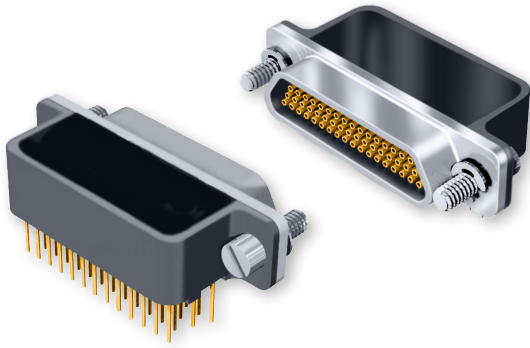




Micro-D GMR7590C Compact Flange Right Angle Mount Printed Circuit Board Connector



Innovative Design for Flex Circuits – These Micro-D connectors answer the need for a compact flex circuit connector. Featuring .075 X .075 inch row spacing. Glenair's GMR7590C accepts standard jackscrews and jackposts, making it ideal for flex-to-board applications.

High Performance – GMR7590C connectors meet the performance requirements of MIL-DTL-83513. Gold plated TwistPin contacts assure best electrical and mechanical performance.

How To Order GMR7590 Connectors

| Sample Part Number | GMR7590C | -31 | S | 2 | B | S1 | 513 |
|-------------------------------|--|-----|---|---|---|----|-----|
| Series | GMR7590C Micro-D Right Angle Mount Connector | | | | | | |
| Contact Layout | 9, 15, 21, 25, 31, 37, 51, 100 (See Table I) | | | | | | |
| Contact Type | P - Pin S - Socket | | | | | | |
| Tail Length in Inches (mm.) | 1 - .109" (2.76) 2 - .150" (3.81) 3 - .190" (4.83) 4 - .250" (6.35) 5 - Staggered Tail Length Length in Inches ± .015 (0.38) | | | | | | |
| Shell Plating Finish | Aluminum Shell A - Cadmium B - Nickel C - Allochrome D - Black Anodize E - Gold | | | Stainless Steel Shell F - Passivated | | | |
| Hardware | B, P, M, M1, S, S1, L, K, F, R (See Table I) | | | | | | |
| Gold-Plated Terminal Mod Code | These connectors are solder-dipped in 60/40 tin-lead solder. To delete the solder dip and change to gold-plated terminals, add code 513 | | | | | | |

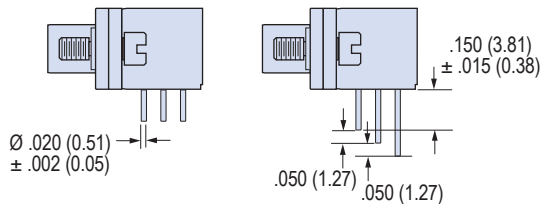
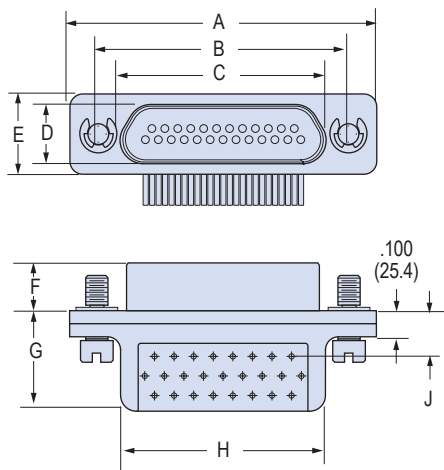
Table I: Mounting Hardware

| B | P | M | M1 | S | S1 | L | K | F | R |
|--|---|--|--|---|---|--|---|---|--|
| | | | | | | | | | |
| Thru-Hole Order Hardware Separately | Jackpost Removable Includes Nut and Washer | Jackscrew Hex Head Removable E-ring | Jackscrew Hex Head Removable E-ring Extended | Jackscrew Slot Head Removable E-ring | Jackscrew Slot Head Removable E-ring Extended | Jackscrew Hex Head Non- Removable | Jackscrew Slot Head Non- Removable Extended | Float Mount For Front Panel Mounting | Float Mount For Rear Panel Mounting |

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Table II: Dimensions



STAGGERED LEADS

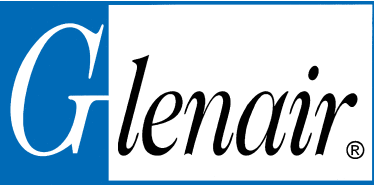
SIZES 9 THRU 51 MOUNTING HOLE IS .088/.096 (2.24/2.39)
SIZE 100 MOUNTING HOLE IS .145/.151 (3.68/3.81)

SIZES 9 THRU 51 THREAD SIZE IS #2-56 UNC
SIZE 100 THREAD SIZE IS #4-40

| Layout | A Max. | | B | | C Max. | | D Max. | | E Max. | | F | | G Max. | | H | |
|--------|--------|-------|------------|------------|--------|-------|--------|------|--------|-------|------------|------------|--------|-------|------------|------------|
| | In. | mm. | In. ± .005 | mm. ± 0.13 | In. | mm. | In. | mm. | In. | mm. | In. ± .003 | mm. ± 0.08 | In. | mm. | In. ± .010 | mm. ± 0.25 |
| 9P | .785 | 19.94 | .565 | 14.35 | .335 | 8.51 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | .400 | 10.16 |
| 9S | .785 | 19.94 | .565 | 14.35 | .400 | 10.16 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | .400 | 10.16 |
| 15P | .935 | 23.75 | .715 | 18.16 | .485 | 12.32 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | .530 | 13.46 |
| 15S | .935 | 23.75 | .715 | 18.16 | .550 | 13.97 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | .530 | 13.46 |
| 21P | 1.085 | 27.56 | .865 | 21.97 | .635 | 16.13 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | .700 | 17.78 |
| 21S | 1.085 | 27.56 | .865 | 21.97 | .700 | 17.78 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | .700 | 17.78 |
| 25P | 1.185 | 30.01 | .965 | 24.51 | .735 | 18.67 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | .800 | 20.32 |
| 25S | 1.185 | 30.01 | .965 | 24.51 | .800 | 20.32 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | .800 | 20.32 |
| 31P | 1.335 | 33.91 | 1.115 | 28.32 | .885 | 22.48 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | .950 | 24.13 |
| 31S | 1.335 | 33.91 | 1.115 | 28.32 | .950 | 24.13 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | .950 | 24.13 |
| 37P | 1.485 | 37.72 | 1.265 | 32.13 | 1.035 | 26.29 | .185 | 4.70 | .310 | 7.87 | .183 | 4.65 | .400 | 10.16 | 1.100 | 27.94 |
| 37S | 1.485 | 37.72 | 1.265 | 32.13 | 1.100 | 27.94 | .251 | 6.38 | .310 | 7.87 | .195 | 4.95 | .400 | 10.16 | 1.100 | 27.94 |
| 51P | 1.435 | 36.45 | 1.215 | 30.86 | .985 | 25.02 | .228 | 5.79 | .351 | 8.92 | .183 | 4.65 | .490 | 12.45 | 1.03 | 26.16 |
| 51S | 1.435 | 36.45 | 1.215 | 30.86 | 1.050 | 26.67 | .296 | 7.52 | .351 | 8.92 | .195 | 4.95 | .490 | 12.45 | 1.03 | 26.16 |
| 100P | 2.170 | 55.12 | 1.800 | 45.72 | 1.384 | 35.15 | .271 | 6.88 | .394 | 10.00 | .183 | 4.65 | .660 | 16.76 | 1.500 | 38.13 |
| 100S | 2.170 | 55.12 | 1.800 | 45.72 | 1.451 | 36.86 | .333 | 8.46 | .394 | 10.00 | .195 | 4.95 | .660 | 16.76 | 1.500 | 38.13 |

| Performance Specifications | |
|----------------------------|-------------------------------|
| Current Rating | 3 AMP |
| DWV | 600 VAC Sea level |
| Insulation Resistance | 5000 Megohms Minimum |
| Contact Resistance | 8 Milliohms Maximum |
| Low Level Contact Resist. | 32 Milliohms Maximum |
| Magnetic Permeability | 2 μ Maximum |
| Operating Temperature | -55° C. to +150° C. |
| Shock, Vibration | 50 g., 20g. |
| Mating Force | (10 Ounces) X (# of Contacts) |

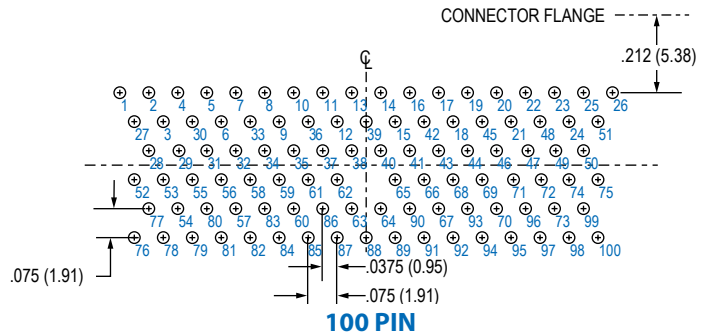
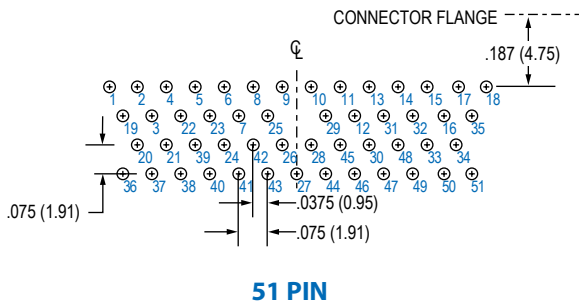
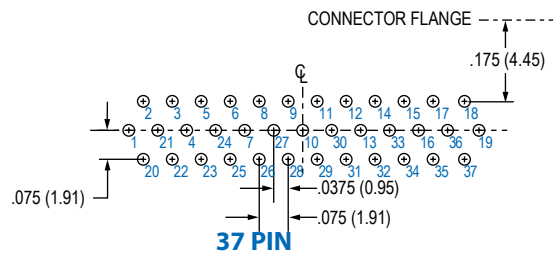
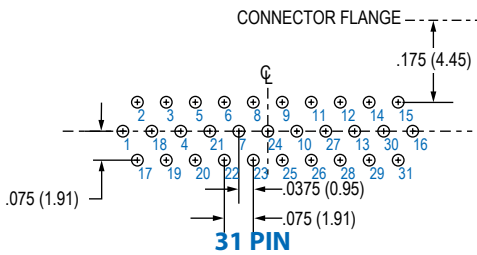
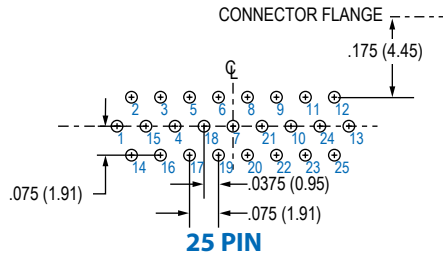
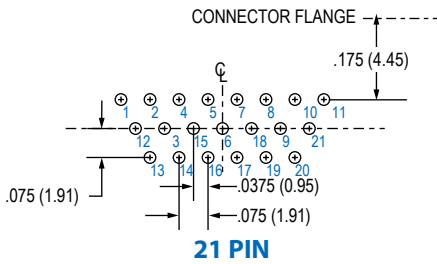
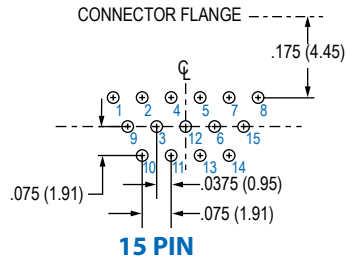
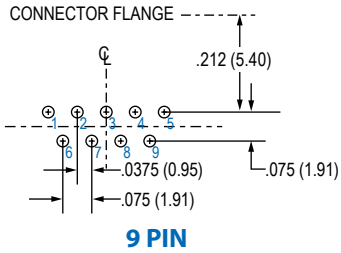
| Materials and Finishes | |
|------------------------|---|
| Connector Shell | Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options |
| Insulator, Tray | Liquid Crystal Polymer (LCP) Polyphenylene Sulfide (PPS) |
| Interfacial Seal | Fluorosilicone Rubber, Blue |
| Pin Contact | Copper Alloy, Gold over Nickel Plating |
| Socket Contact | Copper Alloy, Gold Over Nickel Plating |
| PCB Terminals | Gold Plated Copper Alloy, Solder Dipped |
| Hardware | 300 Series Stainless Steel |
| Encapsulant | Epoxy Resin Hysol EE4215 |



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GMR7590C Connector PCB Layouts – Pin Connectors

Patterns shown are for connector mounting side of PC board.

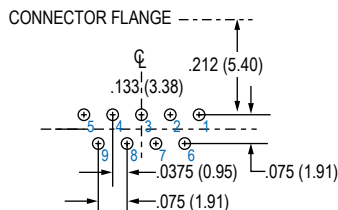


**Micro-D GMR7590C Compact Flange
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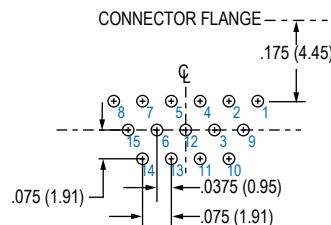


GMR7590C Connector PCB Layouts – Socket Connectors

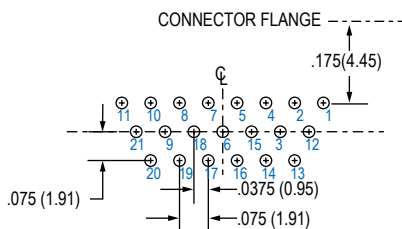
Patterns shown are for connector mounting side of PC board.



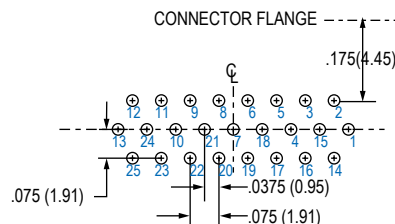
9 SOCKET



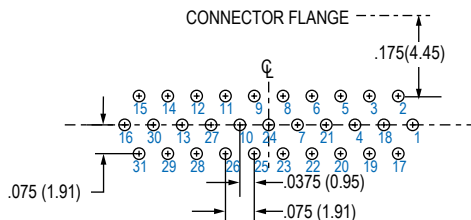
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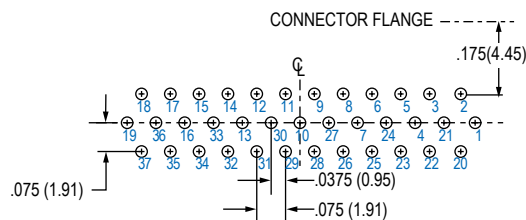
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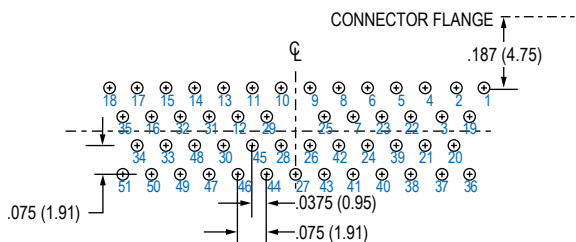
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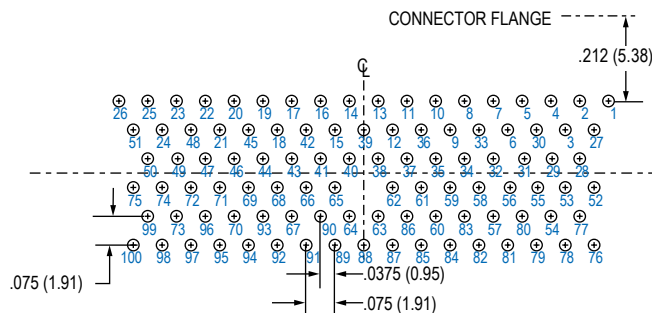
31 SOCKET



37 SOCKET



51 SOCKET



100 SOCKET