MIL-DTL-55302 QPL'D
2 and 3 Row Printed Circuit Board Connectors

17, 29, 33, 41, 53, 62, 65, 72, 80.1, 84, 96, 98, 120, 126, 160 and 160.4 Contacts

- 2 and 3 row printed circuit board connectors
- Provide applications flexibility not available with other MIL-DTL-55302 connectors
- Over 2,500 models can be constructed with available components
- 0.100 [2.54] on center (adjacent rows offset by 0.050 [1.27] to allow straight printed circuit traces)
- Straight dip, right angle solder, crimp, solder cup and Wire Wrap® terminations
- 0.024 [0.60] diameter pins/sockets rated at 4 Amps
- Average insertion/extraction force of 1 ounce per contact
- Contacts removable from wiring side (front release, rear removable)
- Front release, front removable option available on receptacle with 160 contacts
- Alignment and keying provided by the end guides – 36 combinations (user changeable)
- Male or female contacts and guides available in either plug or receptacle

General Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Contacts</td>
<td>17, 29, 33, 41, 53, 62, 65, 72, 80.1, 84, 96, 98, 120, 126, 160, 160.4</td>
</tr>
<tr>
<td>Contact Diameter</td>
<td>0.024 [0.60]</td>
</tr>
<tr>
<td>Current Rating</td>
<td>4 Amps at 30° C rise</td>
</tr>
<tr>
<td>Contact Resistance</td>
<td>&lt; 5 milliohms</td>
</tr>
<tr>
<td>Extraction Force</td>
<td>0.30 – 2.00 oz. per contact</td>
</tr>
<tr>
<td>Contact Life Cycles</td>
<td>100,000</td>
</tr>
<tr>
<td>Breakdown Voltage Between Contacts</td>
<td>&gt; 1600V RMS</td>
</tr>
<tr>
<td>Dielectric Withstanding Voltage</td>
<td>1200V RMS</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>&gt; 10⁶ Megohms at 500 VDC</td>
</tr>
<tr>
<td>Temperature Rating</td>
<td>-55° C to 125° C</td>
</tr>
<tr>
<td>Insulator</td>
<td>Diallyl-phthalate</td>
</tr>
<tr>
<td>Contact Material</td>
<td>Beryllium copper wires and brass body</td>
</tr>
<tr>
<td>Plating</td>
<td>Gold over nickel</td>
</tr>
<tr>
<td>Guide Hardware</td>
<td>Brass / Stainless steel</td>
</tr>
<tr>
<td>Material</td>
<td>Nickel / Passivated</td>
</tr>
<tr>
<td>Plating Reference</td>
<td></td>
</tr>
<tr>
<td>Male Pins</td>
<td>T = 10µin gold (min) over nickel</td>
</tr>
<tr>
<td></td>
<td>TH = 50µin gold (min) over nickel</td>
</tr>
<tr>
<td></td>
<td>TAH = 50µin gold (min) over nickel on mating surface, 5µin gold over nickel on termination</td>
</tr>
<tr>
<td>Female Socket</td>
<td></td>
</tr>
</tbody>
</table>

Connector Dimension

17 to 65 Contacts

Dimensions are in inches [mm]
**Connector Dimensions**

62, 80.1 and 98 Contacts

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>62</th>
<th>80.1</th>
<th>98</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ± 0.020 [0.50]</td>
<td>2.707 [68.75]</td>
<td>3.307 [84.00]</td>
<td>3.907 [99.24]</td>
</tr>
<tr>
<td>B</td>
<td>2.400 [60.96]</td>
<td>3.000 [76.20]</td>
<td>3.600 [91.44]</td>
</tr>
</tbody>
</table>

**Connector Dimensions**

72, 84, 96 and 120 Contacts

Dimensions are in inches [mm]
**Connector Dimensions**

126 Contacts

- **Plug**
  - 0.311 [7.90]
  - 0.154 [3.90]
  - 0.350 [8.90]
  - 0.124 [3.15]

- **Receptacle**
  - 0.311 [7.90]
  - 0.366 [9.30]

160 Contacts

- **Plug**
  - 0.311 [7.90]
  - 0.154 [3.90]
  - 0.366 [9.30]
  - 0.187 [4.75]

- **Receptacle**
  - 0.311 [7.90]
  - 0.366 [9.30]
  - 0.177 [4.50]

160.4 Contacts\(^1,2\)

- **Receptacle**
  - 0.350 [8.90]
  - 0.366 [9.30]
  - 0.183 [4.65]

**NOTES:**

1) Only available with straight dip solder (style “D”) and Wire Wrap (style “Y”) tails.
2) Mates with standard plug.
   Mated length 0.655 [16.90].

Dimensions are in inches [mm]
### Terminal Styles

#### Ref. B
- **For 1/8” PC Board**
- **2 Row and KA126 3 Row**

#### Ref. C
- **For 1/16” PC Board**
- **2 Row and KA126 3 Row**

---

**NOTE:**
1) All tail lengths are ± 0.015 [0.40] long.

Dimensions are in inches [mm]

<table>
<thead>
<tr>
<th>3 Row Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Contacts</strong></td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
</tbody>
</table>
### Terminal Styles

#### Plugs
- **D**
  - Ø 0.024 [0.60]
  - 0.221 [5.62]
  - 0.173 [4.40]
- **H2**
  - Ø 0.059 [1.50] Hole
  - Ø 0.035 [0.90] Hole
  - 0.173 [4.40]
- **R**
  - Ø 0.051 [1.30] Hole
  - Ø 0.035 [0.90] Hole
  - 0.173 [4.40]
- **S**
  - Ø 0.039 [1.00] Hole
  - Ø 0.055 [1.40]
  - 0.203 [5.16]

#### Receptacles
- **D**
  - Ø 0.024 [0.60]
  - 0.221 [5.62]
  - 0.173 [4.40]

**NOTES:**
1) Crimp contacts will be shipped unmounted. When inserting contacts into the blocks/insulators be sure that the flats on the rear of the contact body are aligned with the flats in the insulator.
2) All tails are ± 0.015 [0.40] long.

Solder cup orientation staggered for commercial parts. All the same direction for MIL-DTL-55302 parts.

Dimensions are in inches [mm]
### Terminal Styles

#### KA Series Replacement Contacts

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Standard Sockets</th>
<th>Standard Pins</th>
<th>Beryllium Copper Pins</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>YSK006-028AH</td>
<td>YPN006-034</td>
<td>YPN006-072H</td>
</tr>
<tr>
<td>B</td>
<td>YSK006-029AH</td>
<td>YPN006-035</td>
<td>YPN006-075H</td>
</tr>
<tr>
<td>B</td>
<td>YSK006-030AH</td>
<td>YPN006-036</td>
<td>YPN006-073H</td>
</tr>
<tr>
<td>C</td>
<td>YSK006-013AH</td>
<td>YPN006-023</td>
<td>YPN006-048H</td>
</tr>
<tr>
<td>C</td>
<td>YSK006-006AH</td>
<td>YPN006-016</td>
<td>YPN006-050H</td>
</tr>
<tr>
<td>C</td>
<td>YSK006-014AH</td>
<td>YPN006-024</td>
<td>YPN006-077H</td>
</tr>
<tr>
<td>D</td>
<td>YSK006-005ANH</td>
<td>YPN006-015</td>
<td>YPN006-107H</td>
</tr>
<tr>
<td>D</td>
<td>YSK006-027AH</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>FD</td>
<td>YSK006-274AH</td>
<td>YPN006-470</td>
<td>YPN006-487H</td>
</tr>
<tr>
<td>H2</td>
<td>YSK006-009AH</td>
<td>YPN006-019</td>
<td>—</td>
</tr>
<tr>
<td>R</td>
<td>YSK006-011ANH</td>
<td>YPN006-021</td>
<td>—</td>
</tr>
<tr>
<td>S</td>
<td>YSK006-010ANH</td>
<td>YPN006-020</td>
<td>—</td>
</tr>
<tr>
<td>W</td>
<td>YSK006-020AH</td>
<td>YPN006-039</td>
<td>—</td>
</tr>
<tr>
<td>Y</td>
<td>YSK006-012AH</td>
<td>YPN006-022</td>
<td>—</td>
</tr>
</tbody>
</table>

#### Plating Reference

- **Male Pins:**
  - G = 10µin gold (min) over nickel
  - H = 50µin gold (min) over nickel

- **Female Sockets:**
  - AH = 50µin gold (min) over nickel on mating surface, gold flash over nickel on termination
  - ANH = 50µin gold (min) over nickel on mating surface, nickel over copper flash on socket body components, gold flash over nickel on termination

#### NOTES:

1) All tail lengths are ± 0.015 [0.40] long.
2) Contact for front removable version [0.40].
3) Front removable contact for standard housing.

Dimensions are in inches [mm]

---

** Consult factory for availability
Standard Mounting Styles

**Plug Only**

**Plug/Receptacle**

**Receptacle Only**

**Plug/Receptacle**

<table>
<thead>
<tr>
<th>Terminal (Right Angle)</th>
<th>Dimension A</th>
<th>Dimension B</th>
<th>Dimension C</th>
<th>Dimension D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 row</td>
<td>3 row</td>
<td>2 row</td>
<td>2 row</td>
</tr>
<tr>
<td></td>
<td>3 row</td>
<td>3 row</td>
<td>3 row</td>
<td>3 row</td>
</tr>
<tr>
<td></td>
<td>(KA160)</td>
<td>(Others)</td>
<td>(KA160)</td>
<td>(Others)</td>
</tr>
<tr>
<td>B</td>
<td>0.191 [4.86]</td>
<td>0.207 [5.25]</td>
<td>0.204 [5.18]</td>
<td>0.343 [8.71]</td>
</tr>
<tr>
<td></td>
<td>0.220 [5.59]</td>
<td>0.205 [5.20]</td>
<td>0.218 [5.53]</td>
<td>0.447 [11.36]</td>
</tr>
<tr>
<td></td>
<td>0.347 [8.71]</td>
<td>0.507 [12.89]</td>
<td>0.626 [15.99]</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0.124 [3.15]</td>
<td>0.128 [3.25]</td>
<td>0.165 [4.18]</td>
<td>0.343 [8.71]</td>
</tr>
<tr>
<td></td>
<td>0.141 [3.58]</td>
<td>0.126 [3.20]</td>
<td>0.139 [3.53]</td>
<td>0.447 [11.36]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.468 [11.89]</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.586 [14.99]</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
1) 15.00 oz. in torque.
2) 35.20 oz. in torque.
3) 52.30 oz. in torque.

Dimensions are in inches [mm]
Standard Mounting Styles

1) 15.00 oz. in torque.
2) 35.20 oz. in torque.
3) 52.30 oz. in torque.

Dimensions are in inches [mm]

<table>
<thead>
<tr>
<th>Terminal (Right Angle)</th>
<th>Dimension A</th>
<th>Dimension B</th>
<th>Dimension C</th>
<th>Dimension D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 row</td>
<td>3 row (KA160)</td>
<td>3 row (Others)</td>
<td>2 row</td>
</tr>
<tr>
<td>B</td>
<td>0.191 [4.85]</td>
<td>0.207 [5.25]</td>
<td>0.220 [5.58]</td>
<td>0.204 [5.18]</td>
</tr>
</tbody>
</table>

Downloaded from Arrow.com.
### Locking Mounting Styles

#### Plug/Receptacle

**V1**

- Dimensions: 0.203 [5.15]

**V2**

- Dimensions: 0.276 [7.00]
- M 2.5

#### Plug Only

**V3**

- Dimensions: 0.157 [4.00]
- Hole for Shoulder Nut: Ø 0.106 [2.70]

**V4**

- Dimensions: 0.627 [15.93]
- Hole for M 1.6

#### Receptacle Only

**V41**

- Dimensions: 0.110 [2.80]

#### Plug/Receptacle

**V5**

- Dimensions: 0.886 [22.50]

**V6**

- Dimensions: 0.335 [8.50]
- Mated: Ø 0.106 [2.70]
- Shoulder Nut: Hole for

**V7**

- Dimensions: 0.492 [12.50]

**V8**

- Dimensions: 0.664 [16.86]
- M 3.0

**V9**

- Dimensions: 0.071 [1.80]
- Hole for M 1.6

**V91**

- Dimensions: 0.548 [13.93]

### Notes:

1. 15.00 oz. in torque.
2. 35.20 oz. in torque.
3. 52.30 oz. in torque.
4. Right angle mounting screw length is determined by contact terminal length.

* For contact counts: 62, 80.1, 98 and 160 plugs

Dimensions are in inches [mm]
**Locking Mounting Styles**

### Plug Only

- **V9***
  - M 3.0
  - HOLE FOR SHOULDER NUT
  - 0.162 [4.00] HEX

- **V30**
  - Stationary Jackscrew
  - Ø 0.106 [2.70] HOLE FOR SHOULDER NUT
  - 0.437 [11.10]

- **V32**
  - Rotating Jackscrew
  - 0.331 [8.40]

### Plug/Receptacle

- **V15**
  - M 3.0
  - 0.182 [4.62] HEX

- **V31**
  - Stationary Jack Socket
  - Ø M2.5
  - 0.276 [7.00]

- **V33**
  - Rotating Jack Socket
  - 0.157 [4.00]

### Dimensions

Dimensions are in inches [mm]

### NOTES:

1. 15.00 oz. in torque.
2. 35.20 oz. in torque.
3. 52.30 oz. in torque.
4. Right angle mounting screw length is determined by contact terminal length.

* For contact counts: 62, 80.1, 98 and 160 plugs.

### Style

<table>
<thead>
<tr>
<th>Style</th>
<th>Will Only Mate With</th>
<th>Locking Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>V2, V4</td>
<td>Push, 1/4 Turn</td>
</tr>
<tr>
<td>V2</td>
<td>V1, V3, V6</td>
<td>Push, 1/4 Turn</td>
</tr>
<tr>
<td>V3 &amp; V6*</td>
<td>V2, V4</td>
<td>Push, 1/4 Turn</td>
</tr>
<tr>
<td>V4</td>
<td>V1, V3, V6</td>
<td>Push, 1/4 Turn</td>
</tr>
<tr>
<td>V7</td>
<td>V8, V15</td>
<td>Screw</td>
</tr>
<tr>
<td>V8 &amp; V9*</td>
<td>V7</td>
<td>Screw</td>
</tr>
<tr>
<td>V15</td>
<td>V7</td>
<td>Screw</td>
</tr>
<tr>
<td>V30</td>
<td>V33</td>
<td>Screw</td>
</tr>
<tr>
<td>V31</td>
<td>V32</td>
<td>Screw</td>
</tr>
<tr>
<td>V32</td>
<td>V31, V33</td>
<td>Screw</td>
</tr>
<tr>
<td>V33</td>
<td>V30, V32</td>
<td>Screw</td>
</tr>
</tbody>
</table>
### Mounting Dimensions

**17, 29, 33, 41, 53 and 65 Contacts**

PC Board Shown From Component Side of Board

**Mother Board Application**

**Style 11, 21, V2, V15 and V31**

![Diagram of Mother Board Application](image)

**Daughter Board Application**

**Style 10, 30, V3, V8 and V30**

![Diagram of Daughter Board Application](image)

**Daughter Board Application**

**Style 24 and V4**

![Diagram of Daughter Board Application](image)

**NOTES:**

1) For V15 locking mounting style, dimension is 0.130 ± 0.004 [3.20 ± 0.10] diameter.
2) PC board may be extended to 0.453 [11.50] max for use as a pin protector.

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>1.200 [30.48]</td>
</tr>
<tr>
<td>29</td>
<td>1.800 [45.72]</td>
</tr>
<tr>
<td>33</td>
<td>2.000 [50.8]</td>
</tr>
<tr>
<td>41</td>
<td>2.400 [61.0]</td>
</tr>
<tr>
<td>53</td>
<td>3.000 [76.20]</td>
</tr>
<tr>
<td>65</td>
<td>3.600 [91.44]</td>
</tr>
</tbody>
</table>

Dimensions are in inches [mm]
Mounting Dimensions
62, 80.1 and 98 Contacts
PC Board Shown From Component Side of Board

Mother Board Application
Style 11, 21, V2, V15 and V31

Daughter Board Application
Style 10, 30, V3, V8 and V30

Daughter Board Application
Style 24 and V4

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>2.400 [60.96]</td>
</tr>
<tr>
<td>80.1</td>
<td>3.000 [76.20]</td>
</tr>
<tr>
<td>98</td>
<td>3.600 [91.44]</td>
</tr>
</tbody>
</table>

NOTES:
1) For V15 locking mounting style, dimension is 0.130 ± 0.004 [3.20 ± 0.10] diameter.
2) PC board may be extended to 0.453 [11.50] max for use as a pin protector.

Dimensions are in inches [mm]
### Mounting Dimensions

#### 72, 84, 120 and 126 Contacts

PC Board Shown From Component Side of Board

#### Mother Board Application

**Style 11, 21, V2, V15 and V31**

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>B [in]</th>
<th>C [in]</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>2.100</td>
<td>4.200</td>
</tr>
<tr>
<td>84</td>
<td>2.400</td>
<td>4.800</td>
</tr>
<tr>
<td>96</td>
<td>2.700</td>
<td>5.400</td>
</tr>
<tr>
<td>120</td>
<td>3.300</td>
<td>6.600</td>
</tr>
<tr>
<td>126</td>
<td>2.400</td>
<td>4.800</td>
</tr>
</tbody>
</table>

#### Daughter Board Application

**Style 10, 30, V3, V8 and V30**

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>B [in]</th>
<th>C [in]</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>2.100</td>
<td>4.200</td>
</tr>
<tr>
<td>84</td>
<td>2.400</td>
<td>4.800</td>
</tr>
<tr>
<td>96</td>
<td>2.700</td>
<td>5.400</td>
</tr>
<tr>
<td>120</td>
<td>3.300</td>
<td>6.600</td>
</tr>
<tr>
<td>126</td>
<td>2.400</td>
<td>4.800</td>
</tr>
</tbody>
</table>

#### Daughter Board Application

**Style 24 and V4**

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>B [in]</th>
<th>C [in]</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>2.100</td>
<td>4.200</td>
</tr>
<tr>
<td>84</td>
<td>2.400</td>
<td>4.800</td>
</tr>
<tr>
<td>96</td>
<td>2.700</td>
<td>5.400</td>
</tr>
<tr>
<td>120</td>
<td>3.300</td>
<td>6.600</td>
</tr>
<tr>
<td>126</td>
<td>2.400</td>
<td>4.800</td>
</tr>
</tbody>
</table>

**NOTES:**

1. For V15 locking mounting style, dimension is 0.130 ± 0.004 [3.20 ± 0.10] diameter.
2. PC board may be extended to 0.453 [11.50] max for use as a pin protector.
3. Third row is for 126 pin version only.

Dimensions are in inches [mm]

Downloaded from Arrow.com.
Mounting Dimensions
160 and 160.4 Contacts
PC Board Shown From Component Side of Board

Mother Board Application
Style 11, 21, V2, V15 and V31

Daughter Board Application
Style 10, 30, V3, V9 and V30

Daughter Board Application
Style 24 and V4

NOTES:
1) For V15 locking mounting style, dimension is 0.130 ± 0.004 [3.20 ± 0.10] diameter.
2) PC board may be extended to 0.453 [11.50] max for use as a pin protector.

Dimensions are in inches [mm]
**Cutout for Panel Application**

**17, 29, 33, 41, 53 and 65 Contacts**

**Fixed Mounting Styles 11, 21, V2, V15 and V31**

![Diagram of fixed mounting styles](image)

- Number of Contacts: 17
  - Dimension B: 1.200 [30.48]
- Number of Contacts: 29
  - Dimension B: 1.800 [45.72]
- Number of Contacts: 33
  - Dimension B: 2.000 [50.8]
- Number of Contacts: 41
  - Dimension B: 2.400 [60.96]
- Number of Contacts: 53
  - Dimension B: 3.000 [76.20]
- Number of Contacts: 65
  - Dimension B: 3.600 [91.44]

**Float Mounting Styles 13 and 23**

![Diagram of float mounting styles](image)

**Cutout for Panel Application**

**62, 80.1 and 98 Contacts**

**Fixed Mounting Styles 11, 21, V2, V15 and V31**

![Diagram of fixed mounting styles](image)

**Float Mounting Styles 13 and 23**

![Diagram of float mounting styles](image)

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>2.40 [60.96]</td>
</tr>
<tr>
<td>80.1</td>
<td>3.00 [76.20]</td>
</tr>
<tr>
<td>98</td>
<td>3.60 [91.44]</td>
</tr>
</tbody>
</table>

**NOTE:**

1) For V15 locking mounting style, dimension is 0.130 ± 0.004 [3.20 ± 0.10] dia.
 KA Series 2 & 3 Row

**Cutout for Panel Application**

72, 84, 120 and 126 Contacts

Fixed Mounting Styles 11, 21, V2, V15 and V31

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Dimension B</th>
<th>Dimension C</th>
<th>DMin</th>
<th>EMin</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>2.100 [53.34]</td>
<td>4.200 [106.68]</td>
<td>0.252</td>
<td>0.291</td>
</tr>
<tr>
<td>84</td>
<td>2.400 [60.96]</td>
<td>4.800 [121.92]</td>
<td>0.252</td>
<td>0.291</td>
</tr>
<tr>
<td>96</td>
<td>2.700 [68.58]</td>
<td>5.400 [137.16]</td>
<td>0.252</td>
<td>0.291</td>
</tr>
<tr>
<td>120</td>
<td>3.300 [83.82]</td>
<td>6.600 [167.64]</td>
<td>0.366</td>
<td>0.406</td>
</tr>
<tr>
<td>126</td>
<td>2.400 [60.96]</td>
<td>4.800 [121.92]</td>
<td>0.366</td>
<td>0.406</td>
</tr>
</tbody>
</table>

Float Mounting Styles 13 and 23

<table>
<thead>
<tr>
<th>Number of Contacts</th>
<th>Dimension B</th>
<th>Dimension C</th>
<th>DMin</th>
<th>EMin</th>
</tr>
</thead>
<tbody>
<tr>
<td>160</td>
<td>2.950 [74.93]</td>
<td>5.000 [126.98]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>160.4</td>
<td>2.950 [74.93]</td>
<td>5.000 [126.98]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cutout for Panel Application**

160 and 160.4 Contacts

Fixed Mounting Styles 11, 21, V2, V15 and V31

Float Mounting Styles 13 and 23

Dimensions are in inches [mm]
**Ordering Information**

*For 2 and 3 Row Connectors*

<table>
<thead>
<tr>
<th>KA</th>
<th>17</th>
<th>.4</th>
<th>/127</th>
<th>B</th>
<th>E</th>
<th>V1</th>
<th>F</th>
<th>D</th>
<th>00</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Contacts</td>
<td>17, 29, 33, 41, 53, 62, 72, 80, 84, 98, 99, 120, 126, 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 = Must be used for 80.1 contact version only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.4 = Front removable receptacles²,³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Omit for standard receptacles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Rows</td>
<td>B = 2 rows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C = 3 rows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulator</td>
<td>P = Plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E = Receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locking Mounting Hardware</td>
<td>[Omit for nonlocking hardware]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receptacles : V1, V2, V4, V7, V15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plugs : V1, V2, V3, V4, V7, V8, V15, V6, V30, V31, V32 and V33 ; also V9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(for 62, 80.1, 98, 160 contacts only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Gender</td>
<td>M = Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F = Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = No contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Extraction Tools:**

For standard contacts .................................................................S/DEM 1.0060

**Crimp Tools:**

*Ref. R and H2 contacts – 1 crimp*

Manual crimp tool .................................................................MS3198.1 or M22520/2-01 or AFM8

Positioner for contacts ..........................................................K547

*Ref. H2 contacts*

2 crimps in two operations

Manual crimp tool .................................................................MS3198.1 or M22520/2-01 or AFM8

Positioner for contacts (wire) ......................................................K547

Positioner for contacts (insulation) ..............................................K640

2 crimps in operation

This requires a special tool. Please submit wire samples and consult factory for further information. Crimping instructions doc number S50063

**Other Accessories:**

Insertion tool .................................................................S/MONT 1.0060

Spanner wrench for receptacle with front removable contacts ...........................................T136

Spanner wrench for V8, V9, V10, and V15 .........................................................T249

**Replacement Contacts:** see page 3/54

**Accessories**

**Comb:**

For positioning right angle dip solder contact tails.

YCM017-001

| Number of contacts |

**NOTES:**

1. Important! See Mating Combination Chart for Intermateability.
2. Available with Ref. D (Straight Dip Solder) and Ref. Y (Wire Wrap) terminal styles only.
3. Not available in three row versions.
4. Available with plugs only.
5. In order to keep mating forces as low as possible, it is recommended that the connectors are fixtured during soldering, contact engineering for details.
6. Connectors with no hardware.
7. Crimp contacts will be shipped unmounted. When inserting contacts into the blocks/insulator be sure that the two flats at the rear of the contact body are aligned with the flats in the insulator.
8. Receptacles only.
9. Available in 160 contact version only.

Dimensions are in inches [mm]

www.hypertronics.com
Military Part Number – Hypertronics Part Number Cross Reference
Numbers Are DOD Instead of MIL Due to Metric Design

Slash Sheets 159 and 160
Receptacle 2 Row Insulator Styles
For 17 – 120 Contact Positions

Slash Sheets 162 and 163
Receptacle 2 Row Insulator Styles
For 17 – 120 Contact Positions
Military Part Number – Hypertronics Part Number Cross Reference

Numbers Are DOD Instead of MIL Due to Metric Design

Slash Sheet 161
160 Position Split Shell Receptacles
The Following Models Are Approved

D55302/161 J 160 G   KA 160.4/127CEFD21TAH
D55302/161 G 160 G   KA 160.4/127CEFY21TAH
D55302/161 P 160 G   KA 160.4/127CEMD21TAH
D55302/161 Q 160 G   KA 160.4/127CEMY21TAH

Slash Sheet 164
160 Contact Position Plugs and Receptacles