



Armor Rods

Armor rods are designed to protect the conductor by reducing bending, compression, and abrasion at the support point. Protection against flashover damage is also provided. Armor rods are recommended as protection for spans greater than 300 ft. (91 m). Manufactured from either aluminum alloy, Alumoweld®, or galvanized steel, they are designed for use with ACSR, AAC, AAAC, ACSS, SSAC, TW Types and ACAR conductors as well as Alumoweld® and steel ground wire. All rod sets are manufactured with right-hand lay as standard for aluminum-based material and left hand lay for Alumoweld and steel ground wire.

Features

Color Coded and Center Marked

For ease of identification to conductor size, the armor rods are color coded in the center of the rod. This feature also assists in alignment of the rods during installation.

Repair Damage

When no more than 50% of the outside strands on an ACSR or aluminum conductor have been damaged outside the support point, armor rods may be used to restore 100% of the rated conductance and strength of the line.

Vibration Protection

Installing armor rods improves the conductor's ability to withstand the fatigue forces associated with aeolian type vibration. They do not function as vibration control devices. For assistance in determining the proper vibration protection, contact the AFL Technical Support Team or visit our website at www.Vibrec.com.

Tap Over

Armor rods may be tapped over on ACSR and aluminum conductor, but not on Alumoweld, or steel ground wire. Where tapping is used, it is strongly recommended that the conductor is thoroughly wire brushed and an oxide inhibitor be applied.

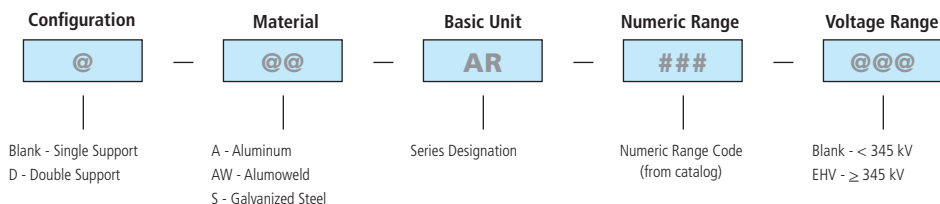
Extra High Voltage Applications

For 345 kV and above, the armor rod ends are modified to eliminate Corona effects and include a suffix of 'EHV' at the end of the AFL part number.

Customized Armor Rods

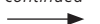
For armor rods with special requirements, such as longer lengths or non-standard lay direction contact the AFL Technical Support Team at 1-800-866-7385.

Ordering Information



Example: For single 795 26/7, Aluminum conductor diameter of 1.099 to 1.139 inches and Extra High Voltage, the complete catalog number is: AAR279EHV

continued





Ordering Information - Armor Rods

AFL NO.	CONDUCTOR DIAMETER RANGE		NOMINAL CABLE SIZE	ROD DIA. (INCHES)	QUANTITY IN SET	COLOR CODE	ROD LENGTH (INCHES)	PACKAGING PER BOX	
	MIN. (INCHES)	MAX. (INCHES)						UNITS	WEIGHT (LBS)
ALUMINUM (RIGHT HAND LAY)									
AAR062	0.244	0.259	#4, 6/1, 7/1	0.146	7	Orange	40 (S) 52 (D)	50	25 (S) 32 (D)
AAR066	0.260	0.273	#3, 7W All Aluminum	0.146	7	Green	42 (S) 54 (D)	50	26 (S) 34 (D)
AAR069	0.274	0.289	#3, 7W Aluminum Alloy	0.146	8	Yellow	42 (S) 54 (D)	50	30 (S) 38 (D)
AAR073	0.290	0.308	#2, 7W All Aluminum	0.146	8	Purple	42 (S) 54 (D)	50	30 (S) 38 (D)
AAR078	0.309	0.326	#2, 6/1, 7/1	0.136	9	Red	44 (S) 56 (D)	50	32 (S) 40 (D)
AAR083	0.327	0.346	#1, 7W All Aluminum	0.146	9	Blue	46 (S) 58 (D)	50	38 (S) 46 (D)
AAR088	0.347	0.366	#1, 6/1	0.146	9	Green	48 (S) 60 (D)	50	40 (S) 49 (D)
AAR093	0.367	0.389	1/0, 7W All Aluminum	0.146	10	Black	50 (S) 62 (D)	50	45 (S) 55 (D)
AAR099	0.390	0.413	1/0, 6/1	0.167	9	Yellow	52 (S) 64 (D)	50	55 (S) 67 (D)
AAR105	0.414	0.436	3/0, 7W Comp.	0.146	10	Brown	52 (S) 64 (D)	50	48 (S) 58 (D)
AAR111	0.437	0.463	2/0, 6/1	0.167	10	Blue	54 (S) 66 (D)	50	64 (S) 76 (D)
AAR118	0.464	0.490	3/0, 7W-19W All Aluminum	0.167	10	Green	54 (S) 66 (D)	50	64 (S) 76 (D)
AAR124	0.491	0.521	3/0, 6/1	0.167	11	Orange	56 (S) 68 (D)	25	37 (S) 46 (D)
AAR132	0.522	0.551	4/0, 7W-19W All Aluminum	0.167	11	Black	58 (S) 70 (D)	25	38 (S) 46 (D)
AAR140	0.552	0.585	4/0, 6/1	0.182	11	Red	60 (S) 72 (D)	25	46 (S) 55 (D)
AAR149	0.586	0.606	266.8, 19W	0.182	12	Black	62 (S) 74 (D)	25	52 (S) 61 (D)
AAR154	0.607	0.630	266.8, 18/1	0.182	12	Purple	64 (S) 76 (D)	25	54 (S) 63 (D)
AAR160	0.631	0.655	266.8, 26/7	0.182	12	Yellow	64 (S) 76 (D)	25	54 (S) 63 (D)
AAR166	0.656	0.679	336.4, 19W	0.182	13	Brown	66 (S) 78 (D)	18	43 (S) 51 (D)
AAR172	0.680	0.703	300, 26/7	0.204	12	Blue	68 (S) 80 (D)	18	52 (S) 60 (D)
AAR179	0.704	0.740	336.4, 26/7	0.204	12	Green	72 (S) 84 (D)	18	54 (S) 64 (D)
AAR188	0.741	0.782	397.5 18/1	0.204	13	Orange	72	18	50
AAR199	0.783	0.814	397.5 26/7	0.250	11	Purple	76	15	66
AAR207	0.815	0.845	636 19W	0.250	11	Red	76	15	66
AAR215	0.846	0.907	477 26/7	0.250	12	Blue	78	15	74
AAR230	0.908	0.929	636 37W	0.250	13	Green	80	12	55
AAR236	0.930	0.976	605 26/7	0.250	13	White	88	12	60
AAR248	0.977	1.016	636 26/7	0.310	11	Yellow	92	6	55
AAR258	1.017	1.035	795 37W-61W	0.310	12	Brown	94	6	45
AAR263	1.036	1.064	715.5 26/7	0.310	12	Blue	96	6	46
AAR270	1.065	1.098	795 24/7	0.310	12	Green	96	6	46
AAR279	1.099	1.139	795 26/7	0.310	12	Orange	100	6	51
AAR289	1.140	1.161	954 36/1	0.310	13	Purple	100	6	52
AAR295	1.162	1.208	1003.5 37W-61W	0.310	13	Red	100	6	57
AAR307	1.209	1.269	1113 45/7	0.365	12	Black	100	6	67

continued



Formed Wire

Ordering Information - Armor Rods (cont.)

AFL NO.	CONDUCTOR DIAMETER RANGE		NOMINAL CABLE SIZE	ROD DIA. (INCHES)	QUANTITY IN SET	COLOR CODE	ROD LENGTH (INCHES)	PACKAGING PER BOX	
	MIN. (INCHES)	MAX. (INCHES)						UNITS	WEIGHT (LBS)
ALUMINUM (CONT.) (RIGHT HAND LAY)									
AAR322	1.270	1.327	1192.5 45/7	0.365	12	White	100	6	67
AAR337	1.328	1.390	1272 45/7	0.365	13	Yellow	100	3	45
AAR353	1.391	1.440	1431 45/7	0.436	11	Brown	100	3	54
AAR366	1.441	1.508	1590 45/7	0.436	12	Blue	100	3	58
AAR383	1.509	1.578	1590 54/19	0.436	12	Green	100	3	58
AAR401	1.579	1.651	1780 84/19	0.436	13	Orange	100	3	60
AAR419	1.652	1.728	—	0.436	13	Purple	100	3	60
AAR439	1.729	1.809	2156 84/19	0.436	14	Red	100	3	64
AAR459	1.810	1.898	2500 91W	0.436	14	Black	100	3	64
AAR482	1.899	1.991	—	0.436	15	White	100	3	74
AAR506	1.992	2.090	—	0.436	15	Yellow	100	3	74
AAR531	2.091	2.193	—	0.436	15	Brown	100	3	82
GALVANIZED STEEL (LEFT HAND LAY)									
SAR058	0.229	0.243	1/4, 7 WIRE	0.086	10	Black	40	50	38
SAR062	0.244	0.259	1/4, 3 WIRE	0.086	10	Yellow	40	50	38
SAR078	0.309	0.326	5/16, 3 OR 7 WIRE	0.100	11	Black	44	50	60
SAR088	0.347	0.373	3/8, 3 OR 7 WIRE	0.100	12	Orange	48	50	70
SAR105	0.414	0.436	7/16, 3 OR 7 WIRE	0.119	12	Green	52	20	54
SAR124	0.491	0.521	1/2, 7 OR 19 WIRE	0.138	12	Blue	56	20	64
ALUMOWELD® (LEFT HAND LAY)									
AWAR043	0.169	0.178	3 #12 AW	0.102	7	Orange	40 (S) 52 (D)	50	31 (S) 40 (D)
AWAR050	0.196	0.207	3 # 11 AW	0.102	7	Black	40 (S) 52 (D)	50	31 (S) 40 (D)
AWAR055	0.218	0.225	3 # 10 AW, 4M AW	0.102	8	Green	40 (S) 52 (D)	50	35 (S) 46 (D)
AWAR060	0.237	0.249	7 # 12 AW, 1/4", 6M AW, 3 # 9 AW	0.102	9	Yellow	40 (S) 52 (D)	50	39 (S) 51 (D)
AWAR067	0.264	0.277	7 # 11 AW, 9/32", 8M AW, 3 # 8 AW	0.114	9	Blue	42 (S) 54 (D)	25	27 (S) 35 (D)
AWAR075	0.296	0.314	7 # 10 AW, 5/16", 10M AW, 3 # 7 AW	0.114	9	Black	46 (S) 58 (D)	25	29 (S) 37 (D)
AWAR085	0.334	0.352	7 # 9 AW, 11/31", 12.5M AW, 3 # 6 AW	0.114	10	Yellow	50 (S) 62 (D)	25	33 (S) 44 (D)
AWAR095	0.373	0.392	7 # 8 AW, 3/8", 3 # 5 AW	0.128	10	Orange	50 (S) 62 (D)	25	44 (S) 54 (D)
AWAR104	0.409	0.425	18M AW	0.128	11	Black	54 (S) 66 (D)	25	52 (S) 62 (D)
AWAR108	0.426	0.450	7 # 7 AW, 7/16", 20M AW	0.128	12	Green	56 (S) 68 (D)	25	59 (S) 70 (D)
AWAR121	0.477	0.504	7 # 6 AW, 1/2"	0.144	11	Blue	56 (S) 68 (D)	20	52 (S) 65 (D)
AWAR136	0.535	0.565	7 # 5 AW, 9/16"	0.162	12	Yellow	60 (S) 72 (D)	10	39 (S) 48 (D)
AWAR150	0.593	0.625	7 # 4 AW, 5/8"	0.183	11	Black	60 (S) 72 (D)	10	59 (S) 56 (D)

End Finish of Rods:

1. Chamfered ends - standard on diameters up to 0.250"
2. Ball ends - standard on diameters greater than 0.250"
3. Tapered ends for EHV - designated by suffix 'EHV'
4. For double armor rods, contact the AFL Technical Support Team

continued

Armor Rods Cross Reference

SINGLE ALUMINUM		
AFL NO.	DULMISON®	PLP®*
AAR062	AAR 0620	AR-0110
AAR066	AAR 0660	AR-0111
AAR069	AAR 0695	AR-0112
AAR073	AAR 0735	AR-0113
AAR078	AAR 0785	AR-0114
AAR083	AAR 0830	AR-0115
AAR088	AAR 0880	AR-0116
AAR093	AAR 0930	AR-0117
AAR099	AAR 0990	AR-0118
AAR105	AAR 1050	AR-0119
AAR111	AAR 1110	AR-0120
AAR118	AAR 1180	AR-0121
AAR124	AAR 1245	AR-0122
AAR132	AAR 1325	AR-0123
AAR140	AAR 1400	AR-0124
AAR149	AAR 1490	AR-0125
AAR154	AAR 1540	AR-0126
AAR160	AAR 1605	AR-0127
AAR166	AAR 1665	AR-0128
AAR172	AAR 1725	AR-0129
AAR179	AAR 1790	AR-0130
AAR188	AAR 1880	AR-0131
AAR199	AAR 1990	AR-0132
AAR207	AAR 2070	AR-0133
AAR215	AAR 2150	AR-0134
AAR230	AAR 2305	AR-0135
AAR236	AAR 2360	AR-0136
AAR248	AAR 2480	AR-0137
AAR258	AAR 2585	AR-0138
AAR263	AAR 2630	AR-0139
AAR270	AAR 2705	AR-0140
AAR279	AAR 2790	AR-0141
AAR289	AAR 2895	AR-0142
AAR295	AAR 2950	AR-0143
AAR307	AAR 3070	AR-0144
AAR322	AAR 3225	AR-0145
AAR337	AAR 3375	AR-0146
AAR353	AAR 3535	AR-0147
AAR366	AAR 3660	AR-0163
AAR383	AAR 3835	AR-0164
AAR401	AAR 4010	AR-0165
AAR419	AAR 4195	AR-0166
AAR439	AAR 4390	AR-0167
AAR459	AAR 4595	AR-0168
AAR482	AAR 4825	AR-0169
AAR506	AAR 5060	AR-0170
AAR531	AAR 5310	AR-0171

SINGLE ALUMINUM (CONT.)		
AFL NO.	DULMISON®	PLP®*
AAR248EHV	—	AR-0500
AAR258EHV	—	AR-0501
AAR263EHV	—	AR-0502
AAR270EHV	—	AR-0503
AAR279EHV	—	AR-0504
AAR289EHV	—	AR-0505
AAR295EHV	—	AR-0506
AAR307EHV	—	AR-0507
AAR322EHV	—	AR-0508
AAR337EHV	—	AR-0509
AAR353EHV	—	AR-0510
AAR366EHV	—	AR-0511
AAR383EHV	—	AR-0512
AAR401EHV	—	AR-0513
AAR419EHV	—	AR-0514
AAR439EHV	—	AR-0516
AAR459EHV	—	AR-0517
AAR482EHV	—	AR-0518
AAR506EHV	—	AR-0519
AAR531EHV	—	AR-0520
GALVANIZED STEEL		
SAR058	SAR 0580	AR-1123
SAR062	SAR 0620	AR-1124
SAR078	SAR 0785	AR-1128
SAR088	SAR 0880	AR-1130
SAR105	SAR 1050	AR-1133
SAR124	SAR 1245	AR-1136
ALUMOWELD®		
AWAR043	AWAR 0430	AR-2113
AWAR050	AWAR 0500	AR-2116
AWAR055	AWAR 0555	AR-2118
AWAR060	AWAR 0600	AR-2120
AWAR067	AWAR 0670	AR-2122
AWAR075	AWAR 0750	AR-2124
AWAR085	AWAR 0850	AR-2126
AWAR095	AWAR 0950	AR-2128
AWAR104	AWAR 1040	AR-2130
AWAR108	AWAR 1080	AR-2131
AWAR121	AWAR 1210	AR-2133
AWAR136	AWAR 1360	AR-2135
AWAR150	AWAR 1505	AR-2137

DOUBLE ALUMINUM		
AFL NO.	DULMISON®	PLP®*
DAAR062	DAAR 0620	AR-0310
DAAR066	DAAR 0660	AR-0311
DAAR069	DAAR 0695	AR-0312
DAAR073	DAAR 0735	AR-0313
DAAR078	DAAR 0785	AR-0314
DAAR083	DAAR 0830	AR-0315
DAAR088	DAAR 0880	AR-0316
DAAR093	DAAR 0930	AR-0317
DAAR099	DAAR 0990	AR-0318
DAAR105	DAAR 1050	AR-0319
DAAR111	DAAR 1110	AR-0320
DAAR118	DAAR 1180	AR-0321
DAAR124	DAAR 1245	AR-0322
DAAR132	DAAR 1325	AR-0323
DAAR140	DAAR 1400	AR-0324
DAAR149	DAAR 1490	AR-0325
DAAR154	DAAR 1540	AR-0326
DAAR160	DAAR 1605	AR-0327
DAAR166	DAAR 1665	AR-0328
DAAR172	DAAR 1725	AR-0329
DAAR179	DAAR 1790	AR-0342
ALUMOWELD®		
DAWAR043D	DAWAR 0430	AR-2313
DAWAR050D	DAWAR 0500	AR-2316
DAWAR055D	DAWAR 0555	AR-2318
DAWAR060D	DAWAR 0600	AR-2320
DAWAR067D	DAWAR 0670	AR-2322
DAWAR075D	DAWAR 0750	AR-2324
DAWAR085D	DAWAR 0850	AR-2326
DAWAR095D	DAWAR 0950	AR-2328
DAWAR104D	DAWAR 1040	AR-2330
DAWAR108D	DAWAR 1080	AR-2331
DAWAR121D	DAWAR 1210	AR-2333
DAWAR136D	DAWAR 1360	AR-2335
DAWAR150D	DAWAR 1505	AR-2337

*PLP is a trademark of Preformed Line Products.

Formed Wire