Application Note:

Sand and Dust Exposure

Glenair TwistPin contacts can be damaged by sand and dust. Unmated connectors should be covered to prevent debris and contamination from accumulating inside the contact cavities. Protective covers are recommended.

Specifications	
Current Rating	3 AMPS
Dielectric Withstanding Voltage	600 VAC sea level, 150 VAC at 70,000 ft.
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +175° C.
Contact Resistance	8 milliohms maximum
Low Level Contact Resistance	32 milliohms maximum
Water Immersion, Mated	MIL-STD-810G, Method 512.5 1 meter for 1 hour
Water Ingress, Mated	Ingress protection 67
Helium Leak rate, Sealed PC tail Receptacles (811-006)	1 x 10^{-4} cc/sec at 1 atmos. pressure differential, following 5 cycles of thermal shock
Shock	300 g's (MIL-DTL-38999 para. 4.5.21.1)
Vibration, Sine	60 g's (MIL-DTL-38999 para. 4.5.23.2.1)
Vibration, Random	23 g's (MIL-DTL-38999 para. 4.4.23.1)
Humidity	EIA-364-31, Cond. IV
Altitude-Low Temperature	EIA-364-105
Durability	2000 cycles of mating
Magnetic Permeability	2 µ maximum
Corrosion (Salt Spray)	Electroless Nickel finish (ME) 48 hours Nickel-PTFE finish (MT) 500 hours Zinc-Nickel with Black Chromate (ZR) 500 hours RoHS Zinc-Nickel with Black Chromate (ZNU) 500 hours RoHS
Shielding Effectiveness	55 dB minimum from 100 MHz to 1000 MHz.

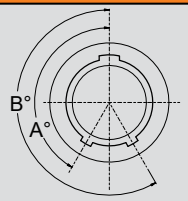
Materials and Finishes	
Shell, Jam-nut, Coupling Nut	Aluminum alloy or SST
Contact	Copper alloy, 50 µ inch gold over nickel plated
Insulator	High grade rigid dielectric
Interfacial Seal, O-ring, Peripheral Seal	Fluorosilicone rubber

Series 811 Recommended Torque Values

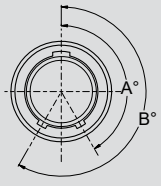
Layout	Coupling Torque				Jam-nut Tightening			
	In-Lbs.		N-m		In-Lbs.		N-m	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
5-7	25	35	2.8	4.0	20	25	2.2	2.8
6-12	35	40	4.0	4.5	20	25	2.2	2.8
7-22	35	40	4.0	4.5	20	25	2.2	2.8
8-30	40	50	4.5	5.7	20	25	2.2	2.8
9-42	40	50	4.5	5.7	20	25	2.2	2.8

Key Positions

Position	A°	B°
A	140°	220°
B	65°	220°
C	85°	240°
D	130°	285°
E	65°	285°
F	85°	220°



Plug



Receptacle