

M300 Connectors Specifications

Materials

Housings:	Glass Filled Thermoplastic UL94V-0
Female contacts:	Beryllium Copper Contact Clip, Brass Shell
Male contacts:	Brass
Contact finish	Gold
Male contacts:	Brass
JackscREW hardware:	Stainless Steel

Electrical

Current	
All contacts simultaneously with 18 AWG wire:	10A max (30°C temp. rise)
All contacts simultaneously with 22 AWG wire:	5A max (30°C temp. rise)
Working voltage	
(at sea level, 913/1050mb):	600V min DC or AC peak
(at altitude 21,336m/70,000ft, 44mb):	150V min DC or AC peak
Voltage proof	
(at sea level, 913/1050mb):	1800V max DC or AC peak
(at altitude 21,336m/70,000ft, 44mb):	450V max DC or AC peak
Contact resistance:	6mΩ max
Insulation resistance:	100MΩ min at 100V DC

Mechanical

Durability:	1000 operations
Mating forces (per contact pair)	
Insertion force:	9N max
Withdrawal force:	1N min
Contact retention in housing	
Cable contact:	15N min
PC-Tail contact:	5N min
Signal crimp accommodation:	18 AWG to 22 AWG BS 3G 210 Type A, MIL-16878E Type E

Environmental

Environmental Classification:	65/175/56 days at 90%RH
Operating temperature:	-65°C to +175°C
Vibration sensitivity:	10Hz to 2000Hz, 1.52mm, 196.1m/s ² (20G), 12 hours
Bump severity:	390m/s ² (40G), 4000 bumps
Shock severity:	981m/s ² (100G), 6ms
Acceleration severity:	490m/s ² (50G)