WOOD POLE SPECIFICATION

TYPE
Wood poles shall be Douglas Fir or Red Cedar of the length and class stated in material list. Wood poles shall meet specifications and dimensions in accordance with the requirements of American National Standards Institute (ANSI) 05.1 for Wood Poles - Specifications and Dimensions.

PRESERVATIVE
Wood poles shall be treated in accordance with the requirements of American Wood-Preservative Association (AWPA) standards for pressure processes. The preservative shall be oil-borne Copper Naphthenate or Pentachlorophenol.

Water-borne ACZA (ammonical copper zinc arsenate) preservative is not acceptable.
WOOD CROSSARM SPECIFICATION

TYPE
Wood crossarms shall be Douglas Fir of the length and type stated in material list. Wood crossarms shall meet specifications and dimensions in accordance with the requirements of RUS Specification 1728H-701. All crossarms shall be free of brashy wood, cracks, decay, and insect holes larger than 3/32 of an inch, conform to paragraphs 169, 169a, 170 and 170a of Standard Grading Rules for West Coast Lumber and be of coastal origin. All crossarms shall be branded legibly to a depth of approximately 1/16 inch before treatment and include the manufacturer’s identification symbol, month and year of manufacturer, species of timber, preservation and indication of preservation retention. The letter and numbers shall be not less than 3/8 inch in height.

PRESERVATIVE
Wood crossarms shall be treated in accordance with the requirements of American Wood-Preservative Association (AMPA) standards for pressure processes. The penetration shall be no less than 3 inches for the end surface and from any pin and bolt holes, and at least 3/16 inch from the surface of any face. The preservative shall be oil-borne Pentachlorophenol.

DRILLED HOLE PLACEMENT
The drilled bolt holes shall conform to RUS specification M-19 as follows:

- 8' Crossarm - Type 5
- 10' Crossarm - Type 6
Eight foot crossarms may be drilled for 42" span angle braces, if so specified.
Pole-Line Hardware

Braces, Crossarm, Anti-Sway

Hot Dip Galvanized

Anti-Sway Braces provide increased stability to crossarms where wind and ice can cause unbalanced longitudinal loads. The braces are manufactured from 1/8" x 2 1/2" carbon structural steel. They can be mounted with a 3/4" machine bolt at the pole end with either 5/8" machine bolts or 3/16" lag screws at the crossarm.

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Length (inches)</th>
<th>Approximate Shipping Weight (lbs. per 100 pcs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J71165.1</td>
<td>42</td>
<td>424</td>
</tr>
<tr>
<td>J71165.2</td>
<td>43</td>
<td>479</td>
</tr>
<tr>
<td>J71165.3</td>
<td>49</td>
<td>584</td>
</tr>
</tbody>
</table>

Braces, Crossarm, Flat Steel

Hot Dip Galvanized

Flat Crossarm Braces used in pairs are an inexpensive means of supporting and supporting crossarms. Mounting hole diameters are 3/16-inch for 3/8-inch crossarm mounting bolts and 3/16-inch for pole mounting with a 1/2-inch lag screw. Holes centers are 1 inch from the brace ends, which are rounded for extra safety.

1/8" x 1/4" SIZE

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Length (inches)</th>
<th>M.H.C Distance (inches)</th>
<th>Approximate Shipping Weight (lbs. per 100 pcs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J71126</td>
<td>26</td>
<td>24</td>
<td>215</td>
</tr>
<tr>
<td>J71128 (F)</td>
<td>28</td>
<td>25</td>
<td>235</td>
</tr>
<tr>
<td>J71130</td>
<td>30</td>
<td>28</td>
<td>355</td>
</tr>
<tr>
<td>J71132</td>
<td>32</td>
<td>30</td>
<td>390</td>
</tr>
</tbody>
</table>

1/32" x 7/32" SIZE

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Length (inches)</th>
<th>M.H.C Distance (inches)</th>
<th>Approximate Shipping Weight (lbs. per 100 pcs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J71026</td>
<td>23</td>
<td>24</td>
<td>150</td>
</tr>
<tr>
<td>J71028</td>
<td>28</td>
<td>28</td>
<td>190</td>
</tr>
<tr>
<td>J71030</td>
<td>30</td>
<td>38</td>
<td>260</td>
</tr>
</tbody>
</table>

Braces, Double Span, Steel

Hot Dip Galvanized

One-piece angle steel double span braces are used to support many crossarm constructions. Braces are attached to the underside of the crossarm with 1/2-inch bolts or lag screws and fastened to the pole with a 5/16-inch bolt. The pole mounting section is designed to allow more than ample clearance for mounting.

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Angle Size (inches)</th>
<th>Span (inches)</th>
<th>Drop (inches)</th>
<th>Approximate Shipping Weight (lbs. per 100 pcs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>J1506</td>
<td>1 1/2 x 1 1/2 x 3/16</td>
<td>42</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>J1507</td>
<td>1 1/2 x 1 1/2 x 3/16</td>
<td>48</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>J1514</td>
<td>1 1/2 x 1 1/2 x 3/16</td>
<td>48</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>J1509 (F)</td>
<td>1 3/4 x 1 3/4 x 3/16</td>
<td>60</td>
<td>18</td>
<td>150</td>
</tr>
<tr>
<td>J1510</td>
<td>1 3/4 x 1 3/4 x 3/16</td>
<td>60</td>
<td>18</td>
<td>150</td>
</tr>
<tr>
<td>J1512</td>
<td>1 3/4 x 1 3/4 x 3/16</td>
<td>72</td>
<td>22</td>
<td>220</td>
</tr>
</tbody>
</table>

1/16" x 1/4" LC

Copyright © 1991 Joslyn Manufacturing Co. • A Joslyn Company • 9220 West Fullenweg Avenue • Franklin Park, IL 60131-9494 • (708) 525-1360
BOLT, SPOOL, SINGLE-UPSET, 5/8in x 18in

by CHANCE Utility
Catalog ID: PS7746

* Representative image
Single-upset spool bolt, 5/8”
diameter x 18” shank length, with 6”
thread length and cone pointed end.
Overall length is 22 3/4”. Includes
one square nut with cotter key. Rated
cantilever load is 1,900 lbs. Hot dip
galvanized per ASTM A-153.
Manufactured in compliance with
ANSI C135.31. RUS listed, q - Bolt,
double upset.

Product Details

General

<table>
<thead>
<tr>
<th>Coating</th>
<th>Galvanized, ASTM A-153</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>Steel</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>12400 lb</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Spool Bolts</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td><strong>UPC</strong></td>
<td>096359565123</td>
</tr>
</tbody>
</table>

**Dimensions**

<table>
<thead>
<tr>
<th><strong>Diameter</strong></th>
<th>0.63 in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diameter (Fraction)</strong></td>
<td>5/8 in</td>
</tr>
<tr>
<td><strong>Distance From Pole</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Length</strong></td>
<td>18.00 in</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>2.02 lb</td>
</tr>
</tbody>
</table>

**Logistics**

| **Carton Quantity** | 20                           |
Models to mount one, two, or three transformers

- Double-band mounts for 3kVA - 100kVA transformers

For 3 through 100kVA transformers, use double band cluster mounts. Use any combination of 12" or 24" EEI-NEMA type A and B lugs as required. If adapters (page 58-4) are used with the mounts, 167 through 250kVA transformers with EEI-NEMA type C lugs can be mounted.

<table>
<thead>
<tr>
<th>Mounts Three Transformers</th>
<th>Model</th>
<th>From pole</th>
<th>Wt. (lb./kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C15M36*</td>
<td>6&quot;</td>
<td>40/18.14</td>
<td></td>
</tr>
<tr>
<td>C15M39</td>
<td>9&quot;</td>
<td>54.2/24.58</td>
<td></td>
</tr>
<tr>
<td>C15M3969</td>
<td>9&quot;-6&quot;-9&quot;</td>
<td>50/22.67</td>
<td></td>
</tr>
</tbody>
</table>

* RUS Listed

- Single-band mounts for 3kVA - 50kVA transformers

For 3kVA through 50kVA, single-band cluster mounts may be used with 12" EEI-NEMA type A lugs.

<table>
<thead>
<tr>
<th>Mounts Three Transformers</th>
<th>Model</th>
<th>From pole</th>
<th>Wt. (lb./kg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C6M36*</td>
<td>6&quot;</td>
<td>24.6/11.15</td>
<td></td>
</tr>
<tr>
<td>C6M39</td>
<td>9&quot;</td>
<td>29.4/13.33</td>
<td></td>
</tr>
<tr>
<td>C6M3969</td>
<td>9&quot;-6&quot;-9&quot;</td>
<td>28/12.7</td>
<td></td>
</tr>
</tbody>
</table>

* RUS Listed

For extra pole bearing surface

Use Model C6M36M when extra pole bearing surface is required.

Includes 3/4" transformer mounting hardware and ground clamp for mounting three 3kVA through 50kVA transformers with 12" EEI-NEMA type A lugs. Gives extra pole bearing surface for increased support on extremely soft or older poles. Ideal where appearance requires transformers to remain in a vertical position. Shipping weight: 31.3 lb. / 14.2 kg.
COMMONWEALTH UTILITIES CORPORATION

IFB-05-013 DISTRIBUTION CONDUCTORS
PRIMARY

PRIMARY CONDUCTOR SPECIFICATION

TYPE – COPPER HARD DRAWN
The copper conductors shall be solid bare copper of Class AA and A for overhead distribution line applications of length and size stated in material list. The conductor shall meet ASTM B-1 for hard drawn copper wire.

TYPE – COPPER SOFT DRAWN
The copper conductors shall be solid bare copper of Class B for overhead distribution line applications of length and size stated in material list. The conductor shall meet ASTM B-3 for drawn or annealed copper wire.

TYPE – ALUMINUM
The aluminum conductors shall be stranded 1350 aluminum alloy of Class AA or A for overhead distribution line applications of length and size stated in material list. The conductor shall meet ASTM B-230 for aluminum wire, 1350-H19 for electrical purposes and ASTM B-231 for aluminum conductors, concentric-lay-stranded.
COMMONWEALTH UTILITIES CORPORATION

SECONDARY CONDUCTOR SPECIFICATION

TYPE - DUPLEX, INSULATED

The duplex conductors shall be:
- one bare stranded copper Class AA, and shall meet ASTM B-1 for hard drawn copper wire and ASTM B-8 for concentric-lay-stranded copper conductor, hard, medium-hard, or soft, and
- one stranded copper Class B, and shall meet ASTM B-3 for soft or annealed copper wire and ASTM B-8 for concentric-lay-stranded copper conductor, hard, medium-hard, or soft and shall be insulated with 600 volt, 90°C crosslinked polyethylene insulation and meets or exceeds ICEA S-66-524. The insulated conductor shall be identified by indent marking or non-erasable print at intervals to not exceed 24 inches (610 mm) on the surface of the covering or insulation and include maximum rated voltage, letter or letters for the type of insulation, manufacturer's name, trademark, or other distinctive marking by which the organization responsible for the product can be readily identified and the AWG size or circular mil area of the wire.

The insulated conductor shall be twisted around the neutral conductor in a right hand direction with a lay of 25 to 60 times the diameter of the insulated conductor. The conductors shall be used for overhead distribution line applications of length and size stated in material list.

TYPE - TRIPLEX, INSULATED

The triplex conductors shall be:
- one bare stranded copper Class AA, and shall meet ASTM B-1 for hard drawn copper wire and ASTM B-8 for concentric-lay-stranded copper conductor, hard, medium-hard, or soft, and
- two stranded copper Class B, and shall meet ASTM B-3 for soft or annealed copper wire and ASTM B-8 for concentric-lay-stranded copper conductor, hard, medium-hard, or soft and shall be insulated with 600 volt, 90°C crosslinked polyethylene insulation and meets or exceeds ICEA S-66-524. The insulated conductor shall be identified by indent marking or non-erasable print at intervals to not exceed 24 inches (610 mm) on the surface of the covering or insulation and include maximum rated voltage, letter or letters for the type of insulation, manufacturer's name, trademark, or other.
distinctive marking by which the organization responsible for
the product can be readily identified and the AWG size or
circular mil area of the wire.

The insulated conductors shall be twisted around the bare neutral
conductor in a right hand direction with a lay of 25 to 60 times
the diameter of one of the insulated conductors. The conductors
shall be used for overhead distribution line applications of
length and size stated in material list.

TYPE - QUADROPLEX, INSULATED

The quadruplex conductors shall be:
• one bare stranded copper Class AA, and shall meet ASTM B-1 for
  hard drawn copper wire and ASTM B-8 for concentric-lay-
  stranded copper conductor, hard, medium-hard, or soft, and
• three stranded copper Class B, and shall meet ASTM B-3 for
  soft or annealed copper wire and ASTM B-8 for concentric-lay-
  stranded copper conductor, hard, medium-hard, or soft and
  shall be insulated with 600 volt, 90°C crosslinked
  polyethylene insulation and meets or exceeds ICEA S-66-524.
  The insulated conductor shall be identified by indent marking
  or non-erasable print at intervals to not exceed 24 inches
  (610 mm) on the surface of the covering or insulation and
  include maximum rated voltage, letter or letters for the type
  of insulation, manufacturer's name, trademark, or other
distinctive marking by which the organization responsible for
the product can be readily identified and the AWG size or
circular mil area of the wire.

The insulated conductors shall be twisted around the bare neutral
conductor in a right hand direction with a lay of 25 to 60 times
the diameter of one of the insulated conductors. The conductors
shall be used for overhead distribution line applications of
length and size stated in material list.

TYPE - SINGLE, INSULATED

The single conductor shall be one stranded copper Class B, and
shall meet ASTM B-3 for soft or annealed copper wire and ASTM B-8
for concentric-lay-stranded copper conductor, hard, medium-hard,
or soft and shall be insulated with 600 volt, 90°C crosslinked
polyethylene insulation and meets or exceeds ICEA S-66-524. The
insulated conductor shall be identified by indent marking or non-
erasable print at intervals to not exceed 24 inches (610 mm) on
the surface of the covering or insulation and include maximum
rated voltage, letter or letters for the type of insulation,
manufacturer's name, trademark, or other distinctive marking by which the organization responsible for the product can be readily identified and the AWG size or circular mil area of the wire.

The conductor shall be used for overhead distribution line applications of length and size stated in material list.