

## Amphe-Lite Connector Specifications

### Material Specifications

**Connector Shell:**  
Glass Filled PEI

**Insert:**  
PPS w/ Glass Fill

**Grommet and Interfacial Seal:**  
Silicone Rubber

**Contacts:**  
Gold/Nickel plated Copper Alloy

### General Specifications

**Insulation Resistance:**  
1000 mega ohms min. at 25 °C

**Dielectric Withstanding Voltage:**  
1000/1500/1800 or 2300 AC (RMS) at Sea Level  
(Dependent on insert arrangement contact spacing.)

**Working Temperatures:**  
-55 °C to +150 °C

**Vibration:**  
Properly wired and mated connector assemblies will withstand 4 hours of 20g peak sinusoidal vibration in both radial & axial directions without loss of electrical continuity in excess of one microsecond.

**Durability:**  
No electrical or mechanical defects after 500 cycles of engagements and disengagements.

**Corrosion Resistance:**  
Composite connectors exceed 2000 hours salt spray exposure.

**Water Immersion:**  
Properly wired and mated connector assemblies will withstand immersion under 3 feet of water for 24 hours without loss of electrical qualities or leakage. (IP 67)

**Humidity:**  
Properly wired and mated assemblies will withstand 10 days of 98% relative humidity while undergoing temperature cycling between +25 °C and +65 °C without loss of electrical qualities or leakage.

**EMI Shielding Effectiveness:**  
50 dB min – 100 Mhz to 10Ghz

**Data Transfer:**  
The XX-35 (XX being the shell size for size 13 – 25) high density insert arrangements are capable of carrying Gigabit Ethernet signals.



Working Voltage	
Contact Size	Voltage AC (RMS)
22	750
20	1000
16	1000
12	1000
Current Rating	
Contact Size	Amps
22	5
20	7.5
16	13
12	20
Useable Wire Size	
Contact Size	O.D. Inches
22	.030 - .054
20	.040 - .083
16	.085 - .109
12	.097 - .142

Contact Retention	
Contact Size	Lbs. Min
22	8
20	10
16	15
12	20
Contact Insertion / Removal Force	
Contact Size	Lbs. Max
22	10
20	20
16	20
12	30
Coupling Torque	
Shell Size	Max./Min. (in.-lb.)
9	8/1
11	12/1
13	16/2
15	20/3
17	24/3
19	28/3
21	32/4
23	36/4
25	40/4