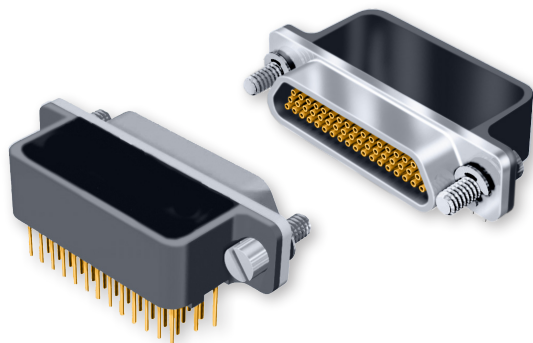




Micro-D GMR7590C Compact Flange Right Angle Mount Printed Circuit Board Connector



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 II)						
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 $\pm$.015 (0.38)						
Shell Plating Finish	Aluminum Shell Stainless Steel Shell A - Cadmium B - Nickel C - Allochrome F - Passivated D - Black Anodize E - Gold						
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

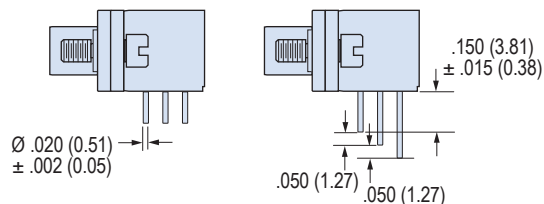
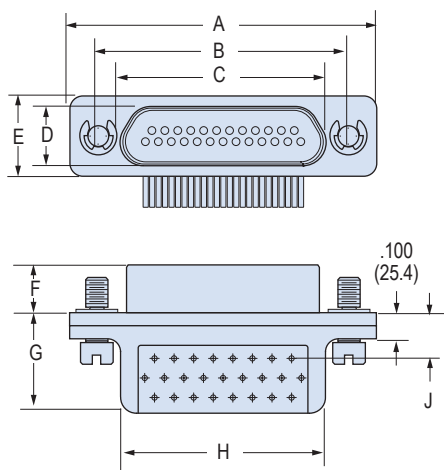
B	P	M	M1	S	S1	L	K	F	R
Thru-Hole Order Hardware Separately	Jackpost Removable Includes Nut and Washer	Jackscrew Hex Head Removable E-ring	Jackscrew Hex Head Removable E-ring Extended	Jackscrew Slot Head Removable E-ring	Jackscrew Slot Head Removable E-ring Extended	Jackscrew Hex Head Non- Removable	Jackscrew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

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Micro-D PCB

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	30.10	.965	24.51	.735	18.67	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.800	20.32
25S	1.185	30.10	.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

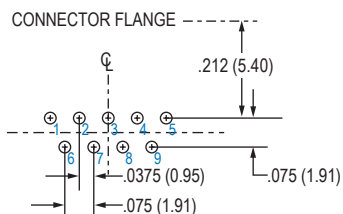
Connector Shell	Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options
Insulator, Tray	Liquid Crystal Polymer (LCP) Polyphenylene Sulfide (PPS)
Interfacial Seal	Fluorosilicone Rubber, Blue
Pin Contact	Copper Alloy, Gold over Nickel Plating
Socket Contact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



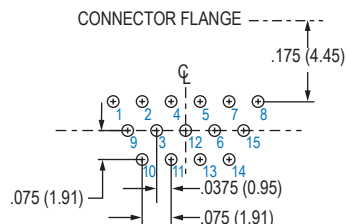
Micro-D GMR7590C Compact Flange Right Angle Mount Printed Circuit Board Connector

GMR7590C Connector PCB Layouts – Pin Connectors

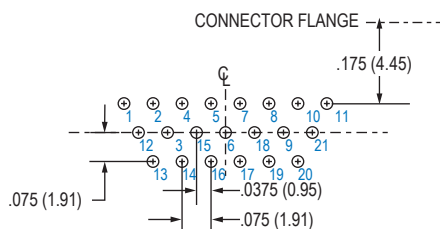
Patterns shown are for connector mounting side of PC board.



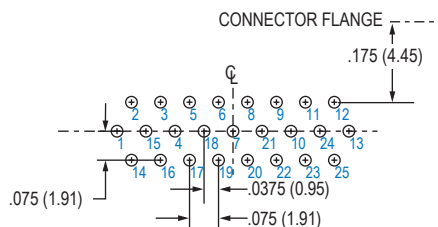
9 PIN



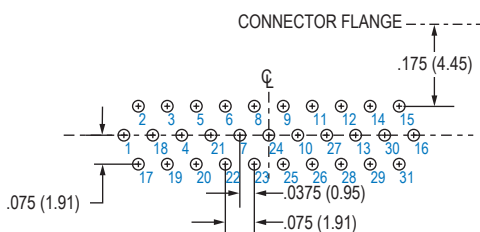
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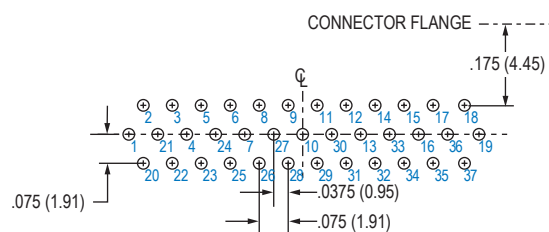
21 PIN



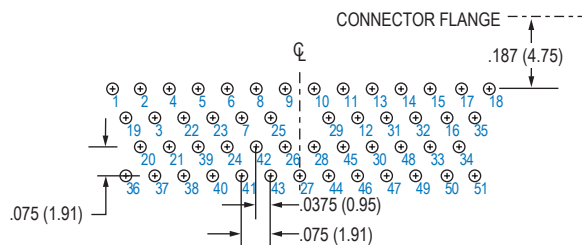
25 PIN



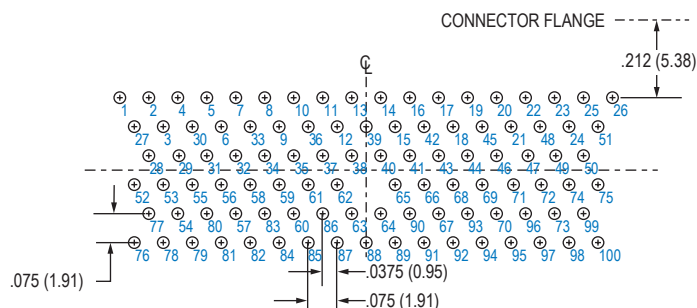
31 PIN



37 PIN



51 PIN



100 PIN

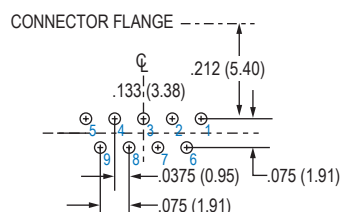
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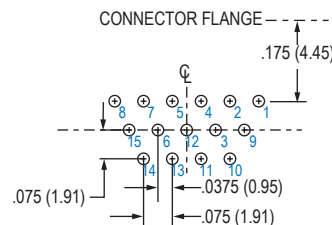
Micro-D PCB

GMR7590C Connector PCB Layouts – Socket Connectors

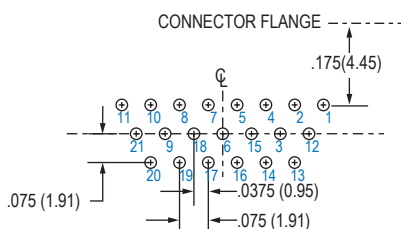
Patterns shown are for connector mounting side of PC board.



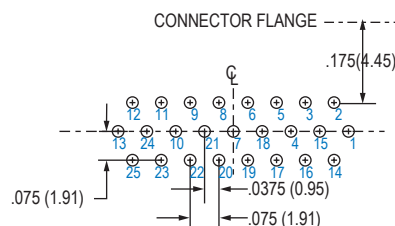
9 SOCKET



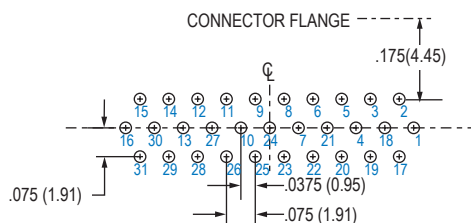
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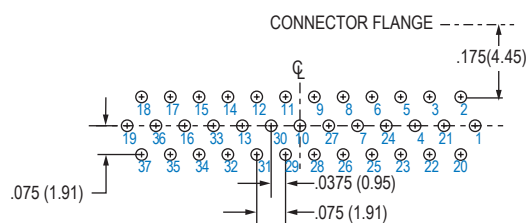
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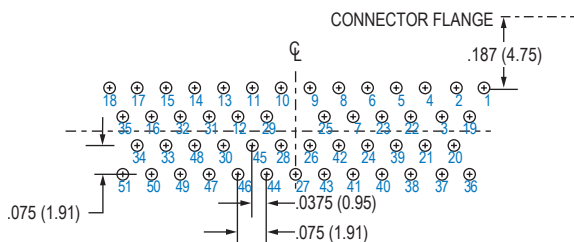
25 SOCKET



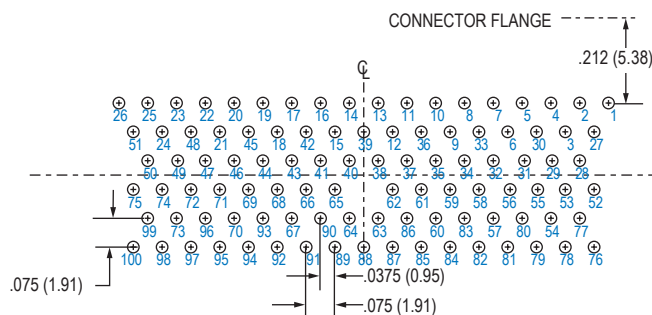
31 SOCKET



37 SOCKET



51 SOCKET



100 SOCKET