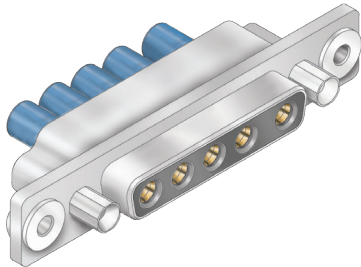# HiPer-D® Combo Connectors

280-059S float mount combo socket connectors for blind mating, crimp termination

Glenair®

Combo HiPer-D® float mount connectors for blind mate applications 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.

C

How To Order				
Sample Part Number		**280-059S**	**5-24W7**	**ME**	**G**
Basic Part Number	280-059S			
Shell Size-Contact Arrangement	See Shell Size - Contact Arrangements Table			
Shell Finish	**ME** = Electroless Nickel **MT** = Nickel-PTFE **JF** = Cadmium with Yellow Chromate **Z2** = Gold **Z1** = Passivated Stainless Steel			
Mating Hardware	**N** = No Hardware **G** = Male Guide Pins **B** = Female Guide Bushings			

Contact Arrangements

Shell Size-Contact Arr.	Contact Size and Qty	
	#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
No Hardware
#8-32 tapped hole

B
Female Guide Bushings
Non-removable

G
Male Guide Pins
Non-removable

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

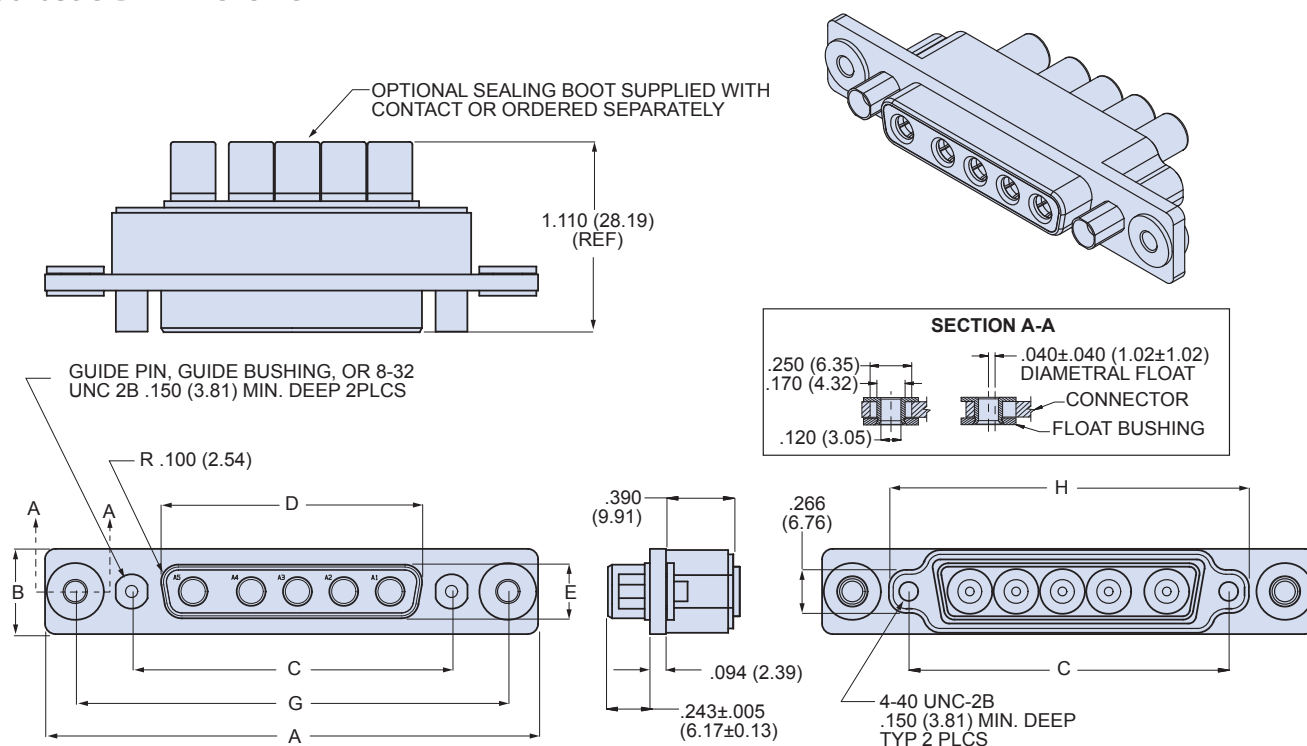|	
Shell	Aluminum alloy
Contacts	Copper alloy, 50 microinches gold
Insulators	Thermoset epoxy
Retention Clips	Copper alloy
Grommet, O-ring	Fluorosilicone rubber
Hardware	300 series stainless steel

SERIES 28
HiPer-D® Combo Connectors
280-059S float mount combo socket connectors for blind mating, crimp termination

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280-059S DIMENSIONS

OPTIONAL SEALING BOOT SUPPLIED WITH CONTACT OR ORDERED SEPARATELY

1.110 (28.19) (REF)

GUIDE PIN, GUIDE BUSHING, OR 8-32 UNC 2B .150 (3.81) MIN. DEEP 2PLCS

SECTION A-A

.250 (6.35)
.170 (4.32)

.120 (3.05)

.040±.040 (1.02±1.02) DIAMETRAL FLOAT
CONNECTOR
FLOAT BUSHING

R .100 (2.54)

D

A B A

AS A4 A3 A2 A1

E

C

G

A

.390 (9.91)

.094 (2.39)

.243±.005 (6.17±0.13)

.266 (6.76)

H

C

4-40 UNC-2B .150 (3.81) MIN. DEEP TYP 2 PLCS

Dimensions														
Shell Size	A		B		C Basic		D		E		G Basic		H	
	in ± .015	mm ± 0.38	in ± .015	mm ± 0.38	in.	mm	in ± .005	mm ± 0.13	in ± .005	mm ± 0.13	in	mm	in ± .005	mm ± 0.13
1	1.986	50.44	.494	12.55	.984	24.99	.643	16.33	.311	7.90	1.636	41.55	1.231	31.27
2	2.314	58.78	.494	12.55	1.312	33.32	.971	24.66	.311	7.90	1.964	49.89	1.559	39.60
3	2.854	72.49	.494	12.55	1.852	47.04	1.511	38.38	.311	7.90	2.504	63.60	2.099	53.31
4	3.502	88.95	.494	12.55	2.500	63.50	2.159	54.84	.311	7.90	3.152	80.06	2.747	69.77
5	3.408	86.56	.600	15.24	2.406	61.11	2.064	52.43	.423	10.74	3.058	77.67	2.653	67.39
6	3.502	88.95	.662	16.81	2.500	63.50	2.189	55.60	.486	12.34	3.152	80.06	2.747	69.77

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.

4. *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 non-environmental 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*.