Miniature Circle Hex Connectors

Featuring High Performance, Lightweight, Composite Construction

www.connectpositronic.com
Experience

- Founded in 1966
- Involvement in the development of international connector specifications through EIA®, IEC and ISO as well as PICMG® and VITA.
- Introduction of new and unique connector products to the electronics industry.
- Patent holder for many unique connector features and manufacturing techniques.
- Vertically integrated manufacturing – raw materials to finished connectors.

Technology

- Expertise with solid machined contacts provides a variety of high reliability connectors including high current density power connectors.
- Quality Assurance lab is capable of testing to IEC, EIA, UL, C.UL, military and customer-specified requirements.
- In-house design and development of connectors based on market need or individual customer requirements.
- Internal manufacturing capabilities include automatic precision contact machining, injection molding, stamping, plating operations and connector assembly.
- Manufacturing locations in southwest Missouri, U.S.A. (headquarters); Puerto Rico, France, China, Singapore, and India. Total square footage: 369,000.

Support

- Compliance to a variety of international and customer specific environmental requirements.
- Large in-house inventory of finished connectors. Customer specific stocking programs.
- Factory direct technical sales support in major cities worldwide.
- One-on-one customer support from worldwide factory locations.
- World class web site.
- Value-added solutions and willingness to develop custom products with reasonable price and delivery.

Regional Headquarters

Springfield, MO
Auch, France
Singapore

Positronic Industries’ FEDERAL SUPPLY CODE (Cage Code) FOR MANUFACTURERS is 28198

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LGH SERIES

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MGH SERIES

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<td>Technical Characteristics</td>
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<td>Typical Assemblies</td>
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<tr>
<td>Panel Mounting Information</td>
<td>13</td>
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<tr>
<td>Ordering Information</td>
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</tr>
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Visit our website for the latest catalog updates and supplements at http://www.connectpositronic.com/products/51/CircleHex/catalogs/

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
SAVE TIME AND MONEY!
Let Positronic support you by cablizing your GH / LGH / MGH connector selection.

Cable Assembly Design Support
We work closely with customers to:
1. Design assemblies in accordance with customer specifications.
2. Prepare cablized connector configuration and performance specifications.
3. Design each system in accordance with applicable customer, domestic, and international standards.
4. Define and conduct performance and verification testing.

FOR MORE DETAILS CONTACT TECHNICAL SALES OR VISIT OUR WEB SITE AT:
HTTP://WWW.CONNECTPOSITRONIC.COM/PRODUCTS/47/CABLEASSEMBLIES
GH series connectors are high reliability, hexagonal connectors offered with solder and straight solder terminations. Contacts have 0.040 inch [1.02 mm] diameters and are rated to 7.5 amperes per contact. Five connector variants, four through ten poles, are offered.

GH series connectors have DAP insulators. A variety of plastic and metal hoods are available, and the locking system is achieved by a lock-ring spring mechanism. Polarization is accomplished by contact layouts or by an oversized contact.

GH series connectors are ideal for use in industrial and instrumentation applications where light weight, miniature, high reliability interconnections are necessary.

TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:
- Insulator: Glass-filled DAP per ASTM-D-5948, Type SDG-F. Grey color is standard.
- Contacts: Precision machined copper alloy.
- Contact Plating: Gold flash over nickel.
- Hoods: Aluminum with yellow or black anodize. Glass-filled DAP.
- Lock Rings and Lock Springs: Copper alloy with zinc plate and chromate seal.

MECHANICAL CHARACTERISTICS:
- Fixed Contacts: Size 20 contact, male - 0.040 inch [1.02 mm] diameter. Female contact - open entry is standard. “Closed entry” is available on solder cup contacts for high reliability applications.
- Contact Retention in Insulator: 10 lbs. [44.5N], minimum.
- Contact Termination: Solder cup - 0.046 inch [1.17 mm] hole diameter for 20 AWG [0.5 mm²] wire maximum.
- Locking Systems: Friction, lock spring with lock ring.

MECHANICAL CHARACTERISTICS, continued:
- Polarization: 0.056 inch [1.42 mm] diameter male contact in position “A” on Size 4 connector. Molding configuration provides polarization on other sizes.
- Mechanical Operations: Open Entry Contacts: 250 operations per IEC 60512-5. Closed Entry Contacts: 500 operations per IEC 60512-5.

ELECTRICAL CHARACTERISTICS:
- Contact Current Rating: 7.5 amperes, maximum.
- Initial Contact Resistance: 0.010 ohms, maximum.
- Flash over Voltage: 1,750 VAC (rms).
- Test Voltage: 1,200 VAC (rms).
- Insulation Resistance: 5 G ohms.
- Clearance and Creepage Distance: 0.025 inch [0.64 mm], minimum.
- Working Voltage: 600 VAC (rms).

CLIMATIC CHARACTERISTICS:
- Temperature Range: -55°C to +125°C.
- Damp Heat, Steady State: 21 days.
EXPLODED VIEW OF TYPICAL CONNECTOR ASSEMBLY

- Male Contact
- Male Insulator
- Lock Ring
- Hex Nut
- Lock Washer
- Cable Clamp
- Plastic Hood
- Metal Hood
- Lock Spring

Typical Part Number: GH7MSCLRN0

Typical Part Number: GH7FSCLSH16

Typical Part Number: GH7MSCLRH19C
SOLDER CUP TERMINATION

**CODE SC** *1*

For solder cup contacts, specify contact code “SC” in Step 4 of the ordering information on page 8.

**TYPICAL PART NUMBER:** GH4FSC00

**NOTE:**

*1 GH4 has 0.056±0.001 [1.42±0.03] Ø Pin in “A” position for polarization.

STRAIGHT SOLDER PRINTED BOARD MOUNT TERMINATION

**CODE DS3, DS4, DS5 and DS6** *1*

For straight solder contacts, specify contact code (DS3, DS4, DS5, or DS6) for desired length of contact termination in Step 4 of the ordering information on page 8.

**CONTACT CODE**

<table>
<thead>
<tr>
<th>CONTACT CODE</th>
<th>“L”</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS3</td>
<td>0.093 [2.36]</td>
</tr>
<tr>
<td>DS4</td>
<td>0.125 [3.18]</td>
</tr>
<tr>
<td>DS5</td>
<td>0.156 [3.96]</td>
</tr>
<tr>
<td>DS6</td>
<td>0.187 [4.75]</td>
</tr>
</tbody>
</table>

**TYPICAL PART NUMBER**

GHSFDS400

CONTACT HOLE POSITION DIMENSIONS AND PRINTED BOARD MOUNT CONTACT HOLE PATTERN

HOLE IDENTIFICATION SHOWN IS FOR MATING FACE OF FEMALE CONNECTOR. USE MIRROR IMAGE FOR MALE CONNECTOR.

**SUGGESTED PRINTED BOARD HOLE SIZES:**

Suggest 0.040 [1.01] Ø holes in printed board for contact terminations.

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
INSULATOR DIMENSIONS
MATING FACE OF FEMALE CONNECTOR FOR SIZES GH 5, 7, 9, AND 10.

NOTES:
*1 Size GH4 uses 0.056 [1.42] Ø pin in position “A” for polarization. For all other sizes, the body design provides polarization.
*2 For Sizes 5 through 10, male and female connector dimensions are typical.

See GH Series Printed Board Hole Patterns, page 3 of this catalog, for contact variant hole positions.

TYPICAL MATING ASSEMBLIES
LOCKING DEVICES

LOCK SPRING
CODE LS

LOCK RING AND NUT
CODE LRN

ALUMINUM HOODS
CODE H14 and H16

<table>
<thead>
<tr>
<th>HOOD CODE</th>
<th>CONNECTOR SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>T THREAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>H14</td>
<td>GH-4</td>
<td>0.250</td>
<td>0.799</td>
<td>1.062</td>
<td>0.594</td>
<td>0.563</td>
<td>0.218</td>
<td>3/8-24 UNF-2B</td>
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<tr>
<td></td>
<td></td>
<td>[6.35]</td>
<td>[20.29]</td>
<td>[26.97]</td>
<td>[15.09]</td>
<td>[14.30]</td>
<td>[5.54]</td>
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<tr>
<td>H16</td>
<td>GH-5, 7, 9, 10</td>
<td>0.260</td>
<td>0.708</td>
<td>0.938</td>
<td>0.632</td>
<td>0.578</td>
<td>0.250</td>
<td>1/2-20 UNF-2B</td>
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<td></td>
<td></td>
<td>[6.60]</td>
<td>[17.98]</td>
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<td>[16.05]</td>
<td>[14.68]</td>
<td>[6.35]</td>
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DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
GH SERIES
PROFESSIONAL QUALITY / FIXED CONTACTS
MINIATURE CIRCLE HEX CONNECTORS

STANDARD PLASTIC HOOD
CODE H10 and H19

<table>
<thead>
<tr>
<th>HOOD CODE</th>
<th>CONNECTOR SIZE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>T THREAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>H10</td>
<td>GH4</td>
<td>0.312</td>
<td>0.687</td>
<td>0.750</td>
<td>0.562</td>
<td>0.250</td>
<td>0.437</td>
<td>0.157</td>
<td>3/8-24 UNF-2B</td>
</tr>
<tr>
<td>H19</td>
<td>GH 5, 7, 9, 10</td>
<td>0.281</td>
<td>0.656</td>
<td>0.875</td>
<td>0.655</td>
<td>0.422</td>
<td>0.540</td>
<td>0.297</td>
<td>1/2-20 UNF-2B</td>
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SHORT PLASTIC HOOD
CODE H10S and H19S

<table>
<thead>
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<th>HOOD CODE</th>
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<th>B</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>T THREAD</th>
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</thead>
<tbody>
<tr>
<td>H10S</td>
<td>GH4</td>
<td>0.312</td>
<td>0.687</td>
<td>0.562</td>
<td>0.437</td>
<td>0.157</td>
<td>3/8-24 UNF-2B</td>
</tr>
<tr>
<td>H19S</td>
<td>GH 5, 7, 9, 10</td>
<td>0.281</td>
<td>0.656</td>
<td>0.655</td>
<td>0.540</td>
<td>0.297</td>
<td>1/2-20 UNF-2B</td>
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PLASTIC HOODS WITH CABLE CLAMPS
CODE H10C and H19C

<table>
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<th>HOOD CODE</th>
<th>CONNECTOR SIZE</th>
<th>A</th>
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<th>C</th>
<th>D</th>
<th>F</th>
<th>G</th>
<th>T THREAD</th>
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</thead>
<tbody>
<tr>
<td>H10C</td>
<td>GH4</td>
<td>0.312</td>
<td>0.687</td>
<td>0.851</td>
<td>0.562</td>
<td>0.437</td>
<td>0.209</td>
<td>3/8-24 UNF-2B</td>
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<tr>
<td>H19C</td>
<td>GH 5, 7, 9, 10</td>
<td>0.281</td>
<td>0.656</td>
<td>0.820</td>
<td>0.655</td>
<td>0.540</td>
<td>0.297</td>
<td>1/2-20 UNF-2B</td>
</tr>
</tbody>
</table>
PANEL CUT-OUT DIMENSIONS

SIZE 4

0.125 [3.18]
30°
0.395 [10.03] Ø
0.250 [6.35]
0.099 [2.51] Ø

SIZES 5, 7, 9, & 10

0.345 [8.76] Ø
0.515 [13.08] Ø

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
**ORDERING INFORMATION - CODE NUMBERING SYSTEM**

Specify Complete Connector By Selecting An Option From Step 1 Through 6

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<th>4</th>
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<th>7</th>
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<th>9</th>
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<td>EXAMPLE</td>
<td>GH</td>
<td>10</td>
<td>M</td>
<td>SC</td>
<td>LRN</td>
<td>0</td>
<td>CE</td>
<td>/AA</td>
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**STEP 1 - BASIC SERIES**
GH Series

**STEP 2 - CONNECTOR VARIANTS**
4, 5, 7, 9, 10

**STEP 3 - CONNECTOR GENDER**
- M - Male
- F - Female

**STEP 4 - CONTACT TERMINATION TYPE**
- SC - Solder Cup. For “Closed Entry” design, add “CE” in Step 7.
- DS3 - Straight Solder, 0.093 [2.36].
- DS4 - Straight Solder, 0.125 [3.18].
- DS5 - Straight Solder, 0.156 [3.96].
- DS6 - Straight Solder, 0.187 [4.75].

NOTE: DS contacts are not available on GH4 connector.

**STEP 5 - MOUNTING AND LOCKING ACCESSORIES**
- LR - Lock Ring.
- LS - Lock Spring.
- N - Mounting Nut.
- W - Lockwasher.
- 0 - If no mounting or locking accessories are required.

NOTE: When the Lock Ring (LR) or Lock Spring (LS) are ordered with the Mounting Nut (N), a Lockwasher (W) is furnished.

**STEP 6 - CABLE ADAPTERS (HOODS)**
- H10 - Standard plastic hood offered on 4 variant.
- H19 - Standard plastic hood offered on 5, 7, 9, and 10 variants.
- H10S - Short plastic hood offered on 4 variant.
- H19S - Short plastic hood offered on 5, 7, 9, and 10 variants.
- H10C - Plastic hood with cable clamps offered on 4 variant.
- H19C - Plastic hood with cable clamps offered on 5, 7, 9, and 10 variants.
- **H14** - Aluminum hood offered on 4 variant.
- **H16** - Aluminum hood offered on 5, 7, 9, and 10 variants.
- 0 - If no hoods are required.

NOTE: Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-D IGES, STEP, or SOLIDWORKS file.

NOTE: Position “A” of GH4 connector is available as “Open Entry” only.

**STEP 7 - ADDITIONAL FEATURES**
- **B** - For black anodized aluminum parts.
- CE - “Closed Entry” contacts on female solder contact.

NOTE: Yellow anodize finish is standard for Aluminum parts.

**STEP 8 - ENVIRONMENTAL COMPLIANCE OPTIONS**
/AA - Compliant per EU Directive 2002/95/EC (RoHS)

NOTE: If compliance to environmental legislation is not required, this step will not be used. Example: GH10M5CLRN0

**STEP 9 - SPECIAL OPTIONS**
CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

**DIMENSIONS ARE IN INCHES [MILLIMETERS].**
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
LGH series connectors are high reliability hexagonal connectors offered with wire solder and straight printed board mount contact terminations. Contacts have 0.040 inch [1.02mm] diameters and are rated at 7.5 amperes each.

LGH series connectors have 12 contacts in a high performance connector package that includes a center post which serves to align and polarize the connectors during mating.

LGH series connectors are ideal for use in industrial and instrumentation applications.

### TECHNICAL CHARACTERISTICS

#### MATERIALS AND FINISHES:
- **Insulator:** Glass-filled polyester per MIL-M-24519, UL 94V-0. Grey color.
- **Contacts:** Precision machined copper alloy.
- **Contact Plating:** Gold flash over nickel.

#### MECHANICAL CHARACTERISTICS:
- **Fixed Contacts:** Size 20 contact, male - 0.040 inch [1.02 mm] diameter. Female contact - open entry or closed entry design available.
- **Contact Retention in Insulator:** 9 lbs. [40 N]
- **Contact Termination:** Solder cup - 0.046 inch [1.17 mm] hole diameter for 20 AWG [0.5 mm] wire maximum. Straight printed board mount - 0.030 inch [0.76 mm] termination diameter.
- **Polarization:** Center post provides polarization of connector.
- **Mechanical Operations:** Open entry 250 operations Closed entry 500 operations

#### ELECTRICAL CHARACTERISTICS:
- **Contact Current Rating:** 7.5 amperes, maximum.
- **Initial Contact Resistance:** 0.008 ohms, maximum.
- **Clearance and Creepage Distance:** 0.039 inch [1.0 mm], minimum.
- **Working Voltage:** 600 VAC (rms).

#### CLIMATIC CHARACTERISTICS:
- **Temperature Range:** -55° to +125° C.
- **Damp Heat, Steady State:** 10 days.
SOLDER CUP TERMINATION
CODE SC

NOTE:
Specify contact code “SC” in Step 4 of the ordering information, page 11.

TYPICAL PART NUMBER: LGH12FSC00

STRAIGHT SOLDER PRINTED BOARD MOUNT TERMINATION
CODE DS6

NOTE:
Specify contact code “DS6” in Step 4 of the ordering information, page 11.

TYPICAL PART NUMBER: LGH12FDS600

CONTACT HOLE POSITION DIMENSIONS AND PRINTED BOARD MOUNT CONTACT HOLE PATTERN
HOLE IDENTIFICATION SHOWN IS FOR MATING FACE OF FEMALE CONNECTOR. USE MIRROR IMAGE FOR MALE CONNECTOR.

SUGGESTED PRINTED BOARD HOLE SIZES:
Suggest 0.045 [1.14] Ø holes in printed board for contact terminations.

PANEL CUT-OUT DIMENSIONS

DIMENSIONS ARE IN INCHES [MILLIMETERS]. ALL DIMENSIONS ARE SUBJECT TO CHANGE.
## INSULATOR DIMENSIONS

MATING FACE OF FEMALE CONNECTOR FOR SIZE LGH 12.

![Diagram of LGH12M and LGH12F connectors]

See LGH Series Printed Board Hole Patterns, page 10 of this catalog, for contact variant hole positions.

## ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 6

<table>
<thead>
<tr>
<th>STEP</th>
<th>EXAMPLE</th>
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<tbody>
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<td>1</td>
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<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>M</td>
</tr>
<tr>
<td>4</td>
<td>SC</td>
</tr>
<tr>
<td>5</td>
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<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>/AA</td>
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<tr>
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<td></td>
</tr>
</tbody>
</table>

### STEP 1 - BASIC SERIES
LGH Series

### STEP 2 - CONNECTOR VARIANTS
12

### STEP 3 - CONNECTOR GENDER
- M - Male
- F - Female - open entry contacts
- FC - Female - closed entry contacts

### STEP 4 - CONTACT TERMINATION TYPE
- SC - Solder Cup.
- DS6 - Straight Solder, 0.182 [4.62]

### NOTE:
Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-D IGES, STEP, or SOLIDWORKS file.

### STEP 6 -
- 0 - This position is reserved for future use, insert “0”.

### STEP 5 -
- 0 - This position is reserved for future use, insert “0”.

### STEP 7 - ENVIRONMENTAL COMPLIANCE OPTIONS
/AA - Compliant per EU Directive 2002/95/EC (RoHS)

### NOTE:
If compliance to environmental legislation is not required, this step will not be used. Example: LGH12MSC00

## 2-D Drawing

## 3-D Model

Dimensions are in inches [millimeters]. All dimensions are subject to change.
MGH series connectors are microminiature, high-reliability connectors. They are available with three contacts for providing polarization: two contacts at 0.030 inch [0.76 mm] diameter, and one contact at 0.040 inch [1.02 mm] diameter. The MGH series is rated to 5 amperes per contact. Spacing between contacts is 0.102 inch [2.59 mm], and the face diameter of the connector is 0.312 inch [7.92 mm].

MGH series connectors are ideally applied where limited space is a concern. MGH series connectors can be used as cable connectors, panel-mounted connectors, or probes. Constructed of high performance materials, MGH series connectors are widely used in medical, industrial, military, and automotive applications.

TECHNICAL CHARACTERISTICS

MATERIALS AND FINISHES:
- Insulator: Glass-filled DAP per ASTM-D-5948, Type SDG-F. Green color is standard.
- Contacts: Precision machined copper alloy.
- Contact Plating: Gold flash over nickel.
- Hoods: Aluminum with yellow or black anodize.
- Lock Rings and Lock Springs: Copper alloy with zinc plate and chromate seal.

MECHANICAL CHARACTERISTICS:
- Fixed Contacts: Two (2) size 22 contacts, male - 0.030 inch [0.76 mm] diameter, and one (1) size 20 contact, male - 0.040 inch [1.02mm] diameter. Female contact - open entry.
- Contact Retention in Insulator: 6 lbs. [26.5 N], minimum.
- Contact Termination: Solder cup - 0.027 inch [0.69mm] hole diameter for 24 AWG [0.25mm²] wire maximum.
- Locking Systems: Friction, lock spring with lock ring.
- Polarization: 0.040 inch [1.02 mm] diameter male contact in position “A”.
- Mechanical Operations: 250 operations per IEC 60512-5.

ELECTRICAL CHARACTERISTICS:
- Contact Current Rating: 5 amperes.
- Initial Contact Resistance: 0.012 ohms, maximum.
- Flash over Voltage: 1,500 VAC (rms).
- Test Voltage: 1,000 VAC (rms).
- Insulation Resistance: 5 G ohms, minimum.
- Clearance and Creepage Distance: 0.021 inch [0.53 mm], minimum.
- Working Voltage: 600 VAC (rms).

CLIMATIC CHARACTERISTICS:
- Temperature Range: -55°C to +125°C.
- Damp Heat, Steady State: 21 days.
TYPICAL ASSEMBLIES

MGH SERIES
PROFESSIONAL QUALITY / FIXED CONTACTS
MICROMINIATURE CIRCLE HEX CONNECTORS

PANEL CUT-OUT DIMENSIONS

DIMENSIONS ARE IN INCHES [MILLIMETERS].
ALL DIMENSIONS ARE SUBJECT TO CHANGE.
## ORDERING INFORMATION - CODE NUMBERING SYSTEM

Specify Complete Connector By Selecting An Option From Step 1 Through 6

<table>
<thead>
<tr>
<th>STEP</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAMPLE</td>
<td>MGH</td>
<td>3</td>
<td>M</td>
<td>SC</td>
<td>LRN</td>
<td>0</td>
<td>/AA</td>
<td></td>
</tr>
</tbody>
</table>

### STEP 1 - BASIC SERIES
MGH Series

### STEP 2 - CONNECTOR VARIANTS
3 - Contact Connector Variant

### STEP 3 - CONNECTOR GENDER
M - Male
F - Female

### STEP 4 - CONTACT TERMINATION TYPE
SC - Solder Cup.

### STEP 5 - MOUNTING AND LOCKING ACCESSORIES
LR - Lock Ring.
LS - Lock Spring.
LRN - Lock Ring and Nut.
0 - If no mounting or locking accessories are required.

### STEP 6 - CABLE ADAPTERS (HOODS)
H7 - Aluminum hood, yellow anodize.
H7B - Aluminum hood, black anodize.
0 - If no hoods are required.

### STEP 7 - ENVIRONMENTAL COMPLIANCE OPTIONS
/AA - Compliant per EU Directive 2002/95/EC (RoHS)

**NOTE:** If compliance to environmental legislation is not required, this step will not be used. Example: MGH3MSCLRN0

### STEP 8 - SPECIAL OPTIONS
CONTACT TECHNICAL SALES FOR SPECIAL OPTIONS

### NOTE:
Once you have made a connector selection, contact Technical Sales if you would like to receive a drawing in DXF, PDF format or a 3-D IGES, STEP, or SOLIDWORKS file.

### 2-D Drawing
![2-D Drawing]

### 3-D Model
![3-D Model]
**Contact Sizes:**
- 0, 8, 12, 16, 20, 22 and 24

**Current Ratings:**
- To 200 amperes per contact

**Terminations:**
- Crimp and panel mount, straight solder, right angle (90°) solder, straight compliant press-in and right angle (90°) compliant press-in

**Configurations:**
- Multiple variants in a variety of package sizes

**Qualifications:**
- PICMG 2.11, PICMG 3.0, VITA 41, DSCC, GSFC S-311-P-4, GSFC S-311-P-10

**Features:**
- High current density
- Energy saving - low contact resistance
- AC/DC operation in a single connector
- Signal contacts for hardware management
- Blind mating
- Sequential mating
- Modular tooling which produces a single piece connector insert

**Power**

**Contact Sizes:**
- 16, 20 and 22

**Current Ratings:**
- To 13 amperes nominal

**Terminations:**
- Crimp, wire solder, straight solder, right angle (90°) solder, straight compliant press-in

**Configurations:**
- Multiple variants in both standard and high densities, thirty package sizes

**Qualifications:**
- MIL-DTL-28748, SAE AS39029, CCITT V.35

**Features:**
- Two performance levels available: industrial quality and military quality
- A wide variety of accessories
- Broad selection of contact variants and package sizes
- Connector keying options

**D-Subminiature**

**Contact Sizes:**
- 12, 16, 20 and 22

**Current Ratings:**
- To 25 amperes nominal

**Terminations:**
- Crimp, wire solder, straight solder, and right angle (90°) solder

**Configurations:**
- Multiple variants in four package sizes

**Qualifications:**
- MIL-DTL-24308, GSFC S-311-P-4, GSFC S-311-P-10, SAE AS39029, DSCC

**Features:**
- Non-corrodible / lightweight composite construction
- EMI/RFI shielded versions
- Thermocouple contacts
- Environmentally sealed versions
- Rear insertion/ front release of removable contacts
- Two level sequential mating
- Overmolding available on full assemblies

**Rectangular**

**Contact Sizes:**
- 8, 16, 20 and 22

**Current Ratings:**
- To 100 amperes

**Terminations:**
- Crimp, wire solder, straight solder, right angle (90°) solder, compliant press-in and right angle (90°) compliant press-in

**Configurations:**
- Multiple variants in both standard and high densities, seven shell sizes

**Qualifications:**
- MIL-DTL-24308, GSFC S-311-P-4, GSFC S-311-P-10, SAE AS39029, DSCC

**Features:**
- Four performance levels available for best cost/performance ratio: professional, industrial, military and space-flight quality
- Options include high voltage, coax, thermocouple and air coupling contacts; environmentally sealed and dual port connector packages including mixed density
- Broad selection of accessories
- Sizes 20 and 22 contacts suitable for use in carrying power
- IP65, IP67

**Circular**

**Contact Sizes:**
- 8, 12, 16, 20 and 22

**Current Ratings:**
- To 40 amperes nominal

**Terminations:**
- Feedthrough is standard; flying leads and board mount available upon request

**Configurations:**
- See D-subminiature and circular configurations above

**Hermetic**

**Contact Sizes:**
- 8, 12, 16, 20 and 22

**Current Ratings:**
- To 40 amperes nominal

**Terminations:**
- Feedthrough is standard; flying leads and board mount available upon request

**Configurations:**
- See D-subminiature and circular configurations above

**Qualifications:**
- Space-D32

**Features:**
- Intended for use as an electrical feedthrough in high vacuum applications
- Leakage rate: 5 x 10-9 mbar.l/s @ vacuum 1.5 x 10-5 atm
- Signal, power, coax and high voltage versions available
- Connectors can be mounted on flange assembly per customer specification

For more information, visit [www.connectpositronic.com](http://www.connectpositronic.com) or call your nearest Positronic sales office listed on the back of this catalog.
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