



VARI-GRIP™ DEAD-END

The **VARI-GRIP Dead-End** is engineered for use on transmission structures, towers, antennas, and other guyed applications requiring large-diameter guy strand. Its key components—including a robust housing, high-strength U-bolt, and hex nuts—enable precise tension adjustments without the need for a turnbuckle.

The **VARI-GRIP Gen2 Dead-End** version, available for select applications, offers a lighter-weight design while maintaining the same high holding strength. Additionally, the Gen2 eliminates the need for conformal castings by providing effective U-bolt support through an optimized structure.

FEATURES AND BENEFITS

VARI-GRIP Dead-End

- The unique housing, wedge, and rod assembly is designed to provide a holding strength of 100% of the strand's rated breaking load
- Retaining rods are made from a material that is compatible with the guy strand material (e.g., aluminum-clad steel rods for aluminum-clad steel guy strand)
- Available for strand sizes of 0.438" - 1.780" (20,800 - 295,500 lb)
- Take-up U-Bolts in sizes 0" and 18" are available for most strand sizes

VARI-GRIP Gen2 Dead-End

- Lighter design while still maintaining the same holding strength features as the standard design
- Conformal castings are not required to properly support the U-Bolt

DESIGN CONSIDERATIONS

Description	Details
Material Selection	The retaining rods are made from a material that is compatible with the guy strand material (i.e., aluminum-clad steel rods for aluminum-clad steel guy strand). Where guying requirements call for strands not shown on the catalog pages, consult PLP
Application and Safety Considerations	<p>VARI-GRIP Dead-Ends are designed for use on Transmission, Tower and Antenna, Communications and other types of guyed structures that require use of large guy strand. They are NOT designed or tested for use on overhead shield wires or wire ropes and are not intended for those applications.</p> <p>VARI-GRIP Dead-Ends should be used only on the size and strand for which they are designed. The VARI-GRIP Dead-End Retaining Rods MUST have the same lay direction as the strand to which they are applied. WHEN ORDERING VARI-GRIP DEAD-ENDS, SPECIFY THE STRAND AND THE STRAND LAY DIRECTION ON WHICH THEY ARE TO BE USE.</p> <p>When installing VARI-GRIP Dead-Ends, care should be taken not to damage the protective coatings on the hardware, rods or fittings.</p> <p>VARI-GRIP Dead-Ends should not be used as tools; that is, come-alongs, pulling-in grips, etc.</p>
Mechanical Strength	VARI-GRIP Dead-Ends are designed to hold the maximum loads published on the catalog pages for only those specific strands listed.
Attachment Hardware	When installing VARI-GRIP Dead-Ends to a pin or other linkage, refer to the table on the next page for minimum and maximum diameters. The minimum dimension indicates the smallest fitting that will ensure support of the U-Bolt, while the maximum dimension indicates the largest fitting that will fit through the U-Bolt.

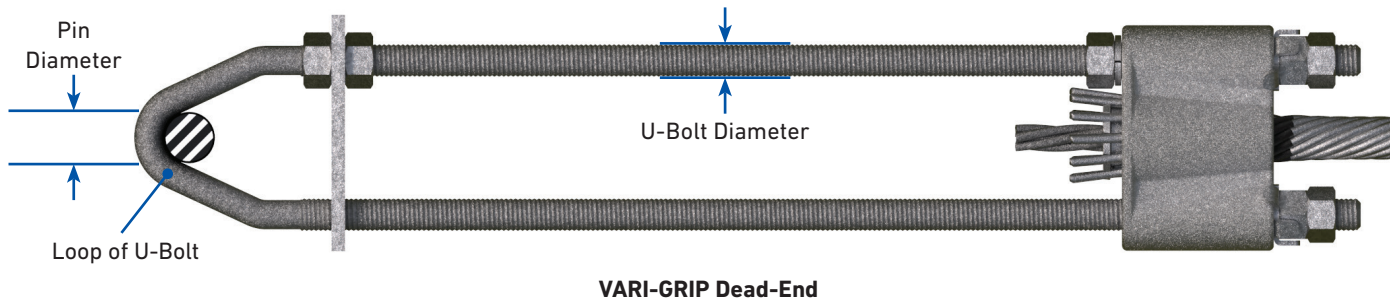
Additional Resources

For additional information regarding the use and installation of VARI-GRIP Dead-Ends, use the QR codes listed below.



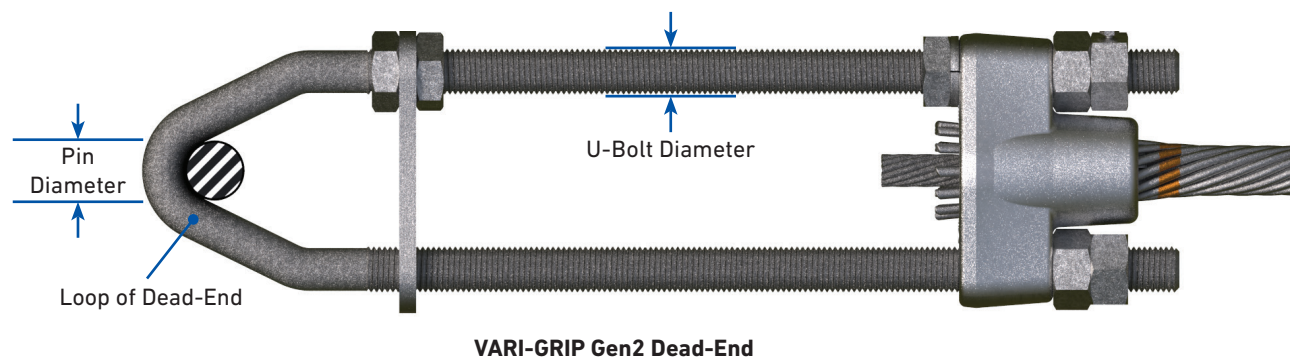
VARI-GRIP Dead-End

ATTACHMENT HARDWARE



Acceptable Pin Diameters for VARI-GRIP™ Dead-End

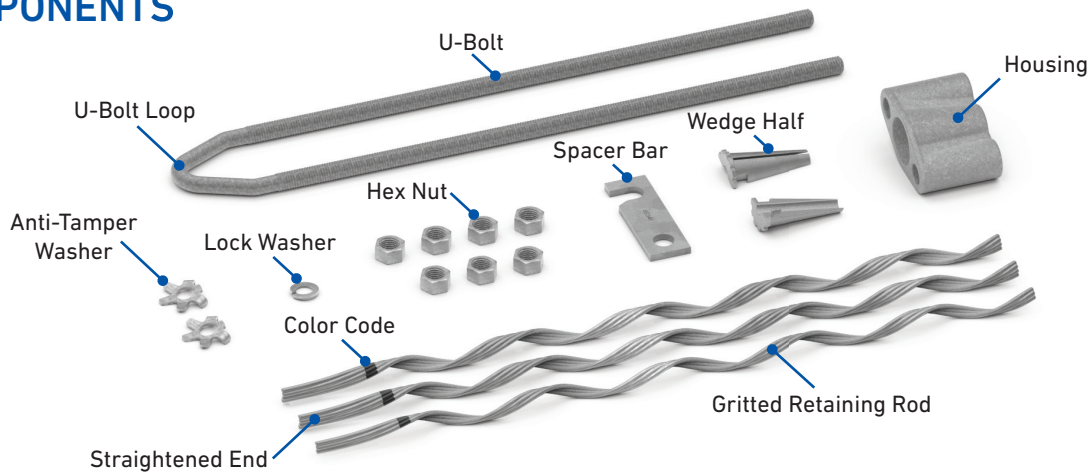
Strand Range	U-Bolt Diameter	Minimum	Maximum
in	in	in	in
0.438 – 0.500	5/8	5/8	1-1/8
0.546 – 0.661	3/4	3/4	1-1/8
0.744 – 0.914	1	1	1-1/4
0.915 – 1.034	1-1/8	1-1/8	1-3/8
1-1/8 EHS 1" BS 61 #7 61 #6	1-1/2	4	4
61 #5 91 #6	1-3/4	4	4-1/2



Acceptable Pin Diameters for VARI-GRIP Gen2 Dead-End

Strand Range	U-Bolt Diameter	Minimum	Maximum
in	in	in	in
0.744 – 0.888	1	1	1-1/4
1.000 – 1.125	1-1/8	1-1/8	1-1/2

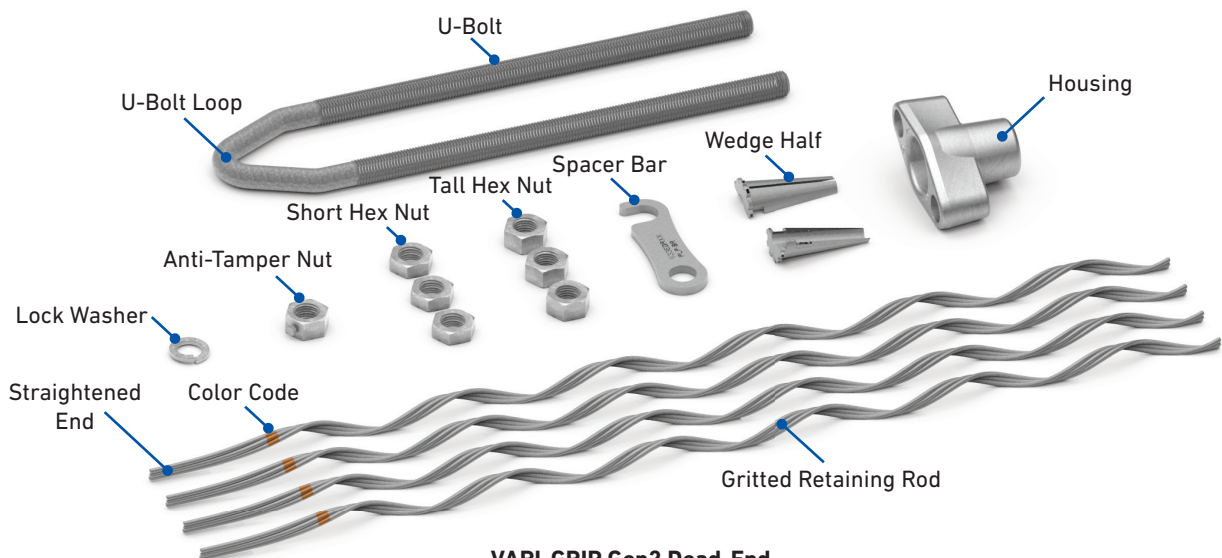
COMPONENTS



VARI-GRIP Dead-End

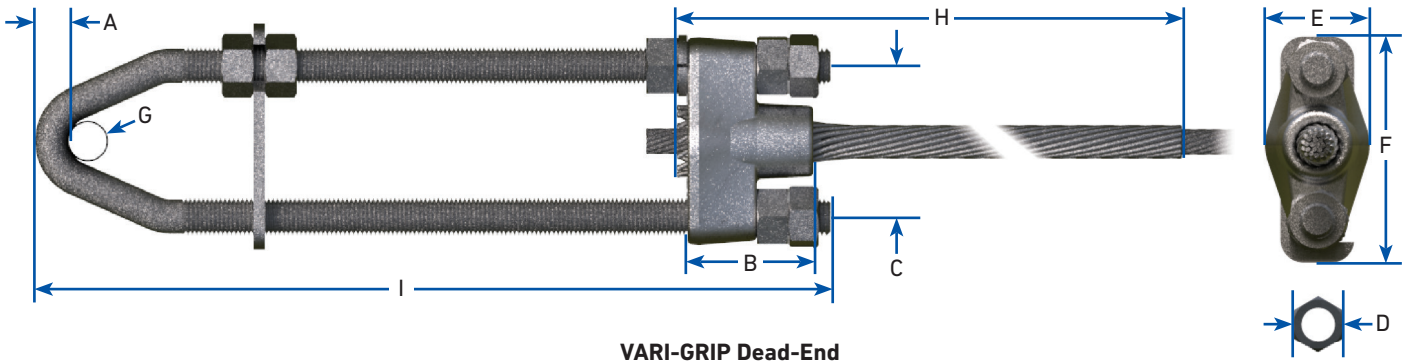
VARI-GRIP™ Dead-End (Standard & Gen2 Designs)

Component	Description
U-Bolt	Allows the dead-end to be adjusted for tensioning
U-Bolt Loop	Allows the dead-end to form properly around the seat of the hardware fitting.
Spacer Bar	Prevents the loop end of the U-Bolt from collapsing during tensioning
Housing	Restrains the U-Bolt and the Wedge Halves
Wedge Halves	Applied directly to the strand near the cut end and held together with tape. Restrains the strand by allowing compressive forces to be evenly distributed to the strand during tensioning.
Gritted Retaining Rods	Gritted helical rods are subsetting for easy installation and prevents the strand from slipping. Manufactured from material compatible with the strand for which they are applied on.
Straightened End	One end of each gritted retaining rod subset is straightened to help conform the rods around the applied wedge halves. The rods of each subset are separated at the straightened end to allow each rod to rest in the grooves of the wedge halves.
Color Code	Identifies strand size for colors corresponding to tabular information on catalog pages
Hex Nut (Standard Design Only)	Secures the U-Bolt to the Housing and secures the Spacer Bar in place on the U-Bolt
Short Hex Nut (Gen2 Design Only)	Secures the Spacer Bar in place on the U-Bolt and secures the Housing
Tall Hex Nut (Gen2 Design Only)	Secures the U-Bolt to the Housing
Lock Washer	Prevents the inner Hex Nut that secures the Housing from loosening
Anti-Tamper Washer (Standard Design Only)	Prevents outer Hex Nuts from being loosened after tensioning has occurred
Anti-Tamper Nut (Gen2 Design Only)	Has a security screw that prevents the nut from being loosened after tensioning has occurred



VARI-GRIP Gen2 Dead-End

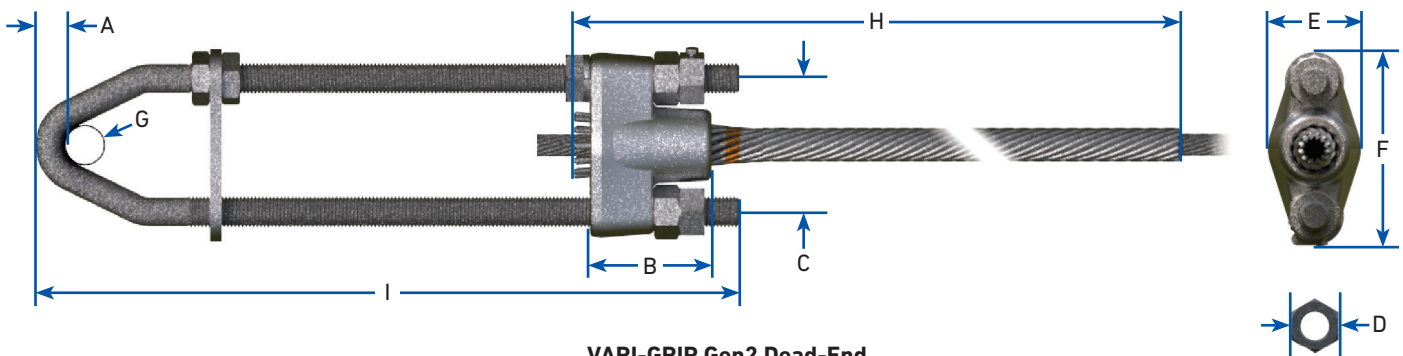
DIMENSIONS



VARI-GRIP Dead-End

VARI-GRIP™ Dead-End (Standard & Gen2 Designs) Dimensions

Strand Range	Dimensions										Design
	A	B	C	D	E	F	G	H	I (0 in)	I (18 in)	
in											
0.438 – 0.500	5/8	3-1/4	3-1/4	1-1/16	3-17/32	4-3/4	15/16	See rod lengths in ordering information tables	N/A	29-9/16	Standard
0.546 – 0.661	3/4	3-1/2	3-9/16	1-1/8	2-3/16	5-3/16	19/32		11-11/16	28-5/16	
3/4, 13/16, 7/8	1	4-1/2	4-1/2	1-5/8	3-1/8	6-1/4	11-16		18-5/8	23-7/8	Gen2
0.744 – 0.914	1	4-1/2	4-3/4	1-1/2	3-5/16	6-11/16	5/8		12-11/16	33-3/16	Standard
0.915 – 1.034	1-1/8	4-15/16	5-3/8	1-5/8	3-5/8	7-5/8	3/4		14	33-1/2	
15/16, 1, 1-1/16, 1-1/8	1-1/8	4-1/3	5-1/2	1-31/32	3-3/4	7-5/8	7/8		26-3/4	27-15/16	Gen2
1.25 – 1.460	1-1/2	7-1/4	7-1/8	2-5/16	5-1/4	10-1/8	2-1/16		20-3/4	39-15/16	Standard
1.5 – 1.64	1-3/4	7-1/4	8-3/16	2-5/8	5-9/16	11-11/16	2-1/2		22-1/2	42-3/4	
1.78	1-3/4	8-3/4	8-3/16	2-5/8	6-5/8	12-3/8	2-1/2		22-1/2	42-3/4	



VARI-GRIP Gen2 Dead-End

ORDERING INFORMATION

Galvanized Steel Extra High-Strength Strand (Left-Hand Lay)

Catalog Number		Strand				U-Bolt Diameter	Rod per Set	Rod Length	Subset	Color Code	Rated Holding Strength	Design
		Nominal Size	Construction	Nominal Range								
				in	Minimum			Maximum			in	
0" Take-Up	18" Take-Up	in						in			lb	
N/A	VG-18-2100	7/16	7W	0.438	0.438	5/8	11	27	3-4-4	Red	20,800	Standard
N/A	VG-18-2101	1/2	7W or 19W	0.459	0.500	5/8	12	30	3-3-3-3	Blue	26,900	
VG-0-2108	VG-18-2108	9/16	7W or 19W	0.559	0.563	3/4	11	28	3-4-4	Yellow	35,000	
VG-0-2102	VG-18-2102	5/8	7W or 19W	0.621	0.625	3/4	11	31	3-4-4	Black	42,400	
VG-0-2103BR	VG-18-2103BR	3/4	1 x 19	0.744	0.754	1	12	44	3-3-3-3	Orange	68,000	Gen2
VG-0-2104BR	VG-18-2104BR	7/8	1 x 19	0.878	0.888	1	13	58	3-3-3-4	Green	92,000	
VG-0-2105BR	VG-18-2105BR	1	1 x 31	1.000	1.010	1-1/8	14	66	3-3-4-4	Blue	122,000	
VG-0-2106BR	VG-18-2106BR	1-1/8	37W	1.125	1.125	1-1/8	14	95	3-3-4-4	Yellow	156,000	
VG-0-2107	VG-18-2107	1-1/4	37W	1.250	1.250	1-1/2	16	103	4-4-4-4	Red	162,000	Standard

Aluminum Clad Steel Strand (Left-Hand Lay)

Catalog Number		Strand			U-Bolt Diameter	Rod per Set	Rod Length	Subset	Color Code	Rated Holding Strength	Design
		Construction	Nominal Range								
			0" Take-Up	18" Take-Up	in		in	in	lb		
N/A	VG-18-3000	7#5	0.546	0.546	3/4	12	26	3-3-3-3	Yellow	27,030	Standard
N/A	VG-18-3100	19#9	0.572	0.572	3/4	11	28	3-4-4	Orange	34,290	
VG-0-3101	VG-18-3101	19#8	0.636	0.661	1	11	32	3-4-4	Black	42,240	
VG-0-3102	VG-18-3102	19#7	0.713	0.741	1	12	35	3-3-3-3	Yellow	51,730	
		37#10								52,950	
VG-0-3103BR	VG-18-3103BR	19#6	0.800	0.810	1	12	46	3-3-3-3	Green	61,700	Gen2
		37#9								66,770	
VG-0-3104BR	VG-18-3104BR	37#8	0.893	0.903	1	12	54	3-3-3-3	Yellow	84,200	
VG-0-3105BR	VG-18-3105BR	19#5	0.904	0.914	1	12	54	3-3-3-3	Yellow	73,350	
VG-0-3106BR	VG-18-3106BR	61#10	0.911	0.921	1-1/8	13	54	3-3-3-4	Yellow	87,290	
VG-0-3107BR	VG-18-3107BR	37#7	1.000	1.010	1-1/8	14	58	3-3-4-4	Green	100,700	
VG-0-3108BR	VG-18-3108BR	61#9	1.024	1.034	1-1/8	14	76	3-3-4-4	Purple	110,100	
VG-0-3109BR	VG-18-3109BR	37#6	1.130	1.130	1-1/8	14	86	3-3-4-4	Yellow	120,200	
VG-0-3110	VG-18-3110	61#8	1.160	1.160	1-1/2	14	98	3-3-4-4	Orange	138,800	Standard
VG-0-3111	VG-18-3111	37#5	1.270	1.270	1-1/2	16	105	4-4-4-4	Red	142,800	
VG-61#7-0	VG-61#7-18	61#7	1.300	1.300	1-1/2	16	106	4-4-4-4	Blue	166,100	
VG-61#6-0	VG-61#6-18	61#6	1.460	1.460	1-1/2	18	116	3-3-4-4-4	Green	198,100	
VG-61#5-0	VG-61#5-18	61#5	1.640	1.640	1-3/4	20	129	4-4-4-4-4	Orange	235,500	
VG-91#6-0	VG-91#6-18	91#6	1.780	1.780	1-3/4	18	165	3-3-4-4-4	Red	295,500	

ORDERING INFORMATION CONTINUED

Galvanized Steel Bridge Strand (Left-Hand Lay)

Catalog Number		Strand				U-Bolt Diameter	Rod per Set	Rod Length	Subset	Color Code	Rated Holding Strength	Design
		Nominal Size	Construction	Nominal Range								
				in	Minimum						Maximum	
0" Take-Up	18" Take-Up	in				in		in				
VG-0-2103BR	VG-18-2103BR	3/4	1 x 19	0.750	0.750	1	12	44	3-3-3-3	Orange	68,000	Gen2
VG-0-4104BR	VG-18-4104BR	13/16	1 x 19	0.813	0.813	1	12	54	3-3-3-3	Red	80,000	
VG-0-2104BR	VG-18-2104BR	7/8	1 x 19	0.875	0.875	1	13	58	3-3-3-4	Green	92,000	
VG-0-4106BR	VG-18-4106BR	15/16	19W, 31W, or 37W	0.938	0.938	1-1/8	14	63	3-3-4-4	Black	108,000	
VG-0-2105BR	VG-18-2105BR	1	19W or 31W	1.000	1.000	1-1/8	14	66	3-3-4-4	Blue	122,000	
VG-0-4108BR	VG-18-4108BR	1-1/16	1 x 31	1.063	1.063	1-1/8	14	91	3-3-4-4	Green	138,000	
VG-0-2106BR	VG-18-2106BR	1-1/8	37W	1.125	1.125	1-1/8	14	95	3-3-4-4	Yellow	156,000	
VG-0-4109	VG-18-4109	1-3/16	1 x 37	1.187	1.187	1-1/2	15	99	3-4-4-4	Orange	172,000	Standard
VG-0-2107	VG-18-2107	1-1/4	1 x 43	1.250	1.250	1-1/2	16	103	4-4-4-4	Red	192,000	
VG-0-4110	VG-18-4110	1-5/16	1 x 43	1.313	1.313	1-1/2	17	107	3-3-3-3-3-2	Black	212,000	
VG-0-4111	VG-18-4111	1-3/8	1 x 43	1.375	1.375	1-1/2	17	110	3-3-3-3-3-2	Orange	232,000	
VG-0-4112	VG-18-4112	1-7/16	1 x 43	1.438	1.438	1-1/2	18	114	3-3-3-3-3-3	Green	252,000	
VG-0-4113	VG-18-4113	1-1/2	1 x43	1.500	1.500	1-3/4	16	119	3-3-3-3-2-2	Pink	276,000	

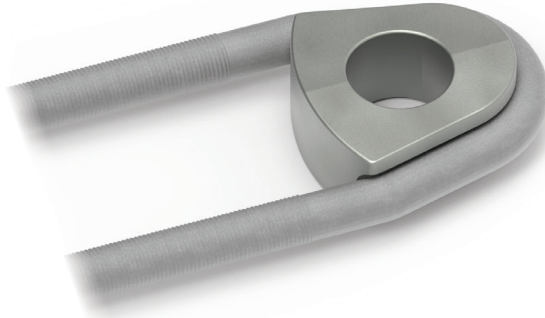
Galvanized Steel Bridge Strand (Right-Hand Lay)

Catalog Number		Strand				U-Bolt Diameter	Rod per Set	Rod Length	Subset	Color Code	Rated Holding Strength	Design
		Nominal Size	Construction	Nominal Range								
				in	Minimum						Maximum	
0" Take-Up	18" Take-Up	in						in			lb	
VG-0-5103BR	VG-18-5103BR	3/4	1 x 19	0.750	0.750	1	12	44	3-3-3-3	Orange	68,000	Gen2
VG-0-5104BR	VG-18-5104BR	13/16	1 x 19	0.813	0.813	1	12	54	3-3-3-3	Red	80,000	
VG-0-5105BR	VG-18-5105BR	7/8	1 x 19	0.875	0.875	1	13	58	3-3-3-4	Green	92,000	
VG-0-5106BR	VG-18-5106BR	15/16	19W, 31W, or 37W	0.938	0.938	1-1/8	14	63	3-3-4-4	Black	108,000	
VG-0-5107BR	VG-18-5107BR	1	19W or 31W	1.000	1.000	1-1/8	14	66	3-3-4-4	Blue	122,000	
VG-0-5108BR	VG-18-5108BR	1-1/16	1 x 31	1.063	1.063	1-1/8	14	91	3-3-4-4	Green	138,000	
VG-0-5109BR	VG-18-5109BR	1-1/8	1 x 37	1.125	1.125	1-1/8	14	95	3-3-4-4	Yellow	156,000	
VG-0-5110	VG-18-5110	1-3/16	1 x 37	1.187	1.187	1-1/2	15	99	3-4-4-4	Orange	172,000	Standard
VG-0-5111	VG-18-5111	1-1/4	1 x 43	1.250	1.250	1-1/2	16	103	4-4-4-4	Red	192,000	
VG-0-5112	VG-18-5112	1-5/16	1 x 43	1.313	1.313	1-1/2	17	107	3-3-3-3-3-2	Black	212,000	
VG-0-5113	VG-18-5113	1-3/8	1 x 43	1.375	1.375	1-1/2	17	110	3-3-3-3-3-2	Orange	232,000	
VG-0-5114	VG-18-5114	1-7/16	1 x 43	1.438	1.438	1-1/2	18	114	3-3-3-3-3-3	Green	252,000	
VG-0-5115	VG-18-5115	1-1/2	1 x43	1.500	1.500	1-3/4	16	119	3-3-3-3-2-2	Pink	276,000	

ACCESSORIES

Conformal Castings

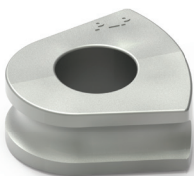
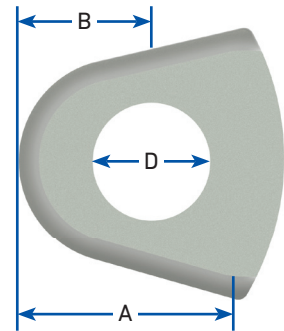
Conformal Casting are designed to help ensure the proper support of the U-bolt portion of VARI-GRIP™ Dead-Ends. They are made from galvanized ductile iron and are compatible with VARI-GRIP Dead-Ends designed for EHS strand, bridge strand, and aluminum-clad steel cables.



Conformal Castings

Catalog Number	Strand Size	U-Bolt Diameter	A	B	C	D
			in			
V1SBG	1-1/8" EHS, 1-1/4" EHS, 37#6, 61#8, 37#5, 61#7, 1" BS, 1-1/16" BS, 1-1/8" BS, 1-3/16" BS	1-1/2	5	2.75	2.875	2.875
V1TBG	61#6, 1-1/4" BS, 1-5/16 BS, 1-3/8" BS, 1-7/16" BS	1-1/2	5	3	2.875	3.125
V1VBG	61#5, 1-1/2" BS	1-3/4	5.844	3.75	3.375	3.625
V1WBG	91#6	1-3/4	5.844	4	3.375	3.875

NOTE: To be used with Standard VARI-GRIP Dead-End only. Gen2 VARI-GRIP Dead-Ends do not require this. (Supplied with Dead-Ends using 1-1/2" and 1-3/4" U-Bolts to assure proper support.



Catalog Number:
V1SBG



Catalog Number:
V1TBG



Catalog Number:
V1VBG



Catalog Number:
V1WBG

ACCESSORIES CONTINUED

VARI-GRIP™ Dead-End Link Plates

VARI-GRIP Dead-End Link Plates provide a reliable alternative to anchor shackles and are suitable for both single and multiple guy strand configurations. These assemblies feature a bolt, nut, and cotter pin design that delivers the same strength and security as traditional anchor shackles. Structural bolts are included to allow for adjustment when used with conformal castings or custom anchor plates. Constructed from hot-dip galvanized steel, the link plates are compatible with VARI-GRIP Dead-Ends designed for galvanized EHS and bridge strand applications.



VARI-GRIP Dead-End Link Plates

Catalog Number	Rated Holding Strength	Strand Size	U-Bolt Diameter	Thru Hole Diameter	Structural Bolt Diameter	Conformal Casting
	lb					
VLP-0600	42,400	7/16 EHS, 1/2 EHS, 9/16 EHS, 5/8 EHS	5/8 – 3/4	1	7/8	N/A
VLP-0601	80,000	3/4 EHS, 3/4 BS, 7/8 EHS, 13/16 BSS	1	1-1/2	1-1/4	N/A
VLP-0603	108,000	7/8 BS, 1 EHS, 15/16 BS	1-1/8	1-1/2	1-3/8	N/A
VLP-0605	156,000	1 BS, 1-1/16 BS, 1-1/8 EHS, 1-1/8 BS	1-1/2	1-7/8	1-3/4	Yes
VLP-0606	192,000	1-3/16 BS, 1-1/4 EHS, 1-1/4 BS	1-1/2	2-3/8	2	Yes
VLP-0607	252,000	1-5/16 BS, 1-3/8 BS, 1-7/16 BS	1-3/4	2-3/8	2-1/4	Yes

NOTE: Smaller bolts in the plate assemblies are not to be removed under any circumstances.



Catalog Number:
VLP-0600



Catalog Number:
VLP-0601



Catalog Number:
VLP-0603



Catalog Number:
VLP-0605



Catalog Number:
VLP-0606



Catalog Number:
VLP-0607