M55181

Materials and finish

Part	Material	Finishes
Plug Shell	Aluminum Alloy	Cadmium Plate
		with Olive drab chromate finish
Receptacle Shell	Brass	Cadmium Plate
		with Olive drab chromate finish
Nose Piece	Alloy Steel	Cadmium Plate
		with Olive drab chromate finish
Draw Screws	Stainless Steel	Passivation
Pin Contact	Brass	1.27 Micron Gold over Nickel
Socket Contact	Copper Alloy	1.27 Micron Gold over Nickel
	with BeCu Spring Element	
Insulator	Glass-filled dially phthalate,	
	type GDF-30F or SDG-F	

Mechanical

Contact Retention	10 lbs	
Durability	500 Cycle	
Insert Strength	400 lbs	

Electrical

Operating Current 4 Contacts (12 AWG)	35 Amp
Operating Current 9 & 18 Contacts (20 AWG)	7.5 Amp
Contact Resistance 4 Contacts (12 AWG)	<0.57 milli Ohms
	(20 m V drop at 35 A)
Contact Resistance 9 & 18 Contacts (20 AWG)	<3.33 milli Ohms
	(20 m V drop at 7.5 A)
Insulation Resistance	1000 M Ohms min at
	500 Vdc
Dielectric with Standing Voltage- 4 Contacts (12 AWG)	2000 V RMS
Dielectric with Standing Voltage- 18 Contacts (20 AWG)	1500 V RMS

Environmental

Operating Temperature	-55 Deg C To + 85 Deg C	
Air Pressure	2.5 PSI	
Water Immersion	6 Feet 48 Hours	

Military standard P/N

M55181/ 5 - 02 (A) (B) (C)

- (A) Military QPL basic specification
- (B) Specification sheet number
- (C) Cable size accommodation

Cable size accommodation

Cable clamp code	Cable Diameter-Inch	Cable Diameter-mm
1	0.292 to 0.343	7.42 to 8.71
2	0.323 to 0.406	8.20 to 10.31
3	0.386 to 0.468	9.80 to 11.88
4	0.448 to 0.531	11.38 to 14.49
5	0.511 to 0.593	12.98 to 15.06