Small Connector, High Reliability

HyperGrip mini circular connectors (HG0) are available with 5 contacts and have a user-configurable keying system, which allows customers to build connectors with six different keying options from a set of common components. This allows for orders with standard pricing, shorter lead times, and minimal inventory. Competitive products require purchasing as many finished connectors as keying configurations needed, causing long lead times, high cost orders with long lead times, resulting in high inventory levels.

The HG0 connectors are made in an off white/light-gray color with color coded rings and strain reliefs. The color coding, along with the keying system, make recognition simple and incorrect mating impossible, which is especially important for medical instrumentation applications where multiple connector interfaces are required.

The HG0 connector incorporates ultra reliable Hypertac hyperboloid contacts with Ø0.30mm pins which create a significantly smaller form factor with five-signal contacts rated at 1 Amp each. The design maintains the same reliable electromechanical performance characteristics of all Hypertac® contacts: high cycle life, low contact resistance, low insertion and extraction force, resistance to shock and vibration, and superior self-cleaning action, but now meet the industry’s increased demands for miniaturization and higher density.

Crimp / solder terminations accommodate up to 26 AWG wire. The receptacle is available with a 6” (15.34mm) pigtail option as well as in custom-to-order lengths.

Custom inserts can also be designed to meet your needs.
Features & Benefits
- Push/Pull latching design - simple, one-hand quick disconnect
- Sealing to IP67 when mated
- Customer keyable - easily keyed in one of six different standard keying positions to prevent mismating, which could result in catastrophic consequences
- Aesthetic Design - smooth medical shape, easy to clean
- Integrated or overmoldable strain relief - prevents cable wire fatigue due to bending
- Front or rear panel mount receptacle design - option to mount the harness assembly from inside or outside the device enclosure
- Fingerproof to IEC60601
- Cable to panel configurations
- Custom insulators can be designed in standard housing
- Self-cleaning contacts
- Value Add Option: Receptacles with 6 inch pigtail wire leads
- Insulation Resistance - 100 megohms at 500 VDC
- Breakdown Voltage between contacts - 800V; Dielectric Withstanding Voltage - 600V

Materials
- High-end Engineering Plastic Components
  - Sterilizable - Autoclave, EtO, Gamma, Cold Chemical
  - Flammability rated to UL94V-0 on thermoplastic components
  - High Temperature - rated to 185°C (in unmated condition, for processing)

Contacts
- Hypertac® Contacts - up to 100,000 Mating Cycles
- 5 gold plated Hypertac® contacts, rated 1A each
- Crimp / Solder Termination

<table>
<thead>
<tr>
<th>HG0</th>
<th>Ø0.807 (20.50)</th>
<th>G</th>
<th>Ø0.370 (9.40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.728 (18.50)</td>
<td>H</td>
<td>Ø0.486 (12.34)</td>
</tr>
<tr>
<td>B</td>
<td>Ø0.630 (16.00)</td>
<td>J</td>
<td>1.436 (36.46)</td>
</tr>
<tr>
<td>C</td>
<td>0.285 (7.25)</td>
<td>K</td>
<td>0.118 (3.00)</td>
</tr>
<tr>
<td>D</td>
<td>1.040 (26.38)</td>
<td>L</td>
<td>0.689 (17.50)</td>
</tr>
<tr>
<td>E</td>
<td>0.343 (8.71)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ordering Information*:
Plug: HG0P11GG503MRH
Receptacle: HG0E10GG503FRAH
Receptacle w/ 6” pigtails: HG0E10GG-0001

*Gray color code standard, for other color codes, replace 2nd “G” in the part number with:
D - Blue
V - Green
R - Red
Y - Yellow

US Patent numbers:
7,326,091 B2
7,661,995 B2
D 596,127 S

Hypertronics Corporation
16 Brent Drive
Hudson, MA 01749-2978
Toll Free: 1-800-225-9228
Phone: +1 978-568-0451
Fax: +1 978-568-0680

WWW.HYPERTRONICS.COM