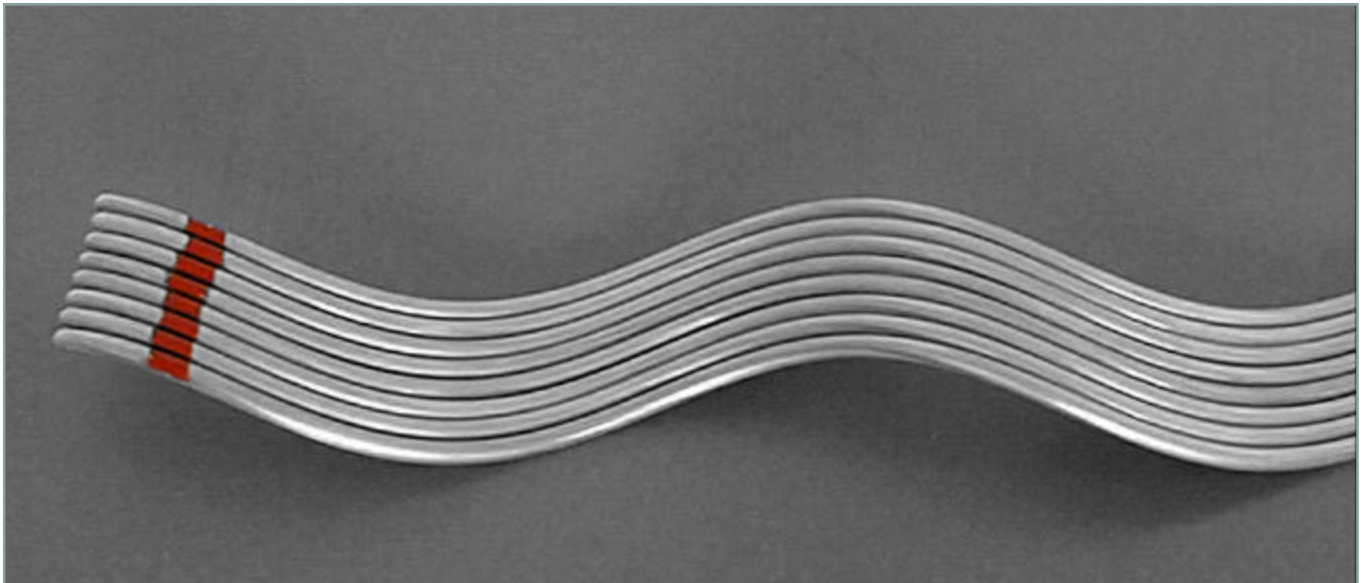


ARMOR RODS

Series 10000



GENERAL DESCRIPTION

Armor Rods are designed to protect conductors by reducing bending, compression, and abrasion at the support point, particularly where handties are used. Protection against flashover damage is also provided. Armor Rods are recommended as the minimum conductor protection for spans of 300-ft. (91m) or more.

PERFORMANCE

When no more than 50% of the outside strands on an ACSR or Aluminum conductor have been damaged at the support point, Armor Rods may be used to repair damage, thereby restoring 100% of the rated conductance and strength.

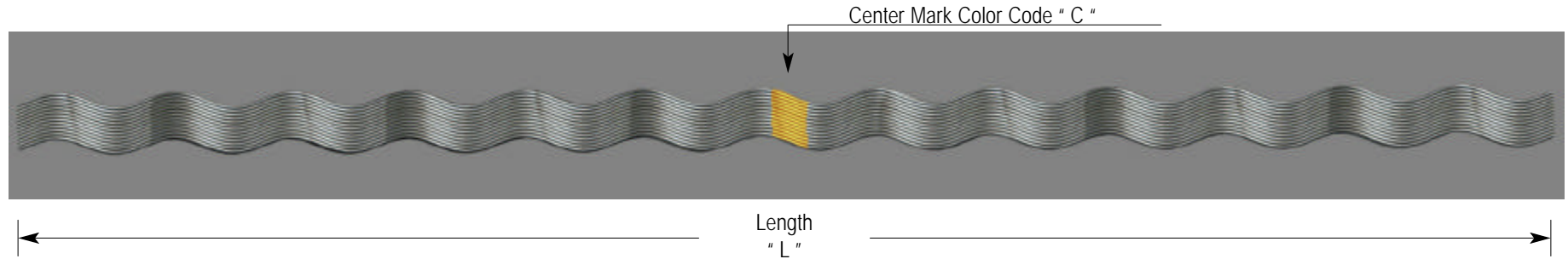
Armor Rods may be tapped over; however, the use of an oxide inhibitor is recommended.

Armor Rods are available in two lengths: one for single support and one for double support if distance between the support is 12 inches (30.5 cm) or less.

GALVANIZED STEEL ARMOR RODS

(ZINC COATED CLASS "A")

Designed for use on: ACSR, All-Aluminum, Aluminum Alloy,
Compacted ACSR, Compacted All-Aluminum, AWAC



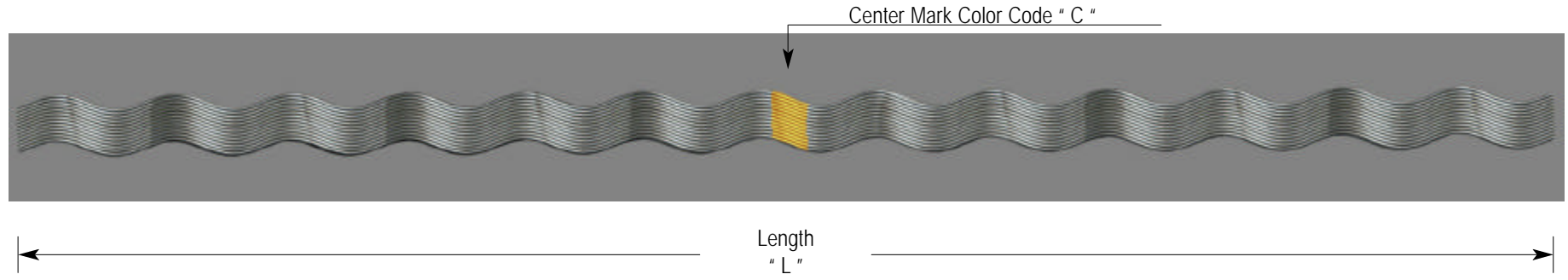
Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M				Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
10010	0.194	0.207	#6 6/1				0.086	9	BLACK	30	50	24
10050	0.244	0.259	#4 6/1				0.086	10	ORANGE	40	50	35
10090	0.309	0.326	#2 6/1				0.086	12	RED	44	25	30
10110	0.347	0.373	#1 6/1				0.086	13	BLACK	48	25	35
10130	0.39	0.413	1/0 6/1				0.1	13	YELLOW	52	15	30
10140	0.437	0.463	2/0 6/1				0.12	14	BLUE	54	15	42
10150	0.491	0.521	3/0 6/1				0.12	14	ORANGE	56	15	46
10160	0.552	0.585	4/0 6/1				0.12	15	RED	60	10	44
10220	0.633	0.646	266.8 6/7, 266.8 26/7, 300 18/1				0.14	15	GREEN	64	10	47
10240	0.68	0.7	300 26/7, 300 30/7, 336 18/1				0.16	14	RED	68	10	60
10250	0.721	0.741	336.4 26/7, 336.4 30/7				0.16	15	YELLOW	72	10	68

GALVANIZED STEEL ARMOR RODS

(ZINC COATED CLASS "A")



Designed for use on: Guy Strands related to ASTM A.475 or CSA G12 specifications

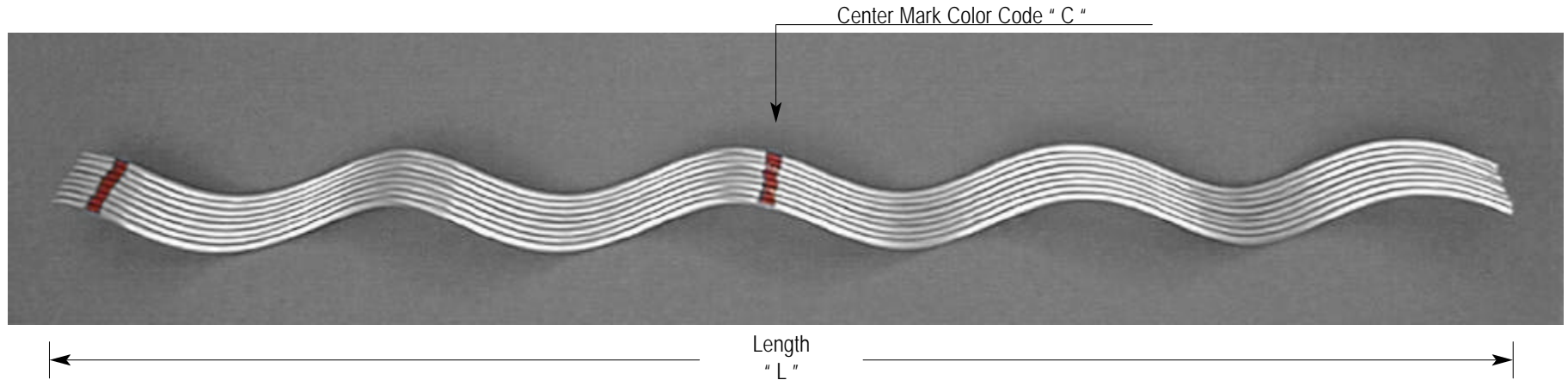


Catalog Number	Diameter Range (inches)		Guy Strands Construction	Wire		Properties		Packaging per box	
	Min	Max		Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
10910	0.229	0.259	1/4, 3 OR 7 WIRE	0.086	10	YELLOW	40	50	38
10920	0.309	0.326	5/16, 3 OR 7 WIRE	0.1	11	BLACK	44	50	60
10930	0.347	0.373	3/8, 3 OR 7 WIRE	0.1	12	ORANGE	48	50	70
10940	0.414	0.436	7/16, 7 WIRE	0.12	12	GREEN	52	20	54
10950	0.491	0.521	1/2, 7 OR 19 WIRE	0.14	12	BLUE	56	20	64

ALUMINUM ARMOR RODS



Designed for use on: ACSR, All-Aluminum, Aluminum Alloy,
Compacted ACSR, Compacted All-Aluminum, AWAC



Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
11010	0.194	0.207	#6,6/1		#6,7W			0.121	7	BLUE	40	100	35
11011	0.194	0.207	#6,6/1		#6,7W			0.121	7	BLUE	52	100	46
11020	0.208	0.219					#4,7W	0.121	7	BLACK	40	100	35
11021	0.208	0.219					#4,7W	0.121	7	BLACK	40	100	35
11030	0.22	0.228	#5,6/1		#5,3-7W			0.121	8	WHITE	40	100	40
11031	0.22	0.228	#5,6/1		#5,3-7W			0.121	8	WHITE	52	100	52
11040	0.229	0.243	#4,6/1	#4,7W		#4,7/1		0.121	8	BROWN	40	100	40
11041	0.229	0.243	#4,6/1	#4,7W		#4,7/1		0.121	8	BROWN	52	100	52
11050	0.244	0.259	#4,6/1		#4,7W			0.146	7	ORANGE	40	50	25

ALUMINUM ARMOR RODS

Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
11051	0.244	0.259	#4,6/1		#4,7W			0.146	7	ORANGE	52	50	33
11060	0.26	0.273		#3,7W			#2,7W	0.146	7	GREEN	42	50	26
11061	0.26	0.273		#3,7W			#2,7W	0.146	7	GREEN	54	50	33
11070	0.274	0.289			#3,7W			0.146	8	YELLOW	42	50	30
11071	0.274	0.289			#3,7W			0.146	8	YELLOW	54	50	39
11080	0.29	0.308		#2,7W		#2,6/1		0.146	8	PURPLE	42	50	30
11081	0.29	0.308		#2,7W		#2,6/1		0.146	8	PURPLE	54	50	39
11090	0.309	0.326	#2,6/1,7/1		#2,7W			0.13	9	RED	44	50	32
11091	0.309	0.326	#2,6/1,7/1		#2,7W			0.13	9	RED	56	50	41
11100	0.327	0.346		#1,7W			#1,7W-19W	0.146	9	BLUE	46	50	38
11101	0.327	0.346		#1,7W			#1,7W-19W	0.146	9	BLUE	58	50	48
11110	0.347	0.366	#1,6/1		#1,7W			0.146	9	GREEN	48	50	40
11111	0.347	0.366	#1,6/1		#1,7W			0.146	9	GREEN	60	50	50
11120	0.367	0.389		1/0,7W			2/0,7W	0.146	10	BLACK	50	50	45
11121	0.367	0.389		1/0,7W			2/0,7W	0.146	10	BLACK	62	50	56
11130	0.39	0.413	1/0,6/1		1/0,7W			0.167	9	YELLOW	52	50	55
11131	0.39	0.413	1/0,6/1		1/0,7W			0.167	9	YELLOW	64	50	68
11140	0.414	0.436		2/0,7W-19W			3/0,7W	0.146	10	BROWN	52	50	48
11141	0.414	0.436		2/0,7W-19W			3/0,7W	0.146	10	BROWN	64	50	59
11150	0.437	0.463	2/0,6/1		2/0,7W	3/0,6/1		0.167	10	BLUE	54	50	64
11151	0.437	0.463	2/0,6/1		2/0,7W	3/0,6/1		0.167	10	BLUE	66	50	78

ALUMINUM ARMOR RODS

Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR	All Aluminum	Aluminum Alloy	Compacted ACSR	Compacted All-Aluminum	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
			Type	Type	Type	Type	Type						
11160	0.464	0.49		3/0,7W,19W				0.167	10	GREEN	54	50	64
11161	0.464	0.49		3/0,7W,19W				0.167	10	GREEN	66	50	78
11170	0.491	0.521	3/0,6/1			4/0,6/1		0.167	11	ORANGE	56	25	37
11171	0.491	0.521	3/0,6/1			4/0,6/1		0.167	11	ORANGE	68	25	45
11180	0.522	0.551		4/0,7W-19W				0.167	11	BLACK	58	25	38
11181	0.522	0.551		4/0,7W-19W				0.167	11	BLACK	70	25	46
11190	0.552	0.585	4/0,6/1					0.182	11	RED	60	25	46
11191	0.552	0.585	4/0,6/1					0.182	11	RED	72	25	55
11200	0.586	0.606		266.8,19W				0.182	12	BLACK	62	25	52
11201	0.586	0.606		266.8,19W				0.182	12	BLACK	74	25	62
11210	0.607	0.63	266.8,18/1					0.182	12	PURPLE	64	25	54
11211	0.607	0.63	266.8,18/1					0.182	12	PURPLE	76	25	64
11220	0.631	0.655	266.8,26/7					0.182	12	YELLOW	64	25	54
11221	0.631	0.655	266.8,26/7					0.182	12	YELLOW	76	25	64
11230	0.656	0.679		336.4/19W				0.182	13	BROWN	66	15	36
11231	0.656	0.679		336.4/19W				0.182	13	BROWN	78	15	43
11240	0.68	0.703	300,26/7					0.204	12	BLUE	68	15	43
11241	0.68	0.703	300,26/7					0.204	12	BLUE	80	15	51
11250	0.704	0.74	336.4,26/7					0.204	12	GREEN	72	15	45
11251	0.704	0.74	336.4,26/7					0.204	12	GREEN	84	15	53
11260	0.741	0.782	397.5,18/1					0.204	13	ORANGE	72	15	50

ALUMINUM ARMOR RODS

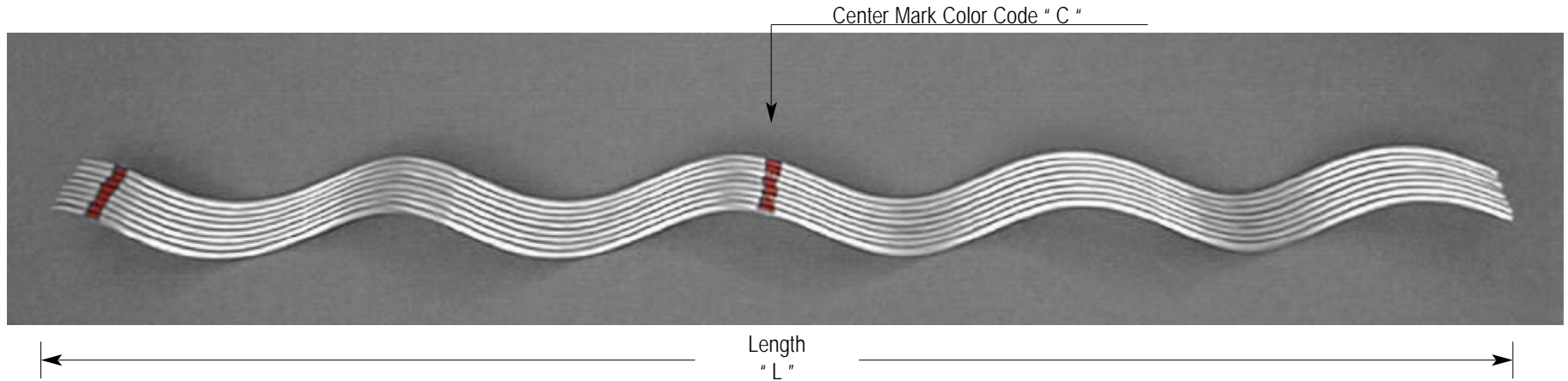
Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
11261	0.741	0.782	397.5,18/1					0.204	13	ORANGE	84	15	58
11270	0.783	0.814	397.5,26/7					0.25	11	PURPLE	76	15	66
11271	0.783	0.814	397.5,26/7					0.25	11	PURPLE	88	15	76
11280	0.815	0.845					636,19W	0.25	11	RED	76	15	66
11281	0.815	0.845					636,19W	0.25	11	RED	88	15	76
11290	0.846	0.907	477,26/7					0.25	12	BLUE	78	15	74
11291	0.846	0.907	477,26/7					0.25	12	BLUE	90	15	85
11300	0.908	0.929		636,37W				0.25	13	GREEN	80	10	55
11301	0.908	0.929		636,37W				0.25	13	GREEN	92	10	63
11310	0.93	0.976	605,26/7					0.25	13	WHITE	88	10	60
11311	0.93	0.976	605,26/7					0.25	13	WHITE	100	10	68
11320	0.977	1.016	636,26/7					0.31	11	YELLOW	92	10	55
11321	0.977	1.016	636,26/7					0.31	11	YELLOW	104	10	62
11330	1.017	1.035		795,37W-61W				0.31	12	BROWN	94	5	45
11331	1.017	1.035		795,37W-61W				0.31	12	BROWN	106	5	51
11340	1.036	1.064	715.5,26/7					0.31	12	BLUE	96	5	46
11341	1.036	1.064	715.5,26/7					0.31	12	BLUE	108	5	52
11350	1.065	1.098	795,24/7					0.31	12	GREEN	96	5	46
11351	1.065	1.098	795,24/7					0.31	12	GREEN	108	5	52
11360	1.099	1.139	795,26/7					0.31	12	ORANGE	100	5	51
11361	1.099	1.139	795,26/7					0.31	12	ORANGE	112	5	57

ALUMINUM ARMOR RODS

Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
11370	1.14	1.161	954,36/1					0.31	13	PURPLE	100	5	52
11371	1.14	1.161	954,36/1					0.31	13	PURPLE	112	5	58
11380	1.162	1.208		1033.5,37W-61W				0.31	13	RED	100	5	57
11381	1.162	1.208		1033.5,37W-61W				0.31	13	RED	112	5	64
11390	1.209	1.269	1113,45/7					0.365	12	BLACK	100	5	67
11391	1.209	1.269	1113,45/7					0.365	12	BLACK	112	5	75
11400	1.27	1.327	1192.5,45/7					0.365	12	WHITE	100	5	67
11401	1.27	1.327	1192.5,45/7					0.365	12	WHITE	112	5	75
11410	1.328	1.39	1272,45/7					0.365	13	YELLOW	100	3	45
11411	1.328	1.39	1272,45/7					0.365	13	YELLOW	112	3	50
11420	1.391	1.44	1431,45/7					0.4365	11	BROWN	100	3	54
11421	1.391	1.44	1431,45/7					0.4365	11	BROWN	112	3	60
11430	1.441	1.508	1590,45/7					0.4365	12	BLUE	100	3	58
11431	1.441	1.508	1590,45/7					0.4365	12	BLUE	112	3	65
11440	1.509	1.578	1590,54/19					0.4365	12	GREEN	100	3	58
11441	1.509	1.578	1590,54/19					0.4365	12	GREEN	112	3	65
11450	1.579	1.651	1780,84/19					0.4365	13	ORANGE	100	3	60
11451	1.579	1.651	1780,84/19					0.4365	13	ORANGE	112	3	67
11460	1.652	1.728						0.4365	13	PURPLE	100	3	60
11461	1.652	1.728						0.4365	13	PURPLE	112	3	67
11470	1.729	1.809	2156,84/19					0.4365	14	RED	100	3	64

ALUMINUM CLAD STEEL ARMOR RODS

Designed for use on: Aluminum Clad Steel Strands



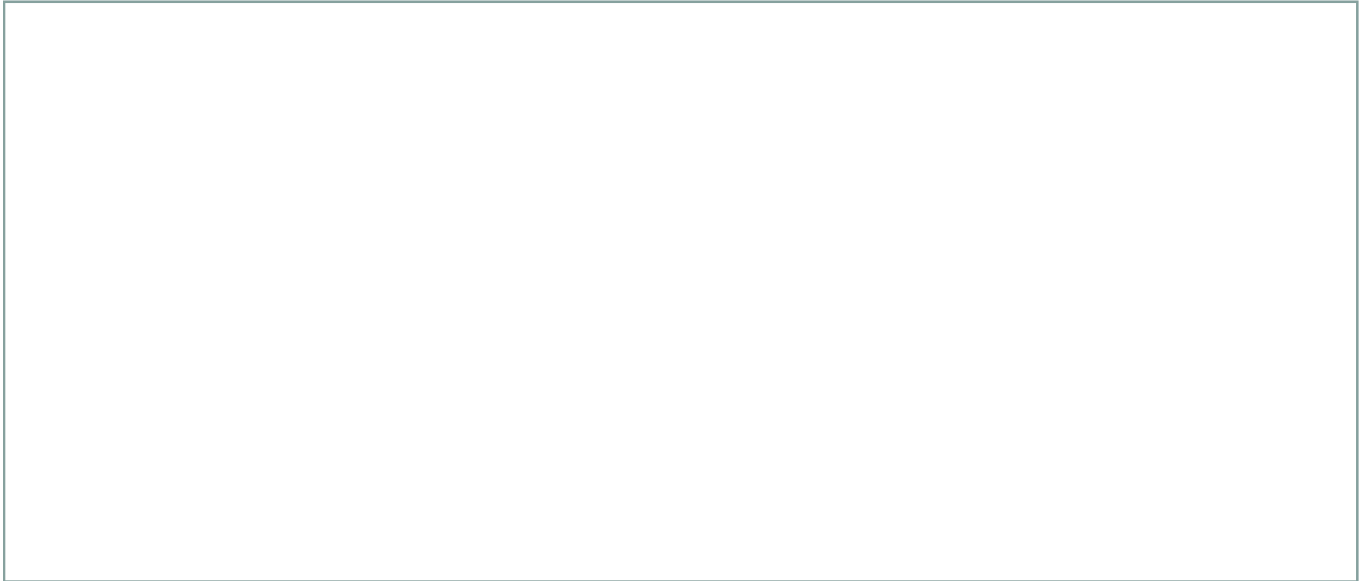
Catalog Number	Diameter Range (inches)		Conductor Construction AWG - MCM	Wire		Properties		Packaging per box	
	Min	Max		Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
			Aluminum Clad Steel						
12110	0.169	0.178	3 #12AW	0.1	7	ORANGE	40	50	31
12111	0.169	0.178	3 #12AW	0.1	7	ORANGE	52	50	38
12120	0.196	0.207	3 #11AW	0.1	7	BLACK	40	50	31
12121	0.196	0.207	3 #11AW	0.1	7	BLACK	52	50	38
12130	0.218	0.225	3 #10AW, 4-M AW	0.1	8	GREEN	40	50	35
12131	0.218	0.225	3 #10AW, 4-M AW	0.1	8	GREEN	52	50	43
12140	0.237	0.249	7 #12AW, 1/4", 6-M AW, 3 #9AW	0.1	9	YELLOW	40	50	39
12141	0.237	0.249	7 #12AW, 1/4", 6-M AW, 3 #9AW	0.1	9	YELLOW	52	50	49
12150	0.264	0.277	7 #11AW, 9/32", 8-M AW, 3 #8AW	0.11	9	BLUE	42	25	27

ALUMINUM CLAD STEEL ARMOR RODS

Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M	Wire		Properties		Packaging per box	
	Min	Max		Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
12151	0.264	0.277	7 #11AW, 9/32", 8-M AW, 3 #8AW	0.11	9	BLUE	54	25	34
12160	0.296	0.314	7 #10, 5/16", 10-M AW, 3 #7AW	0.11	9	BLACK	46	25	29
12161	0.296	0.314	7 #10, 5/16", 10-M AW, 3 #7AW	0.11	9	BLACK	58	25	35
12170	0.334	0.352	7 #9AW, 11/32", 12.5-M AW, 3 #6AW	0.11	10	YELLOW	50	25	33
12171	0.334	0.352	7 #9AW, 11/32", 12.5-M AW, 3 #6AW	0.11	10	YELLOW	62	25	41
12180	0.373	0.392	7 #8AW, 3/8", 3 #5AW	0.13	10	ORANGE	50	25	44
12181	0.373	0.392	7 #8AW, 3/8", 3 #5AW	0.13	10	ORANGE	62	25	52
12190	0.409	0.425	18-M AW	0.13	11	BLACK	54	25	52
12191	0.409	0.425	18-M AW	0.13	11	BLACK	66	25	64
12200	0.426	0.45	7 #7AW, 7/16", 20-M AW	0.13	12	GREEN	56	25	59
12201	0.426	0.45	7 #7AW, 7/16", 20-M AW	0.13	12	GREEN	68	25	82
12210	0.477	0.504	7 #6AW, 1/2"	0.14	11	BLUE	56	20	52
12211	0.477	0.504	7 #6AW, 1/2"	0.14	11	BLUE	68	20	61
12220	0.535	0.565	7 #5AW, 9/16"	0.16	12	YELLOW	60	10	39
12221	0.535	0.565	7 #5AW, 9/16"	0.16	12	YELLOW	72	10	46
12230	0.593	0.625	7 #4AW, 5/8"	0.182	11	BLACK	60	10	59
12231	0.593	0.625	7 #4AW, 5/8"	0.182	11	BLACK	72	10	68

ALUMINUM HELICAL ROD SPACER

Series 19000

**GENERAL DESCRIPTION**

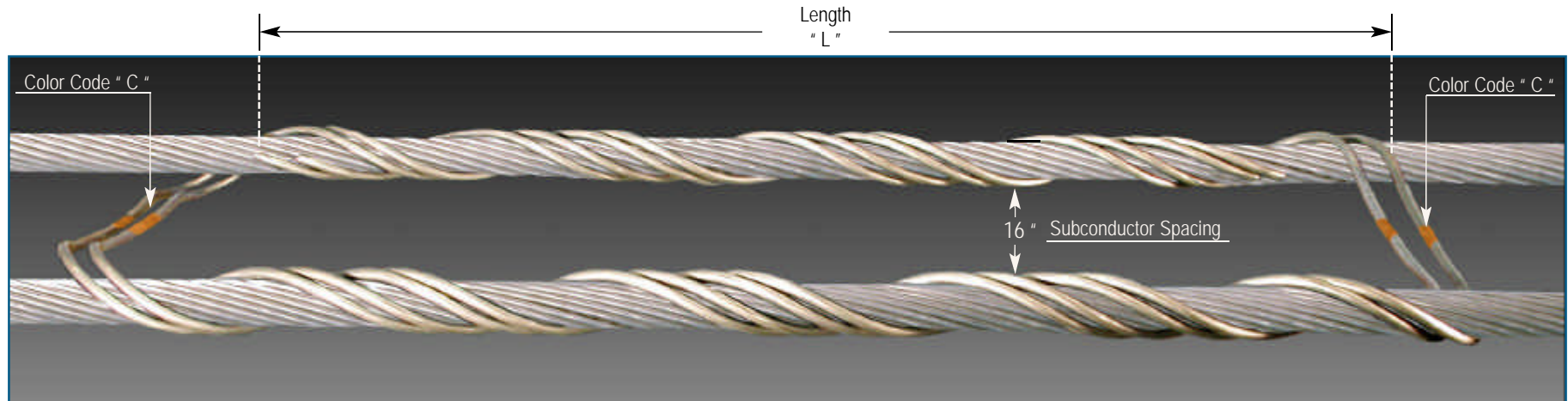
The spacer is composed of two sets of two helical rod per set and folded into a U shape. It is to be used on two-conductor bundles. The spacing of the branches of the U is 16 in, equal to that of the bundled conductors.

PERFORMANCE

This damper is strictly used to maintain the spacing of conductors in normal conditions. It has no damping capability. It may be damage in case of short-circuit and in case of uneven loading of ice.

ALUMINUM UNIFORMED SPACER

Designed for use on: ACSR, All-Aluminum, Aluminum Alloy, Compacted ACSR, Compacted All-Aluminum, AWAC



Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
19270	0.783	0.814	397.5,26/7					0.35	2	PURPLE	35	10	35
19280	0.815	0.845					636,19W	0.35	2	RED	35	10	35
19290	0.846	0.907	477,26/7					0.35	2	BLUE	35	10	35
19300	0.908	0.929		636,37W				0.35	2	GREEN	44	10	44
19310	0.93	0.976	605,26/7					0.35	2	WHITE	44	10	40
19320	0.977	1.016	636,26/7					0.35	2	YELLOW	45	10	45
19330	1.017	1.035		795,37W-61W				0.35	2	BROWN	45	10	45
19340	1.036	1.064	715.5,26/7					0.35	2	BLUE	45	10	45

ALUMINUM UNIFORMED SPACER

Catalog Number	Diameter Range (inches)		Conductor Construction A W G - M C M					Wire		Properties		Packaging per box	
	Min	Max	ACSR Type	All Aluminum Type	Aluminum Alloy Type	Compacted ACSR Type	Compacted All-Aluminum Type	Diam (inches)	Qty per set	Color " C "	Length (inches) " L "	Units	Weight (Lbs)
19350	1.065	1.098	795,24/7					0.35	2	GREEN	45	10	45
19360	1.099	1.139	795,26/7					0.35	2	ORANGE	45	10	45
19370	1.14	1.161	954,36/1					0.35	2	PURPLE	46	10	46
19380	1.162	1.208		1033.5,37W-61W				0.35	2	RED	46	10	46
19390	1.209	1.269	1113,45/7					0.35	2	BLACK	46	10	46
19400	1.27	1.327	1192.5,45/7					0.35	2	WHITE	48	10	48
19410	1.328	1.39	1272,45/7					0.35	2	YELLOW	48	10	48
19420	1.391	1.44	1431,45/7					0.35	2	BROWN	48	10	48
19430	1.441	1.508	1590,45/7					0.35	2	BLUE	49	10	49
19440	1.509	1.578	1590,54/19					0.35	2	GREEN	49	10	49
19450	1.579	1.651	1780,84/19					0.35	2	ORANGE	50	10	50
19460	1.652	1.728						0.35	2	PURPLE	50	10	50
19470	1.729	1.809	2156,84/19					0.35	2	RED	50	10	50
19480	1.81	1.898		2500,91W				0.35	2	BLACK	50	10	50