GUY-GRIP® DEAD-END

GUY-GRIP Dead-Ends, installed at the top, the strain insulators and the anchor, provide the most effective method for securing guy strand. This unique, one-piece dead-end is neat in appearance and free from bolts or holding devices that focus high-stress points on the strand. The GUY-GRIP Dead-End offers a cabled loop, a feature that provides more durability, easier tensioning and adaptability to multiple guying. It is intended for use on single wood poles associated primarily with distribution construction.

FEATURES AND BENEFITS

- For use on single wood poles associated with distribution construction
- Manufactured to match the material of the strand on which it is applied to inhibit corrosion and meet strength requirements
- Will accommodate attachment fittings with a broad range of seat diameters.
- Tooless application
- Can be reapplied twice within the first 90 days after the initial installation for retensioning
- Offset legs help identify the rods of each leg and make installation and removal of the dead-end easier
- Designed to permit strand tails to be buried within the dead-end or passed through the loop when a bond to ground is required

DESIGN CONSIDERATIONS

Description	Details
Material Selection	GUY-GRIP Dead-Ends are made of the same basic material as the strand to which they are applied. This pertains to galvanized steel, mischmetal alloy (AL/ZN), copper clad steel, aluminum clad steel, stainless steel Type 302, and stainless steel Type 316. Any of these materials can be selected from the catalog tables. The recommended types of strand are also indicated.
Application and Safety Considerations	GUY-GRIP Dead-Ends are intended for use on single wood poles associated with distribution construction. **They were not designed or tested for use on overhead shield wires and not intended for that application.** Refer to the Big-Grip Dead-End section as an alternate product recommended for transmission, or tower and antenna guying applications. Lay direction of both the GUY-GRIP Dead-Ends and the strand should be the same. Most strand is left-hand lay. GUY-GRIP Dead-Ends should only be used when guying lengths are less than 90 feet. See Big-Grip Dead-Ends for guying lengths longer than 90 feet. Within the first 90 days after initial application, GUY-GRIP Dead-Ends may be removed and reapplied two times for the purpose of retensioning the guy. After 90 days a new dead-end should be used any time removal is required. GUY-GRIP Dead-Ends should be used on hardware that is held in a fixed position; the fitting should not be allowed to rotate or spin about the axis of the strand. **They should not be used as tools; that is, come-alongs, pulling-in grips, etc.** Refer to the Installation Tools section for the PLP Pulling Eye, designed to assist application at the anchor.
Strand Tail	For appearance and safety, the strand tail should be cut as close as convenient to the crossover mark and buried inside the crossover mark if possible. If desired, the strand tail can, instead, extend through the loop for grounding purposes. Any tail that extends through the loop should be restrained and not permitted to rotate during loading of the guy.
Mechanical Strength	GUY-GRIP Dead-Ends are rated at 100% of the strand's rated breaking strength unless otherwise specified.
Tapping	GUY-GRIP Dead-Ends are mechanical devices **NOT** designed as current transfer connectors. Consequently, tapping is not recommended over or through the GUY-GRIP Dead-End.
Cabled Loop	Anchor eyes and other fittings need groove diameters only slightly larger than the strand because the diameter of the cabled rods of GUY-GRIP Dead-Ends approximates the strand diameter. Cabled loops are designed for a variety of fittings with dimensions shown in the table under Attachment Hardware on the following page.

Additional Resources

For additional information regarding the use and installation of GUY-GRIP Dead-Ends, scan or click the QR code listed below.

GUY-GRIP Dead-End
Webpage

ATTACHMENT HARDWARE

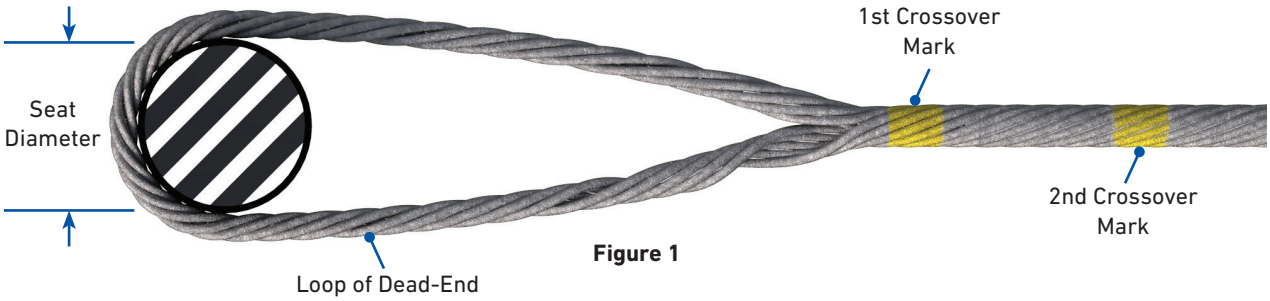


Figure 1

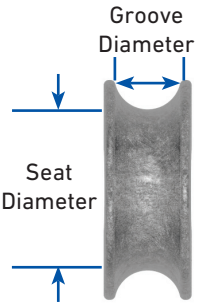


Figure 2

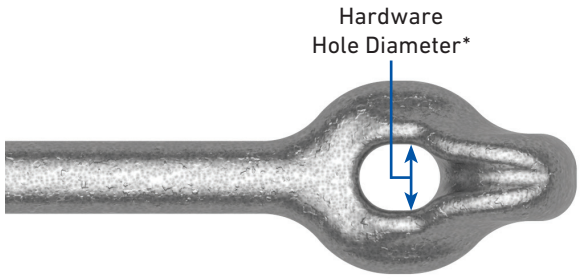


Figure 3

Suggested Hardware Dimensions for Cabled-Loop GUY-GRIP Dead-Ends

Nominal Strand Size		Dead-End Diameter Range		Seat Dimensions (Figures 1 & 2)			Minimum Groove Diameter (Figure 2)	Minimum Hole Diameter* (Figure 3)
in		in		in				
Galvanized Steel	Aluminum-Clad Steel	Minimum	Maximum	Minimum Seat Diameter at 1st Cross-Over Mark	Maximum Seat Diameter at 1st Cross-Over Mark	Maximum Seat Diameter at 2nd Cross-Over Mark	in	in
1/8	–	0.123	0.143	3/4	1-3/4	–	3/16	1/4
5/32	–	0.144	0.173	3/4	1-3/4	2-1/2	1/4	5/16
3/16	–	0.174	0.203	1	1-3/4	2-1/2	1/4	3/8
7/32	3 #10, 4M3	0.204	0.230	1-1/8	1-3/4	2-1/2	5/16	3/8
1/4	7 #12, 6M	0.231	0.259	1-1/8	1-3/4	2-1/2	5/16	7/16
9/32	7 #11, 8M	0.260	0.291	1-1/8	1-3/4	2-1/2	3/8	1/2
5/16	7 #10, 10M	0.292	0.336	1-1/4	1-3/4	2-1/2	3/8	9/16
3/8	7 #8, 14M, 16M	0.337	0.394	1-3/8	1-3/4	2-1/2	7/16	5/8
7/16	7 #7, 18M, 20M	0.395	0.474	1-3/8	2-3/8	–	1/2	11/16
1/2	7 #6	0.475	0.515	1-3/8	2-3/8	–	9/16	3/4
**	7 #5, 25M	0.516	0.570	1-1/2	2-5/8	–	5/8	15/16

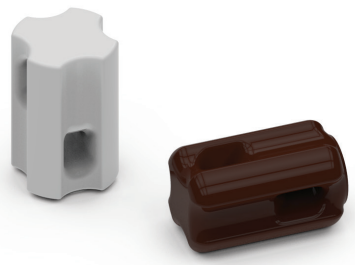
* Depending on geometric shape of the hole, a hole diameter less than specified may be acceptable.
** Use Big-Grip Dead-Ends.

NOTES:

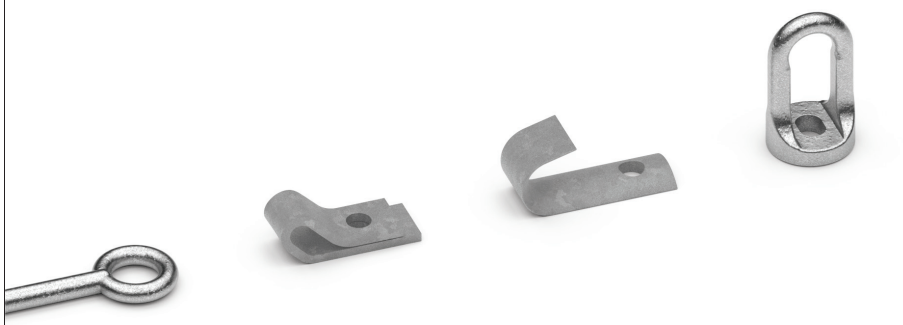
[1] Guying of transmission structures and metal towers require Big-Grip Dead-Ends or VARI-GRIP™ Dead-Ends.
[2] Guying lengths of greater than 90 feet require Big-Grip Dead-Ends or VARI-GRIP Dead-Ends.

ATTACHMENT HARDWARE CONTINUED

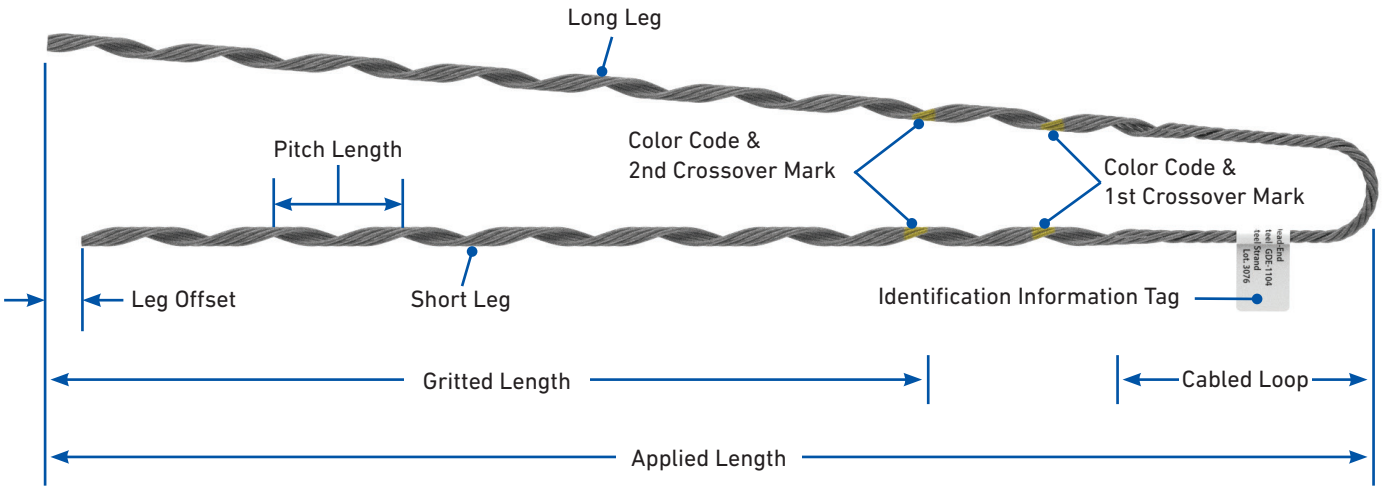
Acceptable Hardware

Thimble Eye Bolts or Rods	Thimble Eye Nut & Thimble Eye
	
Pole and Fiberglass Guy Strain Insulators (ANSI C29.14b-2021)	**Porcelain Guy Strain Insulators (ANSI 54-1, 54-2, 54-3, or 54-4)**
	

Hardware Not Recommended for Use with GUY-GRIP Dead-Ends

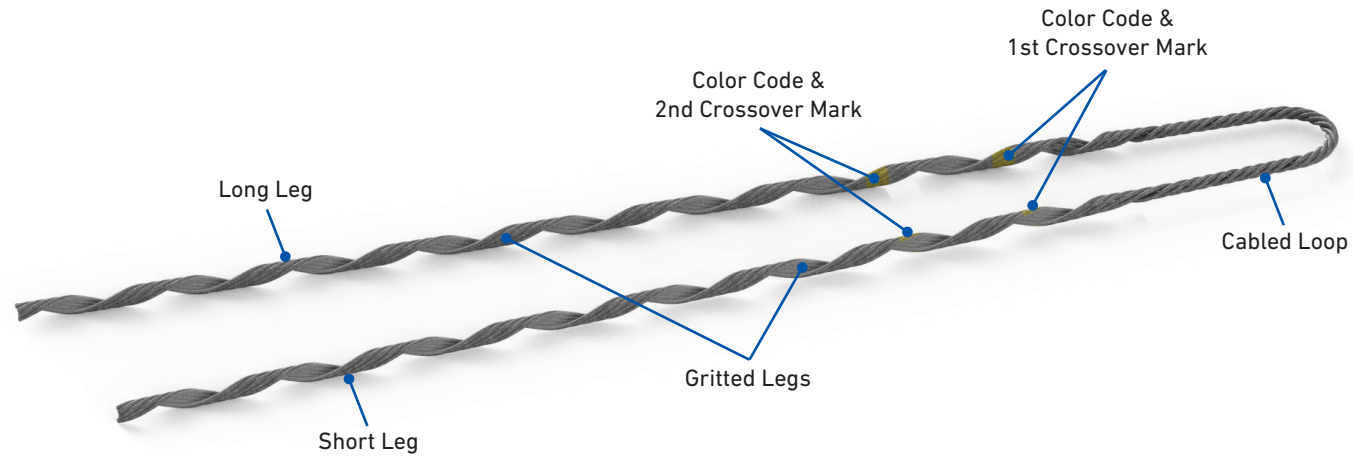
CAUTION	CAUTION
Hardware of this type is not normally acceptable because fatigue life of GUY-GRIP Dead-Ends could be substantially reduced.	See the note below if considering using a thimble with attachment hardware.
	
	NOTE: Heavy-Duty-Type Cable Thimbles, if used, can collapse when guy tensions are high. If thimbles are used in the loop of the GUY-GRIP Dead-End, a large pin is recommended to fill the loop of the thimble to prevent distortion. The collapsing strength of the thimble and the proper pin size should be obtained from the thimble manufacturer.

SPECIFICATIONS



GUY-GRIP Dead-End

Feature	Description
Identification Information Tag	Shows catalog number and pertinent dead-end information. Printed on a flag.
Color Code	Identifies strand size for colors corresponding to tabular information on catalog pages.
1st Crossover Mark	Indicates starting point for application on smaller diameter fittings described in the table under Attachment Hardware
2nd Crossover Mark	Indicates starting point for application on larger diameter fittings described in the table under Attachment Hardware
Short Leg and Long Leg	Identifies rods belonging to each leg after application. During application, the short leg should be applied first.
Pitch Length	One complete wrap of a leg
Gritted Length	Gritted helical legs retain the strand in place
Cabled Loop	Furnished as standard for all sizes. Allows the dead-end to form properly around the seat of the hardware fitting.
Applied Length	Assists in identification of strand size corresponding to tabular information appearing on catalog pages
Leg Offset	Ensures the wires of each leg are defined for future removal



GUY-GRIP Dead-End

ORDERING INFORMATION

Galvanized Steel Strand

For use on Extra High-Strength, High-Strength, Siemens Martin, Utilities Grade[3]

Catalog Number		Strand			Units per Carton	Weight per Carton	Applied Length	Conductor Color Code
		Size	Construction	Mean Diameter				
B-Coat	C-Coat	in		in		lb	in	
GDE-1102	GDE-2102	3/16	7W	0.186	100	29	20	Red
			7W	0.195				
GDE-1103	GDE-2103	7/32	7W	0.216	50	18	24	Green
GDE-1104	GDE-2104	1/4	3W	0.259	50	22	25	Yellow
			7W	0.240				
GDE-1105	GDE-2105	9/32	7W	0.279	50	26	28	Blue
GDE-1106	GDE-2106	5/16	3W	0.312	50	38	31	Black
			7W	0.312				
			7W	0.327				
GDE-1107	GDE-2107	3/8	3W	0.356	50	51	35	Orange
			7W	0.360				
GDE-1108	GDE-2108	7/16	7W	0.435	25	39	38	Green
GDE-1109	GDE-2109	1/2	7W	0.495	25	66	47	Blue
			19W	0.500				

Left-hand lay standard

NOTES:

[1] Big-Grip Dead-End is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.

[2] Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard for all sizes.

[3] Rated holding strength is 100% of published rating for all grades of galvanized strand.

[4] Consult PLP for sizes and stranding not shown.

ORDERING INFORMATION CONTINUED

Mischmetal Alloy (AL/ZN) Strand

For use on Mischmetal Alloy Strand[4]

Catalog Number	Strand			Units per Carton	Weight per Carton	Applied Length	Conductor Color Code
	Size	Construction	Mean Diameter				
	in		in		lb	in	
BDE-9102	3/16	7W	0.186	50	14	20	Red
		7W	0.195				
BDE-9104	1/4	3W	0.259	50	22	25	Yellow
		7W	0.240				
BDE-9106	5/16	3W	0.312	50	38	31	Black
		7W	0.312				
		7W	0.327				
BDE-9107	3/8	3W	0.356	50	52	35	Orange
		7W	0.360				
BDE-9108	7/16	7W	0.435	25	39	38	Green
BDE-9109	1/2	7W	0.495	25	68	47	Blue
		19W	0.500				

Left-hand lay standard

NOTES:

[1] Big-Grip Dead-End is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.

[2] Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard for all sizes.

[3] PLP mischmetal formed wire products are acceptable for use with Bezinal® and Galfan® coated strands.
Bezinal® is a registered trademark of the Bekaert Corporation.
Galfan® is a registered trademark of the Galfan Technology Centre, LLC.

[4] Rated holding strength is 100% of all grades of Mischmetal Alloy strand.

[5] Consult PLP for sizes and stranding not shown.

ORDERING INFORMATION CONTINUED

Aluminum Clad Steel Strand

For use on all grades of Aluminum Clad Steel Strand[3]

Catalog Number	Strand		Units per Carton	Weight per Carton	Applied Length	Conductor Color Code
	Nominal Strand Size	Mean Diameter				
	in	in		lb	in	
AWDE-4102	3 #12	0.174	100	20	18	Orange
AWDE-4108	4M	0.220	50	18	21	Green
	3 #10	0.220				
AWDE-4110	3 #9	0.247	50	20	24	Yellow
	6M	0.242				
AWDE-4113	3 #8	0.277	50	21	24	Blue
	8M	0.272				
AWDE-4116	3 #7	0.311	50	28	26	Black
	10M	0.306				
	5/16" - 7 #10	0.306				
AWDE-4118	11.5M	0.330	50	28	26	Green
AWDE-4119	3 #6	0.349	50	39	29	Yellow
	12.5M	0.343				
	11/32" - 7 #9	0.343				
AWDE-4120	14M	0.363	50	52	31	Blue
AWDE-4122	3 #5	0.392	50	54	32	Orange
	3/8" - 7 #8	0.385				
	16M	0.386				
AWDE-4124	18M	0.417	25	37	34	Black
AWDE-4125	7/16" - 7 #7	0.433	25	39	36	Green
AWDE-4126	20M	0.444	10	21	37	Yellow
AWDE-4128	1/2" - 7 #6	0.486	10	22	39	Blue
AWDE-4130	25M	0.519	10	21	43	Red
AWDE-4131	7 #5	0.546	10	31	44	Yellow

Left-hand lay standard

NOTES:

[1] Big-Grip Dead-End is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.

[2] Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard for all sizes.

[3] Rated holding strength is 100% of all grades of aluminum clad steel strand.

[4] Consult PLP for sizes and stranding not shown.

ORDERING INFORMATION CONTINUED

Copper Clad Steel Strand

For use on all grades of Copper Clad Steel Strand[4]

Catalog Number	Strand		Units per Carton	Weight per Carton	Applied Length	Conductor Color Code
	Nominal Strand Size	Mean Diameter				
	in	in		lb	in	
CDE-8100	2.2M	0.164	100	18	17	Orange
CDE-8102	3 #12	0.174	100	24	17	Red
CDE-8106	4M	0.209	100	31	18	White
CDE-3101	3 #10	0.220	100	43	20	Green
CDE-3103	3 #9	0.247	50	23	21	Yellow
	6M	0.237				
CDE-3104	6M3	0.258	50	22	22	White
CDE-3106	8M	0.276	50	25	23	Blue
	3 #8	0.277				
CDE-3109	10M	0.303	50	33	25	Red
	7 #10 - 5/16"	0.306				
	3 #7	0.311				
CDE-3112	7 #9 - 11/32"	0.343	50	46	27	Green
	12.5M	0.345				
	3 #6	0.349				
CDE-3113	14M	0.360	50	64	30	Blue
CDE-3115	7 #8 - 3/8"	0.385	50	64	31	White
	16M	0.386				
	3 #5	0.392				
CDE-3117	18M	0.414	25	45	34	Orange
CDE-3118	20M	0.438	25	46	35	Yellow
	7 #7 - 7/16"	0.433				
CDE-3121	7 #6 - 1/2"	0.486	25	65	39	Blue
CDE-3123	25M	0.525	10	37	43	Green
CDE-3124	7 #5 - 9/16"	0.546	10	37	44	Yellow

Left-hand lay standard

NOTES:

[1] Big-Grip Dead-End is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.

[2] Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard for all sizes.

[3] Refer to Design Considerations for material selection.

[4] Rated holding strength is 100% of published rating for the strand.

[5] Consult PLP for sizes and stranding not shown.

ORDERING INFORMATION CONTINUED

Stainless Steel Strand

For use on Type 302 and Type 430 Strand

Catalog Number	Strand			Units per Carton	Weight per Carton	Applied Length	Percent of Strands Rated Breaking Strength	Conductor Color Code
	Size	Construction	Mean Diameter					
	in		in		lbs	in		
SDE-5101	7/32	3W	0.224	100	30	22	100%	Blue
		7W	0.216					
SDE-5102	1/4	3W	0.259	50	24	26	100%	Yellow
		7W	0.249					
SDE-5103	9/32	7W	0.279	50	25	27	90%	Black
SDE-5104	5/16	3W	0.312	50	40	31	93%	Orange
		7W	0.312					
SDE-5105	3/8	3W	0.356	50	65	37	83%	Green
		7W	0.360					

Stainless Steel Strand

For use on Type 316 Strand

Catalog Number	Strand			Units per Carton	Weight per Carton	Applied Length	Percent of Strands Rated Breaking Strength	Conductor Color Code
	Size	Construction	Mean Diameter					
	in		in		lbs	in		
SDE-6101	7/32	3W	0.224	100	30	22	100%	Blue
		7W	0.216					
SDE-6102	1/4	3W	0.259	50	24	26	100%	Yellow
		7W	0.249					
SDE-6103	9/32	7W	0.279	50	25	27	90%	Black
SDE-6104*	5/16	3W	0.312	50	41	31	93%	Orange
		7W	0.312					
SDE-6105	3/8	3W	0.356	50	65	37	87%	Green
		7W	0.360					
SDE-6107	1/2	7W	0.500	10	52	53	85%	Blue

*These dead-ends utilize the open helix design
Left-hand lay standard

NOTES:

[1] Big-Grip Dead-End is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
[2] Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard for all sizes.
[3] Refer to Design Considerations for material selection.
[4] Consult PLP for sizes and stranding not shown.

ACCESSORIES

End Sleeves

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

End Sleeves

For use on Galvanized Steel GUY-GRIP® Dead-Ends

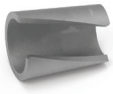
End Sleeve		GUY-GRIP Dead-End Catalog Number			Size
Catalog Number	Carton Quantity	B-Coat	C-Coat	Carton Quantity	in
GC-65303	100	GDE-1102	GDE-2102	100	3/16
GC-65136	100	GDE-1104	GDE-2104	50	1/4
GC-65128	100	GDE-1106	GDE-2106	50	5/16
GC-65264	100	GDE-1107	GDE-2107	50	3/8
GC-65265	100	GDE-1108	GDE-2108	25	7/16
GC-65266	50	GDE-1109	GDE-2109	25	1/2

Catalog Number: GC-65303

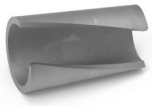
Catalog Number: GC-65136

Catalog Number: GC-65128

Catalog Number: GC-65264



Catalog Number: GC-65265



Catalog Number: GC-65266

See Tower & Antenna Catalog for additional information regarding End Sleeves.