Application
Meter socket configurations for services available with Tacoma Power. For enclosed meter pedestals, see Standard C-MR-0020 "Customer Requirements, Enclosed Meter Pedestal".

General Requirements

**Meter sockets must be:**
- Rated for their intended use
- Installed level, plumb, and rigidly secured to the supporting surface
- Covered when socket is energized
- Readily accessible
- Have level workspace, measuring no less than 3 feet by 3 feet, maintained in front of the meter location at all times
- For multiple occupancy buildings:
  - All meters shall be accurately marked to identify the units they serve
  - Labels must be of sufficient durability to withstand removal from rubbing, fading, or environmental exposure
  - Label characters must be a minimum 1/2 in. tall and of a contrasting color or shade from the surface to which they are affixed so that they are easily readable

**Meter sockets must not be:**
- Of the ringless type
- Placed on a pole owned and maintained by Tacoma Power
- Concealed by materials, structures, or vegetation
- Installed below 36 in. from the front working surface or grade to the mid-point of the socket for commercial multi-metering installed in a vertical configuration
- Installed below 28 in. from the front working surface or grade to the mid-point of the socket for residential multi-metering installed in a vertical configuration

The Chief Electrical Inspector may grant special permission.

Meter Sockets

Meter sockets are available in five configurations. The services used with each configuration are shown in Figures 1 through 5 on the following pages. Other applicable reference drawings can be found in Electric Utility Service Equipment Requirements Committee (EUSERC) drawings. Contact the **Meter Shop** if you need further assistance.
### Figure 1
Self-contained 120/240V and 240/480V 1-Phase, 3-Wire System \(^{[1]}\)

<table>
<thead>
<tr>
<th>4 Jaw Socket</th>
<th>Service Type</th>
<th>Service Voltage</th>
<th>Service Size</th>
<th>Meter Height to Center of Meter</th>
<th>Manual Meter Bypass</th>
<th>Safety Socket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 200A</td>
<td>Temporary Power</td>
<td>120/240V</td>
<td>60A – 320A</td>
<td>Optional</td>
<td>Optional</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td>Single Family Garage Shop</td>
<td></td>
<td>200A</td>
<td></td>
<td>REQUIRED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duplex</td>
<td></td>
<td>320A</td>
<td></td>
<td>OPTIONAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Septic System</td>
<td>120/240V</td>
<td>30A – 125A</td>
<td>5’ – 6’</td>
<td>Optional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Traffic Control System</td>
<td></td>
<td>125/320A</td>
<td></td>
<td>REQUIRED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Street Lights</td>
<td>240/480V</td>
<td>125/200A</td>
<td>5’ – 6’</td>
<td>REQUIRED</td>
<td>REQUIRED</td>
</tr>
<tr>
<td></td>
<td>Small Commercial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pedestal (^{[2]})</td>
<td></td>
<td></td>
<td></td>
<td>OPTIONAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DOT Only Pedestal (^{[2]})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DOT Only Street Lights (^{[2]})</td>
<td></td>
<td></td>
<td></td>
<td>REQUIRED</td>
<td></td>
</tr>
</tbody>
</table>

\(^{[1]}\) If 5-jaw socket used for this system, the 5\(^{th}\) jaw shall be removed.

\(^{[2]}\) Listed service pedestals and packages containing integral meter sockets, installed according to the manufacturer’s instructions, are allowed to be at the height for which they are designed.

**Reference**
- EUSERC meter sockets up to 200A: drawings: 300, 301 and 302
- EUSERC bridge nut or bypass area: drawings: 302B, 311, 312, and 339
**Customer Requirements**  
**Meter Socket Configurations**

**Figure 2** Self-contained 5-Jaw Socket 120/208V 2-Phase and Neutral 3-Wire WYE System

<table>
<thead>
<tr>
<th>5 JAW SOCKET</th>
<th>SERVICE TYPE</th>
<th>SERVICE VOLTAGE</th>
<th>SERVICE SIZE</th>
<th>METER HEIGHT TO CENTER OF METER</th>
<th>MANUAL METER BYPASS</th>
<th>SAFETY SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>WYE</td>
<td>TEMPORARY POWER</td>
<td>120/208V</td>
<td>60A – 200A</td>
<td>5' – 6'</td>
<td>OPTIONAL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>APARTMENT/ CONDOMINIUM</td>
<td>125/216V (Downtown Network)</td>
<td>100/200A</td>
<td>6' max. 28' min.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SMALL COMMERCIAL</td>
<td></td>
<td></td>
<td></td>
<td>REQUIRED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SMALL INDUSTRIAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PEDESTAL[^1]</td>
<td></td>
<td></td>
<td></td>
<td>OPTIONAL</td>
<td></td>
</tr>
</tbody>
</table>

[^1] Listed service pedestals and packages containing integral meter sockets, installed according to the manufacturer’s instructions, are allowed to be at the height for which they are designed.

**NOTE:**  
Install 5th jaw in 9 o'clock position as shown and attach jumper wire between 5th jaw and neutral.

![Diagram](image)

**Reference**  
EUSERC multi meter panel drawings: 300 II (H, I and M), 301, 342, 347, and 353
Customer Requirements
Meter Socket Configurations

Figure 3
Self-contained, 7-Jaw Socket 120/208V, 277/480V 3-Phase 4-Wire WYE Systems and
120/240V, 240/480V 3-Phase 4-Wire DELTA System with Safety or Bypass Socket

<table>
<thead>
<tr>
<th>JAW SOCKET</th>
<th>SERVICE TYPE</th>
<th>SERVICE VOLTAGE</th>
<th>SERVICE SIZE</th>
<th>METER HEIGHT TO CENTER OF METER</th>
<th>MANUAL METER BYPASS</th>
<th>SAFETY SOCKET</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEMP POWER, TEMP POWER, COMMERCIAL, COMMERCIAL, INDUSTRIAL, INDUSTRIAL</td>
<td>WYE</td>
<td>PEDESTAL[2]</td>
<td>120/208V WYE</td>
<td>60A – 200A</td>
<td>5’ – 6’</td>
</tr>
</tbody>
</table>

[1] For Maintenance of existing, obsolete services only.
[2] Listed service pedestals and packages containing integral meter sockets, installed according to the manufacturer's instructions, are allowed to be at the height for which they are designed.

Reference
- EUSERC bypass area drawings: 300 II (I), 306
- EUSERC safety socket drawings: 200F, 305, 305A, 311, 312

Detail of Safety Socket
Bypass Section

BRIDGE NUTS MUST BE TORQUED BY METER SHOP BEFORE ENERGIZING
Figure 4  6-Jaw Socket for 120/240V 1-Phase, 3-Wire Bar-Type System with CT (Current Transformer) Enclosure

<table>
<thead>
<tr>
<th>6 JAW SOCKET</th>
<th>SERVICE TYPE</th>
<th>SERVICE VOLTAGE</th>
<th>SERVICE SIZE</th>
<th>METER HEIGHT TO CENTER OF METER</th>
<th>SPACE FOR TEST SWITCH</th>
<th>CT CAN HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEMP POWER, COMMERCIAL, INDUSTRIAL</td>
<td>120/240V</td>
<td>400A – 800A</td>
<td>5’ – 6’ REQUIRED</td>
<td></td>
<td>5’ – 7’ to top of cabinet</td>
</tr>
</tbody>
</table>

Over 800A Requires Switchboard

**NOTES:**
- CT bracket must be rated for 50K AIC.
- 1-1/4" rigid, IMC or EMT nipple between 6 point meter socket and CT enclosure. PVC may be used if cans are bonded together/grounded per NEC.
- Meter and CT’s shall be within 2 ft. and in line of sight.
- Bonding shall be installed per NEC.
- Customer installs CT bracket, terminal lugs, conduit, cabinets and enclosures, meter sockets, grounding and protection equipment.
- The customer is responsible to torque the nuts that secure the CT’s to the customer equipment. The T&D Meter Department will inspect to ensure the nuts are torqued to the manufacturer’s specification.
- Any CT can or switchgear CT cover over 6 ft. in height at the top requires a hinged cover.

Reference
- EUSERC CT bus drawings: 328A and 328B
- EUSERC CT enclosure drawings: 315 – 319, 325, 326, and 354

If service conductors enter CT cabinet from underground, a minimum of 4" of clearance must be maintained from this side of CT bracket. Tacoma Power's largest CT is 6" in diameter.
### Customer Requirements

#### Meter Socket Configurations

**December 16, 2020**

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**Figure 5** 13-Jaw Socket for 3-phase 120/208V, 277/480V 4-wire WYE and 120/240V or 240/480V 4-wire DELTA System with CT (Current Transformer) Enclosure

<table>
<thead>
<tr>
<th>13 JAW SOCKET</th>
<th>SERVICE TYPE</th>
<th>SERVICE VOLTAGE</th>
<th>SERVICE SIZE</th>
<th>METER HEIGHT TO CENTER OF METER</th>
<th>SPACE FOR TEST SWITCH</th>
<th>CT CAN HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TEMPERATURE, COMMERCIAL, INDUSTRIAL</td>
<td>120/208V or 277/480V WYE</td>
<td>400A – 800A</td>
<td>5’ – 6’</td>
<td>REQUIRED</td>
<td>5’ – 7’ to top of cabinet</td>
</tr>
<tr>
<td></td>
<td>36” X 48” HINGED CT ENCLOSURE</td>
<td>120/240V or 240/480V</td>
<td>Over 800A</td>
<td>Requires Switchboard</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
- CT bracket must be rated for 50k AIC.
- 1-1/4” rigid, IMC or EMT nipple between 13 point meter socket and CT enclosure. PVC may be used if cans are bonded together/grounded per NEC.
- Meter and CT’s shall be within 2 ft. and in line of sight.
- Bonding shall be installed per NEC.
- Customer installs CT bracket, terminal lugs, conduit, cabinets and enclosures, meter sockets, grounding and protection equipment.
- Customer is responsible to torque the nuts that secure the CT’s to the customer equipment. The T&D Meter Department will inspect to ensure the nuts are torqued to the manufacturer’s specification.
- Any CT can or switchgear CT cover over 6 ft. in height at the top requires a hinged cover.

For Maintenance of existing, obsolete services only.

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**Reference**
- EUSERC CT enclosure drawings: 315 – 319, 325, 326, and 354
- EUSERC switchboard drawings: 315, 320, 321

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**Transmission & Distribution Standards**

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