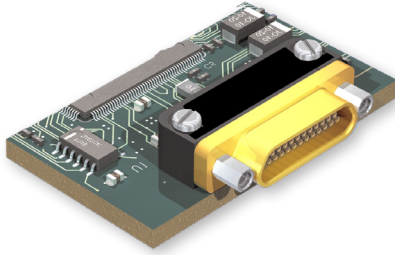




## Micro-D GMR7590 Right Angle Mount Printed Circuit Board Connectors



**Save Space On Your Circuit Board** – These Micro-D connectors feature .075 X .075 inch terminal spacing. Glenair's GMR7590 offers size and weight savings compared to traditional .100" pitch connectors.

**High Performance** – GMR7590 connectors meet the performance requirements of MIL-DTL-83513. Gold plated TwistPin contacts assure best electrical and mechanical performance.

### How To Order GMR7590 Connectors

	GMR7590	-31	S	2	B	SU	513																		
<b>Series</b>	GMR7590 Right Angle Mount Connector																								
<b>Contact Layout</b>	9, 15, 21, 25, 31, 37, 51, 100,																								
<b>Contact Type</b>	P - Pin S - Socket																								
<b>Tail Length in Inches (mm.)</b>	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)																								
<b>Shell Plating Finish</b>	Aluminum Shell A - Cadmium B - Nickel C - Allochrome D - Black Anodize E - Gold			Stainless Steel Shell F - Passivated																					
<b>Jackpost Options</b>	NN - No Jackpost, No Threaded Insert NU - Threaded Insert Only, No Jackposts NM - Metric Threaded Insert Only, No Jackposts SU - Short Jackpost and threaded Insert SM - Short Jackpost and Metric Threaded Insert SN - Short Jackpost, No Threaded Insert (See Table I)			<b>Rear Panel Mount Jackposts and Threaded Inserts</b> <table border="1"> <thead> <tr> <th>UN Threads</th> <th>Metric Threads</th> <th>Panel Thickness</th> </tr> </thead> <tbody> <tr> <td>TU</td> <td>TM</td> <td>.094" (2.4)</td> </tr> <tr> <td>VU</td> <td>VM</td> <td>.062" (1.6)</td> </tr> <tr> <td>WU</td> <td>WM</td> <td>.047" (1.2)</td> </tr> <tr> <td>XU</td> <td>XM</td> <td>.031" (0.8)</td> </tr> <tr> <td>YU</td> <td>YM</td> <td>.023" (0.6)</td> </tr> </tbody> </table>				UN Threads	Metric Threads	Panel Thickness	TU	TM	.094" (2.4)	VU	VM	.062" (1.6)	WU	WM	.047" (1.2)	XU	XM	.031" (0.8)	YU	YM	.023" (0.6)
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YU	YM	.023" (0.6)																							
<b>Gold-Plated Terminal Mod Code</b>	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																								

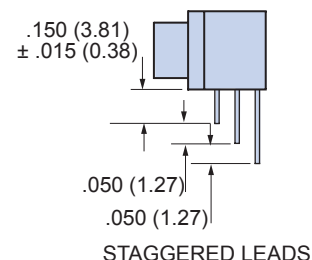
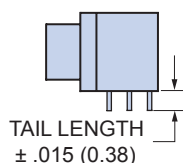
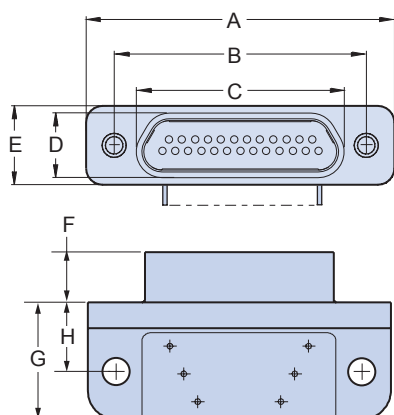
Table I: Jackpost Options

NN	NU, NM	SN	SU, SM	TU, VU, WU, XU, YU TM, VM, WM, XM, YM
No Jackpost, No Threaded Insert In PCB Mtng Hole	No Jackpost, Threaded Insert In PCB Mounting Hole	Jackpost Installed, No Threaded Insert in PCB Mounting Hole	Jackpost With Threaded Insert	Jackpost for Rear Panel Mounting

# Micro-D GMR7590 Right Angle Mount Printed Circuit Board Connectors



Table II: Dimensions



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 OR M2.  
SIZE 100 THREAD SIZE IS #4-40 OR M3.

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	.250	6.35
9S	.785	19.94	.565	14.35	.400	10.16	.251	6.38	.310	7.87	.195	4.95	.400	10.16	.250	6.35
15P	.935	23.75	.715	18.16	.485	12.32	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.250	6.35
15S	.935	23.75	.715	18.16	.550	13.97	.251	6.38	.310	7.87	.195	4.95	.400	10.16	.250	6.35
21P	1.085	27.56	.865	21.97	.635	16.13	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.250	6.35
21S	1.085	27.56	.865	21.97	.700	17.78	.251	6.38	.310	7.87	.195	4.95	.400	10.16	.250	6.35
25P	1.185	30.01	.965	24.51	.735	18.67	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.250	6.35
25S	1.185	30.01	.965	24.51	.800	20.32	.251	6.38	.310	7.87	.195	4.95	.400	10.16	.250	6.35
31P	1.335	33.91	1.115	28.32	.885	22.48	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.250	6.35
31S	1.335	33.91	1.115	28.32	.950	24.13	.251	6.38	.310	7.87	.195	4.95	.400	10.16	.250	6.35
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	.250	6.35
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	.250	6.35
51P	1.435	36.45	1.215	30.86	.985	25.02	.228	5.79	.351	8.92	.183	4.65	.490	12.45	.300	7.62
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	.300	7.62
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	.400	10.16
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	.400	10.16

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)

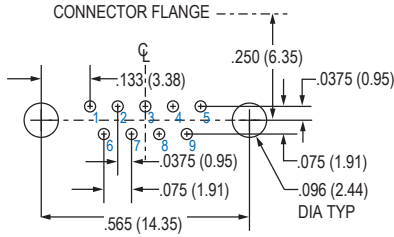
Materials and Finishes	
Connector Shell	Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options
Insulator, Tray	Liquid Crystal Polymer (LCP) Polyphenylene Sulfide (PPS)
Interfacial Seal	Fluorosilicone Rubber, Blue
Pin Contact	Copper Alloy, Gold over Nickel 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



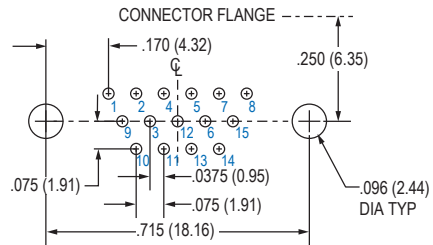
# Micro-D GMR7590 Right Angle Mount Printed Circuit Board Connectors

## GMR7590 Connector PCB Layouts – Pin Connectors

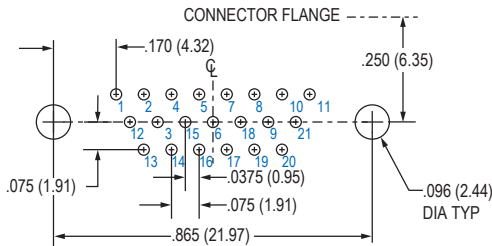
Patterns shown are for connector mounting side of PC board.



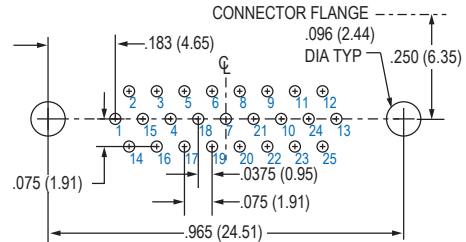
**9 PIN**



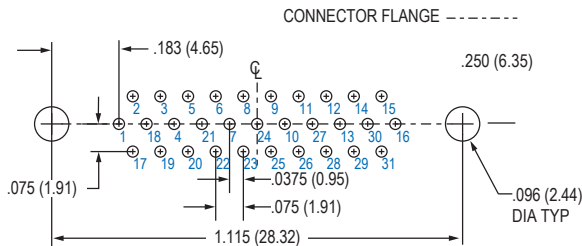
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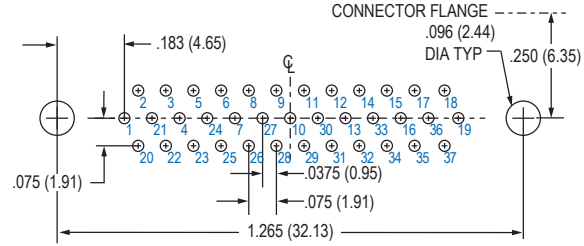
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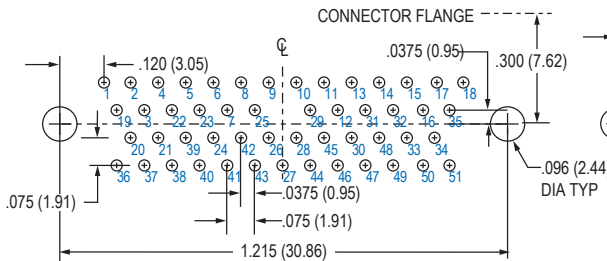
**25 PIN**



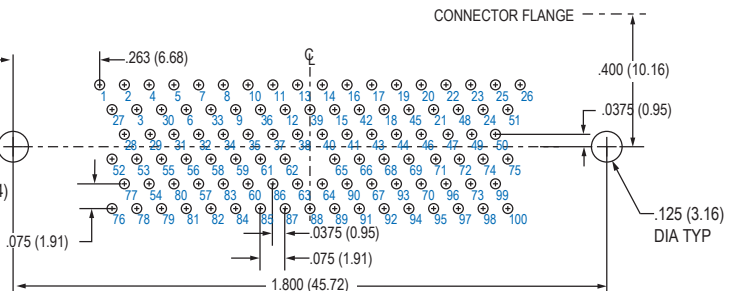
**31 PIN**



**37 PIN**



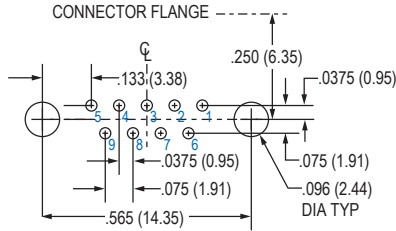
**51 PIN**



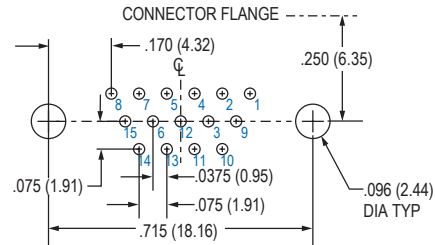
**100 PIN**

## GMR7590 Connector PCB Layouts – Socket Connectors

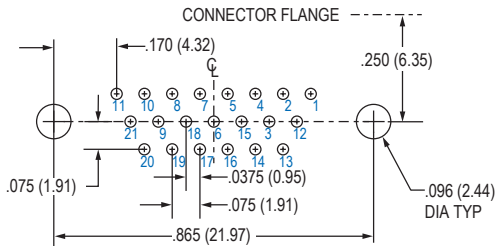
Patterns shown are for connector mounting side of PC board.



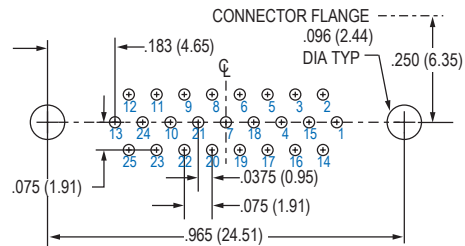
**9 SOCKET**



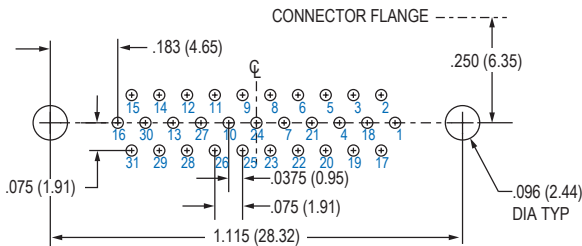
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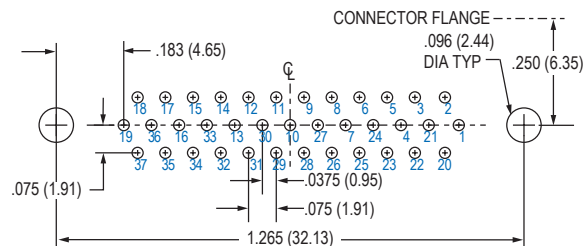
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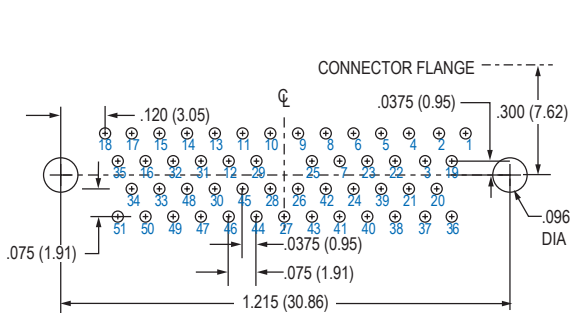
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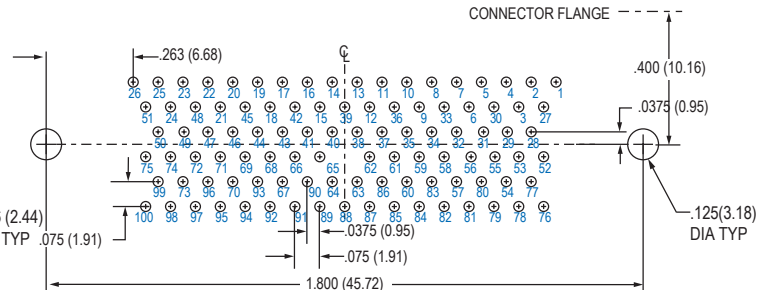
**31 SOCKET**



**37 SOCKET**



**51 SOCKET**



**100 SOCKET**