

## BIG-GRIP DEAD-END

**Big-Grip Dead-Ends** are designed for use on transmission, antenna, communications, and other types of guyed structures that require use of large guy strand.

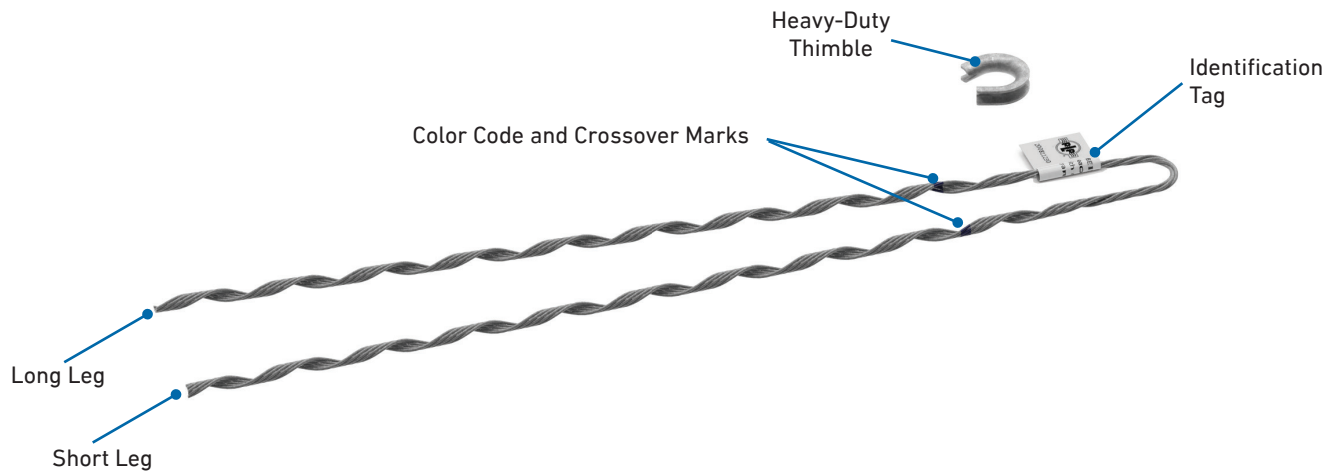
### FEATURES AND BENEFITS

- Big-Grip Dead-Ends are designed at 100% of the rated breaking strength of the strand unless otherwise specified. (Test data available upon request. Reference: TR-634-E)
- Several materials available to ensure compatibility with the strand on which it will be applied
- Intended for a single (one-time) use and for the specified application, although it may be reapplied twice for re-tensioning within 90 days of initial installation.

**CAUTION:** Do not modify or reuse this product after 90 days of initial installation. BIG-GRIP Dead-Ends are not acceptable for use on wire rope applications.

**WARNING:** PLP Products are not designed or tested for uses other than those set forth herein. This includes, but is not limited to, rope/ challenge courses, aerial adventures, canopy tours, and zip line applications. If PLP Products are used in such applications, they may be subjecte

## COMPONENTS



Component	Description
Crossover Marks	Indicates starting point for application
Product Identification Tag	Shows catalog number, nominal sizes
Color Code	Assists in identifying strand size, corresponding to tabular information appearing on catalog pages
Short Leg	Identifies rods belonging to each leg, after application. During application, the short leg should be applied first.
Long Leg	Identifies rods belonging to each leg, after application. During application, the long leg should be applied second.

## STRAND COMPATIBILITY

Big-Grip Dead-Ends should be used only on the size and strand for which they are designed. They must have the same lay direction and be made from the same material as the strand to which they are applied.

- When ordering a Big-Grip Dead-End, make sure to specify the strand diameter, lay direction, and material on which it is to be used.
- When using types of strand and/or sizes of strand not mentioned in these catalog pages, consult PLP for compatible Big-Grip Dead-End designs.



## HARDWARE ACCESSORY GUIDELINES

For hardware and hardware dimensions to be used in conjunction with Big-Grip Dead-Ends, refer to Table 1 on the next page.

Big-Grip Dead-Ends should not be used on hardware that allows the strand to rotate or spin about its axis uncontrolled. Adjustable hardware, such as a turnbuckle, may be used as long as rotational movement of the strand is restricted. Consult PLP for additional information concerning adjustable hardware that can be used with Big-Grip Dead-Ends.

Hardware used in conjunction with Big-Grip Dead-Ends should have smooth contours, ample groove clearances, acceptable diameters, and sufficient strength to minimize abrasion and fatigue of the loop area.

Table 1, Figures 1-6 illustrate some of the possible hardware and the dimensions that may be used with Big-Grip Dead-Ends:

- Figure 1 and Table 1: Minimum and maximum acceptable seat diameters to which the Big-Grip Dead-End can be applied
- Figure 2 and Table 1: Seat diameters and minimum groove diameters
- Figure 3 and Table 1: Minimum hardware hole diameters
- If not using PLP's Heavy-Duty Thimbles, only heavy-duty type wire rope thimbles or solid Hawser-type thimbles are recommended for use with Big-Grip Dead-ends. (Refer to Figures 4, 5, and 6)
- Heavy-duty type wire rope thimbles can collapse when guy tensions are high. In order to support and protect the loop area of the Big-Grip Dead-End, special precautions are necessary.
- To prevent collapse of the thimble, either a Hawser-type thimble (Figure 4), a large pin inside the thimble (Figure 5), or a smaller pin (such as a shackle pin) plus double extra strong weight pipe or equivalent (Figure 6) is necessary. Double extra strong weight pipe, which has increased wall thickness and strength over schedule 160 pipe, does not have a schedule number but information can be obtained from a pipe supplier. Thimble strengths and dimensions can be obtained from a thimble supplier.

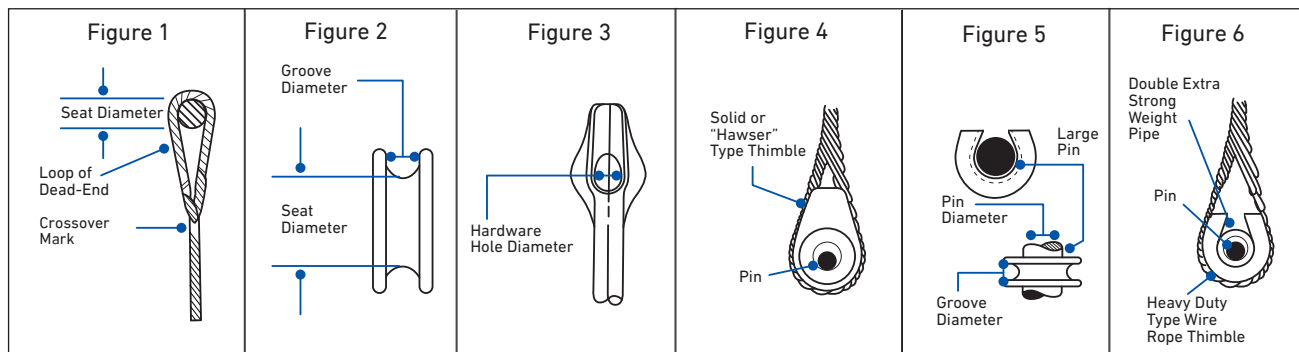
PLP suggests guy tensions be maintained at a minimum of approximately 10% of the strand's Rated Breaking Strength (RBS).

When in doubt about installations, hardware, or applications, contact a PLP representative.

# HARDWARE ACCESSORY GUIDELINES

TABLE 1

Big-Grip Dead-End Hardware Accessory Dimensions											
(All Dimensions in Inches)											
Dead-End Diameter Range	Nominal Strand Sizes	Figure 1 & 2		Figure 2	Figure 3	Heavy Duty Thimble Size	Figure 4 & 5		Figure 6		
		Seat Dimensions		Minimum Groove Diameter	Minimum Hardware Hole Diameter*		Pin Diameters		Double Extra Strong Weight Pipe		
									in		
		Minimum	Maximum				Minimum	Maximum	Nominal Size	OD	ID
.174 - .203	3/16	1	(2-1/2) 1-3/4	1/4	3/8	7/16 - 3/8	5/8	1	3/4	1.050	.614
.204 - .230	7/32	1-1/8	(2-1/2) 1-3/4	5/16	3/8	7/16 - 3/8	5/8	1	3/4	1.050	.614
.231 - .259	1/4	1-1/8	(2-1/2) 1-3/4	5/16	7/16	1/2	1	1-3/8	1	1.315	.815
.260 - .291	9/32	1-1/8	(2-1/2) 1-3/4	3/8	1/2	1/2	1	1-3/8	1	1.315	.815
.292 - .336	5/16	1-1/4	(2-1/2) 1-3/4	3/8	9/16	1/2	1	1-3/8	1	1.315	.815
.337 - .394	3/8	1-3/8	(2-1/2) 1-3/4	7/16	5/8	1/2	1	1-3/8	1	1.315	.815
.395 - .474	7/16	1-3/8	(2-1/2) 2-3/8	1/2	11/16	1/2	1	1-3/8	1	1.315	.815
.475 - .515	1/2	1-3/8	2-3/8	9/16	3/4	5/8	1	1-5/8	1-1/4	1.66	.896
.516 - .570	9/16	1-1/2	2-5/8	5/8	15/16	5/8	1-1/8	1-5/8	1-1/4	1.66	.896
.571 - .635	5/8	2	2-5/8	3/4	1	3/4	1-1/2	1-7/8	1-1/4	1.66	.896
.636 - .772	3/4	2-1/2	3-1/8	7/8	1-3/16	7/8	1-7/8	2-1/8	1-1/2	1.9	1.1
.773 - .868		2-1/2	3-5/8	1	1-3/8	1	2	2-3/8	2	2.375	1.503
.869 - 1.024	7/8 or 1	3	4-1/8	1	1-3/8	1-1/8 - 1-1/4	2-3/8	2-3/4	2	2.375	1.503
1.025 - 1.27		3-1/2	5-1/8	1-3/8	1-3/4	1-1/4 - 1-3/8	2-3/4	3-1/4	2-1/2	2.875	1.771
1.30		4	5-1/8	1-3/8	1-15/16	1-3/8 - 1-1/2	2-7/8	3-3/8	2-1/2	2.875	1.771



\* Depending on geometric shape of the hole, the legs of the Big-Grip Dead-End may be inserted into a hole diameter smaller than specified.



## ORDERING INFORMATION

For use on: Extra High-Strength, Siemens Martin, High-Strength, Utilities Grade

Catalog Number	Size	Strand Construction	Actual Diameter	Units per Carton	Weight per Carton	Approx Length	Color Code	Rated Holding Strength	Strand's Rated Breaking Strength
	in		in		lb	in		lb	Percent
BG-2140	1/8	7W	.123	100	11	14	Blue	1,830	100
BG-2142	3/16	7W	.186	100	33	23	Red	3,990	100
BG-2144	1/4	3W 7W	.259 .240	50	25	27	Yellow	6,650	100
BG-2145	9/32	7W	.279	50	29	30	Blue	8,950	100
BG-2146	5/16	3W 7W	.312 .312	50	41	33	Black	11,200	100
BG-2147	3/8	3W 7W	.356 .360	25	33	37	Orange	15,400	100
BG-2148	7/16	7W	.435	25	47	40	Green	20,800	100
BG-2115	1/2	7W or 19W	.495 or .500	20	63	49	Blue	26,900	100
BG-2116	9/16	7W or 19W	.564 or .565	10	48	55	Yellow	35,000	100
BG-2111	5/8	7W or 19W	.621 or .625	10	65	64	Black	7W 42,400 19W 40,200	100 100
BG-1112	3/4	19W	.750	5	54	76	Orange	58,300	100
BG-1113	7/8	19W	.885	5	76	90	Green	79,700	100
BG-1114	1	19W or 37W	1.000 or 1.001	3	76	125	Blue	19W 104,500 37W 92,430	100 90

### NOTES:

- 1 Left-hand lay is standard.
- 2 For strand sizes smaller than 1/2", refer to the GUY-GRIP® Dead-End.
- 3 Reference Table 1 earlier in this section for acceptable fitting dimensions.
- 4 Cabled loop design is furnished as standard for all sizes.
- 5 Rated Holding Strengths (RHS) of the Big-Grip Dead-Ends are listed for each strand and are expressed as a percent of the strand's Rated Breaking Strength (RBS).
- 6 C-Coat galvanized steel is standard for all Big-Grip Dead-Ends unless otherwise stated.
- 7 B-Coat galvanized steel is used for the Big-Grip Dead-Ends used on 3/4", 7/8", and 1" strand.
- 8 The Aluminum-Clad Steel version of the 7/8" and 1" Big-Grip Dead-End are still available as **Catalog Number: BGMS7023 (7/8")** and **Catalog Number: BGMS7047 (1")**.
- 9 Consult PLP for sizes and stranding not shown.

## ORDERING INFORMATION

For use on: Aluminum-Clad Steel Strand

Catalog Number	Strand Diameter Ranges		Nominal Strand Size	Units per Carton	Weight per Carton	Approx Length	Color Code	Rated Holding Strength	Strand's Rated Breaking Strength
	in							lb	Percent
	Minimum	Maximum			lb	in			
BG-4202	.174	.181	3 # 12	100	22	19	Orange	2,850	100
BG-4208	.219	.230	4M 3 # 10	50	21	22	Green	4,532	100
BG-4210	.237	.247	7 # 12 6M	50	22	24	Yellow	6,000	100
BG-4213	.270	.280	3 # 8 8M	50	24	27	Blue	8,000	100
BG-4216	.303	.313	3 # 7 10M 5/16 7 #10	50	32	29	Black	10,000	100
BG-4220	.343	.355	3 # 12.5M 11/32 7 # 9	50	45	32	Yellow	12,500	100
BG-4221	.350	.364	14M	50	60	35	Blue	14,000	100
BG-4223	.380	.394	3 # 5 3/8 7 # 8 16M	50	62	36	Orange	16,000	100
BG-4225	.410	.426	18M	25	43	39	Black	18,000	100
BG-4226	.427	.442	7/16 7# 7	25	44	40	Green	19,060	100
BG-4227	.443	.459	20M	25	57	41	Yellow	20,000	100
BG-4168	.475	.494	7 # 6	20	60	42	Blue	22,730	100
BG-4169	.495	.515	19 # 10	25	62	44	Green	27,190	100
BG-4170	.516	.536	25M	20	66	47	Red	25,000	100
BG-4171	.537	.555	7 # 5	20	67	48	Yellow	27,030	100
BG-4172	.556	.570	-	15	68	49	Blue	33,330	
BG-4173	.571	.591	19 # 9	20	68	50	Orange	34,290	100
BG-4174	.592	.612	-	16	50	50	Green	34,450	
BG-4175	.613	.635	-	10	49	54	Yellow	45,000	
BG-4176	.636	.661	19 # 8	10	50	56	Black	43,240	100
BG-4177	.662	.686	19 x .1363"	10	66	59	Blue	47,400	100
BG-4178	.687	.712	-	10	68	61	Red	54,200	
BG-4179	.713	.741	19 # 7 37 #10	10	70	63	Black	51,730 50,300	100 95
BG-4180	.742	.772	19 x .1499"	5	41	71	Yellow	54,300	100

The following products are for the specific cables listed:

Catalog Number	Actual Diameters	Nominal Strand Size	Units	lb	Approx Length	Color Code	RHS	RBS
BG-4181	.792	19 x .1584"	5	50	80	Blue	59,000	
BG-4183	.801, .810, .827	37 # 9 19 # 6 19 x .1660"	5	69	84	Green	63,430 61,700 63,000	95 100 100
BG-4185	.849, .850, .866	37 x .121" 19 x .170" 19 x .173" 37 x .123"	5	68	87	Black	71,250 66,000 68,500 74,100	95 100 100 95
BG-4186	.899	37 # 8	5	76	91	Yellow	80,000	95
BG-4187	.910 .934	19 # 5 19 x .1868"	5	78	93	Blue	73,350 75,000	100 100
BG-4188	.981	37 x .1404"	4	52	95	Red	90,250	95
BG-4189	1.01	37 # 7	4	85	108	Green	90,600	90
BG-4190	1.10	37 x .1571"	3	84	117	Black	101,700	90
BG-4191	1.134	37 # 6	3	86	120	Yellow	108,200	89
BG-4192	1.27	37 # 5	2	82	151	Red	127,000	89

### NOTES:

- Left-hand lay is standard.
- For strand sizes smaller than 7#6, refer to the GUY-GRIP® Dead-End.
- "Nominal Strand Size" indicates the strand which fits within the "Strand Diameter Range".
- Reference Table 1 earlier in this section for acceptable fitting dimensions.
- Cabled loop design is furnished as standard for all sizes.
- Rated Holding Strengths (RHS) of the Big-Grip Dead-Ends are listed for each strand and are expressed as a percent of the strand's Rated Breaking Strength (RBS).
- Consult PLP for sizes and stranding not shown.



## ORDERING INFORMATION

For use on: Galvanized Steel Structural Strand (Bridge)

### Left-Hand Lay

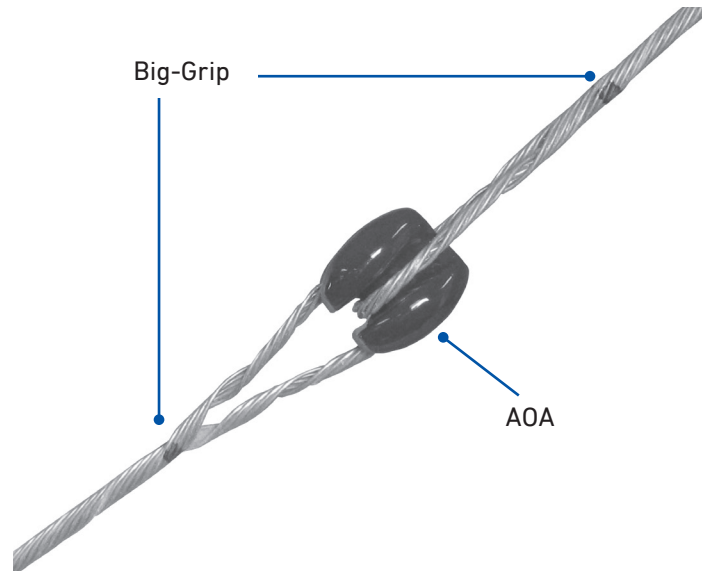
Catalog Number	Big-Grip Material	Strand Construction	Nominal Strand Size	Units per Carton	Weight per Carton	Approx Length	Number of Individual Rods in Each Big-Grip	Color Code	Cable's Published Rated Breaking Strength	Big-Grip Rated Holding Strength
			in		lb	in			lb	lb
BGMS6599	C-Coat Galvanized Steel	19W	1/2	10	39	52	5	Orange	30,000	30,000
BGMS7648	C-Coat Galvanized Steel	19W	9/16	10	49	55	5	Yellow	38,000	38,000
BGMS6446	B-Coat Galvanized Steel	19W	5/8	10	77	67	4	Black	48,000	48,000
BGMS1035	C-Coat Galvanized Steel	19W	11/16	5	54	74	5	Blue	58,000	58,000
BGMS3690	Aluminum-Clad Steel Strand	19W	3/4	5	69	84	4	Orange	68,000	68,000
BGMS2759	Aluminum-Clad Steel Strand	19W	13/16	5	73	85	5	Red	80,000	80,000
BGMS7346	Aluminum-Clad Steel Strand	19W	7/8	3	58	94	5	Orange	92,000	92,000
BGMS7656	Aluminum-Clad Steel Strand	19W	15/16	3	74	121	5	Blue	108,000	101,300

### Right-Hand Lay

Catalog Number	Big-Grip Material	Strand Construction	Nominal Strand Size	Units per Carton	Weight per Carton	Approx Length	Number of Individual Rods in Each Big-Grip	Color Code	Cable's Published Rated Breaking Strength	Big-Grip Rated Holding Strength
			in		lb	in			lb	lb
BGMS0717	C-Coat Galvanized Steel	19W	1/2	10	39	52	5	Orange	30,000	30,000
BGMS6604	C-Coat Galvanized Steel	19W	9/16	10	49	55	5	Blue	38,000	38,000
BGMS2617	B-Coat Galvanized Steel	19W	5/8	10	77	67	4	Black	48,000	48,000
BGMS6654	C-Coat Galvanized Steel	19W	11/16	5	54	74	5	Green	58,000	58,000
BGMS0704	Aluminum-Clad Steel Strand	19W	3/4	5	69	84	4	Black	68,000	68,000
BGMS0721	Aluminum-Clad Steel Strand	19W	13/16	5	73	85	5	Red	80,000	80,000
BGMS5548	Aluminum-Clad Steel Strand	19W	7/8	3	58	94	5	Orange	92,000	92,000
BGMS7260	Aluminum-Clad Steel Strand	19W	15/16	3	74	121	5	Blue	108,000	101,300

## ORDERING INFORMATION

For use on: Extra High-Strength, Siemens Martin, High-Strength, Utilities Grade  
Used with AOA Guy Strain Insulators



Catalog Number	Strand Rated Breaking Strength	Strand Size	Loop Diameter	Loop Rated Breaking Strength
	lb	in	in	lb
<b>AOA-35</b>			<b>Seat Diameter = 2-7/16"</b>	
BGMS5767	20,800	7/16	2.875	22,600
<b>AOA-50</b>			<b>Seat Diameter = 2-11/16"</b>	
BGMS5767	20,800	7/16	2.875	22,600
BGMS0751	26,900	1/2	3.0	29,900
BGMS4825	35,000	9/16	3.5	40,100
BGMS10417	42,400	5/8	4.0	45,300
<b>AOA-65</b>			<b>Seat Diameter = 3"</b>	
BGMS10754	42,400	5/8	3.0	45,300
BGMS9935	58,300	3/4	4.25	85,300
<b>AOA-85</b>			<b>Seat Diameter = 4-3/16"</b>	
BGMS9932	35,000	9/16	4.25	40,100
BGMS9935	58,300	3/4	4.25	85,300
BGMS7346	79,700	7/8	4.25	106,600
<b>AOA-120</b>			<b>Seat Diameter = 4-5/8"</b>	
BGMS10018	58,300	3/4	4.5	85,300
BGMS9936	79,700	7/8	4.625	106,600
BGMS14219	104,500 (19W)	1	5	106,600
	92,343 (37W)			95,900

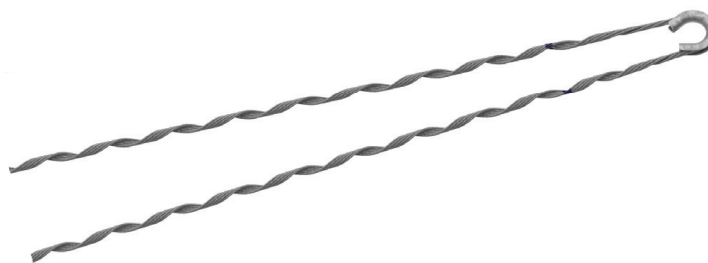
**NOTE:** Left-hand lay is standard.



## ACCESSORIES

### Heavy-Duty Thimble

**Big-Grip Dead-End Heavy-Duty Thimbles** are designed specifically to fit inside the loop of Big-Grip Dead-Ends. The heavy-duty thimbles have an enlarged opening to assist with installation over mounting hardware. All thimbles are hot-dip galvanized in accordance with ASTM-A153 to ensure a long life in the field.



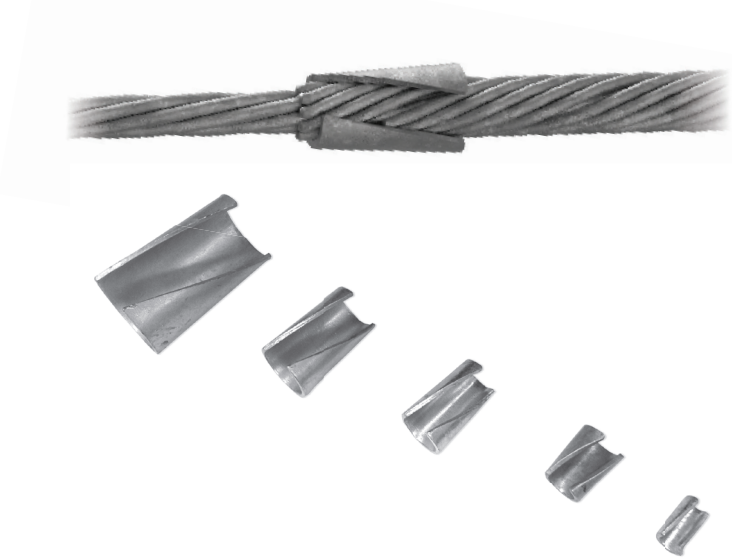
### Thimble Fitment

Big-Grip Dead-End	Heavy-Duty Thimble	Size	Big-Grip	Thimble
Catalog Number	Catalog Number	in	Carton Quantity	Carton Quantity
BG-2140	HDT-9147	1/8	100	50
BG-2142	HDT-9147	3/16	100	50
BG-2144	HDT-9147	1/4	50	50
BG-2145	HDT-9148	9/32	50	25
BG-2146	HDT-9148	5/16	50	25
BG-2147	HDT-9148	3/8	25	25
BG-2148	HDT-9149	7/16	25	20
BG-2115	HDT-9149	1/2	20	20
BG-2116	HDT-9150	9/16	10	10
BG-2111	HDT-9150	5/8	10	10
BG-1112	HDT-9151	3/4	5	5
BG-1113	HDT-9152	7/8	5	3
BG-1114	HDT-9152	1	3	3

## ACCESSORIES

### End Sleeves

**End Sleeves** are designed to help ensure the proper application of GUY-GRIP Dead-Ends and Big-Grip Dead-Ends. They are made from galvanized steel and are compatible with GUY-GRIP Dead-Ends and Big-Grip Dead-Ends designed for EHS strand, bridge strand, and aluminum-clad steel strands.



**For use on: all Galvanized Steel GUY-GRIP Dead-Ends and Big-Grip Dead-Ends – B-Coat and C-Coat**

End Sleeve	GUY-GRIP Dead-Ends B-Coat	Big-Grip Dead-ends C-Coat	Galvanized Strand Size
Catalog Number	Catalog Number	Catalog Number	in
GC-65303	GDE-1102 GDE-2102	BG-2142	3/16
GC-65136	GDE-1104 GDE-2104	BG-2144	1/4
GC-65128	GDE-1106 GDE-2106	BG-2146	5/16
GC-65264	GDE-1107 GDE-2107	BG-2147	3/8
GC-65265	GDE-1108 GDE-2108	BG-2148	7/16
GC-65266	GDE-1109 GDE-2109	BG-2115	1/2
GC-65267		BG-2116	9/16
GC-65268		BG-2111	5/8
GC-65269		BG-2112	3/4
GC-65270		*BG-MS-7023	7/8
GC-65271		*BG-MS-7047	1

\*Manufactured from aluminum-clad steel strand



## ACCESSORIES

### End Sleeves

For use on: Aluminum-Clad Steel Big-Grip Dead-Ends

End Sleeve	Dead-End	Aluminum-Clad Strand Size
Catalog Number	Catalog Number	in
GC-65436	BG-4210	6M, 3 # 9
GC-65128	BG-4216	10M, 7 # 10
GC-65264	BG-4220	12.5, 7 # 9
GC-65265	BG-4221	14M
	BG-4223	16M, 7 # 8
	BG-4225	18M
	BG-4226	7 # 7
GC-65266	BG-4227	20M
	BG-4168	7 # 6
	BG-4169	19 # 10
GC-65267	BG-4170	25M
	BG-4171	7 # 5
	BG-4173	19 # 9
GC-65272	BG-4176	19 # 8
GC-65269	BG-4179	37 # 10
		19 # 7
GC-65298	BG-4181	19x. 1584
	BG-4183	37 # 9
	BG-4183	19 # 6
	BG-4183	19x. 1660
GC-65299	BG-4185	37x. 1213
		19x. 1700
		19x. 1732
		37x. 1237
GC-65270	BG-4186	37 # 8
	BG-4187	19 # 5
	BG-4187	19x. 1868
GC-65271	BG-4188	37x. 1401
	BG-4189	37 # 7

\*Manufactured from aluminum-clad steel wire

