This VL connector is 6.2 mm pitch wire-to-wire and wire-to-board connector, designed for large current up to 20 A (1 or 2-circuit with 3.5 mm² wire). Secondary retainer, which prevents from insufficient insertion of contact and coming off contact, may use and large current circuit can be connected certainly and safety.

- Housing lances
- Retainer
- Suited for large current
- Panel lock

**Specifications**

- Current rating: 20 A AC, DC max. (Refer to the following table.)
- Voltage rating: 600 V AC, DC max.
- Temperature range: -25°C to +90°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value: 7 mΩ max. After environmental tests: 10 mΩ max.
- Insulation resistance: 1,000 MΩ min.
- Withstanding voltage: 2,000 VAC/minute
- Applicable wire: AWG #22 to #12 0.3 to 3.5 mm²
- Applicable panel thickness: 0.5 to 2.0 mm

* In using the products, refer to “Handling Precaution for Terminal and Connector” described on our website (Technical documents of Product information page).
* Contact JST for details.
* RoHS2 compliance

Notes:

1. Punch holes in the panel according to the figures and table shown above. Burrs must be removed.
2. The strength of the panel must be considered when punching two or more holes.
3. The connector must be inserted from the same side as the hole is punched.

### Current rating as a function of the number of circuits and the wire size

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Wire size (AWG)</th>
<th>#12</th>
<th>#14</th>
<th>#16</th>
<th>#18</th>
<th>#20</th>
<th>#22</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#12</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>#14</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>#16</td>
<td>19</td>
<td>14</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>#18</td>
<td>18</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>#20</td>
<td>16</td>
<td>12</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>#22</td>
<td>16</td>
<td>12</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>16</td>
<td>11</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>15</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>15</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

### Inner-housing lock

<2, 3, 4 circuits (Single-row)>

- **Shape I**
- **Shape II**

### Outer-housing lock

<4, 6, 8, 12 circuits>

- **Inner-housing lock**

---

Note: The current rating varies depending on the number of circuits and the wire size used in each connector. The table below lists the current rating as a function of the number of circuits and the wire size.
Contact

Model No. | Applicable wire | Insulation O.D. (mm) | Q’ty/ reel
--- | --- | --- | ---
Pin contact | Socket contact | mm² | AWG # | |
SVM-42T-P2.0 | SVF-42T-P2.0 | 0.3—1.25 | 22—16 | 1.7—3.2 |
SVM-61T-P2.0 | SVF-61T-P2.0 | 0.5×0.5—2.0 | 20×14 | 1.9—3.4 |
SVM-81T-P2.0 | SVF-81T-P2.0 | 3.5 | 12 | 4.1 |

Material and Finish
Phosphor bronze, tin-plated (reflow treatment)

RoHS2 compliance
Note: Contact JST for special products.

Contact position location numbers

RoHS2 compliance
Note: Contact JST for fully automatic crimping applicator.

Receptacle housing

Plug housing

<Inner-housing lock>

<Outer-housing lock>
### Housing

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Voltage rating</th>
<th>Current rating</th>
<th>Receptacle housing (for pin contact)</th>
<th>Q’ty/bag</th>
<th>Plug housing (for socket contact)</th>
<th>Q’ty/bag</th>
<th>Retainer</th>
<th>Q’ty/bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600V</td>
<td>20A</td>
<td>VLR-01VF (Without panel lock product)</td>
<td>500</td>
<td>VLP-01V</td>
<td>500</td>
<td>VLS-01V</td>
<td>1,000</td>
</tr>
<tr>
<td>2</td>
<td>600V</td>
<td>20A</td>
<td>VLR-02V</td>
<td>500</td>
<td>VLP-02V</td>
<td>500</td>
<td>VLS-02V (commonly used for 2-circuit housing and 4-circuit housing)</td>
<td>1,000</td>
</tr>
<tr>
<td>3</td>
<td>600V</td>
<td>19A</td>
<td>VLR-03V</td>
<td>500</td>
<td>VLP-03V</td>
<td>500</td>
<td>VLS-03V (commonly used for 3-circuit housing and 6-circuit housing)</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>600V</td>
<td>18A</td>
<td>VLR-04V</td>
<td>500</td>
<td>VLP-04V</td>
<td>500</td>
<td>VLS-04V (commonly used for 4-circuit housing and 8-circuit housing)</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**RoHS2 compliance**

Note: 1. Contact JST for special products.  
2. Contact JST for Glow Wire compliant connectors.
## Housing

<table>
<thead>
<tr>
<th>No. of circuits</th>
<th>Voltage rating</th>
<th>Current rating</th>
<th>Receptacle housing (for pin contact)</th>
<th>Plug housing (for socket contact)</th>
<th>Retainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>600V</td>
<td>16A</td>
<td>VLR-06V</td>
<td>VLP-06V</td>
<td>VLS-03V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Image]</td>
<td>[Image]</td>
<td>[Image]</td>
</tr>
<tr>
<td>8</td>
<td>600V</td>
<td>16A</td>
<td>VLR-08V</td>
<td>VLP-08V</td>
<td>VLS-08V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Image]</td>
<td>[Image]</td>
<td>[Image]</td>
</tr>
<tr>
<td>12</td>
<td>600V</td>
<td>15A</td>
<td>VLR-12V</td>
<td>VLP-12V</td>
<td>VLS-12V</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[Image]</td>
<td>[Image]</td>
<td>[Image]</td>
</tr>
</tbody>
</table>

Material: Housing...PA 66, UL94V-0, white  
Retainer...Glass-filled PA 66, UL94V-0, ivory

RoHS2 compliance  
Note: 1. Contact JST for special products.  
2. Contact JST for Glow Wire compliant connectors.