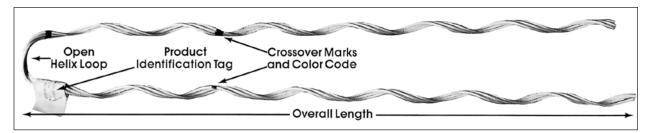
#### **NOMENCLATURE**



Overhead Dead-end Material: Aluminum covered steel.

Crossover Marks: Indicate starting point for application on conductor.

Color Code and Length: Assist in identification of conductor diameter range.

Identification Tape: Identifies catalog number, conductor type, and diameter range.

#### **GENERAL RECOMMENDATIONS**

The Overhead Dead-end, intended for use on aluminumbased conductor, with a diameter range of .229" to .577", is designed to terminate primary, secondary and neutral wire conductors.

The Overhead Dead-end is designed to grip the conductor uniformly to prevent distortion of the conductor. It also offers a unique design that eliminates bolts, nuts, washers and other component parts that may become lost or damaged during installation or in service.

During installation, and at all times, care should be taken to avoid gouging or damaging the aluminum coating of the Overhead Dead-end or the conductor itself.

Overhead Dead-ends should not be used as tools; i.e., come-alongs, pulling-in grips, etc.

Tools are not required nor recommended to install Overhead Dead-ends, except for hot stick applications.

Overhead Dead-ends should be installed on smoothly contoured fittings that have acceptable groove dimensions and diameters to minimize abrasion and fatigue of the loop area. Refer to Tables 1 and 2 in this section, for acceptable dimensions and examples of acceptable fittings. Fittings other than those shown may be used if they have acceptable dimensions.

Overhead Dead-ends should not be used on overhead shield wires.

**RATED HOLDING STRENGTH.** Each of the Overhead Dead-ends will hold 90% of the appropriate ACSR 6/1 conductor's Rated Breaking Strength listed within each conductor diameter range.

When used on aluminum based conductors other than ACSR 6/1, they will develop in excess of 90% of the conductors' Rated Breaking Strength. Holding strengths ratings were established in conjunction with RUS testing requirements for ACSR 6/1 conductor.

When requirements call for Dead-ending conductors larger than .577", use the Distribution-Grip Dead-end listed in the previous section. Also refer to the Dead-end: Coated for applications on jacketed conductors.

When requirements call for Dead-ending conductors associated with bare neutral messengers of self-supported cable used in making service drops, use the Service-Grip Dead-end.

**MATERIAL SELECTION.** The Overhead Dead-end is made from aluminum covered steel wire for compatibility with aluminum based conductors. They also have the same right hand lay direction as most conductors.

**VIBRATION DAMPERS.** On some lines, excessive vibration may require the use of vibration dampers. Utilities that have experienced vibration, or expect to, should consider adding dampers. Consult Preformed Line Products for general guidelines and advice concerning vibration and dampers. Also consult the Motion Control Section.

#### GENERAL RECOMMENDATIONS CONTD.

**CONDUCTOR COMPATIBILITY.** Overhead Dead-ends should be used only on the size and type of conductor for which they are designed. They must have the same lay as the conductor to which they are being applied. When ordering Overhead Dead-ends, make sure to specify the conductor size and type they are to be used on. When using types and/or sizes of conductors not mentioned in these catalog pages, consult Preformed Line Products Company.

**TAPPING.** Tapping over the legs of the Overhead Deadend is **not** recommended. Taps can be made beyond the Dead-end on the conductor or on the tail of the conductor that extends through the Dead-end.

When in doubt about dimensions, fittings, installations, or unusual applications, consult your PREFORMED™ sales representative or Preformed Line Products Co.

#### SAFETY CONSIDERATIONS

- This product is intended for a single (one-time) use and for the specified application, although it may be reapplied twice for retensioning within 90 days of initial installation. CAUTION: DO NOT MODIFY OR REUSE THIS PROD-UCT AFTER 90 DAYS UNDER ANY CIRCUMSTANCES.
- This product is intended for use by trained craftspeople only. This product SHOULD NOT BE USED by anyone who is not familiar with and trained in the use of it.
- When working in the area of energized lines with this product, EXTRA CARE should be taken to prevent accidental electrical contact.
- 4. For PROPER PERFORMANCE AND PERSONAL SAFETY be sure to select the proper size PREFORMED™ product before application.
- **5.** PREFORMED<sup>™</sup> products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.

#### **ACCEPTABLE FITTINGS**

The Overhead Dead-end is designed to be installed on smoothly contoured fittings. Minimum groove widths, minimum and maximum seat diameters for each size are listed in Table 1.

PREFORMED™ Thimble Clevis (TC-17) is suggested for use with all sizes of the Overhead Dead-end. The dimensions of the TC-17 are consistent with the minimum groove widths and seat diameters acceptable for use with the Overhead Dead-end.

A working load of 8500 lbs. has been established on the TC-17 for rigging purposes.

PREFORMED™ Aluminum Thimble Clevis. The ATC 20M, listed in this section, is suggested for use with the Overhead Dead-end sizes from .326" to .577". The dimensions of the ATC 20M are consistent with the minimum groove widths and seat dimensions acceptable for use with those sizes of the Overhead Dead-end.

A working load of 3500 lbs. has been established on the ATC 20M for rigging purposes.

**Table 1. Acceptable Fitting Dimensions** 

		Acceptable Fitting Dimensions (Inches)				
Catalog	Conductor Range	Groove Width	Seat Diameter			
Number	(Inches)	Minimum	Min.	Max.		
OHDE-9534	.229257	1/4	1-1/4	2-3/8		
OHDE-9536	.290325	3/8	1-1/4	2-3/8		
OHDE-9538	.365409	7/16	1-1/2	3		
OHDE-9539	.410460	7/16	1-1/2	3		

NOTE: The Overhead Dead-end is designed to be installed on smoothly contoured fittings. Minimum groove widths and minimum and maximum seat diameters are shown above.



 Cast Iron Thimble Clevis TC-17 For all sizes listed



2. Cast Aluminum ATC-20M For sizes .326" to .577"



3. Spool Insulators

53-4<sub>1</sub>

53-4

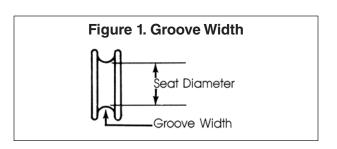
ANSI 53-1 53-2 For all sizes 53-3

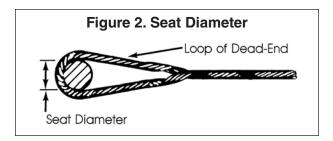
For sizes

.326"-.577"



NOTE: Fittings other than those shown may be used provided they have dimensions shown on Table 1.





For use on: ACSR, Aluminum Alloy All Aluminum, AWAC (6/1) Compacted ACSR



Catalog	Conductor (Inches)		Units	Wt./Lbs.		
Number	Range	Nominal Size	Per Carton		Length (Inches)	Color Code
OHDE-9534	.229257	#4	100	31	24	Orange
OHDE-9536	.290325	#2	100	59	30	Red
OHDE-9538	.365409	1/0	50	47	38	Yellow
OHDE-9539	.410460	2/0	50	60	38	Blue

<sup>\*</sup>These items are obsolete. Distribution-Grip Dead-Ends have replaced Overhead Dead-Ends on the RUS list of acceptable materials.

Right-hand lay standard

#### **EXPLANATORY NOTES:**

- (1) Nominal conductor size indicates one of various combinations of conductor sizes and jacket thickness within each range.
- (2) When in doubt about dimensions, fittings, installations, or unusual applications, consult your PREFORMED™ sales representative or Preformed Line Products Co.