

**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** – Approved for British Standard BS9000, GMR7590 connectors meet the performance requirements of MIL-DTL-83513. Gold plated TwistPin contacts assure best electrical and mechanical performance.

## HOW TO ORDER GMR7590 RIGHT ANGLE .075" PITCH CONNECTORS

Series	Number of Contacts	Contact Type	Tail Length In. (mm.)	Shell Plating Finish	Hardware Option	Gold-Plated Terminal Mod Code
GMR7590 Micro-D Metal Shell, Right Angle Mount PCB	9	P Pin	1 – .109" (2.76)	A – Cadmium	<b>Hardware Option</b> NN – No Jackpost, No Threaded Insert NU – UN Threaded Insert Only, No Jackposts NM – Metric Threaded Insert Only, No Jackposts SU – Short Jackpost and UN Threaded Insert SM – Short Jackpost and Metric Threaded Insert  <b>Rear Panel Mount Jackposts and Threaded Inserts</b> 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)	These connectors are solder-dipped in 63/37 tin-lead solder.  To delete the solder dip and change to gold-plated terminals, add code 513
	15		2 – .150" (3.81)	B – Nickel		
	21		3 – .190" (4.83)	C – Allochrome		
	25	S Socket	4 – .250" (6.35)	D – Black Anodize		
	31		5 – Staggered Tail Length	E – Gold		
	37		Length in Inches ± .015 (0.38)			
51	100					
<b>SAMPLE PART NUMBER</b>						
GMR7590	- 31	S	2	B	SU	

## GMR7590 JACKPOST OPTIONS

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

# GMR7590 Right Angle Micro-D Connectors



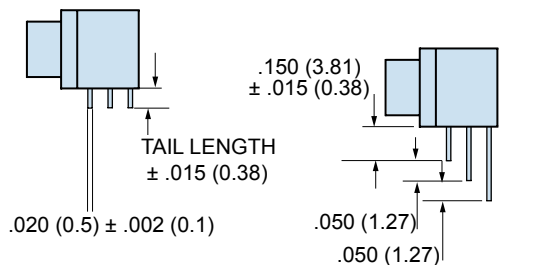
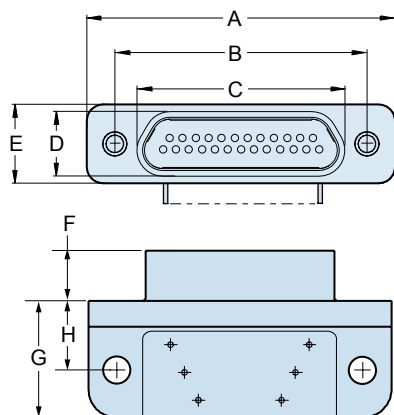
Micro-D  
PCB

## 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 $\mu$ 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)
Interfacial Seal	Flourosilicone Rubber, Blue
Pin Contact	Beryllium Copper 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



STAGGERED LEADS

SIZES 9 THRU 51 MOUNTING HOLE IS .088/094 (2.24/2.39)  
SIZE 100 MOUNTING HOLE IS .145/.150 (3.68/3.81)

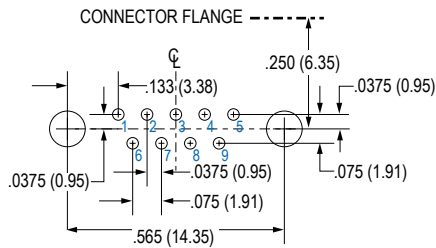
SIZES 9 THRU 51 THREAD SIZE IS #2-56 UNC OR M2.  
SIZE 100 THREAD SIZE IS #4-40 OR M3.

## GMR7590 CONNECTOR DIMENSIONS

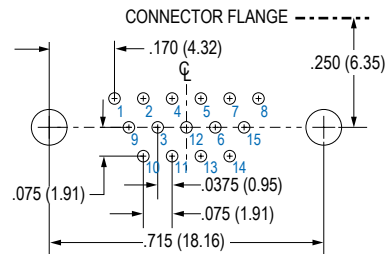
Layout	A Max.		B		C Max.		D Max.		E Max.		F		G Max.		H	
	In.	mm.	In. ±.005	mm. ±0.13	In.	mm.	In.	mm.	In.	mm.	In. ±.003	mm. ±0.08	In.	mm.	In. ±.010	mm. ±0.25
9P	.785	19.94	.565	14.35	.335	8.51	.185	4.70	.310	7.87	.183	4.65	.400	10.16	.250	6.35
9S	.785	19.94	.565	14.35	.400	10.16	.251	6.38	.310	7.87	.195	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	.294	7.47	.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	1.508	38.30	.394	10.00	.394	10.00	.195	4.95	.660	16.76	.400	10.16

## GMR7590 CONNECTOR PCB LAYOUTS – PIN CONNECTORS

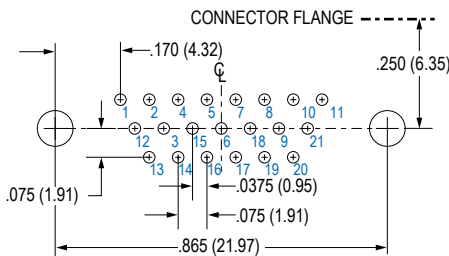
Patterns shown are for connector mounting side of PC board.



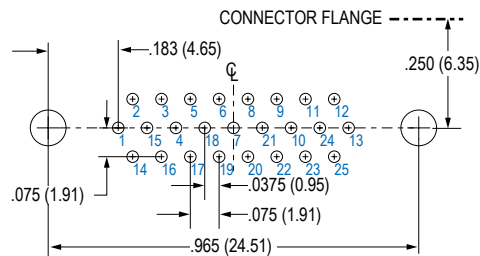
9 PIN



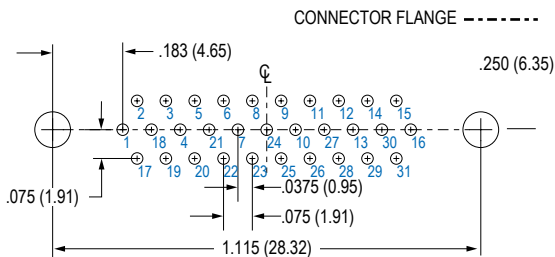
15 PIN



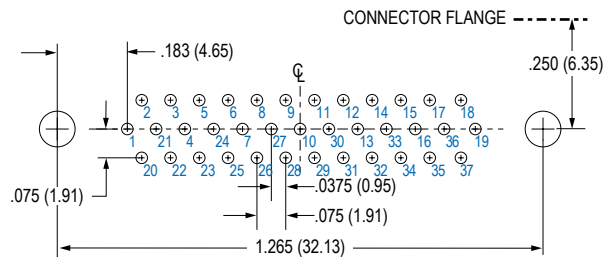
21 PIN



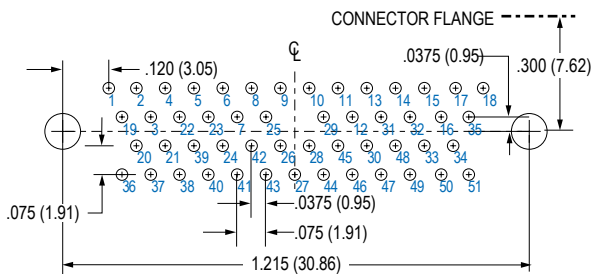
25 PIN



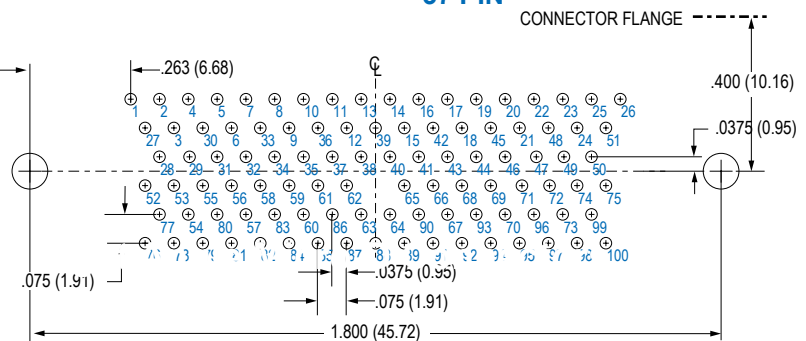
31 PIN



37 PIN



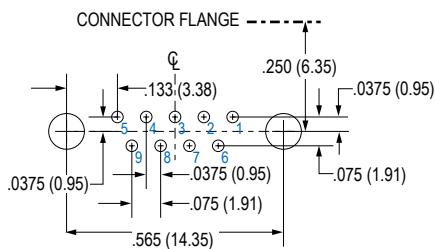
51 PIN



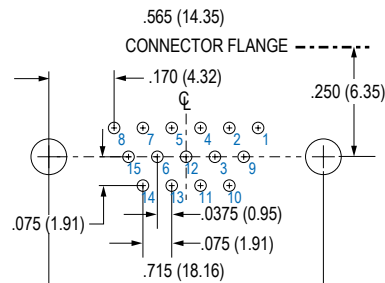
100 PIN

## GMR7590 CONNECTOR PCB LAYOUTS – SOCKET CONNECTORS

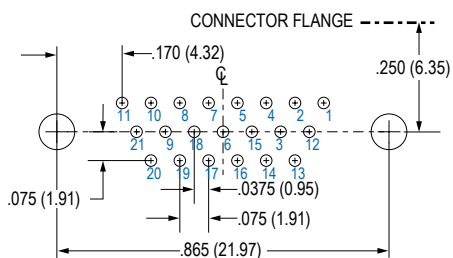
Patterns shown are for connector mounting side of PC board.



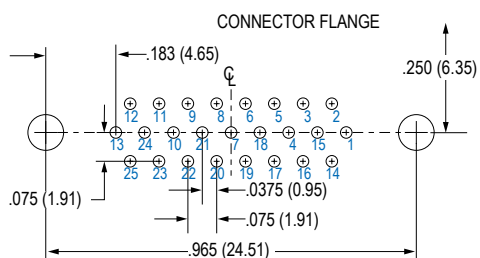
9 SOCKET



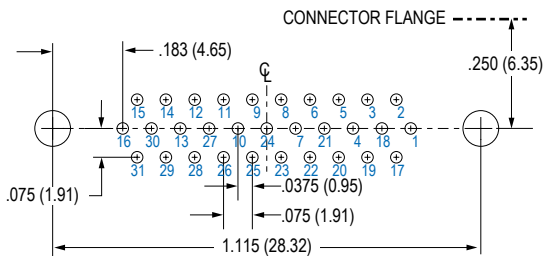
15 SOCKET



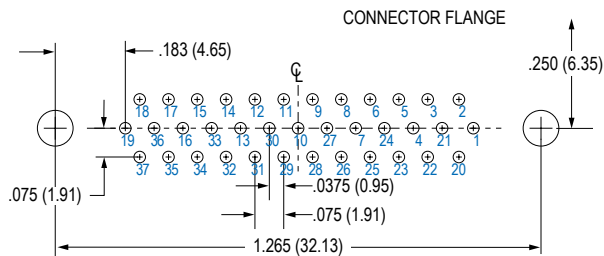
21 SOCKET



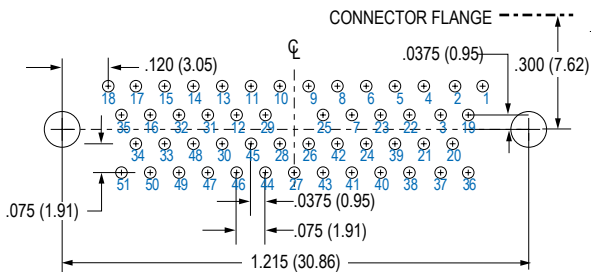
25 SOCKET



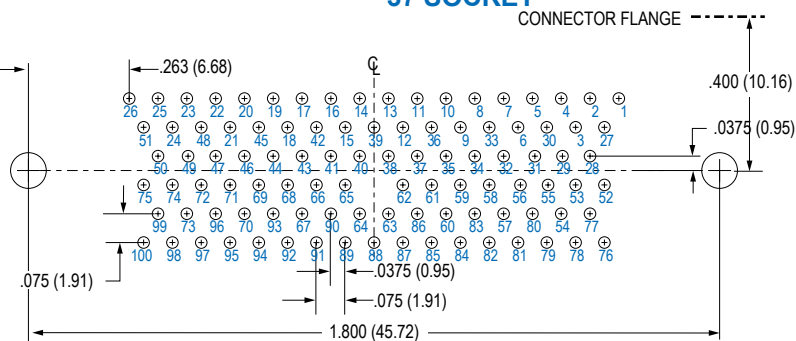
31 SOCKET



37 SOCKET



51 SOCKET



100 SOCKET