

# SERIES 28 HiPer-D® Combo Connectors



## 280-046P combo cable pin connectors with standard mounting flange, crimp termination



Combo HiPer-D® pin connectors 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, waterproof sealing and optional ground springs for improved resistance to electromagnetic interference. Size #20 contacts are packaged with connector. Terminate contacts with crimp tools purchased separately. Glass-reinforced thermoset epoxy insulators, copper alloy retention clips. Fluorosilicone face seal and rear grommet meet IP67 immersion requirement. 1000 VAC, 7.5 Amps (#20), up to 40 Amps with size #8 power contacts.

How To Order					
Sample Part Number		280-046P	3-5W5	MT	G P
Basic Part Number	280-046P				
Shell Size - Contact Arrangement	See Shell Size - Contact Arrangements Table				
Shell Finish	<b>ME</b> = Electroless Nickel <b>Z2</b> = Gold <b>MT</b> = Nickel-PTFE <b>Z1</b> = Passivated Stainless Steel <b>JF</b> = Cadmium with Yellow Chromate				
Ground Spring	<b>G</b> = Supplied with EMI Ground Spring <b>N</b> = No Ground Spring				
Mating Hardware	<b>N</b> = No Hardware (Through-Hole) <b>P</b> = #4-40 Female Jackpost <b>L</b> = Jackscrew, Hex Head, Low Profile <b>K</b> = Jackscrew, Slot Head, Extended Length <b>S</b> = Screwlock, Male, Hex Head, Low Profile <b>T</b> = Screwlock, Male, Slot Head, Extended Length				

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

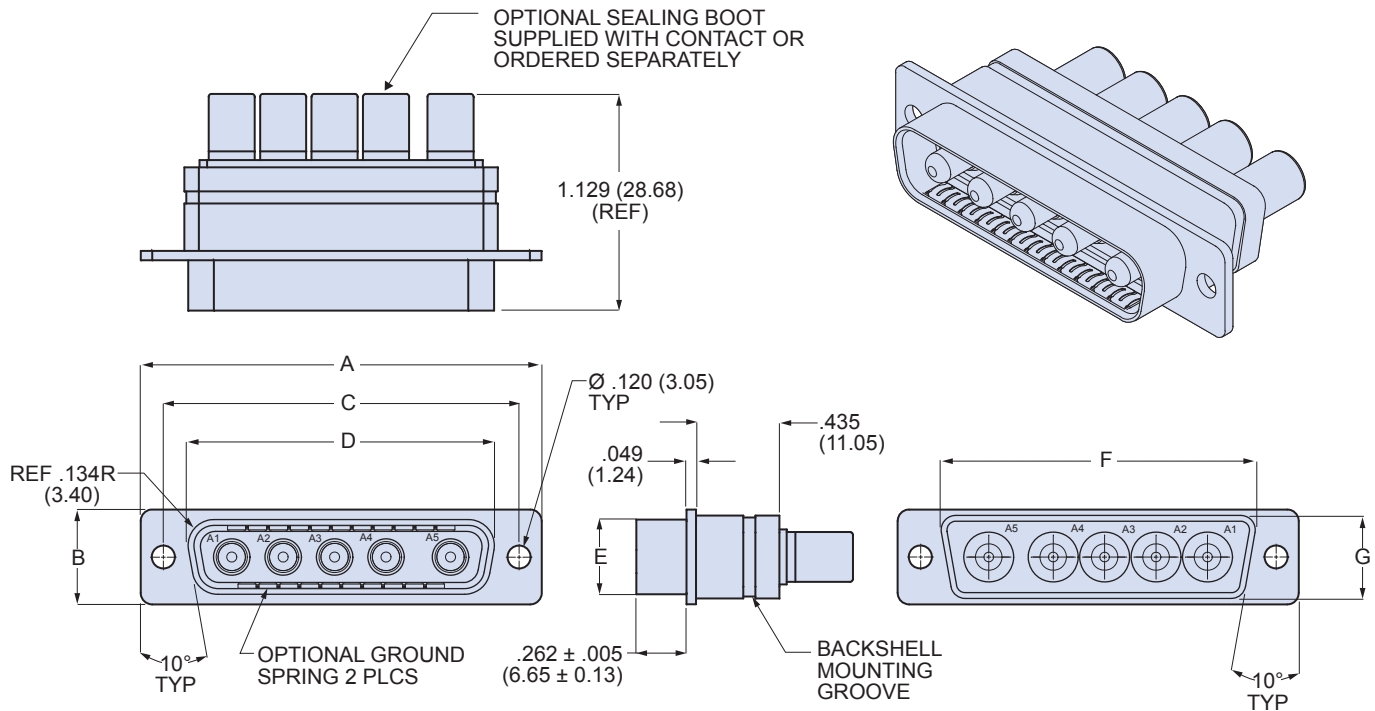
Mating Hardware	
N Thru-Hole No Hardware	P Female Jackpost
S Captive Screwlock, Hex Head	L Captive Jackscrew, Hex Head
K Slot-Head Extended Jackscrew	T Slot-Head Extended Captive Screwlock

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
EMI Spring	Copper alloy, nickel plated
Retention Clips	Copper alloy
Grommet, Face Seal	Fluorosilicone rubber
Hardware	300 series stainless steel

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### 280-046P DIMENSIONS



Dimensions														
Shell Size	A		B		C Basic		D		E		F Max.		G Max.	
	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.	mm
1	1.213	30.81	.494	12.55	.984	24.99	.726	18.44	.389	9.88	.769	19.53	.432	10.97
2	1.541	39.14	.494	12.55	1.312	33.32	1.054	26.77	.389	9.88	1.093	27.76	.432	10.97
3	2.088	53.04	.494	12.55	1.852	47.04	1.594	40.49	.389	9.88	1.635	41.53	.432	10.97
4	2.729	69.32	.494	12.55	2.500	63.50	2.242	56.95	.389	9.88	2.282	57.96	.432	10.97
5	2.635	66.93	.605	15.37	2.406	61.11	2.139	54.33	.501	12.73	2.188	55.58	.544	13.82

### NOTES

- 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.
- For panel cutouts, refer to [Panel Cutouts and Printed Circuit Board Footprints](#).
- 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.
- 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.**
- Additional electrical, mechanical and environmental specifications are listed in [HiPer-D® Product Specification](#).