Don’t leave your connections unprotected!

200 Series Insulators
Lug & Ring Insulators

Battery Terminal Insulators
L - Post Insulators

Adapter Terminal Insulators
Specialty Insulators

VTE carries a large line of Electro-Mechanical Devices

Terminal Busbars
Connection Devices
Fuses & Fuse Holders

www.vteworld.com  +1.231.539.8000  info@vteworld.com
In 1982, Ralph VanTielen founded a company named VanTielen Enterprises. This company was created to produce terminal insulation products for marine, industrial, and commercial industries. VanTielen Enterprises was incorporated in 1992 to become VTE, Inc., and has grown to a solid running company with 30 employees and a gross revenue of over 3 million dollars.

Our company’s direction is driven by two criteria:
1) Producing product that is unique or difficult to find
2) Producing product that is significantly less expensive

Over the years, VTE Inc. has added several lines of terminal insulators, as well as a large range of electro-mechanical connectors and fuses. Today we ship products all over the world, and maintain offices in Michigan, USA and in the Netherlands. We have dealers and distributors in over 15 countries, and are continuing to see growth in our markets, as well as increasing our capabilities and output potential.

Our operations consist of various injection molding equipment, capable of creating our numerous terminal insulation products. Our process allows us to produce products at a worldwide competitive price. The versatility of our process allows our product to be manufactured in numerous colors and materials to meet worldwide standards. Our engineering staff can custom design a solution to fit your needs. Our delivery and quality performance exceeds 98%.

Over the last few years, we’ve grown to include electro-mechanical items, including power distribution posts, terminal busbars, power bushings, fuses and fuse holders. Our electro-mechanical products are engineered to work with our terminal insulators to ensure product protection, user protection and standards compliance.

Look through our catalog, browse through our website, or give us a call to see how our product line can create a solution to fit your needs.
Terminal Insulators

When you think terminal insulators, think VTE Inc.

At VTE, Inc., terminal insulators are the foundation of our business. When the company was founded, our vision was clear: manufacturing molded terminal insulators, of high quality, at a reasonable price. We have been designing, developing and manufacturing terminal insulators for over 25 years.

Through the years, we have extended our reach into all areas of marine, industrial and commercial markets. We’ve worked with clients to develop new and exciting products, to fill the needs of these clients, and the needs of entire markets. But these growth areas haven’t changed our outlook: create great product, at a great price.

VTE has been able to keep current with industry standards, making our products the smart choice for developers of standards-compliant products.

Industry Standards

Industry standards state that each ungrounded terminal or stud that is continuously energized must have a boot, nipple, cap, cover, or shield that prevents accidental short-circuiting at the terminals or studs. VTE terminal insulators are a safe and cost-effective way to adhere to these standards. See page 27 for a more detailed list of the standards that we meet.

Product Materials

VTE manufacturers our products in various materials, to comply with different industry standards, and to meet different pricing objectives. Not all insulators are available in all materials. Please contact VTE for material options.

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Description</th>
<th>U.L. 94 Flame Class</th>
<th>Brittleness Degrees C</th>
<th>Service Temp Degrees C</th>
<th>Tensile Strength PSI</th>
<th>Elongation %</th>
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</thead>
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<tr>
<td>V</td>
<td>Vinyl (Standard)</td>
<td>V-2</td>
<td>-36</td>
<td>105</td>
<td>1300</td>
<td>400</td>
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<tr>
<td>F</td>
<td>Vinyl (FR-Material)</td>
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<td>S</td>
<td>Vinyl (High Temp)</td>
<td>V-2</td>
<td>-29</td>
<td>135</td>
<td>2000</td>
<td>450</td>
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</table>

Color

VTE manufactures product in (14) colors. Not all insulators are available in all colors. Please contact VTE for color options.

Standard Colors: 02 - Red 14 - Black
Special Order Colors: 01 - White 06 - Lt Green 10 - Purple 03 - Pink 07 - Dk Green 11 - Tan 04 - Orange 08 - Lt Blue 12 - Brown 05 - Yellow 09 - Dk Blue 13 - Gray

* Commonly in stock

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200 Series Lug & Ring Terminal Caps

VTE 200 Series terminal insulators are designed to protect ring and lug terminals. They are available in sizes from 12 mm up to 34 mm. They are manufactured from PVC, which has a 105°C temperature rating.

TOD = Terminal Outside Diameter

212 Series
12 mm TOD
18 - 2 ga cable

214 Series
14 mm TOD
18 - 2 ga cable

216 Series
16 mm TOD
18 - 2 ga cable

218 Series
18 mm TOD
18 - 2 ga cable

220 Series
20 mm TOD
18 - 2/0 ga cable

222 Series
22 mm TOD
18 - 2/0 ga cable

224 Series
24 mm TOD
18 - 2/0 ga cable

226 Series
26 mm TOD
18 - 2/0 ga cable

228 Series
28 mm TOD
18 - 2/0 ga cable

230 Series
30 mm TOD
18 - 2/0 ga cable

232 Series
32 mm TOD
18 - 4/0 ga cable

234 Series
34 mm TOD
18 - 4/0 ga cable

The 200 Series terminal insulators work with stud and eyelet terminals.

This series can have an extended length for longer terminals, and can be manufactured in (14) colors.

The 200 Series is commonly used on inverters, starters, windlasses, chargers, and other high energy connections.

VTE also offers our products as packaged point-of-sale items. We offer various combinations of our products.
200 Series Lug & Ring Terminal Caps
Part Dimensions / Ordering Information

## Dimensions

<table>
<thead>
<tr>
<th>Base Part Number</th>
<th>A Terminal O.D. (in/mm)</th>
<th>B Post Height (in/mm)</th>
<th>C Ins. Grip Diameter (in/mm)</th>
<th>D Cable Entry Options (See Chart)</th>
<th>E Terminal Length (in/mm)</th>
<th>Nominal Material Thickness (in/mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>212N</td>
<td>.48 / 12</td>
<td>.70 / 17.8</td>
<td>.5 / 12.7</td>
<td>1, 2</td>
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<td>.06 / 1.5</td>
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<tr>
<td>212E</td>
<td>.48 / 12</td>
<td>.70 / 17.8</td>
<td>.5 / 12.7</td>
<td>1, 2</td>
<td>1.25 / 31.8</td>
<td>.06 / 1.5</td>
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<tr>
<td>214N</td>
<td>.55 / 14</td>
<td>.75 / 19.1</td>
<td>.5 / 12.7</td>
<td>1, 2</td>
<td>1.75 / 34.5</td>
<td>.06 / 1.5</td>
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<tr>
<td>214E</td>
<td>.55 / 14</td>
<td>.75 / 19.1</td>
<td>.5 / 12.7</td>
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<td>1.75 / 34.5</td>
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<tr>
<td>216N</td>
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<td>.80 / 20.3</td>
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<tr>
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<td>.80 / 20.3</td>
<td>.5 / 12.7</td>
<td>1, 2</td>
<td>1.75 / 44.5</td>
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<tr>
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<td>.73 / 18</td>
<td>.87 / 22.1</td>
<td>.5 / 12.7</td>
<td>1, 2</td>
<td>1.75 / 44.5</td>
<td>.07 / 1.8</td>
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<tr>
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<td>.73 / 18</td>
<td>.87 / 22.1</td>
<td>.5 / 12.7</td>
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<td>1.75 / 44.5</td>
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<tr>
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<td>.95 / 24.1</td>
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<td>.08 / 2.0</td>
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<tr>
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<td>.81 / 20</td>
<td>.95 / 24.1</td>
<td>.7 / 17.8</td>
<td>1, 2, 3</td>
<td>1.82 / 46.1</td>
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<td>1.05 / 26.7</td>
<td>.7 / 17.8</td>
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<td>.7 / 17.8</td>
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<td>.08 / 2.0</td>
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<td>1.32 / 33.5</td>
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<td>1, 2, 3</td>
<td>1.75 / 44.5</td>
<td>.09 / 2.3</td>
</tr>
<tr>
<td>228E</td>
<td>1.11 / 28</td>
<td>1.32 / 33.5</td>
<td>.75 / 19.1</td>
<td>1, 2, 3</td>
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<td>.09 / 2.3</td>
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<tr>
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<td>1.40 / 35.6</td>
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<td>1.75 / 44.5</td>
<td>.09 / 2.3</td>
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<td>1.40 / 35.6</td>
<td>.75 / 19.1</td>
<td>1, 2, 3</td>
<td>2.25 / 57.2</td>
<td>.09 / 2.3</td>
</tr>
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<td>1.50 / 38.1</td>
<td>.9 / 22.9</td>
<td>1, 2, 3, 4</td>
<td>1.75 / 44.5</td>
<td>.10 / 2.5</td>
</tr>
<tr>
<td>232E</td>
<td>1.28 / 32</td>
<td>1.50 / 38.1</td>
<td>.9 / 22.9</td>
<td>1, 2, 3, 4</td>
<td>2.38 / 60.5</td>
<td>.10 / 2.5</td>
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<tr>
<td>234N</td>
<td>1.37 / 34</td>
<td>1.60 / 40.8</td>
<td>.9 / 22.9</td>
<td>1, 2, 3, 4</td>
<td>2.0 / 50.8</td>
<td>.10 / 2.5</td>
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<tr>
<td>234E</td>
<td>1.37 / 34</td>
<td>1.60 / 40.8</td>
<td>.9 / 22.9</td>
<td>1, 2, 3, 4</td>
<td>2.63 / 66.8</td>
<td>.10 / 2.5</td>
</tr>
</tbody>
</table>

## Cable Gauges

- **18 - 10**: 0.8mm² (3.24m² [0.13") to 5mm² (5.42m² [0.215")]
- **8 - 2**: 8mm² (0.98mm² [0.023") to 32mm² (11.93mm² [0.51")]
- **2 - 2/0**: 32mm² (11.93mm² [0.51") to 62mm² (18.03mm² [0.80")]
- **3/0 - 4/0**: 81mm² (18.33mm² [0.75") to 103mm² (19.88mm² [0.81")]

## Sample 8 Digit Part Number

- **Mold Number**: 212 - 234
- **Length**: N - Normal, E - Extended
- **Cable Entry**: (see above)
- **Material**: T - Vinyl, V - Vinyl
- **Color**: 02 - Red, 14 - Black

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For use with stud-type terminal posts

Finding the correct insulator

1. Determine your terminal’s outside diameter (A above)
2. Determine your terminal’s post height (B above)
3. Determine your terminal’s cable entry (D above)

Match your terminal’s measurements against the table above to find the correct insulator for your application.

Call VTE Inc. for more information on finding the correct insulator for your needs.

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Lug & Ring Terminal Insulators

A more comprehensive line of insulators, offering a wider variety of lug and ring protection. Our lug and ring insulators can be used with starters, generators, alternators, solenoids, and other devices.

**258 Series**
- Protect large terminal connections from shorts
- Terminal Outside Dia: 2.3" / 58.7mm
- Post Height: 2.0" / 50.8mm
- Inside Grip Diameter: .65" / 16.6mm
- Can accept multiple cables, up to 1/0 ga each

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>258N9</td>
<td>Oval, up to 4/0</td>
</tr>
</tbody>
</table>

**216T Series**
- Snap-on insulator, can be removed without cable
- Terminal Outside Dia: .64" / 16.3mm
- Post Height: .74" / 18.8mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>216T8</td>
<td>.27&quot; / 6.9mm</td>
</tr>
</tbody>
</table>

**400 Series**
- Terminal Outside Dia: .6" / 15.2mm
- Post Height: .88" / 22.4mm
- Inside Grip Dia: .44" / 11.2mm
- Terminal Length: 1.19" / 30.3mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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</thead>
<tbody>
<tr>
<td>400N7</td>
<td>.31&quot; / 7.9mm</td>
</tr>
<tr>
<td>400N8</td>
<td>.44&quot; / 11.2mm</td>
</tr>
<tr>
<td>400E4</td>
<td>.18&quot; / 4.6mm</td>
</tr>
</tbody>
</table>

**405 Series**
- Terminal Outside Dia: 1.0" / 25.4mm
- Post Height: .98" / 24.8mm
- Inside Grip Diameter: .50" / 12.7mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>405N1</td>
<td>.13&quot; / 3.3 mm</td>
</tr>
<tr>
<td>405N2</td>
<td>.30&quot; / 7.6mm</td>
</tr>
<tr>
<td>405N9</td>
<td>.50&quot; / 12.7mm</td>
</tr>
</tbody>
</table>

**470 Series**
- Terminal Outside Dia: .85" / 21.6mm
- Post Height: 1.06" / 26.9mm
- Inside Grip Diameter: .63" / 15.9mm
- Terminal Length: 1.81" / 46.0mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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<tbody>
<tr>
<td>470N9</td>
<td>.83&quot; / 21.6mm</td>
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</tbody>
</table>

**485 Series**
- Terminal Outside Dia: .52" / 12.9mm
- Post Height: .45" / 11.4mm
- Inside Grip Diameter: .25" / 6.4mm
- Cable Entry: .25" / 6.4mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>485N9</td>
<td>.25&quot; / 6.4mm</td>
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</tbody>
</table>
Lug & Ring Terminal Insulators
Continuation of our lug & ring terminal insulators

487 Series
- Terminal Outside Dia: 1.26” / 32mm
- Post Height: .98” / 24.9mm
- Inside Grip Dia: 1.0” / 25.4mm
- Available in 4 cable entries

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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<tbody>
<tr>
<td>487N6</td>
<td>.5” / 12.7mm</td>
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<tr>
<td>487N7</td>
<td>.8” / 15.2mm</td>
</tr>
<tr>
<td>487N8</td>
<td>.65” / 16.5mm</td>
</tr>
<tr>
<td>487N9</td>
<td>.75” / 19mm</td>
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<tr>
<td>487X9</td>
<td>.87” / 22.1mm</td>
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</tbody>
</table>

490 Series
- Used for angled connections
- Terminal Outside Dia: .75” / 19.1mm
- Post Height: 1.07” / 27.2mm
- Inside Grip Dia: .50” / 12.7mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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</thead>
<tbody>
<tr>
<td>490N9</td>
<td>.5” / 12.7mm</td>
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</tbody>
</table>

510 Series
- Terminal Outside Dia: .5” / 12.7mm
- Post Height: .8” / 20.3mm
- Inside Grip Diameter: 6.4 - 11.6mm
- Additional lead times may apply

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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<tbody>
<tr>
<td>510N9</td>
<td>.25” / 6.4mm</td>
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</tbody>
</table>

600 Series
- Terminal Outside Dia: 1.57” / 40mm
- Post Height: 1.62” / 41.1mm
- Inside Grip Dia: .65” / 16.8mm
- Available in 7 cable entries

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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</thead>
<tbody>
<tr>
<td>600N1</td>
<td>(1) 31” / 7.9mm</td>
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<tr>
<td>600N2</td>
<td>(2) 31” / 7.9mm</td>
</tr>
<tr>
<td>600N3</td>
<td>(1) 5” / 12.7mm</td>
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<tr>
<td>600N4</td>
<td>(2) 5” / 12.7mm</td>
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<tr>
<td>600N5</td>
<td>(1) 62” / 15.8mm</td>
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<tr>
<td>600N6</td>
<td>(2) 62” / 15.8mm</td>
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<tr>
<td>600N7</td>
<td>Oval up to 4/0 ga</td>
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</tbody>
</table>

800 Series
- Terminal Outside Dia: .73” / 18.5mm
- Post Height: 1.03” / 26.2mm
- Inside Grip Dia: .42” / 10.7mm
- Additional lead times may apply

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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</thead>
<tbody>
<tr>
<td>800N4</td>
<td>.17” / 4.3mm</td>
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<td>800N5</td>
<td>.21” / 5.3mm</td>
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<td>.31” / 7.9mm</td>
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<tr>
<td>800N9</td>
<td>.50” / 12.7mm</td>
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</tbody>
</table>

801 Series
- Terminal Outside Dia: .75” / 19.1mm
- Post Height: 1.03” / 26.2mm
- Inside Grip Dia: .37” / 9.4mm
- Cable Entry: .31” / 7.9mm

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Battery Terminal Insulators

VTE manufactures a complete line of battery terminal insulators. These insulators are designed for use in marine, commercial, industrial and automotive fields. Our battery terminal insulators are available in various materials and colors.

### 409 Series
- Protect stamped or wrapped battery terminals
- Available in 3 cable entries
- Post Height: .83” / 21.0mm
- Cable Entry: 10 - 2/0 ga

<table>
<thead>
<tr>
<th>Part #</th>
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<tbody>
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<td>.50” / 12.7mm</td>
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<tr>
<td>409N8</td>
<td>.30” / 7.6mm</td>
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</table>

### 415 Series
- Protect tapered style battery posts
- Post Height: .74” / 18.8mm
- Cable Entry: 10 - 2/0 ga
- Available in 4 entry sizes

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
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<tbody>
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<td>415N6</td>
<td>.37” / 9.4mm</td>
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<td>.50” / 12.7mm</td>
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<tr>
<td>415N9</td>
<td>.625” / 15.9mm</td>
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### 416 Series
- Protect tapered style battery posts
- Post Height: .76” / 19.3mm
- Inside Grip: .63” / 16.0mm

<table>
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<th>Cable Entry Size</th>
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<tbody>
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<td>.63” / 16.0mm</td>
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### 417 Series
- Snap-on Insulator, can be removed without cable
- Post Height: .91” / 23.1mm
- Inside Grip Diameter: .50” / 12.7mm
- Cable Entry: 1 - 1/0 ga

<table>
<thead>
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### 430 Series
- Protect tapered style battery posts
- Post Height: .83” / 21.1mm
- Inside Grip Diameter: .56” / 14.2mm
- Cable Entry: 2/0, 3/0 ga

<table>
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<tr>
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<tr>
<td>430N8</td>
<td>.88” / 17.3mm</td>
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</table>

### 458 Series
- Insulator for dual post battery
- Attached cover can insulate post when not in use
- Often used with 226 Series Cap

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>458N0</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Battery Terminal Insulators
Continuation of our battery terminal insulators

500 Series
- Protect angle battery terminals
- Left, right, and dual cable entry
- Available in two sizes
- Cable Entry:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>500L7</td>
<td>.5&quot; / 12.7mm</td>
</tr>
<tr>
<td>500L9</td>
<td>.69&quot; / 17.5mm</td>
</tr>
<tr>
<td>500R7</td>
<td>.5&quot; / 12.7mm</td>
</tr>
<tr>
<td>500R9</td>
<td>.69&quot; / 17.5mm</td>
</tr>
<tr>
<td>500D7</td>
<td>.5&quot; / 12.7mm</td>
</tr>
<tr>
<td>500D9</td>
<td>.69&quot; / 17.5mm</td>
</tr>
</tbody>
</table>

553 Series
- Protect side post battery connection
- Available in two sizes

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>553X6</td>
<td>.59&quot; / 15.0mm</td>
</tr>
<tr>
<td>553X9</td>
<td>.90&quot; / 22.9mm</td>
</tr>
</tbody>
</table>

460 Series
- Protect marine battery, Exide 32
- Tabbed finger grip, for easy removal
- Available for positive and negative
- Allows for secondary battery connection

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>460N9</td>
<td>n/a</td>
</tr>
</tbody>
</table>

462 Series
- Protect dual-post battery terminals
- Often used in marine industry
- Attached cap covers post when not in use

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>462N0</td>
<td>n/a</td>
</tr>
</tbody>
</table>

466 Series
- Protect heavy duty battery terminal
- Inside Grip Dia.: .42" / 10.7mm
- Cable Entry:

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>466L,R,D1</td>
<td>.13&quot; / 3.3mm</td>
</tr>
<tr>
<td>466L,R,D2</td>
<td>.30&quot; / 7.6mm</td>
</tr>
<tr>
<td>466L,R,D3</td>
<td>.50&quot; / 12.7mm</td>
</tr>
<tr>
<td>466N9</td>
<td>Oval up to 4/0 ga</td>
</tr>
</tbody>
</table>

468 Series
- Protect heavy duty battery terminal
- Accepts Right, Left, and Dual Cable
- Snaps onto terminal & cable
- Accepts up to 4/0 ga cables

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>468L9</td>
<td>.82&quot; / 20.8mm</td>
</tr>
<tr>
<td>468R9</td>
<td>.82&quot; / 20.8mm</td>
</tr>
<tr>
<td>468D9</td>
<td>.82&quot; / 20.8mm</td>
</tr>
</tbody>
</table>
Battery Terminal Insulators

Continuation of our battery terminal insulators

**740 Series**
- Protect marine wing-nut terminals
- Top insulator swivels to accommodate different cable direction
- Several cable entries
- Top insulator offers single, dual, and multiple cable entry

<table>
<thead>
<tr>
<th>Red</th>
<th>Black</th>
<th>Cable Entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>73014</td>
<td>74013</td>
<td>(1) .31&quot; / 7.9mm</td>
</tr>
<tr>
<td>73024</td>
<td>74023</td>
<td>(2) .31&quot; / 7.9mm</td>
</tr>
<tr>
<td>73034</td>
<td>74033</td>
<td>(1) .5&quot; / 12.7mm</td>
</tr>
<tr>
<td>73044</td>
<td>74043</td>
<td>(2) .5&quot; / 12.7mm</td>
</tr>
<tr>
<td>73054</td>
<td>74053</td>
<td>(1) .62&quot; / 15.8mm</td>
</tr>
<tr>
<td>73064</td>
<td>74063</td>
<td>(2) .62&quot; / 15.8mm</td>
</tr>
<tr>
<td>73073</td>
<td>74073</td>
<td>Ovab up to 4/0 ga</td>
</tr>
</tbody>
</table>

**843 Series**
- Protect tapered battery post
- Left, right, & dual cable entry
- Post Height: .79" / 20.1mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>843L8</td>
<td>.44&quot; / 11.2mm</td>
</tr>
<tr>
<td>843L9</td>
<td>.50&quot; / 12.7mm</td>
</tr>
<tr>
<td>843R8</td>
<td>.44&quot; / 11.2mm</td>
</tr>
<tr>
<td>843R9</td>
<td>.50&quot; / 12.7mm</td>
</tr>
<tr>
<td>843D8</td>
<td>.44&quot; / 11.2mm</td>
</tr>
<tr>
<td>843D9</td>
<td>.50&quot; / 12.7mm</td>
</tr>
</tbody>
</table>

**900 Series**
- Protect tapered battery post
- Left, right, & dual cable entry
- Cable entry ring can utilize zip-tie, securing insulator
- Cable entry: Up to 3/0 ga (4/0 ga when cut and zip tied)

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>900L9</td>
<td>.83&quot; / 20.6mm</td>
</tr>
<tr>
<td>900R9</td>
<td>.83&quot; / 20.6mm</td>
</tr>
<tr>
<td>900D9</td>
<td>.83&quot; / 20.6mm</td>
</tr>
</tbody>
</table>

**975 Series**
- Heavy duty cable series
- Cable entry accepts double cable
- Wide cable entry for large cable
- Cable Entry: Up to 4/0 ga

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>975D8</td>
<td>.80&quot; / 20.3mm</td>
</tr>
</tbody>
</table>

**976 Series**
- Heavy duty cable series
- Triple cable entry permits 3 cables
- Wide cable entry for large cable
- Cable entries can be blocked
- Cable Entry: Up to 4/0 ga

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>976N8</td>
<td>.80&quot; / 20.3mm</td>
</tr>
</tbody>
</table>

Notes
L-Post Terminal Insulators

This series of insulators is designed to protect L-Post terminals, or Flag terminals.

433 Series
- Protect L-Post battery terminals
- Available with left & right entry
- Cable entry: .44” / 11.2mm
- Post Height: 1.04” / 26.4mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>433L5</td>
<td>.44” / 11.2mm</td>
</tr>
<tr>
<td>433R5</td>
<td>.44” / 11.2mm</td>
</tr>
</tbody>
</table>

436 Series
- Protect flat threaded battery posts
- Also protect low-profile L-Posts
- Insulator snaps onto cable
- Can be secured to cable with zip tie
- Available without shroud
- Post Height: .75” / 19.1mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>436N4</td>
<td>.36” / 9.2mm</td>
</tr>
<tr>
<td>436N5</td>
<td>.46” / 12.2mm</td>
</tr>
<tr>
<td>436N7</td>
<td>.64” / 16.2mm</td>
</tr>
<tr>
<td>436S4</td>
<td>.35” / 9.0mm</td>
</tr>
<tr>
<td>436S5</td>
<td>.48” / 12.2mm</td>
</tr>
</tbody>
</table>

437 Series
- Protect L-Post battery terminals
- Insulator snaps onto cable
- Can be secured to cable with zip tie
- Available without shroud
- Post Height: 1.28” / 32.5mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>437N4</td>
<td>.36” / 9.3mm</td>
</tr>
<tr>
<td>437N5</td>
<td>.46” / 11.4mm</td>
</tr>
<tr>
<td>437N7</td>
<td>.48” / 12.3mm</td>
</tr>
<tr>
<td>437S5</td>
<td>.40” / 10.0mm</td>
</tr>
</tbody>
</table>

439 Series
- Protect L-Post battery terminals
- Large design to fit various terminals
- Insulator snaps onto cable
- Can be secured to cable with zip tie
- Post Height: 1.28” / 32.5mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>439N5</td>
<td>.38” / 9.6mm</td>
</tr>
</tbody>
</table>

444 Series
- Protect smaller L-Post terminals
- Available with left or right entry
- Post Height: 1.2” / 30.5mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>444L6</td>
<td>.30” / 7.6mm</td>
</tr>
<tr>
<td>444R6</td>
<td>.30” / 7.6mm</td>
</tr>
<tr>
<td>444L8</td>
<td>.37” / 9.4mm</td>
</tr>
<tr>
<td>444R8</td>
<td>.37” / 9.4mm</td>
</tr>
<tr>
<td>444L9</td>
<td>.44” / 11.2mm</td>
</tr>
<tr>
<td>444R9</td>
<td>.44” / 11.2mm</td>
</tr>
</tbody>
</table>

799 Series
- Protect L-Post battery terminals
- Left, right & dual cable entry
- Post Height: 1.51” / 38.3mm
- Cable Entry: .25” / 6.4mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>799L9</td>
<td>.25” / 6.4mm</td>
</tr>
<tr>
<td>799R9</td>
<td>.25” / 6.4mm</td>
</tr>
<tr>
<td>79909</td>
<td>.25” / 6.4mm</td>
</tr>
</tbody>
</table>

481 Series
- Protect heavy duty L-Post terminals
- Covers exposed terminal base
- Typically used with 433 Series

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>481N9</td>
<td>n/a</td>
</tr>
</tbody>
</table>

www.vteworld.com 1.800.527.9256 (US & Canada) info@vteworld.com
Adapter Terminal Insulators

Adapter Terminal Insulators are designed to protect combination connections, where cables may be detached from the battery terminal.

### 419 Series
- Protect multiple cable terminals
- Insulator can slide back, to access cable connections
- Cable Entry: .53" / 13.8mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>419N9</td>
<td>Open up to 1/0 ga</td>
</tr>
</tbody>
</table>

### 421 Series
- Protect offset battery terminals
- Use with negative terminal, usually left cable entry
- Insulator slides over terminal
- Cable Entry: .60" / 15.2mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>421N9</td>
<td>.60&quot; / 15.2mm</td>
</tr>
</tbody>
</table>

### 422 Series
- Protect offset battery terminals
- Use with positive terminal, usually right cable entry
- Insulator slides over terminal
- Cable Entry: .60" / 15.2mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>422N9</td>
<td>.60&quot; / 15.2mm</td>
</tr>
</tbody>
</table>

### 456 Series
- Protect marine battery terminals
- Works with bolt-on / wing-nut type battery terminals
- Accepts single or multiple cables

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>456N9</td>
<td>Oval up to 4/0 ga</td>
</tr>
</tbody>
</table>

### 457 Series
- Protect marine battery terminals
- Works with bolt-on / wing-nut type battery terminals
- Single cable entry, in 3 sizes

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>457N1</td>
<td>.11&quot; / 2.8mm</td>
</tr>
<tr>
<td>457N2</td>
<td>.32&quot; / 8.1mm</td>
</tr>
<tr>
<td>457N3</td>
<td>.55&quot; / 14.0mm</td>
</tr>
</tbody>
</table>
Adapter Terminal Insulators
Continuation of our adapter terminal insulators.

451 Series
- Protect multiple cable terminals
- Insulator snaps onto cables and can be removed easily
- Cable Entry: .53" / 13.8mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>451N9</td>
<td>Open up to 1/0 ga</td>
</tr>
</tbody>
</table>

453 Series
- Protect offset battery terminals
- Use with negative terminal, usually left cable entry
- Insulator snaps onto cable
- Cable Entry: .50" / 12.7mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>453L9</td>
<td>Open up to 1/0 ga</td>
</tr>
<tr>
<td>453R9</td>
<td>Open up to 1/0 ga</td>
</tr>
<tr>
<td>453D9</td>
<td>Open up to 1/0 ga</td>
</tr>
</tbody>
</table>

454 Series
- Protect offset battery terminals
- Use with positive terminal, usually right cable entry
- Insulator snaps onto cable
- Cable Entry: .50" / 12.7mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>454L9</td>
<td>Open up to 1/0 ga</td>
</tr>
<tr>
<td>454R9</td>
<td>Open up to 1/0 ga</td>
</tr>
<tr>
<td>454D9</td>
<td>Open up to 1/0 ga</td>
</tr>
</tbody>
</table>

476 Series
- Protect heavy duty battery terminals
- Waterproof insulator/cover kit
- Prevents electrical current flow when submerged in salt water
- Includes 479 Series disc

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>776N7</td>
<td>.42&quot; / 10.7mm</td>
</tr>
<tr>
<td>776N8</td>
<td>.62&quot; / 15.8mm</td>
</tr>
<tr>
<td>776N9</td>
<td>.82&quot; / 20.8mm</td>
</tr>
</tbody>
</table>

70480 Series
- Corrosion prevention kit for 8DA & 4DA batteries
- Cable locations can be changed
- Includes all necessary components: bases, covers, terminals, sleeves, plugs, gel
- For use with 1/0 ga - 4/0 ga cables

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>70480</td>
<td>Min: .5&quot; / 12.7mm</td>
</tr>
</tbody>
</table>
Specialty Terminal Insulators

VTE manufactures various insulators, for distinct applications.

### 310 Series
- Grommet used to seal off cable entry holes
- Protect cables from sharp edges
- Fits Hole Diameter: 1.0” / 25.4mm
- Outer Diameter: 1.54” / 39.1mm
- Max Panel Thickness: .060” / 1.5mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>310N4</td>
<td>.25” / 6.4mm</td>
</tr>
<tr>
<td>310N6</td>
<td>.28” / 7.1mm</td>
</tr>
<tr>
<td>310N7</td>
<td>.38” / 9.7mm</td>
</tr>
<tr>
<td>310N8</td>
<td>.40” / 10.2mm</td>
</tr>
<tr>
<td>310N9</td>
<td>.50” / 12.7mm</td>
</tr>
</tbody>
</table>

### 311 Series
- Grommet used to seal off cable entry holes
- Protect cables from sharp edges
- Fits Hole Diameter: 1.0” / 25.4mm
- Max Panel Thickness: .06” / 1.5mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>311N9</td>
<td>.80” / 20.3mm</td>
</tr>
</tbody>
</table>

### 375 Series
- Protective covers for bulkhead connector
- Available in “L” or “T” shape
- Insulator snaps onto cable
- Accepts 2/0 - 4/0 ga cables

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>375L5</td>
<td>.6” x 1.2” /</td>
</tr>
<tr>
<td>375T5</td>
<td>15.2mm x 30.5mm</td>
</tr>
</tbody>
</table>

### 464 Series
- Protect reset circuit breaker
- Removable side entries to customize application
- Top cover presses down onto circuit breaker posts

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>464N0</td>
<td>.24” / 6.2mm</td>
</tr>
</tbody>
</table>

### 478 Series
- Weatherproof grommet holes
- Works with 480 Series 8D kit, or sold separately
- Inner ring seals out moisture
- Fits Hole Diameter: 1.0” / 25.4mm
- Max Panel Thickness: .09” / 2.3mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>478N9</td>
<td>.77” / 19.6mm</td>
</tr>
</tbody>
</table>

### 479 Series
- Protect connection points from accidental shorts
- Available with 2 hole sizes
- For use with 8 Point Power Posts
- For use with 480 Series 8D Kit
- For use with 476 battery insulator kit

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>479A9</td>
<td>.63” / 16mm</td>
</tr>
<tr>
<td>479B9</td>
<td>.77” / 19.6mm</td>
</tr>
<tr>
<td>479N9</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Specialty Terminal Insulators

Continuation of our specialty terminal insulators.

550 Series
- Covers engine sensors
- Generous height and downward wire exit
- Retainer lip keeps cover in place
- Wall Thickness: ~1mm
- Available in 2 cable entries

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>550N6</td>
<td>.25&quot; / 8.4mm</td>
</tr>
<tr>
<td>550N8</td>
<td>.38&quot; / 9.5mm</td>
</tr>
</tbody>
</table>

560 Series
- Covers engine sensors
- Generous height and downward wire exit
- Retainer lip keeps cover in place
- Wall Thickness: ~2.8mm

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>560N4</td>
<td>.25&quot; / 8.4mm</td>
</tr>
</tbody>
</table>

621 Series
- Small straight sensor cover
- Molded in ring allows for greater strength
- Typically used with oil and water temperature sensors

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>621N9</td>
<td>.25&quot; / 8.4mm</td>
</tr>
</tbody>
</table>

725 Series
- Accepts terminals up to 24mm
- Tunnel cap allows for various cable entry sizes and shapes
- Insulator can be zip-tied to cable
- Maximum terminal OD: .94" / 24mm
- Maximum terminal height: .99" / 25.3mm
- Available in halogen-free material

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>224T9</td>
<td>Various Inserts</td>
</tr>
</tbody>
</table>

729 Series
- Accepts terminals up to 28mm
- Tunnel cap allows for various cable entry sizes and shapes
- Insulator can be zip-tied to cable
- Maximum terminal OD: 1.1" / 28mm
- Maximum terminal height: 1.2" / 30.7mm
- Available in halogen-free material

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>228T9</td>
<td>Various Inserts</td>
</tr>
</tbody>
</table>

735 Series
- Accepts terminals up to 34mm
- Tunnel cap allows for various cable entry sizes and shapes
- Insulator can be zip-tied to cable
- Maximum terminal OD: 1.52" / 34mm
- Maximum terminal height: 1.3" / 38.6mm
- Available in halogen-free material

<table>
<thead>
<tr>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>234T9</td>
<td>Various Inserts</td>
</tr>
</tbody>
</table>
Specialty Terminal Insulators

VTE manufactures various insulators, for distinct applications.

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
<th>Part #</th>
<th>Cable Entry Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>795</td>
<td>Protect multiple cable connections from shorts</td>
<td>795</td>
<td>.7” / 17.8mm</td>
</tr>
<tr>
<td></td>
<td>Snap on top allows access to connection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single Entry Diameter: .7” / 17.8mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>830</td>
<td>Cover for 50 amp 2 pole battery charger connector</td>
<td>830N0</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Made from fire retardant PVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>831</td>
<td>Cover for 175 amp 2 pole battery charger connector</td>
<td>831N0</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Made from fire retardant PVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>832</td>
<td>Cover for 350 amp 2 pole battery charger connector</td>
<td>832N0</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>Made from fire retardant PVC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>840</td>
<td>Small right angle sensor cover</td>
<td>840N9</td>
<td>.25” / 6.4mm</td>
</tr>
<tr>
<td></td>
<td>Typically used with oil or water temperature sensors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body opening: .81” / 20.6mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cable Entry: .25” / 6.4mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>956</td>
<td>Protect connection points, or battery array connections</td>
<td>956D9</td>
<td>.7” / 17.8mm</td>
</tr>
<tr>
<td></td>
<td>Top lid allows for easy access to connection point</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accepts up to 2/0 cables</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Electro-Mechanical Devices

VTE Inc. is a company on the move.

Not being complacent to provide just terminal insulators, VTE has become pioneers in the field of improved electro-mechanical devices. These devices fill a void in our marketplace, by providing high quality, low cost solutions. These devices are designed and manufactured with effectiveness and compliance in mind, so our customers can rest assured that their products will meet applicable industry standards.

We started by developing a safe and effective way to pass electrical current through a barrier. These power bushings are rated up to 500 amps @ 12 vdc, and can easily secure multiple cables. They are available as weatherproof models, for use in water resistant enclosures.

We then started working with power distribution. We developed several power distribution posts, for single and multiple cables. We also developed a few devices for providing battery system access from outside a vehicle. These devices provide outside access to electrical systems, when getting to the battery system could be difficult or dangerous. More recently, we’ve developed a bulkhead connector, for the marine industry. This device safely connects the house battery system to the engine compartment charging system.

Next we focused on terminal busbar solutions. We brought out a 12 point busbar with cover, and then added a 10 point busbar, a 4 point busbar, a dual 4 point terminal busbar, and more recently, a quick connect tab-type busbar.

Even after this level of new market growth, we’re still developing and adding new products. Our engineering and design staff are always developing new ways to create value for our customers. Although we’ve been able to present our current new product lines in this catalog, we urge you to visit our website, where you can find and research our newest, and our most up-to-date offerings.

Generally, our electro-mechanical products are rated for use up to 48 vdc. Other voltage ratings and current specifications are included with each item. For voltages over 48 vdc, please contact VTE.

Blue-Dot Technology

Where applicable, some of our products contain our Blue-Dot Technology. This technology indicates when a conductive fastener (nut) is utilized in place of a mechanical fastener. These conductive fasteners will carry current in a more efficient fashion, and must be kept in their factory installed location.

Failure to keep the conductive fastener in its factory installed location will result in degraded performance. Failure to keep the mechanical fastener in its factory installed location can result in premature device failure. Fasteners must be kept in the location installed by the factory.

www.vteworld.com  1.800.527.9256 (US & Canada)  info@vteworld.com
Electrical Terminal Busbars

VTE’s Terminal Busbars are used to distribute power to several locations. Each busbar has several connection points, some with different sizes. Our busbars can be used in a variety of applications.

10 Point Terminal Busbar

- Multiple connection points, to accommodate various connections
- Secure way to consolidate ground systems
- Maximum Voltage: 48 VDC
- Maximum Amperage: 200 Amps @ 12 vdc
  - 20 amps per connection point @ 12 vdc
- (2) 1/4” (~6mm) stainless terminal posts
- (10) connection points, #8-32 stainless steel screws
- Stainless steel hex nuts and washers
- Base material: 16% glass-filled nylon (red & black)
- Mounting center: 5.19” (131.8mm)

12 Point Terminal Busbar

- Multiple connection points, to accommodate various connections
- Secure way to consolidate ground systems
- Maximum Voltage: 48 VDC
- Maximum Amperage: 240 Amps @ 12 vdc
  - 20 amps per connection point @ 12 vdc
- (1) 1/4” (~6mm) stainless terminal posts
- (12) connection points, #8-32 stainless steel screws
- Stainless steel hex nuts and washers
- Base material: 16% glass-filled nylon (red & black)
- Mounting center: 4.66” (118.4mm)

Tab-Type Terminal Busbar

- Highly cost effective solution for fast busbar connections
- Average of 255% faster than installing spade type terminals
- Average of 340% faster than installing ring type terminals
- Available with 10, 20 or 30 connection points
- Optional cover kit available, to comply with industry standards
- Maximum voltage: 48vdc
- Overall amperage: 120 amp @ 12 vdc
  - Individual amperage: 20 amp @ 12 vdc
- Busbar can be mounted in any orientation
- Connection plate: nickel-plated brass
- Post hardware: Stainless Steel

Kit includes 12 Point Busbar 218 Series insulator, and cover

NEW

18 www.vteworld.com 1.800.527.9256 (US & Canada) info@vteworld.com
Electrical Terminal Busbars

VTE's Terminal Busbars are used to distribute power to several locations. Each busbar has several connection points of different size, and can be used in a variety of applications.

### 3 Point High Amperage Terminal Busbar
- Fasten large high current cables to a high amperage source
- Well suited for distributing power to marine bow thrusters
- Maximum Voltage: 48 VDC
- Maximum Amperage: 700 amps total @ 12 vdc
- (1) 3/8” (~10mm) stainless steel center post
- (2) 5/16” (~8mm) stainless steel connection posts
- Stainless steel hex nuts and washers
- Base material: 16% glass-filled nylon (red & black)
- Connection Plate: Nickel-Plated Brass
- 375T terminal insulator snaps onto cables to help comply with industry standards

### 4 Point Terminal Busbar
- Multiple connection points, to accommodate various connections
- Secure way to consolidate ground systems
- Maximum Voltage: 48 VDC
- Maximum Amperage: 210 Amps @ 12 vdc
- 1/4” (~6mm) stainless steel terminal post
- 3/8” (~10mm) or 5/16” (~8mm) stainless steel connection posts
- Stainless steel hex nuts and washers
- Base material: 16% glass-filled nylon (red & black)
- Mounting center: 4.66” (118.4mm)

### Dual 4 Point Terminal Busbar
- Multiple connection points, to accommodate various connections
- Secure way to consolidate positive and negative systems
- Maximum Voltage: 48 VDC
- Maximum Amperage: 250 Amps total @ 12 vdc
- Positive busbar: 3/8” (~10mm) posts / Negative busbar: 5/16” (~8mm)
- (3) additional 20 amp connection screws per side
- Available as Positive/Negative, All Positive, or All Negative
- Stainless steel hex nuts and washers
- Base material: 16% glass-filled nylon (red & black)
- Mounting center: 4.9” (124.5mm)
8 Point Power Post & Insulation Kits

VTE’s 8 Point Power Distribution Posts connect several wires / cables to a central location. These devices can be used to deliver power to a control panel, feed multiple low-current devices, or when grounding wires / cables.

**Eight Point Power Distribution Post**

- Create reliable, trouble-free circuit paths to control systems
- (8) #8-32 connection points carry up to 20 amps each @ 12 vdc
- Maximum voltage: 48 vdc
- Available post sizes: 1/4" (~6mm), 5/16" (~8mm), 3/8" (~10mm)
- Base Material: Glass-Filled Nylon
- Connection Post: Stainless Steel
- Conductive Disk: Nickel-Plated Copper Alloy
- Conductive Nuts: Tin-Plated Copper Alloy
- Mechanical Fastener Nuts: Stainless Steel
- Mounting Center: 2.5" / 63.5mm
- Kit packaging available with 1, 2, or multiple cable entry
- Terminal Insulation Kits help comply with ABYC, USCG and ISO safety standards

<table>
<thead>
<tr>
<th>Part #</th>
<th>Post Size</th>
<th>Total Amperage</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>77825N02</td>
<td>1/4&quot; (.25&quot;) / 6.4mm</td>
<td>160 amp</td>
<td>Red</td>
</tr>
<tr>
<td>77825N14</td>
<td>1/4&quot; (.25&quot;) / 6.4mm</td>
<td>160 amp</td>
<td>Black</td>
</tr>
<tr>
<td>77831N02</td>
<td>5/16&quot; (.31&quot;) / 7.9mm</td>
<td>160 amp</td>
<td>Red</td>
</tr>
<tr>
<td>77831N14</td>
<td>5/16&quot; (.31&quot;) / 7.9mm</td>
<td>160 amp</td>
<td>Black</td>
</tr>
<tr>
<td>77837N02</td>
<td>3/8&quot; (.37&quot;) / 9.5mm</td>
<td>160 amp</td>
<td>Red</td>
</tr>
<tr>
<td>77837N14</td>
<td>3/8&quot; (.37&quot;) / 9.5mm</td>
<td>160 amp</td>
<td>Black</td>
</tr>
</tbody>
</table>

@ 12 vdc

**Single Point Power Distribution Post**

Power Distribution Posts are designed to securely fasten multiple cables to a single point. They can be used for positive or negative wires / cables, and come in 4 post sizes to fit your needs and budget. The mounting bases are available in two sizes.

- Used to bind two or more voltage wires/cables
- Small Base Post Size: #10, 1/4", 5/16", 3/8" (~5mm, ~6mm, ~8mm, ~10mm)
- Large Base Post Size: 1/4", 5/16", 3/8" (~6mm, ~8mm, ~10mm)
- Maximum Voltage: 48 VDC
- All Hardware: Stainless Steel
- Base Material: Glass-Filled Nylon
- Available Colors: Red & Black

<table>
<thead>
<tr>
<th>Part #</th>
<th>Post Size</th>
<th>Total Amperage</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>77010</td>
<td>#10 (.19&quot;) / 4.8 mm</td>
<td>160 amp*</td>
<td>Small</td>
</tr>
<tr>
<td>77025</td>
<td>1/4&quot; (.25&quot;) / 6.4 mm</td>
<td>160 amp*</td>
<td>Small</td>
</tr>
<tr>
<td>77031</td>
<td>5/16&quot; (.31&quot;) / 7.9 mm</td>
<td>160 amp*</td>
<td>Small</td>
</tr>
<tr>
<td>77037</td>
<td>3/8&quot; (.38&quot;) / 9.5 mm</td>
<td>160 amp*</td>
<td>Small</td>
</tr>
<tr>
<td>77125</td>
<td>1/4&quot; (.25&quot;) / 6.4 mm</td>
<td>160 amp*</td>
<td>Large</td>
</tr>
<tr>
<td>77131</td>
<td>5/16&quot; (.31&quot;) / 7.9 mm</td>
<td>160 amp*</td>
<td>Large</td>
</tr>
<tr>
<td>77137</td>
<td>3/8&quot; (.38&quot;) / 9.5 mm</td>
<td>160 amp*</td>
<td>Large</td>
</tr>
</tbody>
</table>

* Minimum based upon 20+ minutes at rated amperage. Due to the nature of a binding post, current shouldn’t pass through post, thereby negating amperage rating. Individual results may vary. Maximum amperage is @ 12 vdc

Our products are designed and certified to be used in 0 - 48 vdc.

For voltages over 48 vdc, please contact VTE.

The maximum amperage is stated with each item. We design and test to the extreme of the product.

In all cases, the product is tested to ‘full load’ until the temperature stabilizes, then the full load is maintained for 20 minutes, until no additional temperature rise is observed.

For 8-Point insulation kits, please visit www.vteworld.com
Power Bushings
VTE has developed several connection devices, to pass current through barriers, or connect multiple cables to a single point.

**Copper Core Power Bushing**
- Low cost, fast install power bushing
- Available in 550 amp and 350 amp (brass core)
- Can be fitted to panels up to 3/8" (9.5mm) thick
- Fraction of cost relative to similar power bushings
- Bushing Material: Glass-Filled Nylon
- Post Material: Ni Plated Steel (Copper conductivity core)
- Bushing can be fitted with 259 Series terminal insulator
- When used with terminal insulators, complies with industry standards
- Copper Core : 550 amp at 12 vdc
- Brass Core : 350 amp at 12 vdc
- Maximum Voltage: 48 vdc

**Power Bushings**
- Available in 500 amp (1/2") or 300 amp (3/8")
- Panel thickness up to 3/8" (9.5mm)
- Custom panel thickness available
- Less than 10 degree rotation
- High anti-rotation torque
- Maximum Voltage : 48 vdc
- Amperage Maximums are @ 12 vdc
- Base Material: Glass-Filled Nylon (red & black)
- Post Material: Brass
- Weatherproof models include 232 Series terminal insulator
- Weatherproof models meet various industry standards

**Pass Thru Power Post**
Pass Thru Power Posts were developed as a cost effective alternative to our power bushings. They are designed to be used in environments where the higher amperage ratings of our power bushings is not needed. We offer a commercial version, for general applications, and a marine version, which resists salt water corrosion.
- Allows current to be passed through a barrier
- Allows for multiple connections on either side of barrier
- Available in Marine or Commercial class
- Lower cost than power bushing
- Can be installed with regular drill bits
- Maximum voltage: 48 vdc
- Maximum amperage: 250 amps @ 12 vdc
- Base material: glass-filled nylon
- Available in Red & Black
- Can be covered with terminal insulators, complying with ABYC, USCG and ISO standards
Connection Assemblies

Our connection assemblies are designed for passing current through a panel or barrier. Robust mounting points ensure safe and reliable connections. Terminal insulators can be used to protect against accidental shorts.

**Brass Core Jumper Bushing**

- Pass electrical current through a panel or barrier
- Can accommodate barrier thickness from 1/16” up to 3/8” (1.5mm - 9.5mm)
- Nickel plated steel connection post, with brass conductivity core
- High strength glass-filled nylon bushing, high anti-rotation
- Nickel plated steel connection post
- Available as single, pairs, and with mounting panel
- Maximum Voltage: 48 vdc
- Maximum Amperage: 350 amp @ 12 vdc
- Included post insulator protects connection point from accidental shorts
- When used with terminal insulators, meets ISO, USCG, and ABYC safety standards

Our flat mount kit is used when installing a pair of bushings to sheet metal. The included adhesive decal serves as a drilling template.

- 1 Red Brass Core Jumper Bushing
- 1 Black Brass Core Jumper Bushing
- 1 Adhesive decal for drilling guide
- 1 Plastic divider

**Auxiliary Power Connector**

- Low cost solution to attaching charger cable clamps
- For panel thickness up to 3/8” (9.5mm)
- Maximum Amperage: 50 Amps @ 12 vdc
- Maximum Voltage: 48VDC
- Provides connection at accessible side of installation, when battery is not readily accessible, or dangerous to reach
- Each connector has a terminal insulator, to protect against accidental shorts
- Use optional terminal insulator (224 Series) to protect internal connections
- Connection post size: 3/8” (~10mm)
- Base Material: Glass-Filled Nylon

**Our bracket mount kit includes an adapter bracket for fastening a pair of bushings. The laser cut bracket utilizes “Double D” slots for high anti-rotation.**

- 1 Red Brass Core Bushing
- 1 Black Brass Core Bushing
- 1 Plastic divider
- 1 Mounting bracket, powder coated & pre-drilled
**Connection Devices, cont.**

**Bulkhead Connector**
- Connect engine battery system to house battery system
- Anti-rotation design allows for single person installation
- Can support up to 3 cables on each connection
- High strength polypropylene faceplates
- Designed for foil-covered sound insulation on engine side
- Bulkhead thickness from 1/2” to 2” (12mm to 50mm)
- Insulation thickness from 1/2” to 2” (12mm to 50mm)
- Brass connection posts
- Meets NEMA rating 3S, IP54 equivalent
- 15° c temperature rise at 500 amp
- Optional terminal insulators: 232 Series, 375L, 375T
- When used with terminal insulators, meets ISO, USCG, and ABYC safety standards

**Battery Terminals**
*Commonly used battery terminals for marine and commercial use.*

**3516, 3517 Adapter Battery Terminals**
- Commonly used in marine industry, to easily remove cables
- Converts “tapered” SAE post to wing-nut and stud terminal
- Accepts 8 ga thru 4/0 ga (~6mm thru ~120mm)
- Positive Post: 3/8” (~M10)
- Negative Post: 5/16” (~M8)
- Polarity Specific

**3534, 3535 Heavy Duty Battery Terminals**
- Complies with Mil Spec A52425-1 / A52425-2
- Low profile design measures only 3/4” high
- Long bolt permits additional power connections
- Zinc-plated steel hardware included
- Lead construction
- Polarity Specific

www.vteworld.com +1.231.539.8000 info@vteworld.com
Fuses & Fuse Holders

Various solutions for over-current protection

VTE is pushing forward once again. When developing our electro-mechanical and connection device line, we recognized a weakness in our market: safe & effective over-current protection, at a cost-effective pricepoint. Utilizing our accomplished design team, VTE set out to develop a fuse holder line that would better protect your investment, and also be attractive to manufacturing budgets.

This work and development paid off. We first developed a MEGA brand fuse holder. This fuse holder works with the MEGA brand of fuses up to 250 amp. To protect your terminals, we also include a pair of our 405 Series terminal insulators, to help your devices comply with industry standards.

Next, we turned our sights to the ANL fuse line. We developed ways to secure and protect your critical components, but still introduce a significant cost savings. Our design team brought out a low-cost medium duty ANL Fuse Holder. We followed up by developing a high-current version, capable of securing up to 750 amp fuses. We offer both medium duty and heavy duty ANL Fuse Holders with terminal insulation, to comply with industry safety standards.

Recently, we’ve developed a T-Class fuse holder to protect critical electrical components. Our T-Class Fuse Holder was developed with heat dissipation properties incorporated into its design. This ensures safe operation even in high current environments. Our T-Class Fuse Holder kit comes with a protective cover, to ensure compliance with safety regulations.

To augment our higher current protection, VTE also offers a line of smaller fuses and fuse holders, and a line of resettable circuit breakers. These lines offer current protection from 2 up to 100 amps, depending on the series. Our smaller fuse holders offer protective caps, and generous leads for connecting to your systems.
Plug-In Fuses & Holders, Circuit Breakers

VTE offers plug-in fuses of varying sizes and ratings. We also offer fuse holders, and resettable circuit breakers. These fuse products are available through the USA VTE Warehouse, and our worldwide distributors.

**Mini Fuses & Holder**
- Highly cost effective solution for mini fuse applications
- Fuse Amperage: 2, 3, 4, 5, 7.5, 10, 15, 20, 25, 30, 35
- Fuse holder includes weatherproof protective cover
- Fuse holder available with 16, 14 or 12 ga cables
- Fuse holder overall length: 12" (304.8mm)
- Maximum Voltage: 32 vdc

**Auto (ATO) Fuses & Holder**
- Highly cost effective solution for Auto fuse applications
- Fuse Amperage: 2, 3, 4, 5, 7.5, 10, 15, 20, 25, 30, 35
- Fuse holder includes weatherproof protective cover
- Fuse holder available with 14 or 12 ga cables
- Fuse holder overall length: 12" (304.8mm)
- Maximum Voltage: 32 vdc

**Maxi Fuses & Holder**
- Highly cost effective solution for Maxi fuse applications
- Fuse Amperage: 20, 30, 35, 40, 50, 60, 70, 80, 100
- Fuse holder includes weatherproof protective cover
- Fuse holder overall length: 17.25" (438.2mm)
- Fuse holder available with 10 or 8 ga cables
- Maximum Voltage: 32 vdc

**Resettable Circuit Breakers**
- Highly cost effective solution for reset fuse applications
- Can be used with 464 Series terminal insulator to meet USCG, ABYC and ISO safety standards
- Amperage Available: 20, 30, 40, 50
- Mounting Center: 1.54" (39.1mm)
- Maximum Voltage: 32 vdc

www.vteworld.com  +1.231.539.8000 info@vteworld.com
Medium and High Amperage Fuses & Holders

VTE has developed our own line of Fuse Holders. These allow you to protect medium and high amperage devices, such as winches, pumps, motors, and other heavy draw devices.

**ANL Fuse & Holder**
- Fuse Amperage Available: 50, 80, 100, 150, 200, 250, 300
- Ceramic Fuse Amperage: 300, 350, 400, 500
- ANL Fuse Holder Kit includes (2) 487 Series terminal insulators, fastener hardware, and protective cover
- 5/16" (8mm) stud accepts up to 2/0 ga terminal
- Base Material: Glass-Filled Nylon
- Post Material: Stainless Steel
- Lock Washer: Stainless Steel
- Flat Washer: Brass
- Available in Red & Black

**ANL Hi-Amp Fuse Holder**
- Accepts up to 750 Amp fuse
- Maximum Voltage: 32 VDC
- Post Size Available: 5/16", 3/8", 10mm
- Included cover helps comply with safety regulations
- Post Material: Stainless Steel
- Flat Washer: Stainless Steel
- Base Material: Glass-Filled Nylon
- Available in Red & Black
- High amperage fuses sold separately

**Mega Fuses & Holder**
- Cost effective solution to Mega Fuse protection
- Fuse Amperage Available: 60, 80, 100, 125, 150, 175, 200, 225, 250
- Maximum Voltage: 32 VDC
- Holder Post: 5/16" Stainless Steel
- Flat Washers: Brass
- Connection Fastener Nut: Stainless Steel
- When used with included 405 Series terminal insulators, meets safety regulations
- Base Material: Glass-Filled Nylon

**T-Class Fuses & Holder**
- Commonly used for equipment protection
- Fuse Amperage Available: 300, 400
- Very fast reaction time VS. ANL Fuses
- Maximum Voltage: 48 VDC
- 3/8" Stud accepts up to 4/0 ga cable
- Connection Stud: Stainless Steel
- Connection Fastener Nut: Stainless Steel
- Washers: Stainless Steel
- Base Material: Glass-Filled Nylon

www.vteworld.com 1.800.527.9256 (US & Canada) info@vteworld.com
Our Commitment To You

VTE is committed to our customers. We strive to make every purchasing experience a positive one. Here’s a few items that help explain our commitment to you.

- We offer commercial quantity sales, at bulk prices - 1000+ on terminal insulators
- For low-volume sales, VTE Warehouse stocks VTE manufactured product
- We offer access to engineering and design support
- We gladly accept VISA and MasterCard
- We offer generous credit terms
- We offer free samples

- Factory-direct Low Prices
- On Time Shipments
- Reasonable Lead Times
- Excellent Quality

Standards We Meet

When protecting your device with VTE terminal insulators, your product can meet some of these industry standards. Our product material meet various UL standards.

- UL94-V2 - Self Extinguishing (our ‘V’ material)
- UL94-V0 - Our ‘F’ material

Ordering Information

VTE Inc. Terms and conditions

Minimum Order Quantity: 1000 pieces, on terminal insulators
100 pieces on parts over $1.50

Delivery: 2 to 4 weeks after order confirmation

Delivery with setup charges: Expedited Shipments: $150 USD plus expedited freight charge.

F.O.B Pellston, Michigan 49769 USA

Shipping: UPS, Federal Express

VTE Warehouse Terms and conditions

Minimum Order: $15.00

Delivery: Orders placed by 10:00 EST will be shipped by 5:00pm (in stock items only)
Non-stocked items: Ship within 5 days after order confirmation

F.O.B: Pellston, Michigan 49769 USA

Shipping: UPS, Federal Express, USPS

Terms: Net 30
VISA, Mastercard, Discover
Contact Us

Manufacturer
Factory Direct - Large Volume Sales
VTE Inc.
5437 Robinson Rd.
P.O. Box 790
Pellston, Mich 49769
USA
Phone: +1.231.539.8000
Toll Free: +1.800.527.9256 (US & Canada)
Fax: +1.231.539.0914
Email: info@vteworld.com
Website: www.vteworld.com

North American Distributor
Warehouse - Low Volume Sales
VTE Warehouse
P.O. Box 786
Pellston, Mich 49769
USA
Phone: +1.231.539.0998
Toll Free: +1.800.227.0899 (US & Canada)
Fax: +1.231.539.7044
Email: warehouse@vteworld.com
Website: www.vtewarehouse.com

European Distributor - All Products All Quantities
VTE Europe
C. Trompleaen 3
's-Gravendal 1243 LA
The Netherlands
Phone: +31 35 656 5560
Cell Phone: +31 65 391 8120
Fax: +31 35 656 1178
Email: info@vte.nl
Website: www.vte.nl

Australian Distributor - All Products All Quantities
Bellanco Pty Ltd.
P.O. Box 413
Beenleigh, QLD 4207
Australia
Phone: +61 7 5546 4366
Fax: +61 7 5546 4493
Email: sales@bellanco.com.au
Website: www.bellanco.com

Pau"ger Control Systems
Australian Distributor - All Products All Quantities
Pau"ger Control Systems
6/14 Hopper Ave
ORMEOU 4208 QLD
Australia
Phone: +61 7 5571 5194
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Kaohsiung, Taiwan 802
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