



Positronic
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MGH SERIES

PROFESSIONAL QUALITY / FIXED CONTACTS

MICROMINIATURE CIRCLE HEX CONNECTORS

Circle
Hex

**Size 22 Signal/Power
Contacts**

**High Performance
Construction**

**Polarization and
Locking Accessories**

**UL Recognized
File #E49351**



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.



**For RoHS options
see page 14.**

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 [0.25mm ²] 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.

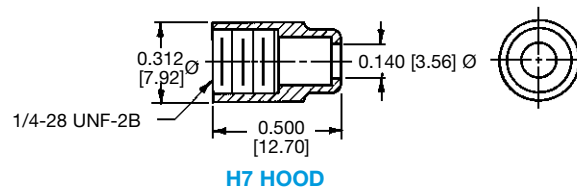
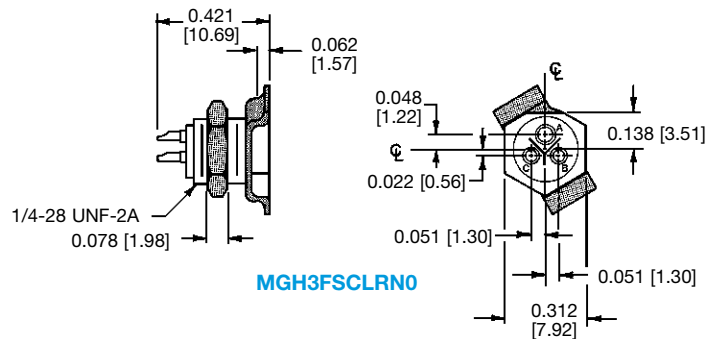
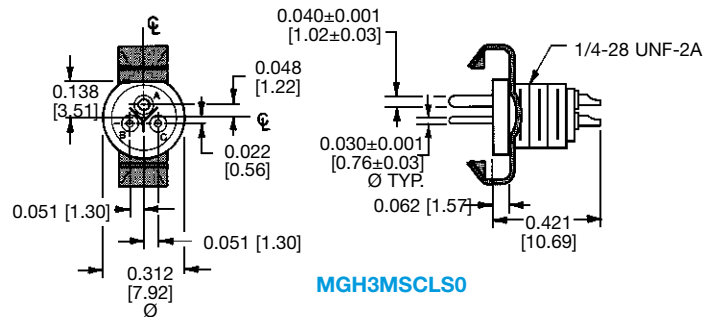
ELECTRICAL CHARACTERISTICS:

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).

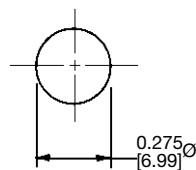
CLIMATIC CHARACTERISTICS:

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

TYPICAL ASSEMBLIES



PANEL CUT-OUT DIMENSIONS





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ORDERING INFORMATION - CODE NUMBERING SYSTEM

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

STEP	1	2	3	4	5	6	7	8
EXAMPLE	MGH	3	M	SC	LRN	0	/AA	

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 8 - SPECIAL OPTIONS

**CONTACT TECHNICAL SALES
FOR SPECIAL OPTIONS**

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: MGH3MSCLRNO



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.