### TABLE 183.340(p)—CONDUCTOR SIZES FOR AMPERES—LENGTHS

<table>
<thead>
<tr>
<th>Total current on circuit, amperes</th>
<th>Length of conductor in meters (feet) from source of current to most distant fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1(10)</td>
<td>6.1(20) 7.6(25) 9.2(30) 10.7(35) 12.2(40) 13.7(45) 15.2(50) 16.8(55) 18.3(60)</td>
</tr>
<tr>
<td>5</td>
<td>14 14 14 14 14 14 14 14 12 12 12 12 12 12 12 12 12 12 12</td>
</tr>
<tr>
<td>10</td>
<td>14 14 14 14 14 14 14 14 10 10 10 10 10 10 10 10 8 8 8 8</td>
</tr>
<tr>
<td>15</td>
<td>14 14 12 12 12 12 12 12 8 8 8 8 8 8 8 8 8 8 8 8</td>
</tr>
<tr>
<td>20</td>
<td>12 12 10 10 10 10 10 10 8 8 8 8 6 6 6 6 6 6 6</td>
</tr>
<tr>
<td>25</td>
<td>10 10 10 8 8 8 8 8 6 6 6 6 6 6 6 6 4 4</td>
</tr>
</tbody>
</table>

Other values can be computed by means of the following formula:

\[
\text{cm} = \frac{K \times I \times L \times (\times 2 \text{ for two-wire circuit})}{E}
\]

Where:
- \(\text{cm}\): Circular-mil area of conductor
- \(K\): 3.26 ohms/mil-meter (metric)
  = 0.75 ohm/mil-foot (english)
  (a constant representing the resistance of copper)
- \(I\): Load current, in amperes.
- \(L\): Length of conductor from center of distribution, in meters (feet).
- \(E\): Voltage drop at load, in volts.

(q) If used, each armored cable metallic covering must:
  (1) Be electrically continuous; and
  (2) Be grounded at each end of the run to:
    (i) The metallic hull; or
    (ii) The common ground plate on nonmetallic vessels; and
  (3) Have final sub-circuits grounded at the supply end only.

(r) A portable or temporary electric cord or cable must be constructed and used in compliance with the requirements of § 111.60–13 in subchapter J of this chapter for a flexible electric cord or cable.

§ 183.352 Battery categories.

This section applies to batteries installed to meet the requirements of § 183.310 for secondary sources of power to vital loads, or sources of power to final emergency loads.

(a) Large. A large battery installation is one connected to a battery charger having an output of more than 2 kilowatts (kw), computed from the highest possible charging current and the rated voltage of the battery installation.

(b) Small. A small battery installation is one connected to a battery charger having an output of 2 kw or less, computed as above.