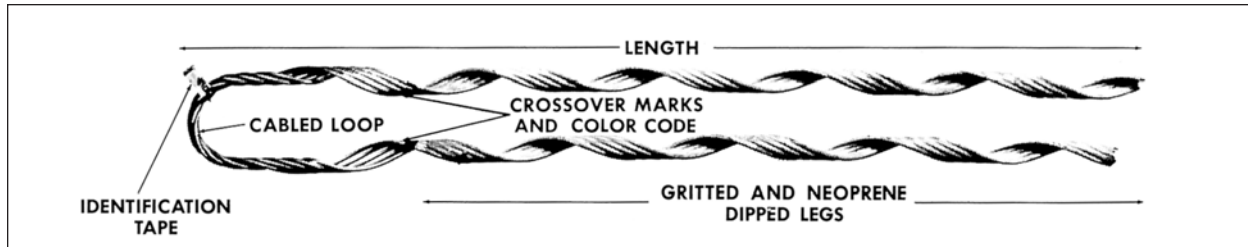


Coated Dead-end

NOMENCLATURE



Crossover Marks: Indicate starting point for application.

Gritted and Neoprene Dipped Legs: Grit is permanently embedded in a coating of neoprene.

Color Code and Length: Assist in identification of conductor size, corresponding to tabular information appearing on catalog pages.

Identification Tape: Shows catalog number and range of outside diameters.

GENERAL RECOMMENDATIONS

Dead-end: Coated, manufactured of aluminum alloy wire, is designed for direct application over conductors jacketed with neoprene, polyethylene, vinyl, or rubber. The sub-setted rods in each leg, bonded together with neoprene, exert a low radial pressure without damaging the jacket. Because it is not necessary to skin the plastic covering, the same Dead-end can be used for either aluminum-base or copper-base conductors.

Coated Dead-ends should not be used over fabric braided conductor. In this case, the fabric should be skinned and a *Distribution-Grip Dead-end* applied.

RATED HOLDING STRENGTH. Holding values of coated Dead-ends are dependent on a combination of several factors:

- Conductor size, type, stranding
- Thickness of jacket
- Type of jacket
- Specific density of various polyethylenes

The multiplicity of combinations makes it impractical to publish a table of "Rated Holding Strengths." As a general guide, the following considerations may be adapted for a certain conductor and construction practice.

When tested under static tension (ram speed of two inches per minute), Coated Dead-ends will hold the full rated breaking strength of all-aluminum and copper conductors, jacketed with neoprene or medium density polyethylene. Static tension results on ACSR approximates the full strength of the aluminum strands plus 10% of the steel core strength.

When Coated Dead-ends are tested under sustained (24 hours) loading, generally lower holding strengths are recorded. This is attributed to the cold-flow characteristics and frictional coefficient of various plastics. The tables appearing on the back of each catalog page are based on long-term sustained load tests and may be considered representative of the cables described.

This data indicates that the highest percentage of rated breaking strength (RBS) is held on medium density polyethylene and vinyl. High density (linear) polyethylene has the lowest percent of RBS.

In addition to the specific densities, the data indicates the percent of RBS will also be reduced by increased jacket thickness.

The test results, expressed in actual pounds of sustained load capacity, make it apparent that values between 500 and 1,000 lbs. should be sufficient to meet field requirements on industrial or commercial service drops and messengered aerial spacer cables. Values exceeding 1,000 lbs. are sufficient for primaries and secondaries in urban distribution.

TAPPING. Coated Dead-ends allow the plastic jacket to remain intact and the conductor continues through the crossover point of the grip. Connectors are applied to the continued tail, with minimum stripping and exposure to corrosion.





RADIO INTERFERENCE. R.I.V. readings and flashover tests indicate Coated Dead-ends, applied over plastic jacketed conductors, have the same satisfactory electrical performance as Dead-ends applied over bare conductors. This statement does not apply to fabric covered conductor. Distribution-Grip (Slack Span/Overhead) Dead Ends are not recommended for use with high temperature/low sag conductors such as ACSS, ACSS/AW, ACSS/TW, ACCR or other types of conductors with loose, and/or annealed outer layer strands. Typically THERMOLIGN® Dead-ends are suggested for these applications. Consult PLP for further information.

Distribution-Grip (Slack Span/Overhead) Dead Ends are not recommended for use with high temperature/low sag conductors such as ACSS, ACSS/AW, ACSS/TW, ACCR or other types of conductors with loose, and/or annealed outer layer strands. Typically THERMOLIGN® Dead Ends are suggested for these applications; consult PLP for further information.



Coated Dead-end

GENERAL RECOMMENDATIONS CONTD.

| ACCEPTABLE FITTINGS | | | | SIZE | | |
|---|---|---|--|-----------------------------|--------------------------|-------------------------|
| CAST | SPOOL INSULATOR | DROP-FORGED | THIMBLES | CONDUCTOR OUTSIDE DIAMETERS | | |
|  |  |  |  DIAMETERS GROOVE WIDTH | | | |
| 3/4" Groove Width | NEMA 53-1 NEMA 53-2 NEMA 53-3 Diameters 1 1/2" to 2 3/4" | 3/4" Groove Width | Diameters 1 1/4" to 2 3/8" | Groove Width 5/16" Min. | Sizes up to .310" O.D. | |
| | | | Diameters 1 1/4" to 2 3/8" | Groove Width 3/8" Min. | Sizes up to .374" O.D. | |
| | | | Diameters 1 1/4" to 2 3/8" | Groove Width 7/16" Min. | Sizes up to .428" O.D. | |
| | | | Diameters 1 1/4" to 2 3/8" | Groove Width 1/2" Min. | Sizes up to .507" O.D. | |
| | | | Diameters 1 1/4" to 2 3/8" | Groove Width 5/8" Min. | Sizes up to .608" O.D. | |
| | | | Diameters 1 1/4" to 2 3/8" | Groove Width 3/4" Min. | Sizes up to .783" O.D. | |
| 7/8" Groove Width | | 1 1/2" Groove Width | 1 1/2" Groove Width | Diameters 1 1/2" to 2 3/8" | Groove Width 7/8" Min. | Sizes up to .888" O.D. |
| 1 1/2" Groove Width | | | | Diameters 1 1/2" to 2 3/8" | Groove Width 1" Min. | Sizes up to 1.005" O.D. |
| | | | | Diameters 1 1/2" to 2 3/8" | Groove Width 1 1/8" Min. | Sizes up to 1.138" O.D. |
| | | Diameters 1 1/2" to 2 3/8" | Groove Width 1 1/2" Min. | Sizes up to 1.550" O.D. | | |

Loops are designed for use with a variety of thimble-clevises, insulators, and thimbles. The fittings appearing in this table have smoothly contoured diameters and adequate groove widths. See page 14-2 for a list of available Thimble Clevises.

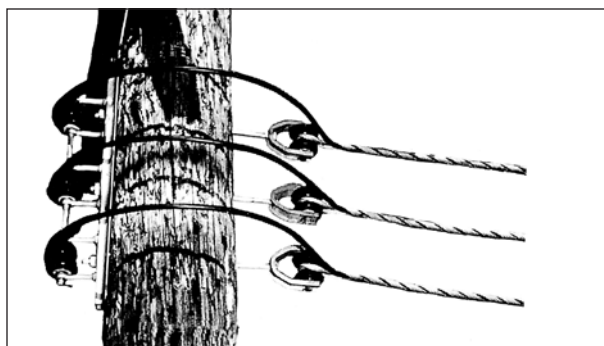
(1) Consult Factory for spool insulators ANSI Class 53-4 and 53-5.

SAFETY CONSIDERATIONS

- This product is 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 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.
- For **PROPER PERFORMANCE AND PERSONAL SAFETY** be sure to select the proper size PLP® product before application.
- PLP® Products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.

Coated Dead-end

For use on:
Plastic Jacketed Conductors
Polyethylene, Neoprene
Vinyl, Rubber



| Catalog Number | Diameter Range (Inches) | | Nominal Conductor Size AWG or MCM | Units | Wt./Lbs. | Length (Inches) | Color Code |
|----------------|-------------------------|------|--|------------|----------|-----------------|------------|
| | Min. | Max. | | Per Carton | | | |
| ND-0500 | .243 | .253 | #6, 7W, 2/64s | 100 | 13 | 16 | Green |
| ND-0501 | .254 | .264 | #6, Solid, 3/64s #6, 6/1, 2/64s | 100 | 14 | 17 | Red |
| ND-0502 | .265 | .272 | #4, Solid, 2/64s | 100 | 14 | 17 | Blue |
| ND-0503 | .273 | .284 | #6, 7W, 3/64s | 100 | 14 | 18 | Orange |
| ND-0100 | .285 | .297 | #6, 6/1, 3/64s #4, 7W, 2/64s | 100 | 15 | 19 | Black |
| ND-0101 | .298 | .310 | #4, Solid, 3/64s #6, 7W, 4/64s | 100 | 17 | 19 | Yellow |
| ND-0102 | .311 | .323 | #4, 7W, 2/64s Al. Alloy #4, 6/1, 2/64s | 100 | 18 | 20 | Blue |
| ND-0103 | .324 | .338 | #6, 7W, 4/64s, Al. Alloy #4, 7W, 3/64s | 100 | 18 | 20 | Orange |
| ND-0104 | .339 | .354 | #4, 7W, 3/64s, Al. Alloy #4, 6/1, 3/64s | 100 | 20 | 21 | Black |
| ND-0105 | .355 | .374 | #4, 7W, 4/64s | 100 | 20 | 22 | Yellow |
| ND-0106 | .375 | .397 | #4, 7W, 4/64s #4, 7W, 5/64s | 100 | 25 | 23 | Red |
| ND-0107 | .398 | .420 | #2, 6/1, 3/64s #2, 7/1, 3/64s | 100 | 26 | 24 | Green |
| ND-0108 | .421 | .445 | #2, 7W, 4/64s, Al. Alloy #1, 7W, 3/64s | 50 | 20 | 27 | Black |
| ND-0109 | .446 | .475 | #1, 7W, 4/64s #4, 7W, 8/64s | 50 | 22 | 28 | Orange |

Conductor may be right-hand lay or left-hand lay.

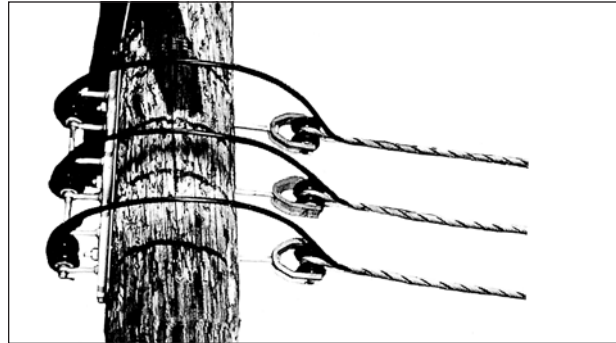
EXPLANATORY NOTES:

- (1) Nominal conductor size indicates one of various combinations of conductor sizes and jacket thickness within each range.
- (2) Holding strength values for representative sizes appear on the reverse side of this page.



Coated Dead-end

For use on:
Plastic Jacketed Conductors
Polyethylene, Neoprene
Vinyl, Rubber



| Catalog Number | Size | Jacketing | Outside Diameter (Inches) | Sustained Load Test Results (Lbs.) | Percent of Breaking Strength |
|----------------|----------------|-------------|---------------------------|------------------------------------|------------------------------|
| ND-0500 | #6, 7W, 2/64s | Poly* | .246 | 450 | 89% |
| ND-0100 | #4, 7W, 2/64s | Poly* | .294 | 750 | 95% |
| ND-0102 | #4, 6/1, 2/64s | Poly* | .313 | 800 | 46% |
| | #4, 7/1, 2/64s | Poly (.929) | .320 | 850 | 39% |
| ND-0103 | #4, 7W, 3/64s | Neoprene | .326 | 800 | 108% |
| ND-0104 | #4, 6/1, 3/64s | Neoprene | .344 | 750 | 43% |
| ND-0106 | #2, 7W, 3/64s | Neoprene | .386 | 600 | 52% |
| | #2, 6/1, 3/64s | Poly* | .386 | 750 | 62% |
| ND-0107 | #2, 6/1, 3/64s | Poly* | .410 | 900 | 34% |
| | #2, 6/1, 3/64s | Neoprene | .410 | 900 | 34% |
| | #2, 7/1, 3/64s | Poly* | .419 | 1,200 | 35% |
| | #2, 7/1, 3/64s | Neoprene | .419 | 1,000 | 30% |

*Low density or medium density polyethylene per ASTM D-1243-58T.

This table is based on actual results of long term sustained load tests and may be considered representative of the cables described. Refer earlier in this section for an explanation of the multiple factors affecting holding strength of Dead-ends Coated.

Coated Dead-end

For use on:
Plastic Jacketed Conductors
Polyethylene, Neoprene
Vinyl, Rubber

| Catalog Number | Diameter Range (Inches) | | Nominal Conductor Size AWG or MCM | Units | Wt./Lbs. | Length (Inches) | Color Code |
|----------------|-------------------------|-------|--|------------|----------|-----------------|------------|
| | Min. | Max. | | Per Carton | | | |
| ND-0110 | .476 | .507 | #1, 19W, 5/64s 1/0, 7W, 4/64s | 50 | 30 | 30 | Blue |
| ND-0111 | .508 | .536 | 1/0, 19W, 6/64s /0, 19W, 5/64s | 50 | 29 | 30 | Red |
| ND-0112 | .537 | .571 | 2/0, 7W, 4/64s 2/0, 19W, 6/64s, Comp. | 50 | 34 | 31 | Black |
| ND-0113 | .572 | .608 | 3/0, 19W, 4/64s 2/0, 19W, 5/64s | 50 | 36 | 33 | Yellow |
| ND-0114 | .609 | .648 | 1/0, 7W, 8/64s 4/0, 7W, 4/64s | 25 | 24 | 33 | Red |
| ND-0115 | .649 | .690 | 1/0, 7W, 10/64s 4/0, 19W, 4/64s | 25 | 26 | 34 | Green |
| ND-0116 | .691 | .735 | 250, 19W, 4/64s 266.8, 18/1, 4/64s | 25 | 30 | 35 | Black |
| ND-0117 | .736 | .783 | 3/0, 7W, 10/64s | 25 | 32 | 36 | Orange |
| ND-0118 | .784 | .834 | 300, 19W, 5/64s 336.4, 19W, 5/64s | 25 | 34 | 38 | Blue |
| ND-0119 | .835 | .888 | 350, 19W, 5/64s 300, 19W, 10/64s Comp. | 25 | 40 | 40 | Black |
| ND-0120 | .889 | .945 | 250, 19W, 10/64s 300, 19W, 10/64s | 25 | 44 | 42 | Yellow |
| ND-0121 | .946 | 1.005 | 450, 37W, 6/64s 500, 37W, 6/64s | 25 | 52 | 44 | Green |
| ND-0122 | 1.006 | 1.070 | 450, 37W, 8/64s 336.4, 19W, 12/64s | 10 | 24 | 45 | Red |
| ND-0123 | 1.071 | 1.138 | 350, 19W, 12/64s 500, 37W, 10/64s | 10 | 24 | 47 | Blue |
| ND-0124 | 1.139 | 1.212 | 636, 37W, 10/64s Comp. 500, 37W, 12/64s | 10 | 30 | 48 | Orange |
| ND-0125 | 1.213 | 1.288 | 795, 61W, 6/64s 795, 37W, 10/64s Comp. | 10 | 30 | 49 | Black |
| ND-0126 | 1.289 | 1.372 | 1033.5, 61W, 6/64s | 10 | 32 | 51 | Yellow |
| ND-0127 | 1.373 | 1.458 | 715, 37W, 14/64s | 10 | 38 | 53 | Green |
| ND-0128 | 1.459 | 1.550 | 795, 37W, 14/64s | 10 | 40 | 56 | Red |

Right-hand or left-hand lay standard

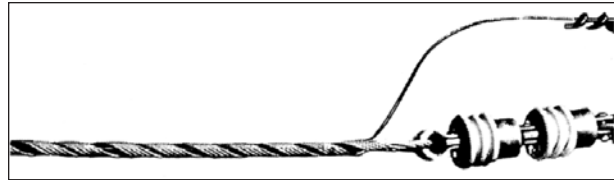
EXPLANATORY NOTES:

- (1) Nominal conductor size indicates one of various combinations of conductor sizes and jacket thickness within each range.
- (2) Cabled loop design furnished for all sizes on this page. See reference chart in this section for acceptable fittings.
- (3) Holding strength values for representative sizes appear on the reverse side of this page.



Coated Dead-end

For use on:
Plastic Jacketed Conductors
Polyethylene, Neoprene
Vinyl, Rubber



| Catalog Number | Size | Jacketing (Specific Gravity) | Outside Diameter (Over Jacket) (Inches) | Sustained Load Test Results (Lbs.) | Percent of Breaking Strength |
|----------------|-----------------------------|------------------------------|---|------------------------------------|------------------------------|
| ND-0110 | 1/0, 7W, 4/64s | Poly. (.918) | .493 | 1,100 | 62% |
| ND-0110 | 1/0, 7W, 4/64s | Neoprene | .493 | 1,650 | 98% |
| ND-0110 | 1/0, 7W, 4/64s | Poly. (.931) | .493 | 2,200 | 101% |
| ND-0110 | #4, 6/1, 8/64s | Poly. (.929) | .502 | 950 | 54% |
| ND-0112 | 2/0, 7W, 4/64s | Poly. (.928) | .539 | 1,800 | 104% |
| ND-0112 | 2/0, 7W, 4/64s | Neoprene | .539 | 2,100 | 99% |
| ND-0115 | 1/0, 7W, 10/64s | Poly. (.982) | .678 | 600 | 33% |
| ND-0115 | 4/0, 6/1, 4/64s | Neoprene | .688 | 2,900 | 36% |
| ND-0116 | 1/0, 7W, 10/64s | Poly. (.949) | .692 | 500 | 28% |
| ND-0116 | 4/0, 7W, .078 | Vinyl | .695 | 1,600 | 47% |
| ND-0116 | 3/0, 7W, 8/64s | Poly. (.927) | .706 | 1,900 | 70% |
| ND-0116 | 250, 19W, 5/64s | Neoprene | .732 | 3,200 | 79% |
| ND-0118 | 336.4, 19W, 4/64s | Poly. (.920) | .791 | 3,600 | 63% |
| ND-0118 | 366.4, 19W, 4/64s | Poly. (.933) | .791 | 4,500 | 79% |
| ND-0118 | 336.4, 19W, 5/64s | Neoprene | .824 | 3,600 | 67% |
| ND-0118 | 4/0, 7W, 10/64s | Poly. (.920) | .830 | 3,000 | 49% |
| ND-0119 | 266.8, 19W, 10/64s | Poly. (.966) | .885 | 1,800 | 40% |
| ND-0120 | 336.4, 19W, .150" Compacted | Poly. (.943) | .910 | 2,600 | 46% |
| ND-0120 | 397.5, 19W, 6/64s | Poly. (.928) | .912 | 4,700 | 72% |
| ND-0120 | 400, 19W, 6/64s | Neoprene | .913 | 5,000 | 80% |
| ND-0121 | 500, 37W, 6/64s | Poly. (.926) | 1.001 | 5,600 | 65% |

This table is based on actual results of long term sustained load tests and may be considered representative of the cables described.

Refer to reference charts in this section for additional information on Holding Strengths.

| | |
|---|-------------------|
| Specific gravity of various polyethylenes: | |
| ASTM Designation D-1248-58T | |
| Low Density (g/cu. cm.) | 0.910-0.925 |
| Medium Density (g/cu. cm.) | 0.926-0.940 |
| High Density (g/cu. cm.) | 0.941-0.965 |