum body and two core grips.
- 2. Installation Instructions for Compression Joints (INS-ACA117) are on page 60 in this catalog.
- 3. For more information on die selection and ordering instructions, see Tools and Equipment tab in this catalog.

ASSEMBLY		CONDUC	TOR		DIMENSION			
CATALOG		SIZE	STRA	NDING	DIAMETER		C	i
NUMBER	ACSK AND ACSS	KCMIL	AL	ST	IN		IN	ММ
SDCJ-AS109HTRXX	WOODCOCK	336.4	22	7	0.701	20AH	13.2	335
SDCJ-AS113HTRXX	LINNET	336.4	26	7	0.720	20AH	13.5	343
SDCJ-AS114HTRXX	ORIOLE	336.4	30	7	0.741	20AH	13.8	351
SDCJ-AS185HTRXX	CHICKADEE	397.5	18	1	0.743	20AH	13.8	351
SDCJ-AS115HTRXX	PTARMIGAN	397.5	20	7	0.752	20AH	13.8	351
SDCJ-AS116HTRXX	BRANT	397.5	24	7	0.772	20AH	13.9	353
SDCJ-AS117HTRXX	IBIS	397.5	26	7	0.783	20AH	13.9	353
SDCJ-AS118HTRXX	LARK	397.5	30	7	0.806	20AH	13.9	353
SDCJ-AS186HTRXX	PELICAN	477.0	18	1	0.814	24AH	14.6	371
SDCJ-AS119HTRXX	TAILORBIRD	477.0	20	7	0.823	20AH	14.5	368
SDCJ-AS120HTRXX	FLICKER	477.0	24	7	0.846	24AH	14.3	363
SDCJ-AS121HTRXX	HAWK	477.0	26	7	0.858	24AH	14.6	371
SDCJ-AS122HTRXX	HEN	477.0	30	7	0.883	24AH	14.3	363
SDCJ-AS187HTRXX	OSPREY	556.5	18	1	0.879	24AH	13.4	340
SDCJ-AS123HTRXX	SAPSUCKER	556.5	22	7	0.901	24AH	14.1	358
SDCJ-AS124HTRXX	PARAKEET	556.5	24	7	0.914	24AH	14.6	371
SDCJ-AS125HTRXX	DOVE	556.5	26	7	0.927	27AH	14.9	378
SDCJ-AS126HTRXX	EAGLE	556.5	30	7	0.953	27AH	15.1	384
SDCJ-AS127HTRXX	PEACOCK	605.0	24	7	0.953	27AH	15.1	384
SDCJ-AS128HTRXX	SQUAB	605.0	26	7	0.966	27AH	15.1	384
SDCJ-AS130HTRXX	WOOD DUCK	605.0	30	7	0.994	27AH	15.1	384
SDCJ-AS129HTRXX	TEAL	605.0	30	19	0.994	27AH	15.1	384
SDCJ-AS188HTRXX	SWIFT	636.0	36	1	0.930	27AH	15.1	384
SDCJ-AS189HTRXX	KINGBIRD	636.0	18	1	0.940	27AH	15.1	384
SDCJ-AS131HTRXX	GOLDFINCH	636.0	22	7	0.963	27AH	15.2	386
SDCJ-AS132HTRXX	ROOK	636.0	24	7	0.977	27AH	15.4	391

Solo HD Replacement Compression Joint for ACSS and ACSR Conductors, SDCJR Series

ASSEMBLY		CONDUC	TOR		DIMENSION			
CATALOG		SIZE	STRA	NDING	DIAMETER		G	i
NUMBER	ACSR AND ACSS	KCMIL	AL	ST	IN	HEX DIES SIZE	IN	ММ
SDCJ-AS133HTRXX	GROSBEAK	636.0	26	7	0.990	27AH	15.9	404
SDCJ-AS182HTRXX	SCOTER	636.0	30	7	1.019	27AH	15.9	404
SDCJ-AS134HTRXX	EGRET	636.0	30	19	1.019	27AH	15.9	404
SDCJ-AS135HTRXX	FLAMINGO	666.6	24	7	1.000	27AH	15.4	391
SDCJ-AS183HTRXX	GANNET	666.6	26	7	1.014	27AH	16.4	417
SDCJ-AS136HTRXX	STILT	715.5	24	7	1.036	30AH	16.4	417
SDCJ-AS137HTRXX	STARLING	715.5	26	7	1.051	30AH	16.4	417
SDCJ-AS138HTRXX	REDWING	715.5	30	19	1.081	30AH	16.4	417
SDCJ-AS190HTRXX	COOT	795.0	36	1	1.040	30AH	16.4	417
SDCI-AS141HTRXX	CUCKOO	795.0	24	7	1.092	30AH	16.4	417
SDCI-AS142HTRXX	DRAKE	795.0	26	7	1 108	30AH	16.5	419
SDCI-AS144HTRXX	MACAW	795.0	42	7	1.055	304H	16.5	419
SDCI-AS140HTRXX	TERN	795.0	45	7	1.053	30AH	15.4	391
SDCI-AS141HTRXX	CONDOR	795.0	54	7	1 092	304H	16.4	417
SDCI-AS143HTRXX	MALLARD	795.0	30	19	1 140	30AH	17.8	452
SDCI-AS145HTRXX	RUDDY	900.0	45	7	1 131	30AH	16.2	411
SDCI-AS146HTRXX	CANARY	900.0	54	7	1.167	304H	16.8	427
	CATRIRD	954.0	36	,	1.102	30AH	16.1	427
	CORNERAKE	954.0	20	7	1.140	30AH	16.1	405
	REDRIRD	954.0	20	7	1.105	30AH	16.1	405
	RAII	954.0	45	7	1.150	30AH	16.1	405
	TOWHEE	954.0	45	7	1.105	30VH	10.1	405
		954.0	40 57	7	1.175	30AH	20.6	523
		954.0	30	10	1.130	347H	10.1	185
	TANAGER	1033 5	36	13	1.240	30VH	19.1	463
		1022.5	10	7	1.100	24AU	10.2	402
		1033.5	42	7	1.203	34AH	17./	402
		1022.5	54	7	1.212	24AU	17.4	442
		1112.0	J4 //5	7	1.245	24AH	17.1	402
		1112.0	4J 54	10	1.202	24AII	17.1	454
	PLINTING	1102.5	J4 //5	7	1.295	24AH	10.1	400
	CDACKIE	1102.5	4J E 4	10	1.302	26AU	10.1	400
	DITTEDN	1192.5)4 //E	7	1.550	26AU	17.0	400
		1272.0	40	7	1.545		17.0	432
		1272.0	40 E /	10	1.337	26AU	17.8	452
		1272.0)4 //E	7	1.302	26AU	19.1	405
		1251.5	4J E 4	10	1.300	20AII	10.4	407
		1/21 0	15	19	1.424		19.5	495
		1431.0	4J E 4	10	1.427	20AII	19.5	495
		1431.0)4 //E	19	1.405	ΠΑΟζ	19.5	495
		1510.0	43 E 4	10	1.400	50AП 40AЦ	19.5	495
		1510.0	12	7	1.000	40AH	19.5	495
		1590.0	42	7	1.492	40AH	19.5	495
		1590.0	40	/	1.504	40AH	19.5	495 F19
		1790.0	04	19	1.044		20.4	510
		1/60.0	04 70	19	1.002	42AH	20.1	511
		2034.5	72	10	1.081	42AH	20.1	511
		2007.0	70	19	1.700	42AH	20.1 21.1	511
	DLUEBIKD	2150.0	ŏ4	19	1.702	44AH	21.1	530
		2107.0	12	/	1.000	44AH	20.4	210
	IHKASHEK	2312.0	/b	19	1.802	44AH	10.9	480
ουίj-ασιδιμικχχ	JUKEE	2015.0	10	19	1.000	4ŏAH	19.1	400



Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Single Tongue

The SDACS-AS Series Dead End Assembly is specifically designed for use on both ACSR and ACSS conductors. The body of the SOLO HD Dead End is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost ½ when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with terminal and aluminum hardware.

For die sizes 30 AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

• Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compount Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves
 Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools
 By using the same compression pumps
 and presses, AFL does not require the
 need for a large investment in both the
 tools and training.



continued



Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Single Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV) For Standard Finish, leave blank. (< 345 kV) For bolt, nut and cotter pin add BNC at the END

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDACS-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Adjustable Clevis Dead End installation instructions INS-ACA125 on page 52.

ACCEMDIV							
	CODE NAME SIZE		STR	AND			
CAIALOG NO.		KCMIL	AL	ST	DIAMETER		
SDACS-AS109HT	WOODCOCK	336.4	22	7	0.701	20AH	
SDACS-AS113HT	LINNET	336.4	26	7	0.720	20AH	
SDACS-AS114HT	ORIOLE	336.4	30	7	0.741	20AH	
SDACS-AS185HT	CHICKADEE	397.5	18	1	0.743	20AH	
SDACS-AS115HT	PTARMIGAN	397.5	20	7	0.752	20AH	
SDACS-AS116HT	BRANT	397.5	24	7	0.772	20AH	
SDACS-AS117HT	IBIS	397.5	26	7	0.783	20AH	
SDACS-AS118HT	LARK	397.5	30	7	0.806	20AH	
SDACS-AS186HT	PELICAN	477.0	18	1	0.814	24AH	
SDACS-AS119HT	TAILORBIRD	477.0	20	7	0.823	20AH	
SDACS-AS120HT	FLICKER	477.0	24	7	0.846	24AH	
SDACS-AS121HT	HAWK	477.0	26	7	0.858	24AH	
SDACS-AS122HT	HEN	477.0	30	7	0.883	24AH	
SDACS-AS187HT	OSPREY	556.5	18	1	0.879	24AH	
SDACS-AS123HT	SAPSUCKER	556.5	22	7	0.901	24AH	
SDACS-AS124HT	PARAKEET	556.5	24	7	0.914	24AH	
SDACS-AS125HT	DOVE	556 5	26	7	0.927	27AH	
SDACS-AS126HT	EAGLE	556.5	30	7	0.953	27AH	
SDACS-AS127HT	PEACOCK	605.0	24	7	0.953	27AH	
SDACS-AS128HT	SQUAB	605.0	26	7	0.966	27AH	
SDACS-AS130HT	WOOD/DUCK	605.0	30	7	0.994	27AH	
SDACS-AS129HT	TEAL	605.0	30	19	0.994	27AH	
SDACS-AS188HT	SWIFT	636.0	36	1	0.930	27AH	
SDACS-AS189HT	KINGBIRD	636.0	18	1	0.940	27AH	
SDACS-AS131HT	GOLDFINCH	636.0	22	7	0.963	27AH	
SDACS-AS132HT	ROOK	636.0	24	7	0.977	27AH	
SDACS-AS133HT	GROSBEAK	636.0	26	7	0.990	27AH	
SDACS-AS182HT	SCOTER	636.0	30	7	1.019	27AH	
SDACS-AS134HT	EGRET	636.0	30	19	1.019	27AH	

continued

PAFL

Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Single Tongue

	CONDUCTORS						
ASSEMBLY		SIZE	STR	AND	DIAMETED		
CAIALUG NO.		KCMIL	AL	ST	DIAMETER	HEX DIES	
SDACS-AS135HT	FLAMINGO	666.6	24	7	1.000	27AH	
SDACS-AS183HT	GANNET	666.6	26	7	1.014	27AH	
SDACS-AS136HT	STILT	715.5	24	7	1.036	30AH	
SDACS-AS137HT	STARLING	715.5	26	7	1.051	30AH	
SDACS-AS138HT	REDWING	715.5	30	19	1.081	30AH	
SDACS-AS190HT	COOT	795.0	36	1	1.040	30AH	
SDACS-AS141HT	CUCKOO	795.0	24	7	1.092	30AH	
SDACS-AS142HT	DRAKE	795.0	26	7	1.108	30AH	
SDACS-AS144HT	MACAW	795.0	42	7	1.055	30AH	
SDACS-AS140HT	TERN	795.0	45	7	1.063	30AH	
SDACS-AS141HT	CONDOR	795.0	54	7	1.092	30AH	
SDACS-AS143HT	MALLARD	795.0	30	19	1.140	30AH	
SDACS-AS145HT	RUDDY	900.0	45	7	1.131	30AH	
SDACS-AS146HT	CANARY	900.0	54	7	1.162	30AH	
SDACS-AS191HT	CATBIRD	954.0	36	1	1.140	30AH	
SDACS-AS147HT	CORNCRAKE	954.0	20	7	1.165	30AH	
SDACS-AS184HT	REDBIRD	954.0	24	7	1.196	30AH	
SDACS-AS148HT	RAIL	954.0	45	7	1.165	30AH	
SDACS-AS149HT	TOWHEE	954.0	48	7	1.175	30AH	
SDACS-AS150HT	CARDINAL	954.0	54	7	1.196	30AH	
SDACS-AS151HT	CANVASBACK	954.0	30	19	1.248	34AH	
SDACS-AS192HT	TANAGER	1033.5	36	1	1.186	30AH	
SDACS-AS153HT	SNOWBIRD	1033.5	42	7	1.203	34AH	
SDACS-AS152HT	ORTOLAN	1033.5	45	7	1.212	34AH	
SDACS-AS154HT	CURLEW	1033.5	54	7	1.245	34AH	
SDACS-AS155HT	BLUEJAY	1113.0	45	7	1.259	34AH	
SDACS-AS157HT	FINCH	1113.0	54	19	1.293	34AH	
SDACS-AS158HT	BUNTING	1192.5	45	7	1.302	34AH	
SDACS-AS159HT	GRACKLE	1192.5	54	19	1.338	36AH	
SDACS-AS161HT	BITTERN	1272.0	45	7	1.345	36AH	
SDACS-AS162HT	DIVER	1272.0	48	7	1.357	36AH	
SDACS-AS163HT	PHEASANT	1272.0	54	19	1.382	36AH	
SDACS-AS164HT	DIPPER	1351.5	45	7	1.386	36AH	
SDACS-AS166HT	MARTIN	1351.5	54	19	1.424	38AH	
SDACS-AS167HT	BOBOLINK	1431.0	45	7	1.427	38AH	
SDACS-AS169HT	PLOVER	1431.0	54	19	1.465	38AH	
SDACS-AS170HT	NUTHATCH	1510.0	45	7	1.466	38AH	
SDACS-AS172HT	PARROT	1510.0	54	19	1.505	40AH	
SDACS-AS171HT	RATITE	1590.0	42	7	1.492	40AH	
SDACS-AS173HT	LAPWING	1590.0	45	7	1.504	40AH	
SDACS-AS174HT	FALCON	1590.0	54	19	1.544	40AH	
SDACS-AS175HT	CHUKAR	1780.0	84	19	1.602	42AH	
SDACS-AS176HT	MOCKINGBIRD	2034.5	72	7	1.681	42AH	
SDACS-AS177HT	ROADRUNNER	2057.0	76	19	1.700	42AH	
SDACS-AS178HT	BLUEBIRD	2156.0	84	19	1.762	44AH	
SDACS-AS179HT	KIWI	2167.0	72	7	1.735	44AH	
SDACS-AS180HT	THRASHER	2312.0	76	19	1.802	44AH	
SDACS-AS181HT	IORFF	2515.0	76	19	1 880	48AH	



Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Double Tongue

The SDACD-AS Series Dead End Assembly is specifically designed for use on both ACSR and ACSS conductors. The body of the SOLO HD Dead End is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost ½ when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with terminal and aluminum hardware.

For die sizes 30 AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

• Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves
 Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

• Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools
 By using the same compression pumps
 and presses, AFL does not require the
 need for a large investment in both the

tools and training.



1 (800) 866-7385

Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Double Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV) For Standard Finish, leave blank. (< 345 kV) For bolt, nut and cotter pin add BNC at the END

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDACD-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Adjustable Clevis Dead End installation instructions INS-ACA125 on page 52.

FAFL

		SIZE	STR	AND	DIAMETER	
CATALOG NO.		KCMIL	AL	ST	DIAWETEK	
SDACD-AS109HT	WOODCOCK	336.4	22	7	0.701	20AH
SDACD-AS113HT	LINNET	336.4	26	7	0.720	20AH
SDACD-AS114HT	ORIOLE	336.4	30	7	0.741	20AH
SDACD-AS185HT	CHICKADEE	397.5	18	1	0.743	20AH
SDACD-AS115HT	PTARMIGAN	397.5	20	7	0.752	20AH
SDACD-AS116HT	BRANT	397.5	24	7	0.772	20AH
SDACD-AS117HT	IBIS	397.5	26	7	0.783	20AH
SDACD-AS118HT	LARK	397.5	30	7	0.806	20AH
SDACD-AS186HT	PELICAN	477.0	18	1	0.814	24AH
SDACD-AS119HT	TAILORBIRD	477.0	20	7	0.823	20AH
SDACD-AS120HT	FLICKER	477.0	24	7	0.846	24AH
SDACD-AS121HT	HAWK	477.0	26	7	0.858	24AH
SDACD-AS122HT	HEN	477.0	30	7	0.883	24AH
SDACD-AS187HT	OSPREY	556.5	18	1	0.879	24AH
SDACD-AS123HT	SAPSUCKER	556.5	22	7	0.901	24AH
SDACD-AS124HT	PARAKEET	556.5	24	7	0.914	24AH
SDACD-AS125HT	DOVE	556.5	26	7	0.927	27AH
SDACD-AS126HT	EAGLE	556.5	30	7	0.953	27AH
SDACD-AS127HT	PEACOCK	605.0	24	7	0.953	27AH
SDACD-AS128HT	SQUAB	605.0	26	7	0.966	27AH
SDACD-AS130HT	WOOD/DUCK	605.0	30	7	0.994	27AH
SDACD-AS129HT	TEAL	605.0	30	19	0.994	27AH
SDACD-AS188HT	SWIFT	636.0	36	1	0.930	27AH
SDACD-AS189HT	KINGBIRD	636.0	18	1	0.940	27AH
SDACD-AS131HT	GOLDFINCH	636.0	22	7	0.963	27AH
SDACD-AS132HT	ROOK	636.0	24	7	0.977	27AH
SDACD-AS133HT	GROSBEAK	636.0	26	7	0.990	27AH
SDACD-AS182HT	SCOTER	636.0	30	7	1.019	27AH
SDACD-AS134HT	EGRET	636.0	30	19	1.019	27AH

continued

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Solo HD[®] Compression Dead End for ACSR and ACSS Conductor, Adjustable Clevis, Double Tongue

		SIZE	STR	AND		
CATALOG NO.	CODE NAME	KCMIL	AL	ST	DIAWETER	
SDACD-AS135HT	FLAMINGO	666.6	24	7	1.000	27AH
SDACD-AS183HT	GANNET	666.6	26	7	1.014	27AH
SDACD-AS136HT	STILT	715.5	24	7	1.036	30AH
SDACD-AS137HT	STARLING	715.5	26	7	1.051	30AH
SDACD-AS138HT	REDWING	715.5	30	19	1.081	30AH
SDACD-AS190HT	COOT	795.0	36	1	1.040	30AH
SDACD-AS141HT	CUCKOO	795.0	24	7	1.092	30AH
SDACD-AS142HT	DRAKE	795.0	26	7	1.108	30AH
SDACD-AS144HT	MACAW	795.0	42	7	1.055	30AH
SDACD-AS140HT	TERN	795.0	45	7	1.063	30AH
SDACD-AS141HT	CONDOR	795.0	54	7	1.092	30AH
SDACD-AS143HT	MALLARD	795.0	30	19	1.140	30AH
SDACD-AS145HT	RUDDY	900.0	45	7	1.131	30AH
SDACD-AS146HT	CANARY	900.0	54	7	1.162	30AH
SDACD-AS191HT	CATBIRD	954.0	36	1	1.140	30AH
SDACD-AS147HT	CORNCRAKE	954.0	20	7	1.165	30AH
SDACD-AS184HT	REDBIRD	954.0	24	7	1.196	30AH
SDACD-AS148HT	RAIL	954.0	45	7	1.165	30AH
SDACD-AS149HT	TOWHEE	954.0	48	7	1.175	30AH
SDACD-AS150HT	CARDINAL	954.0	54	7	1.196	30AH
SDACD-AS151HT	CANVASBACK	954.0	30	19	1.248	34AH
SDACD-AS192HT	TANAGER	1033.5	36	1	1.186	30AH
SDACD-AS153HT	SNOWBIRD	1033.5	42	7	1.203	34AH
SDACD-AS152HT	ORTOLAN	1033.5	45	7	1.212	34AH
SDACD-AS154HT	CURLEW	1033.5	54	7	1.245	34AH
SDACD-AS155HT	BLUEJAY	1113.0	45	7	1.259	34AH
SDACD-AS157HT	FINCH	1113.0	54	19	1.293	34AH
SDACD-AS158HT	BUNTING	1192.5	45	7	1.302	34AH
SDACD-AS159HT	GRACKLE	1192.5	54	19	1.338	36AH
SDACD-AS161HT	BITTERN	1272.0	45	7	1.345	36AH
SDACD-AS162HT	DIVER	1272.0	48	7	1.357	36AH
SDACD-AS163HT	PHEASANT	1272.0	54	19	1.382	36AH
SDACD-AS164HT	DIPPER	1351.5	45	7	1.386	36AH
SDACD-AS166HT	MARTIN	1351.5	54	19	1.424	38AH
SDACD-AS167HT	BOBOLINK	1431.0	45	7	1.427	38AH
SDACD-AS169HT	PLOVER	1431.0	54	19	1.465	38AH
SDACD-AS170HT	NUTHATCH	1510.0	45	7	1.466	38AH
SDACD-AS172HT	PARROT	1510.0	54	19	1.505	40AH
SDACD-AS171HT	RATITE	1590.0	42	7	1.492	40AH
SDACD-AS173HT	LAPWING	1590.0	45	7	1.504	40AH
SDACD-AS174HT	FALCON	1590.0	54	19	1.544	40AH
SDACD-AS175HT	CHUKAR	1780.0	84	19	1.602	42AH
SDACD-AS176HT	MOCKINGBIRD	2034.5	72	7	1.681	42AH
SDACD-AS177HT	ROADRUNNER	2057.0	76	19	1.700	42AH
SDACD-AS178HT	BLUEBIRD	2156.0	84	19	1.762	44AH
SDACD-AS179HT	KIWI	2167.0	72	7	1.735	44AH
SDACD-AS180HT	THRASHER	2312.0	76	19	1.802	44AH
SDACD-AS181HT	JOREE	2515.0	76	19	1.880	48AH



Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye and Clevis Type, Single Tongue

This Series Dead End Assembly is specifically designed for ACSS/TW conductors. The body of the Solo HD Dead End is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost half when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead-end assembly comes with terminal and aluminum hardware.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools By using the same compression pumps and presses, AFL does not require the need for a large investment in both the tools and training.





continued

Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye and Clevis Type, Single Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

For a clevis application substitute the E for a C: **SDES-AS**: EYE TERMINATION **SDCS-AS**: CLEVIS TERMINATION

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDES-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Dead End installation instructions INS-ACA116 on page 44.

	CONDUCTORS						
ASSEMBLY		SIZE	ТУЛГ	STR	AND		
CATALUG NO.		KCMIL	ITPE	AL	ST	DIAMETER	
SDES-AS114HT	ORIOLE ACSS/TW	336.4	23	18	7	0.693	20AH
SDES-AS120HT	FLICKER ACSS/TW	447.0	13	18	7	0.776	24AH
SDES-AS121HT	HAWK ACSS/TW	447.0	16	18	7	0.798	24AH
SDES-AS122HT	HEN ACSS/TW	477.0	23	18	7	0.825	24AH
SDES-AS124HT	PARAKEET ACSS/TW	556.5	13	18	7	0.835	24AH
SDES-AS125HT	DOVE ACSS/TW	556.5	16	20	7	0.852	24AH
SDES-AS858HT	CALUMET ACSS/TW	565.3	16	18	7	0.858	24AH
SDES-AS846HT	MOHAWK ACSS/TW	571.7	13	18	7	0.846	24AH
SDES-AS132HT	ROOK ACSS/TW	636.0	13	19	7	0.890	27AH
SDES-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	7	0.908	27AH
SDES-AS182HT	SCOTER ACSS/TW	636.0	23	18	7	0.953	27AH
SDES-AS927HT	OSWEGO ACSS/TW	664.8	16	20	7	0.927	27AH
SDES-AS913HT	MYSTIC ACSS/TW	666.6	13	20	7	0.913	27AH
SDES-AS990HT	WABASH ACSS/TW	762.8	16	20	7	0.990	30AH
SDES-AS977HT	MAUMEE ACSS/TW	768.2	13	20	7	0.977	30AH
SDES-AS140HT	TERN ACSS/TW	795.0	7	17	7	0.960	30AH
SDES-AS980HT	PUFFIN ACSS/TW	795.0	10	18	7	0.980	30AH
SDES-AS141HT	CONDOR ACSS/TW	795.0	13	20	7	0.993	30AH
SDES-AS142HT	DRAKE ACSS/TW	795.0	16	20	7	1.010	30AH
SDES-AS146HT	CANARY ACSS/TW	900.0	13	30	7	1.080	30AH
SDES-AS077HT	FRASER ACSS/TW	946.7	10	35	7	1.077	30AH
SDES-AS044HT	PHOENIX ACSS/TW	954.0	5	30	7	1.044	30AH
SDES-AS148HT	RAIL ACSS/TW	954.0	7	32	7	1.061	30AH
SDES-AS150HT	CARDINAL ACSS/TW	954.0	13	20	7	1.084	30AH
SDES-AS060HT	KETTLE ACSS/TW	957.2	7	32	7	1.060	30AH
SDES-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	7	1.108	30AH
SDES-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	7	1.092	30AH
SDES-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	7	1.089	34AH
SDES-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	7	1.102	34AH

continued

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Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye and Clevis Type, Single Tongue

	CONDUCTORS							
		SIZE	TVDE	STR	AND			
CAIALUG NO.	CODE NAME	KCMIL	ITPE	AL	ST	DIAMETER		
SDES-AS154HT	CURLEW ACSS/TW	1033.5	13	22	7	1.128	34AH	
SDES-AS131HT	-	1080.0	7	20	7	1.131	34AH	
SDES-AS129HT	AVOCET ACSS/TW	1113.0	5	30	7	1.129	34AH	
SDES-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	7	1.143	34AH	
SDES-AS157HT	FINCH ACSS/TW	1113.0	13	38	19	1.185	34AH	
SDES-AS165HT	GENESEE ACSS/TW	1158.0	7	33	7	1.165	34AH	
SDES-AS196HT	HUDSON ACSS/TW	1158.4	13	26	7	1.196	34AH	
SDES-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	7	1.155	34AH	
SDES-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	7	1.167	34AH	
SDES-AS158HT	BUNTING ACSS/TW	1192.5	7	33	7	1.191	34AH	
SDES-AS159HT	GRACKLE ACSS/TW	1192.5	13	38	19	1.225	36AH	
SDES-AS245HT	YUKON ACSS/TW	1233.6	13	38	19	1.245	34AH	
SDES-AS213HT	NELSON ACSS/TW	1257.1	7	35	7	1.213	34AH	
SDES-AS202HT	SCISSORTAIL ACSS/TW	1272.0	5	30	7	1.202	36AH	
SDES-AS203HT	CATAWBA ACSS/TW	1272.0	5	30	7	1.203	34AH	
SDES-AS161HT	BITTERN ACSS/TW	1272.0	7	35	7	1.220	36AH	
SDES-AS163HT	PHEASANT ACSS/TW	1272.0	13	39	19	1.264	36AH	
SDES-AS290HT	THAMES ACSS/TW	1334.6	13	39	19	1.290	36AH	
SDES-AS164HT	DIPPER ACSS/TW	1351.5	7	35	7	1.256	36AH	
SDES-AS166HT	MARTIN ACSS/TW	1351.5	13	39	19	1.300	38AH	
SDES-AS259HT	MACKENZIE ACSS/TW	1359.7	7	36	7	1.259	36AH	
SDES-AS248HT	TRUCKEE ACSS/TW	1372.5	5	30	7	1.248	34AH	
SDES-AS167HT	BOBOLINK ACSS/TW	1431.0	7	30	7	1.291	38AH	
SDES-AS169HT	PLOVER ACSS/TW	1431.0	13	37	19	1.337	38AH	
SDES-AS340HT	MERRIMACK ACSS/TW	1433.5	13	39	19	1.340	38AH	
SDES-AS302HT	MIRAMICHI ACSS/TW	1455.3	7	36	7	1.302	38AH	
SDES-AS292HT	ST. CROIX ACSS/TW	1467.8	5	33	7	1.292	38AH	
SDES-AS382HT	RIO GRAND ACSS/TW	1533.3	13	39	19	1.382	38AH	
SDES-AS345HT	POTOMAC ACSS/TW	1557.4	7	36	7	1.345	38AH	
SDES-AS334HT	PLATTE ACSS/TW	1569.0	5	33	7	1.334	38AH	
SDES-AS173HT	LAPWING ACSS/TW	1590.0	7	36	7	1.358	40AH	
SDES-AS174HT	FALCON ACSS/TW	1590.0	13	42	19	1.408	40AH	
SDES-AS424HT	PECOS ACSS/TW	1622.0	13	39	19	1.424	40AH	
SDES-AS386HT	SCHUYLKILL ACSS/TW	1657.4	7	36	7	1.386	40AH	
SDES-AS407HT	JAMES ACSS/TW	1730.6	13	34	19	1.407	42AH	
SDES-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	7	1.427	40AH	
SDES-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	19	1.445	42AH	
SDES-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	19	1.545	42AH	
SDES-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	7	1.504	42AH	
SDES-AS602HT	POWDER ACSS/TW	2153.8	8	64	19	1.602	44AH	
SDES-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	19	1.608	44AH	
SDES-AS762HT	SANTEE ACSS/TW	2627.3	8	64	19	1.762	48AH	

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Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye and Clevis Type, Double Tongue

This Double Tongue Dead End Assembly is specifically designed for ACSS/TW conductors. The body of the Solo HD Dead Ends are fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost half when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with two 15° terminals and aluminum hardware.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

• Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools By using the same compression pumps and presses, AFL does not require the need for a large investment in both the tools and training.





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Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye Type, Double Tongue, SDED-AS Series

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

For a clevis application substitute the E for a C: **SDED-AS**: EYE TERMINATION **SDCD-AS**: CLEVIS TERMINATION

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDED-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Dead End installation instructions INS-ACA116 on page 44.

	CONDUCTORS						
		SIZE	TVDE	STR	AND	DIAMETER	
CAIALUG NO.		KCMIL	ITPE	AL	ST	DIAWEIEK	
SDED-AS114HT	ORIOLE ACSS/TW	336.4	23	18	7	0.693	20AH
SDED-AS120HT	FLICKER ACSS/TW	447.0	13	18	7	0.776	24AH
SDED-AS121HT	HAWK ACSS/TW	447.0	16	18	7	0.798	24AH
SDED-AS122HT	HEN ACSS/TW	477.0	23	18	7	0.825	24AH
SDED-AS124HT	PARAKEET ACSS/TW	556.5	13	18	7	0.835	24AH
SDED-AS125HT	DOVE ACSS/TW	556.5	16	20	7	0.852	24AH
SDED-AS858HT	CALUMET ACSS/TW	565.3	16	18	7	0.858	24AH
SDED-AS846HT	MOHAWK ACSS/TW	571.7	13	18	7	0.846	24AH
SDED-AS132HT	ROOK ACSS/TW	636.0	13	19	7	0.890	27AH
SDED-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	7	0.908	27AH
SDED-AS182HT	SCOTER ACSS/TW	636.0	23	18	7	0.953	27AH
SDED-AS927HT	OSWEGO ACSS/TW	664.8	16	20	7	0.927	27AH
SDED-AS913HT	MYSTIC ACSS/TW	666.6	13	20	7	0.913	27AH
SDED-AS990HT	WABASH ACSS/TW	762.8	16	20	7	0.990	30AH
SDED-AS977HT	MAUMEE ACSS/TW	768.2	13	20	7	0.977	30AH
SDED-AS140HT	TERN ACSS/TW	795.0	7	17	7	0.960	30AH
SDED-AS980HT	PUFFIN ACSS/TW	795.0	10	18	7	0.980	30AH
SDED-AS141HT	CONDOR ACSS/TW	795.0	13	20	7	0.993	30AH
SDED-AS142HT	DRAKE ACSS/TW	795.0	16	20	7	1.010	30AH
SDED-AS146HT	CANARY ACSS/TW	900.0	13	30	7	1.080	30AH
SDED-AS077HT	FRASER ACSS/TW	946.7	10	35	7	1.077	30AH
SDED-AS044HT	PHOENIX ACSS/TW	954.0	5	30	7	1.044	30AH
SDED-AS148HT	RAIL ACSS/TW	954.0	7	32	7	1.061	30AH
SDED-AS150HT	CARDINAL ACSS/TW	954.0	13	20	7	1.084	30AH
SDED-AS060HT	KETTLE ACSS/TW	957.2	7	32	7	1.060	30AH
SDED-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	7	1.108	30AH
SDED-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	7	1.092	30AH
SDED-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	7	1.089	34AH
SDED-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	7	1.102	34AH

continued

FAFL

Solo HD[®] Compression Dead End for ACSS/TW Conductor, Eye Type, Double Tongue, SDED-AS Series

	CONDUCTORS						
ASSEMIRTA		SIZE	E TYPE ST		AND		
CATALUG NU.		KCMIL	ITPE	AL	ST	DIAWETER	
SDED-AS154HT	CURLEW ACSS/TW	1033.5	13	22	7	1.128	34AH
SDED-AS131HT	_	1080.0	7	20	7	1.131	34AH
SDED-AS129HT	AVOCET ACSS/TW	1113.0	5	30	7	1.129	34AH
SDED-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	7	1.143	34AH
SDED-AS157HT	FINCH ACSS/TW	1113.0	13	38	19	1.185	34AH
SDED-AS165HT	GENESEE ACSS/TW	1158.0	7	33	7	1.165	34AH
SDED-AS196HT	HUDSON ACSS/TW	1158.4	13	26	7	1.196	34AH
SDED-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	7	1.155	34AH
SDED-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	7	1.167	34AH
SDED-AS158HT	BUNTING ACSS/TW	1192.5	7	33	7	1.191	34AH
SDED-AS159HT	GRACKLE ACSS/TW	1192.5	13	38	19	1.225	36AH
SDED-AS245HT	YUKON ACSS/TW	1233.6	13	38	19	1.245	34AH
SDED-AS213HT	NELSON ACSS/TW	1257.1	7	35	7	1.213	34AH
SDED-AS202HT	SCISSORTAIL ACSS/TW	1272.0	5	30	7	1.202	36AH
SDED-AS203HT	CATAWBA ACSS/TW	1272.0	5	30	7	1.203	34AH
SDED-AS161HT	BITTERN ACSS/TW	1272.0	7	35	7	1.220	36AH
SDED-AS163HT	PHEASANT ACSS/TW	1272.0	13	39	19	1.264	36AH
SDED-AS290HT	THAMES ACSS/TW	1334.6	13	39	19	1.290	36AH
SDED-AS164HT	DIPPER ACSS/TW	1351.5	7	35	7	1.256	36AH
SDED-AS166HT	MARTIN ACSS/TW	1351.5	13	39	19	1.300	38AH
SDED-AS259HT	MACKENZIE ACSS/TW	1359.7	7	36	7	1.259	36AH
SDED-AS248HT	TRUCKEE ACSS/TW	1372.5	5	30	7	1.248	34AH
SDED-AS167HT	BOBOLINK ACSS/TW	1431.0	7	30	7	1.291	38AH
SDED-AS169HT	PLOVER ACSS/TW	1431.0	13	37	19	1.337	38AH
SDED-AS340HT	MERRIMACK ACSS/TW	1433.5	13	39	19	1.340	38AH
SDED-AS302HT	MIRAMICHI ACSS/TW	1455.3	7	36	7	1.302	38AH
SDED-AS292HT	ST. CROIX ACSS/TW	1467.8	5	33	7	1.292	38AH
SDED-AS382HT	RIO GRAND ACSS/TW	1533.3	13	39	19	1.382	38AH
SDED-AS345HT	POTOMAC ACSS/TW	1557.4	7	36	7	1.345	38AH
SDED-AS334HT	PLATTE ACSS/TW	1569.0	5	33	7	1.334	38AH
SDED-AS173HT	LAPWING ACSS/TW	1590.0	7	36	7	1.358	40AH
SDED-AS174HT	FALCON ACSS/TW	1590.0	13	42	19	1.408	40AH
SDED-AS424HT	PECOS ACSS/TW	1622.0	13	39	19	1.424	40AH
SDED-AS386HT	SCHUYLKILL ACSS/TW	1657.4	7	36	7	1.386	40AH
SDED-AS407HT	JAMES ACSS/TW	1730.6	13	34	19	1.407	42AH
SDED-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	7	1.427	40AH
SDED-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	19	1.445	42AH
SDED-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	19	1.545	42AH
SDED-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	7	1.504	42AH
SDED-AS602HT	POWDER ACSS/TW	2153.8	8	64	19	1.602	44AH
SDED-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	19	1.608	44AH
SDED-AS762HT	SANTEE ACSS/TW	2627.3	8	64	19	1.762	48AH



Solo HD Replacement Compression Dead End for ACSS/TW and ACSR/TW Conductors, SDESR Series



The Solo HD Replacement Dead Ends are used to replace damaged conductor and dead ends at the structure. They are designed for fast and easy installation, requiring only the AH compression die set. By using a high strength alloy, the compression length has been shortened for less compression bites, while maintaining a minimum 95% of the ASTM rated strength. The replacement dead end does not require filler compound, eliminating an installation step.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV." Each dead end assembly comes with terminal and aluminum hardware, unless no terminal (NT) is used in the part number. The tongue and terminal pad are constructed with a 15° angle, which permits a terminal connector to be bolted in the straight or 30° position.

The end tapers of all compression accessories are supplied with a high voltage finish for die size sections 30AH and above.

Ordering Instructions

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

Step 4: Determine Length of Span Removal (XX)

Determine the length of existing dead end and/or conductor (XX) that will be cut out, to the nearest inch (Maximum 60").

Step 5: Assemble Catalog Number



Example:

A replacement compression dead end for 959.6 Suwannee/TW conductor with no terminal, EHV finish and a <u>removed conductor length of 24</u> <u>inches</u>, the complete catalog number is:

SDES-AS108HTR24NTEHV

Notes:

- 1. Assembly Catalog Number includes one aluminum body, one terminal, and one eye/core grip.
- 2. Installation Instructions for Compression Joints (INS-ACA116) are on page 44 in this catalog.
- 3. For more information on die selection and ordering instructions, see Tools and Equipment section of the AFL Transmission and Distribution catalog.

		DIMENSION		NSION				
ASSEMBLY CATALOG NUMBER	ACSR/TW AND	SIZE	SIZE STRANDING		DIAMETER	ALUMINUM	G	
Crimite C Nomber	ACSS/TW	KCMIL	AL	ST	IN		IN	ММ
SDES-AS114HTRXX	ORIOLE ACSS/TW	336.4	23	18	0.693	20AH	13.8	351
SDES-AS120HTRXX	FLICKER ACSS/TW	447.0	13	18	0.776	24AH	14.3	363
SDES-AS121HTRXX	HAWK ACSS/TW	477.0	16	18	0.798	24AH	14.6	371
SDES-AS122HTRXX	HEN ACSS/TW	477.0	23	18	0.825	24AH	14.3	363
SDES-AS124HTRXX	PARAKEET ACSS/TW	556.5	13	18	0.835	24AH	14.6	371
SDES-AS125HTRXX	DOVE ACSS/TW	556.5	16	20	0.852	24AH	14.9	378
SDES-AS858HTRXX	CALUMET ACSS/TW	565.3	16	18	0.858	24AH	15.2	386
SDES-AS846HTRXX	MOHAWK ACSS/TW	571.7	13	18	0.846	24AH	15.2	386
SDES-AS132HTRXX	ROOK ACSS/TW	636.0	13	19	0.890	27AH	15.4	391
SDES-AS133HTRXX	GROSBEAK ACSS/TW	636.0	16	20	0.908	27AH	15.9	404
SDES-AS182HTRXX	SCOTER ACSS/TW	636.0	23	18	0.953	27AH	15.9	404
SDES-AS927HTRXX	OSWEGO ACSS/TW	664.8	16	20	0.927	27AH	15.9	404
SDES-AS913HTRXX	MYSTIC ACSS/TW	666.6	13	20	0.913	27AH	16.2	411
RXXSDES-AS990HT	WABASH ACSS/TW	762.8	16	20	0.990	30AH	16.2	411

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Solo HD Replacement Compression Dead End for ACSS/TW and ACSR/TW Conductors, SDESR Series

			DIMEN	ISION				
	ACSR/TW AND	SIZE	STRAI	STRANDING DIAMETER			G	
	ACSS/TW	KCMIL	AL	ST	IN		IN	ММ
SDES-AS977HTRXX	MAUMEE ACSS/TW	768.2	13	20	0.977	30AH	17.5	445
SDES-AS140HTRXX	TERN ACSS/TW	795.0	7	17	0.960	30AH	15.4	391
SDES-AS980HTRXX	PUFFIN ACSS/TW	795.0	10	18	0.980	30AH	15.8	401
SDES-AS141HTRXX	CONDOR ACSS/TW	795.0	13	20	0.993	30AH	16.4	417
SDES-AS142HTRXX	DRAKE ACSS/TW	795.0	16	20	1.010	30AH	16.5	419
SDES-AS146HTRXX	CANARY ACSS/TW	900.0	13	30	1.080	30AH	16.8	427
SDES-AS077HTRXX	FRASER ACSS/TW	946.7	10	35	1.077	30AH	16.3	414
SDES-AS044HTRXX	PHOENIX ACSS/TW	954.0	5	30	1.044	30AH	16.3	414
SDES-AS148HTRXX	RAIL ACSS/TW	954.0	7	32	1.061	30AH	16.1	409
SDES-AS150HTRXX	CARDINAL ACSS/TW	954.0	13	20	1.084	30AH	20.6	523
SDES-AS060HTRXX	KETTLE ACSS/TW	957.2	7	32	1.060	30AH	16.7	424
SDES-AS108HTRXX	SUWANNEE ACSS/TW	959.6	16	22	1.108	30AH	17.5	445
SDES-AS092HTRXX	COLUMBIA ACSS/TW	966.2	13	21	1.092	30AH	17.5	445
SDES-AS153HTRXX	SNOWBIRD ACSS/TW	1033.5	5	30	1.089	34AH	18.2	462
SDES-AS152HTRXX	ORTOLAN ACSS/TW	1033.5	7	32	1.102	34AH	17.4	442
SDES-AS154HTRXX	CURLEW ACSS/TW	1033.5	13	22	1.128	34AH	18.2	462
SDES-AS131HTRXX	—	1080.0	7	20	1.131	34AH	17.6	447
SDES-AS129HTRXX	AVOCET ACSS/TW	1113.0	5	30	1.129	34AH	17.7	450
SDES-AS155HTRXX	BLUEJAY ACSS/TW	1113.0	7	33	1.143	34AH	21.1	536
SDES-AS157HTRXX	FINCH ACSS/TW	1113.0	13	38	1.185	34AH	18.1	460
SDES-AS165HTRXX	GENESEE ACSS/TW	1158.0	7	33	1.165	34AH	18.2	462
SDES-AS196HTRXX	HUDSON ACSS/TW	1158.4	13	26	1.196	34AH	18.5	470
SDES-AS155HTRXX	CHEYENNE ACSS/TW	1168.1	5	30	1.155	34AH	18.5	470
SDES-AS167HTRXX	OXBIRD ACSS/TW	1192.5	5	30	1.167	34AH	18.5	470
SDES-AS158HTRXX	BUNTING ACSS/TW	1192.5	7	33	1.191	34AH	18.1	460
SDES-AS159HTRXX	GRACKLE ACSS/TW	1192.5	13	38	1.225	36AH	18.1	460
SDES-AS245HTRXX	YUKON ACSS/TW	1233.6	13	38	1.245	34AH	18.6	472
SDES-AS213HTRXX	NELSON ACSS/TW	1257.1	7	35	1.213	34AH	18.6	472
SDES-AS427HTRXX	PEE DEE ACSS/TW	1758.6	7	37	1.427	40AH	19.9	505
SDES-AS175HTRXX	CHUKAR ACSS/TW	1780.0	8	37	1.445	42AH	20.1	511
SDES-AS545HTRXX	CUMBERLAND ACSS/TW	1926.9	13	42	1.545	42AH	20.8	528
SDES-AS504HTRXX	ATHABASKA ACSS/TW	1949.6	7	42	1.504	42AH	20.8	528
SDES-AS602HTRXX	POWDER ACSS/TW	2153.8	8	64	1.602	44AH	21.1	536
SDES-AS178HTRXX	BLUEBIRD ACSS/TW	2156.0	8	64	1.608	44AH	21.1	536
SDES-AS762HTRXX	SANTEE ACSS/TW	2627.3	8	64	1.762	48AH	21.7	551



Solo HD[®] Compression Joint for ACSS/TW Conductor

The SDCJ-AS Series Compression Joint Assembly is specifically designed for ACSS/TW conductors. The Solo HD Compression Joint is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost half when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Compression Joints are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each compression joint assembly comes with an aluminum joint and a steel sleeve.

For die sizes 30AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish.

Benefits

• Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector Assembly can be used for both ACSS and ACSR type conductors, eliminating the need for multiple part numbers.
- Same Compression Die Set
 The Aluminum Hex (AH) die size remains the
 same as that of the standard AFL two-die
 system used today and eliminates the need
 for the Steel Hex (SH) dies altogether.
- Same Compression Tools
 By using the same compression pumps
 and presses, AFL does not require the
 need for a large investment in both the
 tools and training.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.



Solo HD[®] Compression Joint for ACSS/TW Conductor

Ordering Information

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDCJ-AS142HT**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Joint installation instructions INS-ACA117 on page 60.

	CONDUCTORS						
		SIZE	ТУРГ	STR	AND	DIAMETED	
CAIALUG NO.		KCMIL	ITPE	AL	ST	DIAWETER	
SDCJ-AS114HT	ORIOLE ACSS/TW	336.4	23	18	7	0.693	20AH
SDCJ-AS120HT	FLICKER ACSS/TW	447.0	13	18	7	0.776	24AH
SDCJ-AS121HT	HAWK ACSS/TW	477.0	16	18	7	0.798	24AH
SDCJ-AS122HT	HEN ACSS/TW	477.0	23	18	7	0.825	24AH
SDCJ-AS124HT	PARAKEET ACSS/TW	556.5	13	18	7	0.835	24AH
SDCJ-AS125HT	DOVE ACSS/TW	556.5	16	20	7	0.852	24AH
SDCJ-AS858HT	CALUMET ACSS/TW	565.3	16	18	7	0.858	24AH
SDCJ-AS846HT	MOHAWK ACSS/TW	571.7	13	18	7	0.846	24AH
SDCJ-AS132HT	ROOK ACSS/TW	636.0	13	19	7	0.890	27AH
SDCJ-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	7	0.908	27AH
SDCJ-AS182HT	SCOTER ACSS/TW	636.0	23	18	7	0.953	27AH
SDCJ-AS927HT	OSWEGO ACSS/TW	664.8	16	20	7	0.927	27AH
SDCJ-AS913HT	MYSTIC ACSS/TW	666.6	13	20	7	0.913	27AH
SDCJ-AS990HT	WABASH ACSS/TW	762.8	16	20	7	0.990	30AH
SDCJ-AS977HT	MAUMEE ACSS/TW	768.2	13	20	7	0.977	30AH
SDCJ-AS140HT	TERN ACSS/TW	795.0	7	17	7	0.960	30AH
SDCJ-AS980HT	PUFFIN ACSS/TW	795.0	10	18	7	0.980	30AH
SDCJ-AS141HT	CONDOR ACSS/TW	795.0	13	20	7	0.993	30AH
SDCJ-AS142HT	DRAKE ACSS/TW	795.0	16	20	7	1.010	30AH
SDCJ-AS146HT	CANARY ACSS/TW	900.0	13	30	7	1.080	30AH
SDCJ-AS077HT	FRASER ACSS/TW	946.7	10	35	7	1.077	30AH
SDCJ-AS044HT	PHOENIX ACSS/TW	954.0	5	30	7	1.044	30AH
SDCJ-AS148HT	RAIL ACSS/TW	954.0	7	32	7	1.061	30AH
SDCJ-AS150HT	CARDINAL ACSS/TW	954.0	13	20	7	1.084	30AH
SDCJ-AS060HT	KETTLE ACSS/TW	957.2	7	32	7	1.060	30AH
SDCJ-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	7	1.108	30AH
SDCJ-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	7	1.092	30AH
SDCJ-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	7	1.089	34AH
SDCJ-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	7	1.102	34AH

FAFL
Solo HD[®] Compression Joint for ACSS/TW Conductor, SDCJ-AS Series

ACCEMPIN	CONDUCTORS						
		SIZE	тург	STR	AND	DIAMETED	
CAIALUG NU.		KCMIL	ITPE	AL	ST	DIAWETER	
SDCJ-AS154HT	CURLEW ACSS/TW	1033.5	13	22	7	1.128	34AH
SDCJ-AS131HT		1080.0	7	20	7	1.131	34AH
SDCJ-AS129HT	AVOCET ACSS/TW	1113.0	5	30	7	1.129	34AH
SDCJ-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	7	1.143	34AH
SDCJ-AS157HT	FINCH ACSS/TW	1113.0	13	38	19	1.185	34AH
SDCJ-AS165HT	GENESEE ACSS/TW	1158.0	7	33	7	1.165	34AH
SDCJ-AS196HT	HUDSON ACSS/TW	1158.4	13	26	7	1.196	34AH
SDCJ-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	7	1.155	34AH
SDCJ-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	7	1.167	34AH
SDCJ-AS158HT	BUNTING ACSS/TW	1192.5	7	33	7	1.191	34AH
SDCJ-AS159HT	GRACKLE ACSS/TW	1192.5	13	38	19	1.225	36AH
SDCJ-AS245HT	YUKON ACSS/TW	1233.6	13	38	19	1.245	34AH
SDCJ-AS213HT	NELSON ACSS/TW	1257.1	7	35	7	1.213	34AH
SDCJ-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	7	1.427	40AH
SDCJ-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	19	1.445	42AH
SDCJ-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	19	1.545	42AH
SDCJ-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	7	1.504	42AH
SDCJ-AS602HT	POWDER ACSS/TW	2153.8	8	64	19	1.602	44AH
SDCJ-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	19	1.608	44AH
SDCI-AS762HT	SANTEF ACSS/TW	2627.3	8	64	19	1.762	48AH



Solo HD Replacement Compression Joint for ACSS/TW and ACSR/TW Conductors, SDCJR Series



The Solo HD Replacement Joints are used to replace damaged conductor and removed splices in midspan. They are designed for fast and easy installation, requiring only the AH compression die set. By using a high strength alloy, the compression length has been shortened for less compression bites, while maintaining a minimum 95% of the ASTM rated strength. The replacement joint does not require filler compound, eliminating an installation step.

The end tapers of all compression accessories are supplied with a high voltage finish for die size sections 30AH and above.

Ordering Instructions

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Determine Length of Span Removal (XX)

Determine the length of existing splice and/or conductor (XX) that will be cut out, to the nearest inch (Maximum 60").

Step 3: Assemble Catalog Number



+ Removed Conductor Length (XX)

Example:

A replacement compression joint for 959.6 Suwannee/TW conductor with a <u>removed conductor length of 24 inches</u>, the complete catalog number is:

SDCJ-AS108HTR24

Notes:

- 1. Assembly Catalog Number includes one aluminum body and two core grips.
- Installation Instructions for Compression Joints (INS-ACA117) are on page 60 in this catalog.
- 3. For more information on die selection and ordering instructions, see Tools and Equipment section of the AFL Transmission and Distribution catalog.

ASSEMBLY		OR			DIME	DIMENSION		
CATALOG	ACSR/TW AND	SIZE	STRA	NDING	DIAMETER	ALUMINUM	(S
NUMBER	ACSS/TW	KCMIL	AL	ST	IN		IN	ММ
SDCJ-AS114HT	ORIOLE ACSS/TW	336.4	23	18	0.693	20AH	13.8	351
SDCJ-AS120HT	FLICKER ACSS/TW	447.0	13	18	0.776	24AH	14.3	363
SDCJ-AS121HT	HAWK ACSS/TW	477.0	16	18	0.798	24AH	14.6	371
SDCJ-AS122HT	HEN ACSS/TW	477.0	23	18	0.825	24AH	14.3	363
SDCJ-AS124HT	PARAKEET ACSS/TW	556.5	13	18	0.835	24AH	14.6	371
SDCJ-AS125HT	DOVE ACSS/TW	556.5	16	20	0.852	24AH	14.9	378
SDCJ-AS858HT	CALUMET ACSS/TW	565.3	16	18	0.858	24AH	15.2	386
SDCJ-AS846HT	MOHAWK ACSS/TW	571.7	13	18	0.846	24AH	15.2	386
SDCJ-AS132HT	ROOK ACSS/TW	636.0	13	19	0.890	27AH	15.4	391
SDCJ-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	0.908	27AH	15.9	404
SDCJ-AS182HT	SCOTER ACSS/TW	636.0	23	18	0.953	27AH	15.9	404
SDCJ-AS927HT	OSWEGO ACSS/TW	664.8	16	20	0.927	27AH	15.9	404
SDCJ-AS913HT	MYSTIC ACSS/TW	666.6	13	20	0.913	27AH	16.2	411
SDCJ-AS990HT	WABASH ACSS/TW	762.8	16	20	0.990	30AH	16.2	411
SDCJ-AS977HT	MAUMEE ACSS/TW	768.2	13	20	0.977	30AH	17.5	445
SDCJ-AS140HT	TERN ACSS/TW	795.0	7	17	0.960	30AH	15.4	391
SDCJ-AS980HT	PUFFIN ACSS/TW	795.0	10	18	0.980	30AH	15.8	401
SDCJ-AS141HT	CONDOR ACSS/TW	795.0	13	20	0.993	30AH	16.4	417
SDCJ-AS142HT	DRAKE ACSS/TW	795.0	16	20	1.010	30AH	16.5	419
SDCJ-AS146HT	CANARY ACSS/TW	900.0	13	30	1.080	30AH	16.8	427
SDCJ-AS077HT	FRASER ACSS/TW	946.7	10	35	1.077	30AH	16.3	414
SDCJ-AS044HT	PHOENIX ACSS/TW	954.0	5	30	1.044	30AH	16.3	414
SDCJ-AS148HT	RAIL ACSS/TW	954.0	7	32	1.061	30AH	16.1	409
SDCJ-AS150HT	CARDINAL ACSS/TW	954.0	13	20	1.084	30AH	20.6	523
SDCJ-AS060HT	KETTLE ACSS/TW	957.2	7	32	1.060	30AH	16.7	424
SDCJ-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	1.108	30AH	17.5	445



Solo HD Replacement Compression Joint for ACSS/TW and ACSR/TW Conductors, SDCJR Series

ASSEMBLY		OR			DIMENSION			
CATALOG	ACSR/TW AND	SIZE	STRANDING		DIAMETER	ALUMINUM	G	
NUMBER	ACSS/TW	KCMIL	AL	ST	IN		IN	ММ
SDCJ-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	1.092	30AH	17.5	445
SDCJ-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	1.089	34AH	18.2	462
SDCJ-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	1.102	34AH	17.4	442
SDCJ-AS154HT	CURLEW ACSS/TW	1033.5	13	22	1.128	34AH	18.2	462
SDCJ-AS131HT	—	1080.0	7	20	1.131	34AH	17.6	447
SDCJ-AS129HT	AVOCET ACSS/TW	1113.0	5	30	1.129	34AH	17.7	450
SDCJ-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	1.143	34AH	21.1	536
SDCJ-AS157HT	FINCH ACSS/TW	1113.0	13	38	1.185	34AH	18.1	460
SDCJ-AS165HT	GENESEE ACSS/TW	1158.0	7	33	1.165	34AH	18.2	462
SDCJ-AS196HT	HUDSON ACSS/TW	1158.4	13	26	1.196	34AH	18.5	470
SDCJ-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	1.155	34AH	18.5	470
SDCJ-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	1.167	34AH	18.5	470
SDCJ-AS158HT	BUNTING ACSS/TW	1192.5	7	33	1.191	34AH	18.1	460
SDCJ-AS159HT	GRACKLE ACSS/TW	1192.5	13	38	1.225	36AH	18.1	460
SDCJ-AS245HT	YUKON ACSS/TW	1233.6	13	38	1.245	34AH	18.6	472
SDCJ-AS213HT	NELSON ACSS/TW	1257.1	7	35	1.213	34AH	18.6	472
SDCJ-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	1.427	40AH	19.9	505
SDCJ-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	1.445	42AH	20.1	511
SDCJ-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	1.545	42AH	20.8	528
SDCJ-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	1.504	42AH	20.8	528
SDCJ-AS602HT	POWDER ACSS/TW	2153.8	8	64	1.602	44AH	21.1	536
SDCJ-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	1.608	44AH	21.1	536
SDCJ-AS762HT	SANTEE ACSS/TW	2627.3	8	64	1.762	48AH	21.7	551



Solo HD[®] Compression Dead End for ACSS/TW Conductor, Adjustable Clevis, Single Tongue

The SDACS-AS Series Dead End Assembly is specifically designed for ACSS/TW conductors. The body of the SOLO HD Dead End is fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost ½ when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with terminal and aluminum hardware.

For die sizes 30 AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

• Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves
 Enhancing speed of installation, full tension
 joints can travel through sheaves without
 impact to the performance of the connector,
 allowing for more conductor to be strung
 from a single location.

Qualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.

• Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector
 Assembly can be used for both ACSS and
 ACSR type conductors, eliminating the need
 for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools
 By using the same compression pumps
 and presses, AFL does not require the
 need for a large investment in both the
 tools and training.



1 (800) 866-7385

Solo HD[®] Compression Dead End for ACSS/TW Conductor, Adjustable Clevis, Single Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS/TW Conductor with no terminal and EHV finish, the complete catalog number is: **SDACS-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Adjustable Clevis Dead End installation instructions INS-ACA125 on page 52.

ACCEMPIN	CONDUCTORS							
		SIZE		ST	RAND			
CAIALOG NO.		KCMIL		AL	ST	DIAMETER		
SDACS-AS114HT	ORIOLE ACSS/TW	336.4	23	18	7	0.693	20AH	
SDACS-AS120HT	FLICKER ACSS/TW	447.0	13	18	7	0.776	24AH	
SDACS-AS121HT	HAWK ACSS/TW	447.0	16	18	7	0.798	24AH	
SDACS-AS122HT	HEN ACSS/TW	477.0	23	18	7	0.825	24AH	
SDACS-AS124HT	PARAKEET ACSS/TW	556.5	13	18	7	0.835	24AH	
SDACS-AS125HT	DOVE ACSS/TW	556.5	16	20	7	0.852	24AH	
SDACS-AS858HT	CALUMET ACSS/TW	565.3	16	18	7	0.858	24AH	
SDACS-AS846HT	MOHAWK ACSS/TW	571.7	13	18	7	0.846	24AH	
SDACS-AS132HT	ROOK ACSS/TW	636.0	13	19	7	0.890	27AH	
SDACS-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	7	0.908	27AH	
SDACS-AS182HT	SCOTER ACSS/TW	636.0	23	18	7	0.953	27AH	
SDACS-AS927HT	OSWEGO ACSS/TW	664.8	16	20	7	0.927	27AH	
SDACS-AS913HT	MYSTIC ACSS/TW	666.6	13	20	7	0.913	27AH	
SDACS-AS990HT	WABASH ACSS/TW	762.8	16	20	7	0.990	30AH	
SDACS-AS977HT	MAUMEE ACSS/TW	768.2	13	20	7	0.977	30AH	
SDACS-AS140HT	TERN ACSS/TW	795.0	7	17	7	0.960	30AH	
SDACS-AS980HT	PUFFIN ACSS/TW	795.0	10	18	7	0.980	30AH	
SDACS-AS141HT	CONDOR ACSS/TW	795.0	13	20	7	0.993	30AH	
SDACS-AS142HT	DRAKE ACSS/TW	795.0	16	20	7	1.010	30AH	
SDACS-AS146HT	CANARY ACSS/TW	900.0	13	30	7	1.080	30AH	
SDACS-AS077HT	FRASER ACSS/TW	946.7	10	35	7	1.077	30AH	
SDACS-AS044HT	PHOENIX ACSS/TW	954.0	5	30	7	1.044	30AH	
SDACS-AS148HT	RAIL ACSS/TW	954.0	7	32	7	1.061	30AH	
SDACS-AS150HT	CARDINAL ACSS/TW	954.0	13	20	7	1.084	30AH	
SDACS-AS060HT	KETTLE ACSS/TW	957.2	7	32	7	1.060	30AH	
SDACS-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	7	1.108	30AH	
SDACS-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	7	1.092	30AH	
SDACS-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	7	1.089	34AH	
SDACS-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	7	1.102	34AH	

continued

Solo HD[®] Compression Dead End for ACSS/TW Conductor, Adjustable Clevis, Single Tongue

	CONDUCTORS						
		SIZE	TVDE	STR	AND	DIAMETED	
CAIALOG NO.	CODE NAME	KCMIL	TIFE	AL	ST	DIAMETER	
SDACS-AS154HT	CURLEW ACSS/TW	1033.5	13	22	7	1.128	34AH
SDACS-AS131HT		1080.0	7	20	7	1.131	34AH
SDACS-AS129HT	AVOCET ACSS/TW	1113.0	5	30	7	1.129	34AH
SDACS-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	7	1.143	34AH
SDACS-AS157HT	FINCH ACSS/TW	1113.0	13	38	19	1.185	34AH
SDACS-AS165HT	GENESEE ACSS/TW	1158.0	7	33	7	1.165	34AH
SDACS-AS196HT	HUDSON ACSS/TW	1158.4	13	26	7	1.196	34AH
SDACS-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	7	1.155	34AH
SDACS-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	7	1.167	34AH
SDACS-AS158HT	BUNTING ACSS/TW	1192.5	7	33	7	1.191	34AH
SDACS-AS159HT	GRACKLE ACSS/TW	1192.5	13	38	19	1.225	36AH
SDACS-AS245HT	YUKON ACSS/TW	1233.6	13	38	19	1.245	34AH
SDACS-AS213HT	NELSON ACSS/TW	1257.1	7	35	7	1.213	34AH
SDACS-AS202HT	SCISSORTAIL ACSS/TW	1272.0	5	30	7	1.202	36AH
SDACS-AS203HT	CATAWBA ACSS/TW	1272.0	5	30	7	1.203	34AH
SDACS-AS161HT	BITTERN ACSS/TW	1272.0	7	35	7	1.220	36AH
SDACS-AS163HT	PHEASANT ACSS/TW	1272.0	13	39	19	1.264	36AH
SDACS-AS290HT	THAMES ACSS/TW	1334.6	13	39	19	1.290	36AH
SDACS-AS164HT	DIPPER ACSS/TW	1351.5	7	35	7	1.256	36AH
SDACS-AS166HT	MARTIN ACSS/TW	1351.5	13	39	19	1.300	38AH
SDACS-AS259HT	MACKENZIE ACSS/TW	1359.7	7	36	7	1.259	36AH
SDACS-AS248HT	TRUCKEE ACSS/TW	1372.5	5	30	7	1.248	34AH
SDACS-AS167HT	BOBOLINK ACSS/TW	1431.0	7	30	7	1.291	38AH
SDACS-AS169HT	PLOVER ACSS/TW	1431.0	13	37	19	1.337	38AH
SDACS-AS340HT	MERRIMACK ACSS/TW	1433.5	13	39	19	1.340	38AH
SDACS-AS302HT	MIRAMICHI ACSS/TW	1455.3	7	36	7	1.302	38AH
SDACS-AS292HT	ST. CROIX ACSS/TW	1467.8	5	33	7	1.292	38AH
SDACS-AS382HT	RIO GRAND ACSS/TW	1533.3	13	39	19	1.382	38AH
SDACS-AS345HT	POTOMAC ACSS/TW	1557.4	7	36	7	1.345	38AH
SDACS-AS334HT	PLATTE ACSS/TW	1569.0	5	33	7	1.334	38AH
SDACS-AS173HT	LAPWING ACSS/TW	1590.0	7	36	7	1.358	40AH
SDACS-AS174HT	FALCON ACSS/TW	1590.0	13	42	19	1.408	40AH
SDACS-AS424HT	PECOS ACSS/TW	1622.0	13	39	19	1.424	40AH
SDACS-AS386HT	SCHUYLKILL ACSS/TW	1657.4	7	36	7	1.386	40AH
SDACS-AS407HT	JAMES ACSS/TW	1730.6	13	34	19	1.407	42AH
SDACS-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	7	1.427	40AH
SDACS-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	19	1.445	42AH
SDACS-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	19	1.545	42AH
SDACS-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	7	1.504	42AH
SDACS-AS602HT	POWDER ACSS/TW	2153.8	8	64	19	1.602	44AH
SDACS-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	19	1.608	44AH
SDACS-AS762HT	SANTEE ACSS/TW	2627.3	8	64	19	1.762	48AH

Solo HD[®] Compression Dead End for **ACSS/TW Conductor, Adjustable Clevis, Double Tongue**

The SDACD-AS Series Double Tongue Dead End Assembly is specifically designed for ACSS conductor. The body of the SOLO HD Dead Ends are fabricated from a specially tempered aluminum that will transfer elevated current and dissipate increased heat more efficiently.

The tongue and terminal pad are constructed with a 15° angle, which permits the terminal connector to be bolted in the straight or 30° position. Its innovative design provides a solid, void-free compression through the complete unit with once set of dies, reducing the total quantity of compressions and installation time by almost 1/2 when compared to the of the ones required by the two die compression systems while keeping the same reliable and proven performance.

All Solo HD Dead Ends are designed for full tension use, achieving a minimum of 95% of the ASTM rated strength of the conductor. Each dead end assembly comes with terminal and aluminum hardware.

For die sizes 30 AH and above, the end tapers of the compression portions of all compression accessories are supplied with a high voltage finish. Corona bolts are furnished as standard on 15° terminals for these die sizes.

The square edges of the bolted pads of the compression accessories could cause Corona. Pads with edges and corners rounded can be supplied by adding the catalog suffix "EHV".

Benefits

Half the Installation Time

Using an innovative core gripping system that allows a single die to compress the outer aluminum barrel to grip both the steel core as well as the aluminum strands, utilizing the same Aluminum Hex (AH) die set.

- No Filler Compound Required By creating a practically void-free compression, eliminating ingress of water, and using steels that eliminate the exposure of raw steel after, thereby eliminating rust and corrosion, AFL has removed variability of the amount of compound being placed in each connector.
- Joints Travel Over Sheaves Enhancing speed of installation, full tension joints can travel through sheaves without impact to the performance of the connector, allowing for more conductor to be strung from a single location.

Same Install Method

With no new tools required, installation crews do not require training on new compression tools.

- One Connector Assembly can be used for both ACSS and ACSR type conductors, eliminating the need for multiple part numbers.
- Same Compression Die Set The Aluminum Hex (AH) die size remains the same as that of the standard AFL two-die system used today and eliminates the need for the Steel Hex (SH) dies altogether.
- Same Compression Tools By using the same compression pumps and presses, AFL does not require the need for a large investment in both the tools and training.

Oualifications

GOVERNING BODY	STANDARD CODE
ANSI	C119.4

Contact AFL for further details.



continued



Solo HD[®] Compression Dead End for ACSS/TW Conductor, Adjustable Clevis, Double Tongue

Ordering Information

Assembly Catalog No.

Terminal Connector

Step 1: Assembly Catalog Number

Determine the assembly catalog number based on the conductor being used.

Step 2: Terminal Connector

For an assembly without a terminal connector, use "NT". For an assembly with a terminal connector, leave blank.

Step 3: Extra High Voltage Finish

For Extra High Voltage Finish, use "EHV". (> 345 kV). For Standard Finish, leave blank. (< 345 kV)

EHV Finish

Step 4: Assemble Catalog Number

EXAMPLE: For 795 Drake ACSS Conductor with no terminal and EHV finish, the complete catalog number is: **SDACD-AS142HTNTEHV**

Notes

For instructions, see Solo HD ACSR/ACSS/ACSS-TW Adjustable Clevis Dead End installation instructions INS-ACA125 on page 52.

PAFL

	CONDUCTORS							
		SIZE	TVDE	STR	AND	DIAMETED		
CATALOG NO.		KCMIL	ITTPE	AL	ST	DIAWETER	TEX DIES	
SDACD-AS114HT	ORIOLE ACSS/TW	336.4	23	18	7	0.693	20AH	
SDACD-AS120HT	FLICKER ACSS/TW	447.0	13	18	7	0.776	24AH	
SDACD-AS121HT	HAWK ACSS/TW	447.0	16	18	7	0.798	24AH	
SDACD-AS122HT	HEN ACSS/TW	477.0	23	18	7	0.825	24AH	
SDACD-AS124HT	PARAKEET ACSS/TW	556.5	13	18	7	0.835	24AH	
SDACD-AS125HT	DOVE ACSS/TW	556.5	16	20	7	0.852	24AH	
SDACD-AS858HT	CALUMET ACSS/TW	565.3	16	18	7	0.858	24AH	
SDACD-AS846HT	MOHAWK ACSS/TW	571.7	13	18	7	0.846	24AH	
SDACD-AS132HT	ROOK ACSS/TW	636.0	13	19	7	0.890	27AH	
SDACD-AS133HT	GROSBEAK ACSS/TW	636.0	16	20	7	0.908	27AH	
SDACD-AS182HT	SCOTER ACSS/TW	636.0	23	18	7	0.953	27AH	
SDACD-AS927HT	OSWEGO ACSS/TW	664.8	16	20	7	0.927	27AH	
SDACD-AS913HT	MYSTIC ACSS/TW	666.6	13	20	7	0.913	27AH	
SDACD-AS990HT	WABASH ACSS/TW	762.8	16	20	7	0.990	30AH	
SDACD-AS977HT	MAUMEE ACSS/TW	768.2	13	20	7	0.977	30AH	
SDACD-AS140HT	TERN ACSS/TW	795.0	7	17	7	0.960	30AH	
SDACD-AS980HT	PUFFIN ACSS/TW	795.0	10	18	7	0.980	30AH	
SDACD-AS141HT	CONDOR ACSS/TW	795.0	13	20	7	0.993	30AH	
SDACD-AS142HT	DRAKE ACSS/TW	795.0	16	20	7	1.010	30AH	
SDACD-AS146HT	CANARY ACSS/TW	900.0	13	30	7	1.080	30AH	
SDACD-AS077HT	FRASER ACSS/TW	946.7	10	35	7	1.077	30AH	
SDACD-A3044HT	PHOENIX ACSS/TW	954.0	5	30	7	1.044	30AH	
SDACD-AS148HT	RAIL ACSS/TW	954.0	7	32	7	1.061	30AH	
SDACD-AS150HT	CARDINAL ACSS/TW	954.0	13	20	7	1.084	30AH	
SDACD-AS060HT	KETTLE ACSS/TW	957.2	7	32	7	1.060	30AH	
SDACD-AS108HT	SUWANNEE ACSS/TW	959.6	16	22	7	1.108	30AH	
SDACD-AS092HT	COLUMBIA ACSS/TW	966.2	13	21	7	1.092	30AH	
SDACD-AS153HT	SNOWBIRD ACSS/TW	1033.5	5	30	7	1.089	34AH	
SDACD-AS152HT	ORTOLAN ACSS/TW	1033.5	7	32	7	1.102	34AH	

continued

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<u>1 (800) 866-7385</u>

Solo HD[®] Compression Dead End for ACSS/TW Conductor, Adjustable Clevis, Double Tongue

		A 1 1 1 B 4 I B 11 I B 4					
		SIZE	тург	STE	RAND	DIAMETER	
CAIALUG NO.		KCMIL	ITPE	AL	ST	DIAWEIEK	
SDACD-AS154HT	CURLEW ACSS/TW	1033.5	13	22	7	1.128	34AH
SDACD-AS131HT	-	1080.0	7	20	7	1.131	34AH
SDACD-AS129HT	AVOCET ACSS/TW	1113.0	5	30	7	1.129	34AH
SDACD-AS155HT	BLUEJAY ACSS/TW	1113.0	7	33	7	1.143	34AH
SDACD-AS157HT	FINCH ACSS/TW	1113.0	13	38	19	1.185	34AH
SDACD-AS165HT	GENESEE ACSS/TW	1158.0	7	33	7	1.165	34AH
SDACD-AS196HT	HUDSON ACSS/TW	1158.4	13	26	7	1.196	34AH
SDACD-AS155HT	CHEYENNE ACSS/TW	1168.1	5	30	7	1.155	34AH
SDACD-AS167HT	OXBIRD ACSS/TW	1192.5	5	30	7	1.167	34AH
SDACD-AS158HT	BUNTING ACSS/TW	1192.5	7	33	7	1.191	34AH
SDACD-AS19HT	GRACKLE ACSS/TW	1192.5	13	38	19	1.225	36AH
SDACD-AS245HT	YUKON ACSS/TW	1233.6	13	38	19	1.245	34AH
SDACD-AS213HT	NELSON ACSS/TW	1257.1	7	35	7	1.213	34AH
SDACD-AS202HT	SCISSORTAIL ACSS/TW	1272.0	5	30	7	1.202	36AH
SDACD-AS203HT	CATAWBA ACSS/TW	1272.0	5	30	7	1.203	34AH
SDACD-AS161HT	BITTERN ACSS/TW	1272.0	7	35	7	1.220	36AH
SDACD-AS163HT	PHEASANT ACSS/TW	1272.0	13	39	19	1.264	36AH
SDACD-AS290HT	THAMES ACSS/TW	1334.6	13	39	19	1.290	36AH
SDACD-AS164HT	DIPPER ACSS/TW	1351.5	7	35	7	1.256	36AH
SDACD-AS166HT	MARTIN ACSS/TW	1351.5	13	39	19	1.300	38AH
SDACD-AS259HT	MACKENZIE ACSS/TW	1359.7	7	36	7	1.259	36AH
SDACD-AS248HT	TRUCKEE ACSS/TW	1372.5	5	30	7	1.248	34AH
SDACD-AS167HT	BOBOLINK ACSS/TW	1431.0	7	30	7	1.291	38AH
SDACD-AS169HT	PLOVER ACSS/TW	1431.0	13	37	19	1.337	38AH
SDACD-AS340HT	MERRIMACK ACSS/TW	1433.5	13	39	19	1.340	38AH
SDACD-AS302HT	MIRAMICHI ACSS/TW	1455.3	7	36	7	1.302	38AH
SDACD-AS292HT	ST. CROIX ACSS/TW	1467.8	5	33	7	1.292	38AH
SDACD-AS382HT	RIO GRAND ACSS/TW	1533.3	13	39	19	1.382	38AH
SDACD-AS345HT	POTOMAC ACSS/TW	1557.4	7	36	7	1.345	38AH
SDACD-AS334HT	PLATTE ACSS/TW	1569.0	5	33	7	1.334	38AH
SDACD-AS173HT	LAPWING ACSS/TW	1590.0	7	36	7	1.358	40AH
SDACD-AS174HT	FALCON ACSS/TW	1590.0	13	42	19	1.408	40AH
SDACD-AS424HT	PECOS ACSS/TW	1622.0	13	39	19	1.424	40AH
SDACD-AS386HT	SCHUYLKILL ACSS/TW	1657.4	7	36	7	1.386	40AH
SDACD-AS407HT	JAMES ACSS/TW	1730.6	13	34	19	1.407	42AH
SDACD-AS427HT	PEE DEE ACSS/TW	1758.6	7	37	7	1.427	40AH
SDACD-AS175HT	CHUKAR ACSS/TW	1780.0	8	37	19	1.445	42AH
SDACD-AS545HT	CUMBERLAND ACSS/TW	1926.9	13	42	19	1.545	42AH
SDACD-AS504HT	ATHABASKA ACSS/TW	1949.6	7	42	7	1.504	42AH
SDACD-AS602HT	POWDER ACSS/TW	2153.8	8	64	19	1.602	44AH
SDACD-AS178HT	BLUEBIRD ACSS/TW	2156.0	8	64	19	1.608	44AH
SDACD-AS762HT	SANTEE ACSS/TW	2627.3	8	64	19	1.762	48AH

Installation Instructions

for AFL Dead End

For Use on Overhead Conductor Types

ACSR, ACSS, ACSS/TW



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Preparation

Prior to making connections, the conductor and accessory bore must be clean.

NOTE: Improper cleaning of conductor strands can result in higher resistance dead ends; this causes the fittings to operate at higher temperatures leading to premature failure.

Clean conductor strands thoroughly by using one of the methods below:

Method 1 – ConductaClean[®] System (Recommended)

ConductaClean solution cleans ends of overhead conductor prior to assembly and removes oxidation and contaminants from strands.

See information on ConductaClean at AFLglobal.com or call: 800-866-7385 Ref: Transmission tool CCP-SYS_T.

Method 2 – Wire Brush

Clean conductor strands thoroughly with wire brush. Wire brush "New" conductor also.

Check accessory bore for foreign particles, removing if present.

Follow Installation Instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.



Prior to cutting, wrap tape around the conductor to help maintain the round contour, making it easier to slide the end through the aluminum dead end. File approximately 0.09 inch chamfer on the end of the conductor. (The larger the chamfer, the easier the conductor will slide through).

Straighten several feet of the conductor removing the set caused by the reel.



Assembly



Slide aluminum dead end body (barrel first) over the conductor until sufficient working length protrudes from tongue end.





Cutting Back Aluminum Strands for Installation of Steel Eye/"Core Grip"

NOTE: It is extremely important not to nick the core strands during cutting back of the aluminum strands. If this is done, the ultimate strength of the dead end will be reduced. The cable manufacturer suggests the following method of cutting back the strands.



Suggested Method of Cutting Back Aluminum Strands

- 1. Tape location where "cutting back" is needed.
- 2. Position RIGID cable trimmer around conductor at the tape location.
- 3. Cut outer aluminum strands by rotating tool until layer becomes loose.
- 4. Remove cut outer aluminum layer strand.
- 5. Bend inner layer wires back and forth until they fracture.
- 6. Remove the broken wires.





Suggested Arrangement of Compressor and Accessory During Field Installation of Dead End

The photo at right illustrates a setup, which works well to ensure a straight compression and easy maneuverability of the compressor. The conductor has been "tied off" to the tower with a sling and chain wench. The compressor is then attached to the sling by a large shackle (The compressor is suspended upside down). The accessory and cable are tied to the sling ensuring all parts are straight and in-line. The compressor can easily be slid along to each successive compression.





File chamfer on end of core to remove burrs and sharp edge. Chamfer will reduce the expanded diameter of the core (due to cutting) and ease the installation of the Steel Eye/"Core Grip".

Assembly



Insert end of conductor into "Core Grip" of Steel Eye. Rotate Eye "back and forth" while pushing Eye onto conductor core.



Remove tape from ends of aluminum strands.



Slide aluminum dead end body over Steel Eye/"Core Grip" until tongue butts solidly against felt washer and shoulder of steel forging.

Push to verify internal parts have remained tight during positioning of aluminum dead end body (See below), then place a mark at the end of barrel.



Align eye or clevis in desired orientation of dead end to ensure proper positioning when dead end is fastened to insulator hardware.

Select die size to compress aluminum dead end body. Die size for aluminum dead end body and die size marked on the die must be the same.

The dead end will bow during compression unless reasonable care is taken to have about 15 ft. (4.5 m) of the conductor supported straight out from the end of the dead end.

NOTE: Filler compound is not required in Dead end due to its <u>void-free</u> internals (See supporting test data available from AFL).

Compressing

Lubricate area to be compressed from "Start" knurl to end of barrel with "Accu-Lube" or similar lubricant, <u>or</u> cover barrel with accessory plastic wrapper.



Verify mark place at end of barrel has remained where originally place. If not, push internals together prior to making first compression (see illustration above).

Make initial compression on the dead end body over the steel shank beginning at the start knurl near the tongue. Continue making compressions overlapping the previous compression by approximately 0.50 inch. Complete die closure is required for each compression. Continue compressing to end of Dead End barrel.



Compressing (cont.)



Compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present with file or emery cloth.

CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.

Installation of Terminal Connector



Terminal assemblies consist of Terminal Connector and attachment hardware. The terminal comes prefilled with compound from the factory.

See "Preparation" on page 2 for notes on preparation of conductor.



Mark the conductor from the end, a distance equal to the compression length of the terminal.



Insert conductor into terminal. Be sure the conductors is inserted to the mark on the conductor.

Select die size to compress Terminal Connector. Die size for Terminal Connector and die size marked on the die must be the same.





Compressing

Lubricate area to be compressed from "Start" knurl to end of barrel with "Accu-Lube" or similar lubricant, or cover barrel with accessory plastic wrapper.



Press the Terminal Connector over the conductor. Make the initial compression at the start knurl. Continue making compressions to the end of the Terminal Connector barrel, overlapping the previous compression by approximately 0.50 inches. Complete die closure is required for each compression.



Compressed portion of the Terminal Connector should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

Clean contact surface of Terminal Connector and Dead End pad.

Coat surfaces with AFL Alnox Electrical Joint Compound <u>or</u> AFL HiTemp[®] Universal Compound and then wire brush through compound. Do not remove coating.

Bolt Terminal Connector to Dead End pad. Partially tighten all bolts and then re-tighten each bolt to recommended torque. Aluminum Bolts: (1/2" bolts – 25 lbf-ft (34 N.m); 5/8" bolts – 40 lbf-ft (54 N.m).

CAUTION: Follow Installation Instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.



Installation Instructions SOLO HD[®] Compression System

Adjustable Clevis Dead End

for Use on Overhead Conductor Types

ACSR, ACSS, ACSS/TW



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Preparation

Prior to making connections, the conductor and accessory bore must be clean.

NOTE: Improper cleaning of conductor strands can result in higher resistance dead ends; this causes the fittings to operate at higher temperatures leading to premature failure.

Clean conductor strands thoroughly by using one of the methods below:

Method 1 – ConductaClean[®] System (Recommended)

ConductaClean solution cleans ends of overhead conductor prior to assembly and removes oxidation and contaminants from strands.

See information on ConductaClean at AFLglobal.com or call: 800-866-7385 Ref: Transmission tool CCP-SYS_T.

Method 2 – Wire Brush

Clean conductor strands thoroughly with wire brush. Wire brush "new" conductor also.

Check accessory bore for foreign particles, removing if present.

Follow Installation Instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.



Prior to cutting, wrap tape around the conductor to help maintain the round contour, making it easier to slide the end through the aluminum dead end. File approximately 0.09 inch chamfer on the end of the conductor. (The larger the chamfer, the easier the conductor will slide through).

Straighten several feet of the conductor removing the set caused by the reel.



Assembly





Slide aluminum dead end body (barrel first) over the conductor until sufficient working length protrudes from tongue end.







Cutting Back Aluminum Strands for Installation of Adjustable Clevis/"Core Grip"

NOTE: It is extremely important not to nick the core strands during cutting back of the aluminum strands. If this is done, the ultimate strength of the dead end will be reduced. The cable manufacturer suggests the following method of cutting back the strands.



Suggested Method of Cutting Back Aluminum Strands

- 1. Tape location where "cutting back" is needed.
- 2. Position RIGID cable trimmer around conductor at the tape location.
- 3. Cut outer aluminum strands by rotating tool until layer becomes loose.
- 4. Remove cut outer aluminum layer strand.
- 5. Bend inner layer wires back and forth until they fracture.
- 6. Remove the broken wires.





Suggested Arrangement of Compressor and Accessory During Field Installation of Dead End

The photo at right illustrates a setup, which works well to ensure a straight compression and easy maneuverability of the compressor. The conductor has been "tied off" to the tower with a sling and chain wench. The compressor is then attached to the sling by a large shackle (The compressor is suspended upside down). The accessory and cable are tied to the sling ensuring all parts are straight and in-line. The compressor can easily be slid along to each successive compression.





File chamfer on end of core and end of aluminum strands to remove burrs and sharp edge. Chamfer will reduce the expanded diameter of the core (due to cutting) and ease the installation of the adjustable clevis/" core grip".

Assembly



Insert end of conductor into "core grip" of clevis assembly. Rotate clevis assembly "back and forth" while pushing it onto conductor core.



Remove tape from ends of aluminum strands.

Adjust distance between Jam Nuts to 3.38 inches (86 mm) as shown in the illustration above.



Slide aluminum dead end body over adjustable clevis/"core grip" until tongue butts solidly against felt washer and nut.

Push to verify internal parts have remained tight during positioning of aluminum dead end body (See below), then place a mark at the end of barrel.



Align clevis in desired orientation of dead end to ensure proper positioning when dead end is fastened to insulator hardware. Lock in place with adjacent jam nut.

Select die size to compress aluminum dead end body. Die size for aluminum dead end body and die size marked on the die must be the same.

The dead end will bow during compression unless reasonable care is taken to have about 15 ft. (4.5 m) of the conductor supported straight out from the end of the dead end.

NOTE: Filler compound is not required in dead end due to its <u>void-free</u> internals (See supporting test data available from AFL).

Compressing

Lubricate area to be compressed from "Start" knurl to end of barrel with "Accu-Lube" or similar lubricant, <u>or</u> cover barrel with accessory plastic wrapper.

Verify mark place at end of barrel has remained where originally place. If not, push internals together prior to making first compression (see illustration above).



Make initial compression on the dead end body over the steel threads beginning at the start knurl near the tongue. Continue making compressions overlapping the previous compression by approximately 0.50 inch. Complete die closure is required for each compression. Continue compressing to end of dead end barrel.



Compressing (cont.)



Compressed portion of the dead end should have a smooth uniform appearance. Remove flash, if present with file or emery cloth.

CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.

Installation of Terminal Connector



Terminal assemblies consist of Terminal Connector and attachment hardware. The terminal comes prefilled with compound from the factory.

See "Preparation" on page 2 for notes on preparation of conductor.



Mark the conductor from the end, a distance equal to the compression length of the terminal.



Insert conductor into terminal. Be sure the conductors is inserted to the mark on the conductor.

Select die size to compress Terminal Connector. Die size for Terminal Connector and die size marked on the die must be the same.



Compressing

Lubricate area to be compressed from "Start" knurl to end of barrel with "Accu-Lube" or similar lubricant, <u>or</u> cover barrel with accessory plastic wrapper.



Press the Terminal Connector over the conductor. Make the initial compression at the start knurl. Continue making compressions to the end of the Terminal Connector barrel, overlapping the previous compression by approximately 0.50 inches. Complete die closure is required for each compression.



Compressed portion of the Terminal Connector should have a smooth uniform appearance. Remove flash, if present, with file or emery cloth.

Clean contact surface of Terminal Connector and Dead End pad.

Coat surfaces with AFL Alnox Electrical Joint Compound <u>or</u> AFL HiTemp[®] Universal Compound and then wire brush through compound. Do not remove coating.

Bolt Terminal Connector to Dead End pad. Partially tighten all bolts and then re-tighten each bolt to recommended torque. Aluminum Bolts: (1/2" bolts – 25 lbf-ft (34 N.m); 5/8" bolts – 40 lbf-ft (54 N.m).

CAUTION: Follow Installation Instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.



Installation Instructions for AFL Joint for Use on Overhead Conductor Types ACSR, ACSS, ACSS/TW



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Preparation

Prior to making connections, the conductor and accessory bore must be clean.

NOTE: Improper cleaning of conductor strands can result in higher resistance joints; this causes the fittings to operate at higher temperatures leading to premature failure.

Clean conductor strands thoroughly by using one of the methods below:

Method 1 – ConductaClean[®] System (Recommended)

ConductaClean solution cleans ends of overhead conductor prior to assembly and removes oxidation and contaminants from strands.

See information on ConductaClean at AFLglobal.com or call: 800-866-7385 Ref: Transmission tool CCP-SYS_T.

Method 2 – Wire Brush

Clean conductor strands thoroughly with wire brush. Wire brush "New" conductor also.

Check accessory bore for foreign particles, removing if present.

Follow Installation Instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.





Prior to cutting, wrap tape around the conductor to help maintain the round contour, making it easier to slide the end through the aluminum joint. File approximately 0.09 inch chamfer on the end of the conductor. (The larger the chamfer, the easier the conductor will slide through).

Straighten several feet of the conductor removing the set caused by the reel.





Assembly



Joint consists of an aluminum body and steel sleeve/"core grip" as shown above.



STEEL SLEEVE/"CORE GRIP"

ALUMINUM BODY

Measure back from each conductor and mark at a distance equal to 1/2 the length of the aluminum body.



Slide aluminum body over the conductor and beyond mark until sufficient working length protrudes from barrel end.



Cutting Back Aluminum Strands for Installation of Steel Sleeve/"Core Grip"



NOTE: It is extremely important not to nick the core strands during cutting back of the aluminum strands. If this is done, the ultimate strength of the Joint will be reduced. The cable manufacturer suggests the following method of cutting back the strands.



Suggested Method of Cutting Back Aluminum Strands

- 1. Tape location where "cutting back" is needed
- 2. Position RIGID cable trimmer around conductor at the tape location
- 3. Cut outer aluminum strands by rotating tool until layer becomes loose.
- 4. Remove cut outer aluminum layer strand
- 5. Bend inner layer wires back and forth until they fracture
- 6. Remove the broken wires.







Suggested Arrangement of Compressor and Accessory During Field Installation of Joint

The photos below illustrate setup, which works well to ensure a straight compression and easy maneuverability of the compressor. The photos below show the conductor has been "tied off" (tensioned with slings and chain hoist) to slacken the conductor at point of installation.

Setup 1: The compressor is attached to the sling by a large shackle (the compressor is suspended upside down). The accessory and cable are tied to the sling ensuring all parts are straight and in-line. The compressor can easily be slid along to each successive compression.

Setup 2: The compressor sits on a board, which sits on the rails of the high lift. The board and compressor can be slid along to each successive compression. The accessory and cable must be supported and all parts must be straight and in-line or bowing will occur.









File chamfer on end of core to remove burrs and sharp edge. Chamfer will reduce the expanded diameter of the core (due to cutting) and ease the installation of the Steel Sleeve/"Core Grip".

Assembly



Insert ends of conductor into "Core Grip" ends of steel sleeve. Rotate sleeve "back and forth" while pushing sleeve onto conductor core.



Remove tape from ends of aluminum strands.

Slide aluminum joint body over steel core grip and center within marks.

MARK	mark

Push to verify internal parts have remained tight during positioning of aluminum joint body (see above).



HiTemp[®]

Assembly (cont.)

Select die size to compress aluminum joint body. Die size for aluminum joint body and die size marked on the die must be the same.

The joint will bow during compression unless reasonable care is taken to have about 15 ft. (4.5 m) of the conductor supported straight out from the end of the joint.

NOTE: Filler compound is not required in the joint due to its <u>void-free</u> internals (see supporting test data available from AFL).

Compressing



Lubricate outside surface of joint with "Accu-Lube" or similar lubricant, or cover barrel with accessory plastic wrapper.

Verify marks placed at end of barrel has remained where originally placed. If not, push internals together prior to making first compression (see illustration on previous page).



Make initial compression over the center portion of the joint (at 1).

Make the second compression on one end overlapping the initial compression by approximately 0.50 inches (**at 2**) (do not skip bite).

Make the third compression on the opposite end, overlapping the initial compression by 0.50 inches (at 3).

Continue making compressions to the end of the joint overlapping the previous compression by approximately 0.50 inch.

NOTE: Do not compress "End Taper." Complete die closure is required for each compression. Go back and complete the compression on the opposite end.

The "End Tapers" are not compressed (note stamped markings on illustration).

-		
	RESS	
	DO NOT PI	



Compressing (cont.)



Compressed portion of the joint should have a smooth uniform appearance. Remove flash, if present with file or emery cloth.

CAUTION: Follow installation instructions carefully. Improper installation can result in mechanical failure of the cable system and possible injury to persons handling or in the vicinity of the cable system.







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