

Quick Compress Accessories for Maximum Conductor Operating Temperatures of 100°C (212°F)



In the past, three separate compression accessory series were required to connect ACSR, AAC, AAAC and ACAR. To assist utilities and distributors in reducing inventory, AFL designed one series of compression accessories that can handle all four conductor types, the Quick Compress Product Line. Quick Compress handles these conductors while maintaining the same mechanical and electrical reliability as other AFL product lines.

There are two primary characteristics that make Quick Compress different from any other accessory line. First, it is made of a high strength aluminum alloy, which has a minimum tensile strength nearly twice that of other compression accessory systems. This means that for the same conductor size, smaller connectors can be used without any fear of sacrificing strength. Secondly, Quick Compress uses an aluminum 'core grip' to hold the steel core of ACSR. This eliminates the need to have a dead end steel compression barrel or a steel sleeve for full tension ACSR joints. By eliminating the steel, only one set of dies is required for installing Quick Compress Accessories.

All compression accessories are designed to operate at a temperature 15% to 25% cooler than the conductor. Quick Compress accessories are designed for a maximum conductor operating temperature of 100°C (212°F). For applications exceeding 100°C (212°F) operating temperature, see the Standard and HiTemp® Compression Accessories sections.

Features

Installs in 40% Less Time

Quick Compress Accessories are designed to save valuable time. They are made of a high strength alloy allowing for shorter accessories resulting in fewer compression bites. The accessories come pre-filled, the steel eye is pre-compressed and a one-piece core grip is included. Compared to other two-die accessory systems, Quick Compress Accessories can be installed in 40% less time.

One-Piece Core Grip

When using ACSR conductor, the one-piece core grip eliminates the need for a dead end steel compression barrel or a steel sleeve for full tension compression joints.

Factory Installed Eye

The dead end features a steel eye that is oriented and installed at the factory. This decreases installation time and eliminates costly field errors.

Factory Pre-filled

Quick Compress dead ends, joints, terminals and jumper connectors are pre-filled with AFL Filler Compound (AFC) and capped to prevent loss of compound prior to installation, eliminating an installation step.

High Voltage Applications

The end tapers of all compression accessories are supplied with a high voltage finish for die sizes 12CD and above. Corona bolts are furnished standard on 15° terminals for these section sizes. The square edges of bolted pads of the compression accessories could cause Corona. Pads with rounded edges and corners can be supplied by adding the catalog suffix 'EHV'.

Quick Reference Guide for Quick Compress Accessories for AAC Conductor

CODE WORD	CONDUCTOR			COMPRESSION ACCESSORIES													
	SIZE	STRANDING	DIA.	DEAD END ASSEMBLIES						JOINT	JUMPER CONNECTOR	TERMINAL CONNECTORS			OPEN RUN TEE CONNECTOR	OPEN RUN TEE TAP	REPAIR SLEEVE
	KCMIL	AL/ST	IN	VERT. EYE SINGLE TONGUE	HOR. EYE SINGLE TONGUE	VERT. EYE DOUBLE TONGUE	HOR. EYE DOUBLE TONGUE	ADJ. EYE SINGLE TONGUE	ADJ. CLEVIS SINGLE TONGUE			STRAIGHT	15°	90°			
Peony	300.0	19	0.629	VESE070	HESE070	VEDE070	HEDE070	AESE070	ACSE070	CJE07	JC07	TS07	TF07	TN07	TTOC07	TTOP07	RS07
Tulip	336.4	19	0.666	VESE070	HESE070	VEDE070	HEDE070	AESE070	ACSE070	CJE07	JC07	TS07	TF07	TN07	TTOC07	TTOP07	RS07
Daffodil	350.0	19	0.679	VESE070	HESE070	VEDE070	HEDE070	AESE070	ACSE070	CJE07	JC07	TS07	TF07	TN07	TTOC07	TTOP07	RS07
Canna	397.5	19	0.724	VESE080	HESE080	VEDE080	HEDE080	AESE080	ACSE080	CJE08	JC08	TS08	TF08	TN08	TTOC08	TTOP08	RS08
Goldentuft	450.0	19	0.770	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Yarrow	450.0	37	0.770	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Cosmos	477.0	19	0.793	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Syringa	477.0	37	0.795	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Zinnia	500.0	19	0.811	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Hyacinth	500.0	37	0.813	VESE090	HESE090	VEDE090	HEDE090	AESE090	ACSE090	CJE09	JC09	TS09	TF09	TN09	TTOC09	TTOP09	RS09
Dahlia	556.5	19	0.856	VESE100	HESE100	VEDE100	HEDE100	AESE100	ACSE100	CJE10	JC10	TS10	TF10	TN10	TTOC10	TTOP10	RS10
Mistletoe	556.5	37	0.858	VESE100	HESE100	VEDE100	HEDE100	AESE100	ACSE100	CJE10	JC10	TS10	TF10	TN10	TTOC10	TTOP10	RS10
Meadowsweet	600.0	37	0.891	VESE100	HESE100	VEDE100	HEDE100	AESE100	ACSE100	CJE10	JC10	TS10	TF10	TN10	TTOC10	TTOP10	RS10
Orchid	636.0	37	0.918	VESE100	HESE100	VEDE100	HEDE100	AESE100	ACSE100	CJE10	JC10	TS10	TF10	TN10	TTOC10	TTOP10	RS10
Heuchera	650.0	37	0.928	VESE100	HESE100	VEDE100	HEDE100	AESE100	ACSE100	CJE10	JC10	TS10	TF10	TN10	TTOC10	TTOP10	RS10
Verbena	700.0	37	0.963	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Flag	700.0	61	0.964	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Violet	715.5	37	0.974	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Nasturtium	715.5	61	0.975	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Petunia	750.0	37	0.997	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Cattail	750.0	61	0.998	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Arbutus	795.0	37	1.026	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Lilac	795.0	61	1.028	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
—	800.0	37	1.031	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Heliotrope	800.0	61	1.031	VESE110	HESE110	VEDE110	HEDE110	AESE110	ACSE110	CJE11	JC11	TS11	TF11	TN11	TTOC11	TTOP11	RS11
Cockscomb	900.0	37	1.092	VESE120	HESE120	VEDE120	HEDE120	AESE120	ACSE120	CJE12	JC12	TS12	TF12	TN12	TTOC12	TTOP12	RS12
Snapdragon	900.0	61	1.094	VESE120	HESE120	VEDE120	HEDE120	AESE120	ACSE120	CJE12	JC12	TS12	TF12	TN12	TTOC12	TTOP12	RS12
Magnolia	954.0	37	1.124	VESE120	HESE120	VEDE120	HEDE120	AESE120	ACSE120	CJE12	JC12	TS12	TF12	TN12	TTOC12	TTOP12	RS12
Goldenrod	954.0	61	1.126	VESE120	HESE120	VEDE120	HEDE120	AESE120	ACSE120	CJE12	JC12	TS12	TF12	TN12	TTOC12	TTOP12	RS12
Hawkweed	1000.0	37	1.150	VESE130	HESE130	VEDE130	HEDE130	AESE130	ACSE130	CJE13	JC13	TS13	TF13	TN13	TTOC13	TTOP13	RS13
Camellia	1000.0	61	1.152	VESE130	HESE130	VEDE130	HEDE130	AESE130	ACSE130	CJE13	JC13	TS13	TF13	TN13	TTOC13	TTOP13	RS13
Bluebell	1033.5	37	1.170	VESE130	HESE130	VEDE130	HEDE130	AESE130	ACSE130	CJE13	JC13	TS13	TF13	TN13	TTOC13	TTOP13	RS13
Larkspur	1033.5	61	1.172	VESE130	HESE130	VEDE130	HEDE130	AESE130	ACSE130	CJE13	JC13	TS13	TF13	TN13	TTOC13	TTOP13	RS13
Marigold	1113.0	61	1.216	VESE130	HESE130	VEDE130	HEDE130	AESE130	ACSE130	CJE13	JC13	TS13	TF13	TN13	TTOC13	TTOP13	RS13
Hawthorn	1192.5	61	1.258	VESE140	HESE140	VEDE140	HEDE140	AESE140	ACSE140	CJE14	JC14	TS14	TF14	TN14	TTOC14	TTOP14	RS14
—	1250.0	127	1.289	VESE140	HESE140	VEDE140	HEDE140	AESE140	ACSE140	CJE14	JC14	TS14	TF14	TN14	TTOC14	TTOP14	RS14
Narcissus	1272.0	61	1.300	VESE140	HESE140	VEDE140	HEDE140	AESE140	ACSE140	CJE14	JC14	TS14	TF14	TN14	TTOC14	TTOP14	RS14
—	1300.0	127	1.315	VESE140	HESE140	VEDE140	HEDE140	AESE140	ACSE140	CJE14	JC14	TS14	TF14	TN14	TTOC14	TTOP14	RS14
Columbine	1351.0	61	1.340	VESE150	HESE150	VEDE150	HEDE150	AESE150	ACSE150	CJE15	JC15	TS15	TF15	TN15	TTOC15	TTOP15	RS15
Carnation	1431.0	61	1.379	VESE150	HESE150	VEDE150	HEDE150	AESE150	ACSE150	CJE15	JC15	TS15	TF15	TN15	TTOC15	TTOP15	RS15
—	1500.0	91	1.412	VESE150	HESE150	VEDE150	HEDE150	AESE150	ACSE150	CJE15	JC15	TS15	TF15	TN15	TTOC15	TTOP15	RS15
Gladiolus	1510.5	61	1.417	VESE150	HESE150	VEDE150	HEDE150	AESE150	ACSE150	CJE15	JC15	TS15	TF15	TN15	TTOC15	TTOP15	RS15
Coreopsis	1590.0	61	1.454	VESE160	HESE160	VEDE160	HEDE160	AESE160	ACSE160	CJE16	JC16	TS16	TF16	TN16	TTOC16	TTOP16	RS16
Dogwood	1590.0	91	1.454	VESE160	HESE160	VEDE160	HEDE160	AESE160	ACSE160	CJE16	JC16	TS16	TF16	TN16	TTOC16	TTOP16	RS16
Jessamine	1750.0	61	1.525	VESE170	HESE170	VEDE170	HEDE170	AESE170	ACSE170	CJE17	JC17	TS17	TF17	TN17	TTOC17	TTOP17	RS17
Cowslip	2000.0	91	1.630	VESE180	HESE180	VEDE180	HEDE180	AESE180	ACSE180	CJE18	JC18	TS18	TF18	TN18	TTOC18	TTOP18	RS18
Sagebrush	2250.0	91	1.729	VESE190	HESE190	VEDE190	HEDE190	AESE190	ACSE190	CJE19	JC19	TS19	TF19	TN19	TTOC19	TTOP19	RS19
—	2300.0	91	1.750	VESE190	HESE190	VEDE190	HEDE190	AESE190	ACSE190	CJE19	JC19	TS19	TF19	TN19	TTOC19	TTOP19	RS19
Lupine	2500.0	91	1.823	VESE200	HESE200	VEDE200	HEDE200	AESE200	ACSE200	CJE20	JC20	TS20	TF20	TN20	TTOC20	TTOP20	RS20

Quick Compress Catalog Numbering System

The simplified AFL catalog numbering system for alloy compression connectors facilitates specifying, ordering and inventory control. The catalog number is stamped on each compression connector for easy and positive field identification.

Example: Catalog No. VES126

TYPE OF CONNECTOR	TUBE CODE	CORE GRIP CODE
VES (see table below)	① XX	②③ Y ⑤ Y N T

Example:

CONDUCTOR	DEAD END	CORE GRIP	DIE SIZE	TERMINAL	DEAD END ASSEMBLY
795.26/7 ACSR	VES12	CG126	12CD	TF12	VES126
927 kcmil-6201	VES12	–	12CD	TF12	VES120
954 kcmil-1350(EC)	VESE12	–	12CD	TF12	VES120

⑦ TYPE OF CONNECTOR	STANDARD U.S. SIZES			BRITISH, EUROPEAN AND STANDARD METRIC SIZES		
	ACSR	1350(EC)	ALLOY ACAR	ACSR	1350(EC)	ALLOY ACAR
Dead Ends, Vertical Eye, Single Tongue	VES	VESE	VES	VESM	VESEM	VESM
Dead Ends, Vertical Eye, Double Tongue	VED	VEDE	VED	VEDM	VEDEM	VEDM
Dead Ends, Horizontal Eye, Single Tongue	HES	HESE	HES	HESM	HESEM	HESM
Dead Ends, Horizontal Eye, Double Tongue	HED	HEDE	HED	HEDM	HEDEM	HEDM
Dead Ends, Adjustable Eye, Single Tongue	AES	AESE	AES	AESM	AESEM	AESM
Dead Ends, Adjustable Eye, Double Tongue	AED	AEDE	AED	AEDM	AEDEM	AEDM
Dead Ends, Adjustable Clevis, Single Tongue	ACS	ACSE	ACS	ACSM	ACSEM	ACSM
Dead Ends, Adjustable Clevis, Double Tongue	ACD	ACDE	ACD	ACDM	ACDEM	ACDM
Terminal Connectors, Straight Pad	TS	TS	TS	TSM	TSM	TSM
Terminal Connectors, 15° Pad ⑥	TF	TF	TF	TFM	TFM	TFM
Terminal Connectors, 45° Pad	T45	T45	T45	T45M	T45M	T45M
Terminal Connectors, 90° Pad	TN	TN	TN	TNM	TNM	TNM
Compression Joints	CJ	CJE	CJ	CJM	CJEM	CJM
Jumper Connector	JC	JC	JC	JCM	JCM	JCM
Repair Sleeve	RS	RS	RS	RSM	RSM	RSM
Core Grip	CG	–	–	CG	–	–
Tee Connector - Closed Run, Cable to Cable	TTCC	TTCC	TTCC	TTCCM	TTCCM	TTCCM
Tee Connector - Open Run, Cable to Cable	TTOC	TTOC	TTOC	TTOCM	TTOCM	TTOCM
Tee Tap - Closed Run, Cable to Pad	TTCP	TTCP	TTCP	TTCPM	TTCPM	TTCPM
Tee Tap - Open Run, Cable to Pad	TTOP	TTOP	TTOP	TTOPM	TTOPM	TTOPM

NOTES:

- ① The two digit number (denoted by XX) defines tube code. These numbers will be 07 through 21 inclusive.
- ② A single digit suffix (denoted by Y) is used to order the dead end assembly or joint assembly. This suffix also shows the core grip code. These numbers will be 0 through 7 inclusive, where 0 indicates no core grip and 1 through 7 indicates the core grip for a given tube size.
- ③ The dead end assembly for an ACSR consists of the prefilled aluminum dead end body precompressed onto the steel eye, the 15° terminal connector, hardware and core grip. Double tongue dead end assemblies include two terminal connectors. The joint assembly for ACSR consists of a prefilled aluminum sleeve and two core grips.
- ④ The dead end assembly for SAC conductors consists of the prefilled dead end body, precompressed onto the steel eye, the 15° terminal connector and hardware. Double tongue dead end assemblies include two terminal connectors.

- ⑤ To order dead end assembly without the jumper terminal, specify VESXXYNT. For the VES126NT, the assembly would consist of the VES12 dead end and CG126 core grip for the 795 26/7 ACSR.
- ⑥ The 15° terminal connectors are supplied with 1/2 inch aluminum alloy bolts, nuts and washers. Terminal sizes 12 and larger are supplied with corona bolts.
- ⑦ With the exception of repair sleeves, tee connectors and tee taps all of the compression barrels are prefilled with AFC.
- ⑧ Die code for compressors:

B – CD	Compressor Model: 12A
30 – CD	30A
60 – CD	60A
100 – CD	100A

Quick Compress Catalog Numbering System (cont.)

TUBE, CORE GRIP AND ASSEMBLY CODES FOR ACSR CONDUCTORS

CONDUCTOR SIZE			TUBE CODE XX	ASSEMBLY AND CORE GRIP CODE CG
KCMIL	MM ²	STRAND		
266.8	135.2	6/7	07	075
		18/1	07	072
		26/7	07	076
300.0	152.0	26/7	08	085
336.4	170.5	18/1	08	082
		26/7	08	086
		30/7	09	096
397.5	201.4	18/1	08	083
		24/7	09	095
		26/7	09	096
		30/7	10	106
477.0	241.7	18/1	09	092
		24/7	09	095
		26/7	10	096
		30/7	11	106
556.5	282.0	18/1	10	102
		24/7	10	105
		26/7	10	106
		30/7	11	117
605.0	306.8	24/7	11	115
		26/7	11	116
		30/19	12	126
636.0	322.3	18/1	10	103
		24/7	11	115
		26/7	11	116
		30/19	12	126
		36/1	10	101
666.8	337.7	24/7	11	115
715.5	362.6	24/7	11	115
		26/7	12	126
		30/19	13	138
795.0	402.8	24/7	12	125
		26/7	12	126
		30/19	14	146
		36/1	11	111
		45/7	12	123
54/7	12	125		
900.0	456.1	45/7	12	124
		54/7	13	135
954.0	483.4	36/1	12	121
		45/7	13	133
		54/7	13	135
1033.5	523.7	36/1	13	131
		45/7	13	134
		54/7	14	145
1113.0	583.9	45/7	14	143
		54/19	14	145

TUBE, CORE GRIP AND ASSEMBLY CODES FOR ACSR CONDUCTORS (cont.)

CONDUCTOR SIZE			TUBE CODE XX	ASSEMBLY AND CORE GRIP CODE CG
KCMIL	MM ²	STRAND		
1192.5	604.3	45/7	14	144
		54/19	15	155
1272.0	644.5	45/7	15	153
		54/19	15	153
1351.5	685.2	45/7	15	154
		54/19	15	155
1431.0	725.2	45/7	16	163
		54/19	16	165
1510.5	765.2	45/7	16	164
		54/19	16	165
1590.0	805.8	45/7	16	164
		54/19	17	175
1780.0	901.9	84/19	17	174
2034.0	1030.6	72/7	18	183
2156.0	1092.3	84/19	19	194
2167.0	1098.1	72/7	19	193
2312.0	1171.5	76/19	19	193
2515.0	1274.4	76/19	20	203

STRANDED ALUMINUM CONDUCTORS CONDUCTOR DIAMETER RANGE AND TUBE CODE

DIAMETER RANGE				TUBE CODE XX
INCHES		MILLIMETERS		
MIN.	MAX.	MIN.	MAX.	
.595	.680	15.1	17.3	07
.680	.765	17.3	19.4	08
.765	.855	19.4	21.7	09
.855	.950	21.7	24.1	10
.950	1.1045	24.1	26.5	11
1.045	1.140	26.5	29.0	12
1.140	1.235	29.0	31.4	13
1.235	1.330	31.4	33.8	14
1.330	1.425	33.8	36.2	15
1.425	1.520	36.2	38.6	16
1.520	1.615	38.6	41.0	17
1.615	1.710	41.0	43.4	18
1.710	1.805	43.4	45.8	19
1.805	1.900	45.8	48.3	20