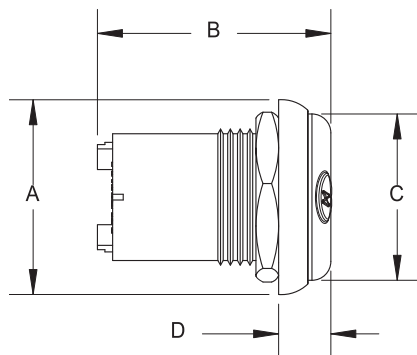




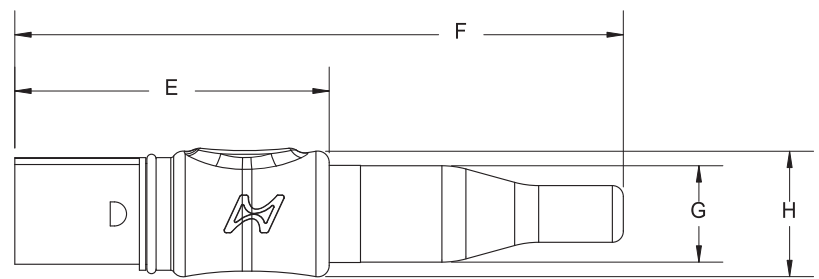
HyperGrip® - Push/Pull Plastic Circular Connectors

- For medical and other high reliability applications
- Customer-keyable (6 positions)
- 12 (HG2), 19 (HG3), 33 (HG4), or 80 (HG6) contact positions
- Other contact configurations available upon request
- 1 Amp per contact
- Color coding
- Overmoldable plug design
- Front or rear panel mount receptacle design
- High-end engineering plastic components meet medical sterilizing and cleaning requirements
- Crimp and solder cup contact terminations available (printed circuit tails available on panel mount receptacle)
- Sealing option: IP67 (temporary immersion) when mated
- Meets fingerproofing requirements of UL544 and IEC60601

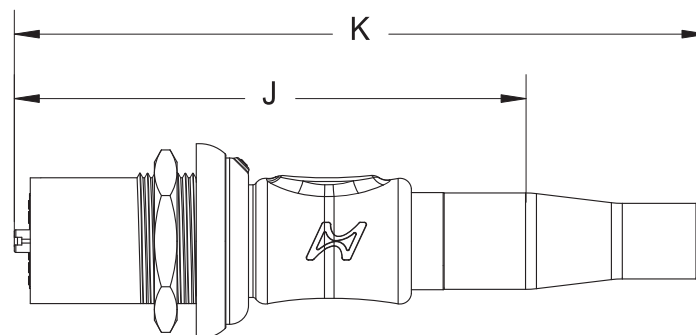
	HG2	HG3	HG4
A	Ø1.014 [25.76]	Ø1.172 [29.77]	Ø1.250 [31.77]
B	1.220 [30.98]	1.137 [28.87]	1.137 [28.87]
C	Ø0.866 [22.00]	Ø1.007 [25.59]	Ø1.090 [27.80]
D	0.272 [6.91]	0.272 [6.91]	0.272 [6.91]
E	1.637 [41.59]	1.637 [41.59]	1.637 [41.59]
F	3.265 [82.93]	3.500 [88.88]	3.500 [88.88]
G	Ø0.502 [12.75]	Ø0.650 [16.50]	Ø0.710 [18.15]
H	Ø0.656 [16.66]	Ø0.800 [20.36]	Ø0.880 [22.47]
J	2.700 [68.56]	2.890 [73.47]	2.890 [73.47]
K	3.724 [94.60]	3.880 [98.45]	3.880 [98.45]



"E" Receptacle

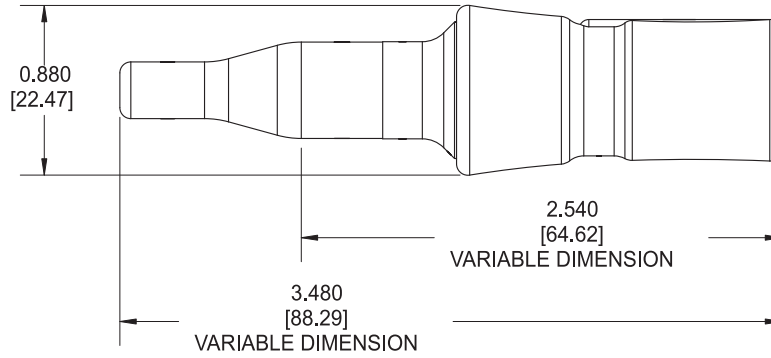


"P" Plug

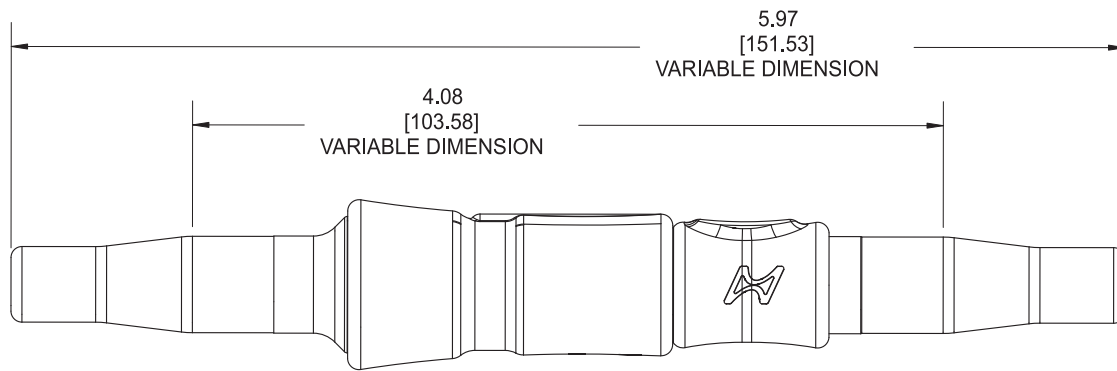


Plug/Receptacle Mated with Strain Relief

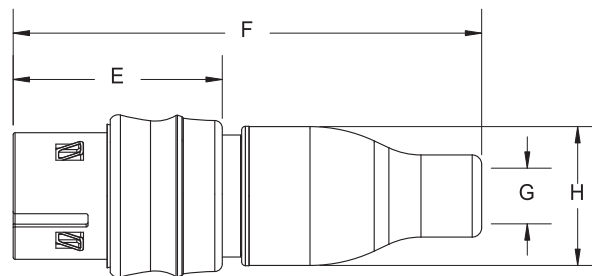
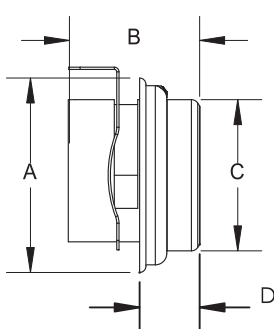
Dimensions are in inches [mm]



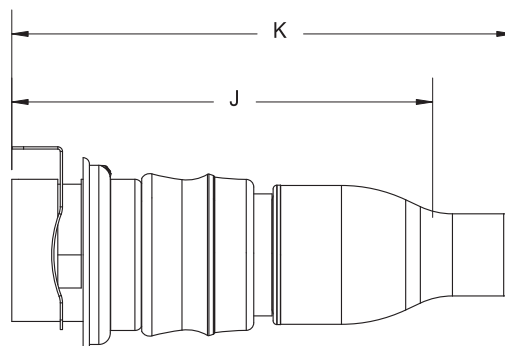
**“C” Cable Receptacle
HG2 Only**



**Plug/Cable Receptacle Mated
HG2 Only**



HG6 Only



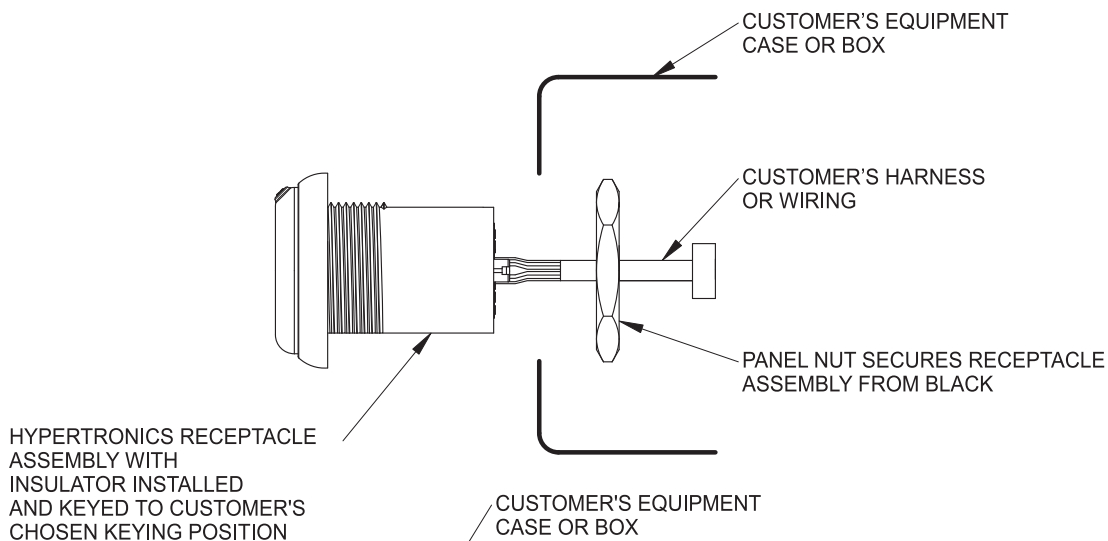
	HG6
A	Ø2.026 [51.45]
B	1.452 [36.87]
C	Ø1.789 [45.45]
D	0.669 [17.00]
E	2.224 [56.50]
F	4.950 [125.72]
G	Ø1.452 [36.88]
H	Ø1.467 [37.00]
J	4.371 [111.02]
K	5.265 [133.72]

NOTE:
HG6 drawings are reduced to 50 percent and show optional strain relief.

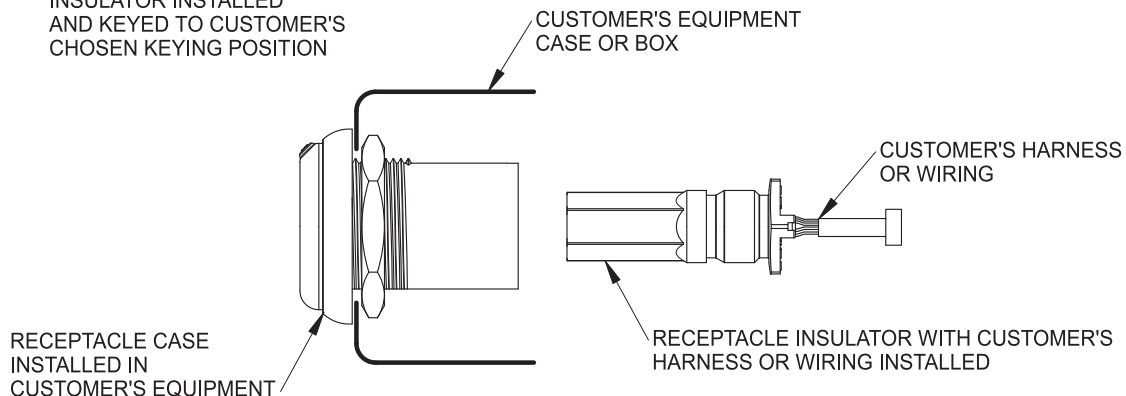
Dimensions are in inches [mm]

General Specifications - HyperGrip	
Contact Diameter	0.016 [0.40]
Current Rating	1 Amp
Contact Resistance	< 8 milliohms
Contact Extraction Force Each	0.5 – 1.6 oz.
Contact Life Cycles	Up to 100,000
Plug Cycle Life	Up to 20,000
Breakdown Voltage Between Contacts	> 1000V
Dielectric Withstanding Voltage	> 750V
Contact Material and Plating	Sockets: Beryllium copper wires and brass body components 50µin gold over nickel on wires, gold flash over nickel on termination Pins: Brass 50µin gold over nickel
Insulation Resistance	> 5 x 10 ⁴ megohms at 500 VDC
Temperature Rating Polyetherimide, LCP, Silicone	-40° C to 125° C Up to 185° C processing
Sterilization	Steam autoclave, Gamma, ETO

Front Mounting Installation



Rear Mounting Installation



Dimensions are in inches [mm]

Ordering Information

HG 2 P 4 3 G G 12 04 M R H

HyperGrip Plastic Circular

Size Size: (2), (3), (4), (6)

Type
 P = Plug
 E = Receptacle/panel
 C = Receptacle/cable
 (C available on HG2 only)

Sealing Option
 1 = Sealed
 4 = Unsealed

Strain Relief Size Options
 0 = No strain relief
 3 = 3.00 - 4.50mm cable dia. range (HG2 only - optional)
 4 = 4.50 - 6.50mm cable dia. range (HG2 only - standard)
 5 = 7.00 - 9.00mm cable dia. range (HG3 only)
 6 = 9.00 - 11.00mm cable dia. range (HG4 only)

Outer Shell Color
 G = LT gray

Color Coding
 G = LT Gray (standard)
 D = Blue
 M* = Brown
 R = Red
 V = Green
 B* = Black
 Y = Yellow
 W* = White
 N' = No color code

Plating
 H = Pins: 50µin gold on contact surfaces, gold flash on terminations
 AH = Sockets: 50µin gold on contact surfaces, gold flash on terminations (Omit for no contacts)

Termination
 S = Solder cup (optional)
 R = Crimp (standard)
 D = Straight dip printed circuit (optional)
 Panel receptacle only (Omit for no contacts)

Contact Gender
 F = Female sockets (standard receptacle)
 M = Male pins (standard plug)
 N = No contacts

Size	HG2	HG3	HG4	HG6
Contact Diameter	0.40mm	0.40mm	0.40mm	0.40mm
Positions	12	19	33	80

* Color is special order only.

Available Contacts	Wire Gauge (AWG)
Female Receptacle - Standard	
Crimp Socket (standard)	26 – 28
Solder Cup Socket (optional)	26 Max.
Printed Circuit Terminal Socket (optional)	N/A
Male Plug - Standard	
Crimp Pin (standard)	26 – 28
Solder Cup Pin (optional)	26 Max.
Male Receptacle - Special Order Only	
Crimp Pin	26 – 28
Solder Cup Pin	26 Max.
Printed Circuit Terminal Pin	N/A
Female Plug - Special Order Only	
Crimp Pin	26 – 28
Solder Cup Pin	26 Max.

Accessories	Part Numbers
Crimp Tool	AFM8 or M22520/2-01
Positioner	T2030
Insertion Tool	T1916
Receptacle Insulator Extraction Tool	T2057 (HG2) T2085-20 (HG3) T2085-34 (HG4) T2085-85 (HG6)

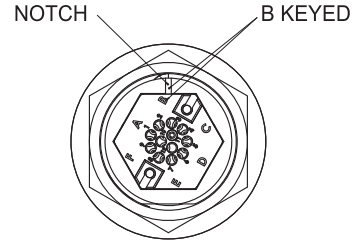
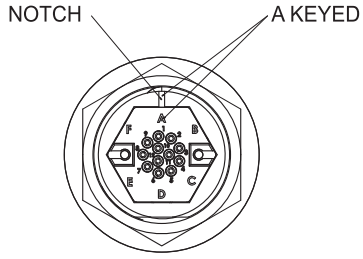
NOTE:
 1) If N applies: Plug and cable receptacle - specify no strain relief.
 Panel receptacle - specify unsealed (no panel color code).

Dimensions are in inches [mm]

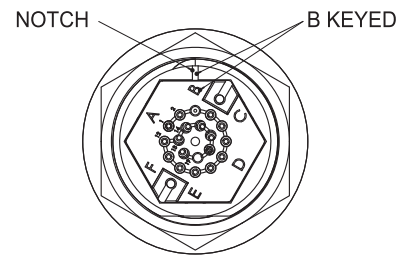
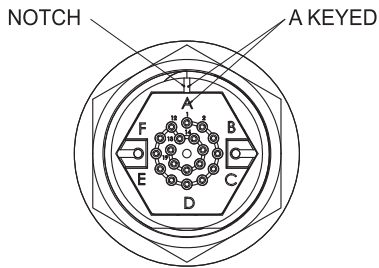
Keying Position A
(Receptacle Wiring End)

Keying Position B
(Receptacle Wiring End)

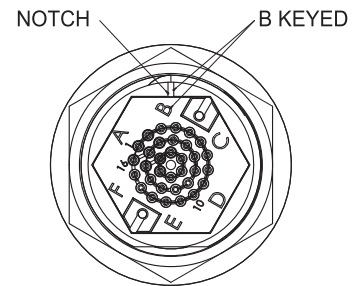
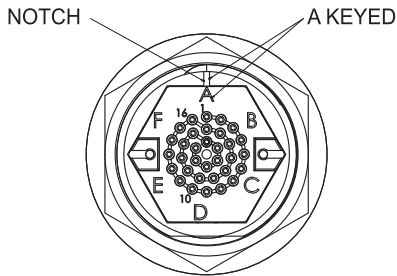
HG2



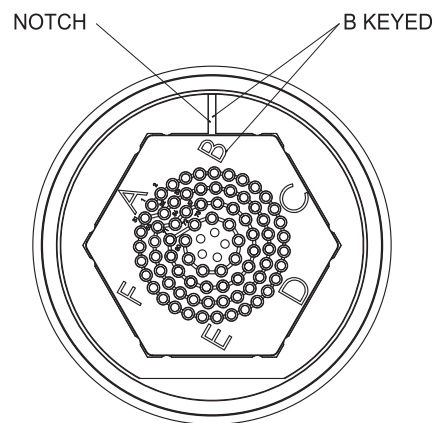
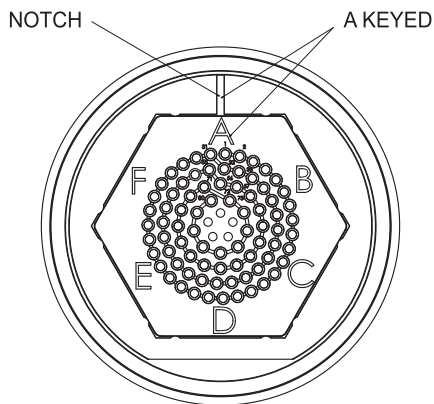
HG3



HG4



HG6



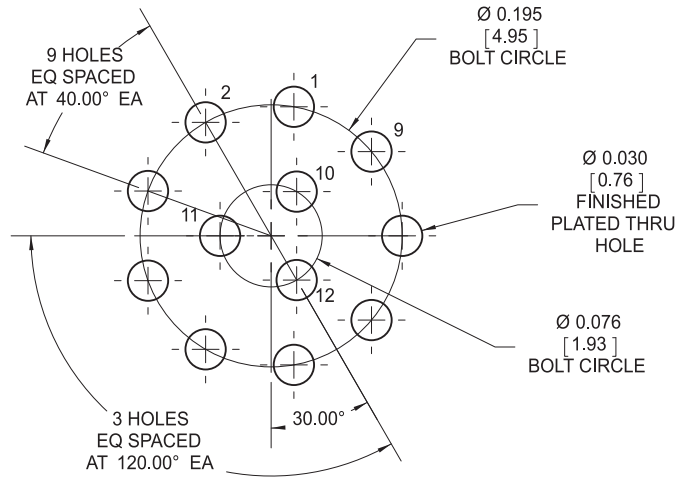
NOTE:
6 different keying positions possible - A through F.

Dimensions are in inches [mm]

HG2 Panel Receptacles

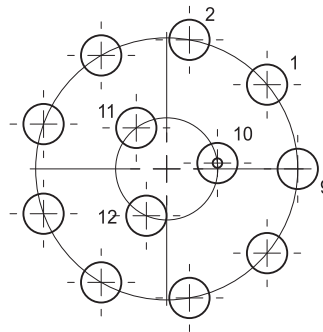
12 Position Printed Circuit Board Cutout

“A” Key (D Termination)



12 Position Printed Circuit Board Cutout

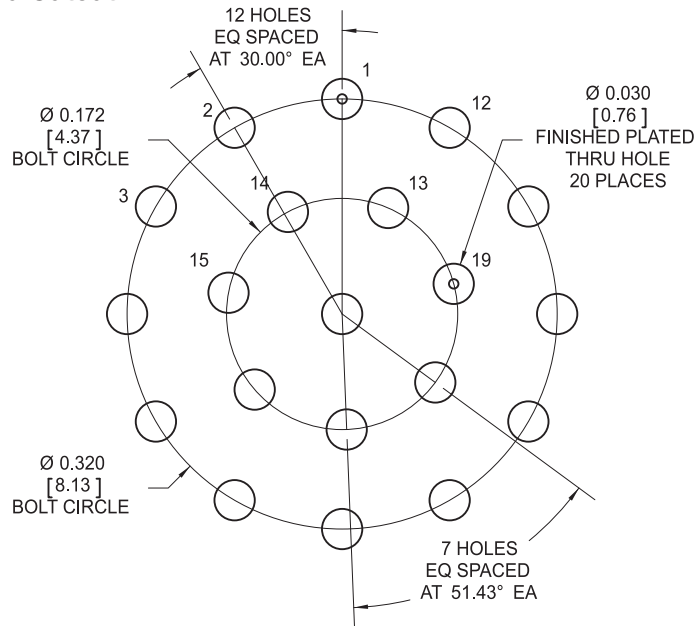
“B” Key (D Termination)



HG3 Panel Receptacles

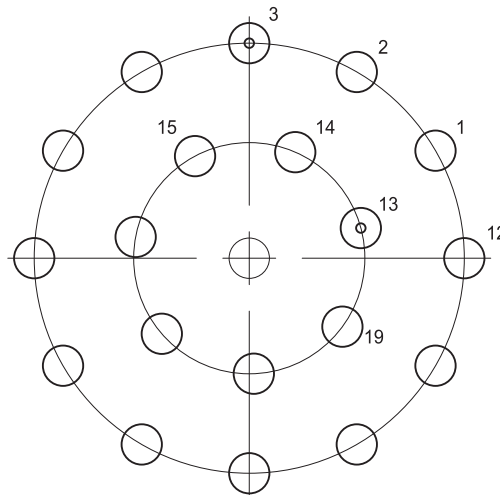
19 Position Printed Circuit Board Cutout

“A” Key (D Termination)



19 Position Printed Circuit Board Cutout

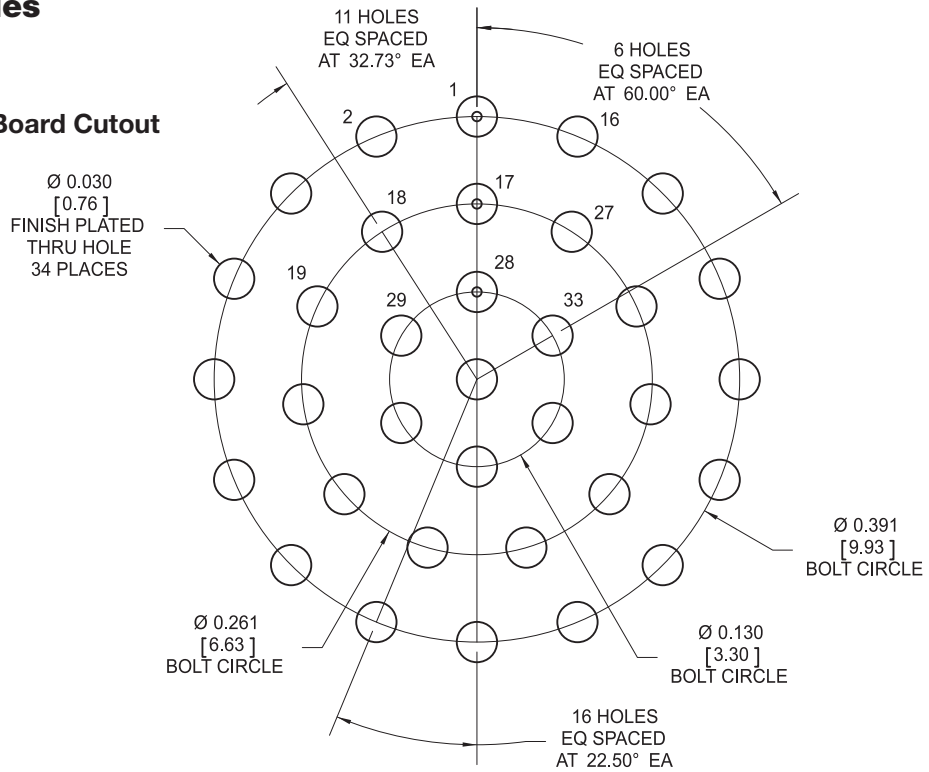
“B” Key (D Termination)



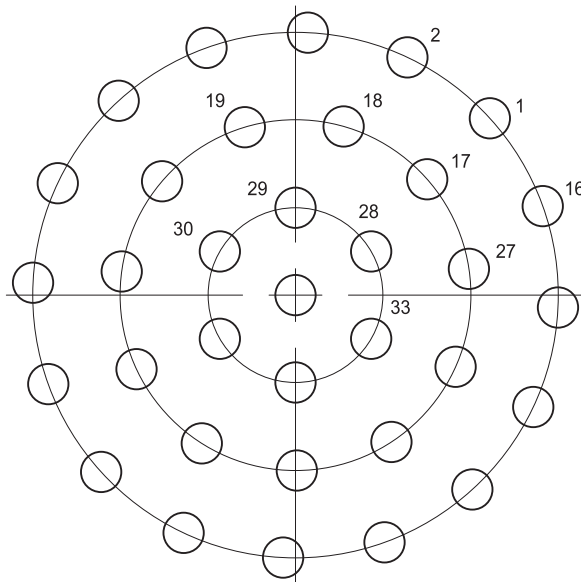
Dimensions are in inches [mm]

HG4 Panel Receptacles

33 Position Printed Circuit Board Cutout
 "A" Key (D Termination)



33 Position Printed Circuit Board Cutout
 "B" Key (D Termination)

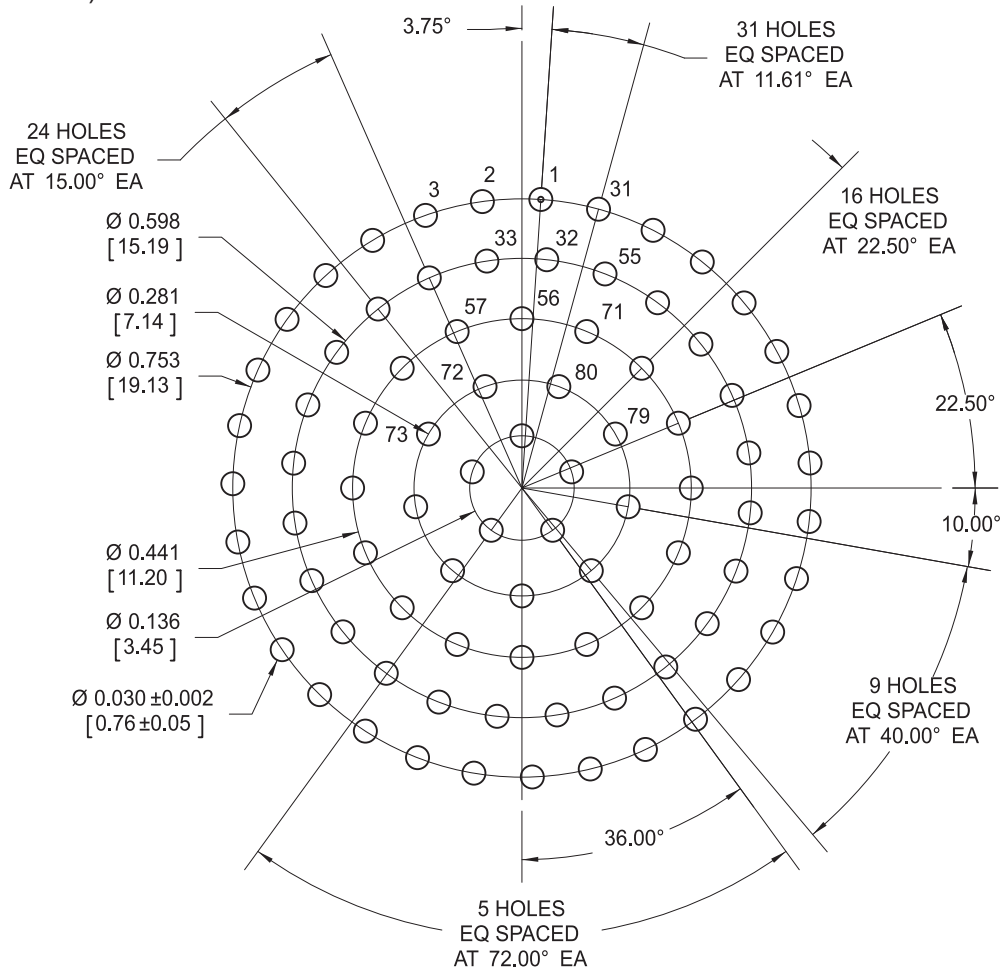


Dimensions are in inches [mm]

HG6 Panel Receptacles

80 Position Printed Circuit Board Cutout

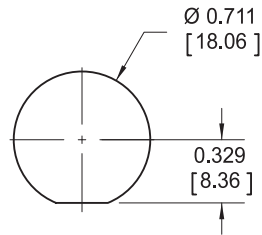
"A" Key (D Termination)



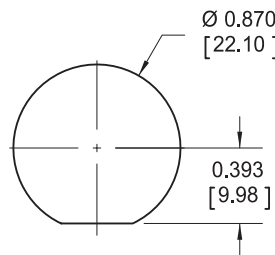
Dimensions are in inches [mm]

Panel Cutouts

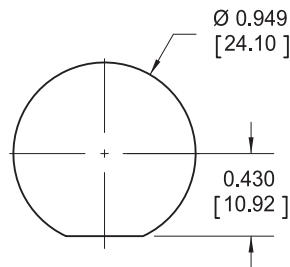
HG2



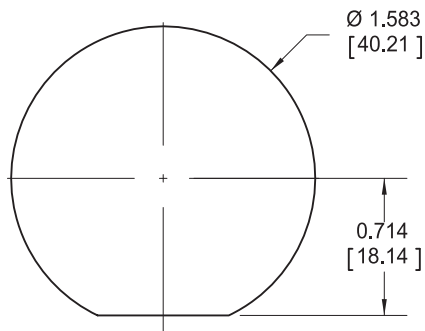
HG3



HG4



HG6



Dimensions are in inches [mm]