Miniature, Economical & Rugged Circular Connector Systems

**Connector Versions**

<table>
<thead>
<tr>
<th>Connector Versions</th>
<th>BKC320: Three (3) Size 20 Contacts</th>
<th>BKC620: Six (6) Size 20 Contacts</th>
</tr>
</thead>
</table>

**Technical Characteristics**

**Materials and Finishes**
- **Insulator:** Glass-filled nylon, UL 94V-0.
- **Contacts:** Precision machined copper alloy with gold over nickel plate.
- **‘O’ Ring:** Silicon, UL 94V-0

**Electrical Characteristics**
- **Contact Current Ratings**
  - Size 20 Contacts: 7.5 amperes nominal.
- **Initial Contact Resistance per IEC 512-2, Test 2b**
  - Size 20 Contacts: 0.005 ohms, maximum.
- **Insulator Resistance per IEC 512-2, Test 3a**
  - Insulator: 5 G ohms, minimum.
- **Proof Voltage**
  - Size 20 Contacts: 1000 V r.m.s.
- **Working Voltage**
  - Size 20 Contacts: 250 V r.m.s.

**Climatic Characteristics**
- **Working temperature:** -55°C to +125°C
- **Dust and Water Ingress:** IP65 with overmolded Assemblies (Consult Factory for details)

**Mechanical Characteristics**
- **Polarization:** Provided by insulator.
- **Fixed Contacts:** Size 20 female contacts feature “Open Entry” 500 cycles design.
- **Contact Retention in Insulator:** Size 20 Contacts: 27 N [6 lbs.] minimum.
- **Locking System:** Threaded or Twist Locking Shroud
- **UL:** File E220614
Above Dimensions are same for both BKC320 and BKC620 versions.
**Solder Cup Contacts**

**Male Connector**
Typical Part Number:
BKC620M2T10

Typical Part Number:
BKC620M2T1W10
Specify code M2TW in Step 2

**Female Connector**
Typical Part Number:
BKC620F2T20

Typical Part Number:
BKC620F2TW30
Specify code F2TW in Step 2

*applicable for BKC620 only.
**applicable for BKC620 and BKC320.

**ACCESSORIES**

**Connector with Hood**
Male or Female

Materials:
Hood & Clamp: Nylon, UL 94V-0.
Screws: Steel with zinc plate.

Note: Hood design can accommodate jacketed cable Ø between 4.50mm [0.177] to 6.00mm [0.236]

**Panel Mounting Option**

**Panel Mount**

- Rear Panel Mount
- Front Panel Mount

Materials:
Screws and Nuts: Steel with zinc plate.

* Screw and nut shown for reference only.
** Panel thickness 1.50 [0.059] max only.

**Panel Cutout**

Front Mount (Jam Nut)
Twist Lock Cutout

Threaded Lock Cutout

Rear Mount Cutout for Threaded Lock or Twist Lock Connector with Flange

**Dust Cover**

Panel Mount

Cable

Materials:
Dust Cover: Glass-Filled Nylon, UL 94V-0.

Unless otherwise specified, dimensional tolerances are:
1) Male contact mating diameters : ±0.03 [0.001]
2) Contact termination diameters : ±0.08 [0.003]
3) All other diameters : ±0.13 [0.005]
4) All other dimensions : ±0.38 [0.015]

Dimensions are in millimeters [inches].
All dimensions are subject to change.
**Step 1: Connector Version**

**Example: BKC620**

- **BKC620**: Six (6) size 20 contacts.
- **BKC320**: Three (3) size 20 contacts.

**Step 2: Connector Gender and Type of Contacts**

<table>
<thead>
<tr>
<th>Step</th>
<th>Example</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M2T1</strong></td>
<td>Threaded Male, solder cup, fixed contacts. (Supplied Without Threaded Locking Shroud)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
<tr>
<td><strong>F2T1</strong></td>
<td>Threaded Female, solder cup, fixed contacts. (Supplied Without Threaded Locking Shroud)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
<tr>
<td><strong>M2T2</strong></td>
<td>Threaded Male, solder cup, fixed contacts. (Supplied With Threaded Locking Shroud)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
<tr>
<td><strong>F2T2</strong></td>
<td>Threaded Female, solder cup, fixed contacts. (Supplied With Threaded Locking Shroud)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
</tbody>
</table>

- **M2TW1**: Twist Male, solder cup, fixed contacts. (Supplied without Twist Locking Shroud)
- **F2TW1**: Twist Female, solder cup, fixed contacts. (Supplied without Twist Locking Shroud)
- **M2TW3**: Twist Male, solder cup, fixed contacts. (Supplied with Twist Locking Shroud)
- **F2TW3**: Twist Female, solder cup, fixed contacts. (Supplied with Twist Locking Shroud)

**Step 3: Mounting Styles and Hood**

<table>
<thead>
<tr>
<th>Step</th>
<th>Example</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P</strong></td>
<td>Panel mount with jam nut and without flange. (Available in Front Mount version only)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
<tr>
<td><strong>PF</strong></td>
<td>Panel mount with Flange and without jam nut. (Available in Rear Mount version only)</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td>Hood</td>
<td>BKC620</td>
<td>F2T1</td>
<td>PF</td>
<td>/AA</td>
<td>XXX</td>
</tr>
</tbody>
</table>

**Step 4: Environmental Compliance Option**

- **/AA**: Compliance per EU Directive 2002/95/EC (RoHS)
- **Example**: BKC620M2T2P/AA.

**Note**: If RoHS legislation is not required, this step will not be used. **Example**: BKC620M2T2P.

**Step 6 - Special Options**

- **Consult factory for special options.**

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**Typical Connector Assembly & Ordering Information**

**Specify complete connector by following step 1 through step 5.**

**Typical Connector Assembly**

**Threaded Locking System**

- **Jam Nut**
- **Front Panel Mount**
- **Female Connector**
- **O Ring**
- **Male Connector**
- **Threaded Locking Shroud**
- **Clamping Screws**
- **Cable Clamp**
- **Hood**

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**Contact Information**

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positronic Industries, Inc.</strong></td>
<td>423 N Campbell Ave, PO Box 8247 Springfield, MO 65801, USA</td>
<td>(417) 866-2322</td>
<td>(417) 866-4115</td>
<td><a href="mailto:info@connectpositronic.com">info@connectpositronic.com</a></td>
</tr>
<tr>
<td><strong>Positronic S.A.S.</strong></td>
<td>Zone Industrielle d’Engachies 46 Route d’Engachies France 32050 Auch Cedex 9</td>
<td>33 (0) 5 6263 4491</td>
<td>33 (0) 5 6263 5117</td>
<td><a href="mailto:contact@connectpositronic.com">contact@connectpositronic.com</a></td>
</tr>
<tr>
<td><strong>Positronic Asia PTE LTD.</strong></td>
<td>Blk 3014A Ubi Road 1 #07-01 Singapore 408703</td>
<td>65 6842 1419</td>
<td>65 6842 1421</td>
<td><a href="mailto:singapore@connectpositronic.com">singapore@connectpositronic.com</a></td>
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