series 28 HiPer-D[®] Combo Connectors



280-089P combo cable socket connectors with standard mounting flange, integral banding platform and crimp termination



Combo HiPer-D^{*} Combo-D connectors, with integral banding platform, feature size #20 signal contacts and size #8 power or coax contacts. *Size #8 contacts are ordered separately*. The HiPer-D^{*} features a rugged machined aluminum shell and wire grommet for environmental protection. Size #20 contacts are packaged with connector. Terminate contacts with crimp tools purchased separately. Glass-reinforced thermoset epoxy insulators, copper alloy retention clips. Fluorosilicone rear grommet meets IP67 immersion requirement. 1000 VAC, 7.5 Amps (#20), up to 40 Amps with size #8 power contacts.

Ordering Information								
Sample Part Number	280-089	S	1-5W1	ME	Р			
Basic Part Number	280-089							
Contact	S = Socket A = Less contact							
Shell Size- Contact Arrangement	Contact Arrangements are shown in the adjacent table							
Shell Finish	ME = Electroless Nickel (RoHS) MT = Nickel-PTFE (RoHS) Z1 = Passivated Stainless Steel (RoHS) ZM = Nickel Over Stainless							
Mating Hardware	N = No Hardware P = Female Jackpost L = Low Profile Hex Hea K = Slot Head Extended S = Hex Head Captive S T = Slot Head Extended	Jackscr crewlocł	ew K					

Contact Arrangements									
Shell Size-	Contact Size and Qty								
Contact Arr.	#22	#20	#8						
1-2W2			2						
1-5W1		4	1						
2-3W3			3						
2-7W2		5	2						
2-11W1		10	1						
3-5W5			5						
3-9W4		5	4						
3-13W3		10	3						
3-17W2		15	2						
3-21W1		20	1						
4-8W8			8						
4-13W6		7	6						
4-17W5		12	5						
4-21WA4		17	4						
4-25W3		22	3						
4-27W2		25	2						
5-24W7		17	7						
5-36W4		32	4						
5-43W2		41	2						
5-47W1		46	1						

Mating Hardware									
N Thru-Hole No Hardware	P Female Jackpost	S Captive Screwlock, Hex Head							
(2.92/3.18)	#4-40 UNC-2A NUT AND LOCKWASHER #4-40 UNC-2B	#4-40 UNC-2A							
L Captive Jackscrew, Hex Head	K Slot-Head Extended Jackscrew	T Slot-Head Extended Captive Screwlock							
#4-40 UNC-2A	ARETAINER #440 UNC-2A	RETAINER #4-40 UNC-2A							

Specifications					
Current Rating	#20 7.5 AMPS, #8 40 AMPS				
Test Voltage	1000 VAC RMS				
Insulation Resistance	5000 megohms minimum				
Operating Temperature	-65° C. to +200° C.				
Ingress Protection	IP 67				
Shock	300 g.				
Vibration, Random	43.92 g.				

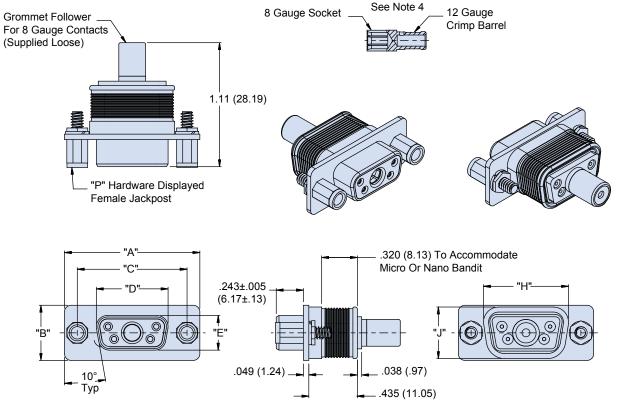
Materials and Finishes					
Shell Aluminum alloy					
Contacts	Copper alloy, 50 microinches gold				
Insulators	Thermoset epoxy				
Retention Clips	Copper alloy				
Grommet, O-ring	Fluorosilicone rubber				
Hardware	300 series stainless steel				

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280-089P DIMENSIONS



Dimensions														
Shell	"A" ±.015		"B" ±.015		"C" ±.005		"D" ±.005		"E" ±005		"H"		"J"	
Size	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
1	1.213	30.81	0.494	12.55	0.984	24.99	0.643	16.33	0.311	7.90	0.760	19.30	0.462	11.73
2	1.541	39.14	0.494	12.55	1.312	33.32	0.971	24.66	0.311	7.90	1.089	27.66	0.462	11.73
3	2.088	53.04	0.494	12.55	1.852	47.04	1.511	38.38	0.311	7.90	1.629	41.38	0.462	11.73
4	2.729	69.32	0.494	12.55	2.5	63.50	2.159	54.84	0.311	7.90	2.277	57.84	0.462	11.73
5	2.635	66.93	0.605	15.37	2.406	61.11	2.064	52.43	0.423	10.74	2.182	55.42	0.474	12.04
6	2.729	69.32	0.668	16.97	2.5	63.50	2.189	55.60	0.486	12.34	2.307	58.60	0.626	15.90

NOTES

- 1. See *About Series 28 HiPer-D*[•] *Shell Plating Options* for additional shell material and finish options. Glenair offers the industry's widest selection of plating options with no minimum order quantities or setup charges.
- 2. For panel cutouts, refer to Panel Cutouts and Printed Circuit Board Footprints.
- 3. Connectors are supplied with size #20 crimp contacts per M39029. Contacts are not installed. Refer to *HiPer-D^{*} Contacts and Tools* section for contact part numbers, specifications, crimp tool information, and insertion/extraction tools.
- Size 8 contacts are ordered separately. Refer to HiPer-D^{*} Contacts and Tools section for contact ordering information, specifications, crimp tool information, and insertion/extraction tools.
- 5. Combo HiPer-D^{*} connectors meet the applicable requirements of MIL-DTL-24308 and are intermateable with standard nonenvironmental D Subminiature connectors with corresponding contact arrangements and type. *Size 8 contacts from other manufacturers cannot be installed in HiPer-D*^{*} *connectors.*
- 6. Additional electrical, mechanical and environmental specifications are listed in HiPer-D^{*} Product Specification.