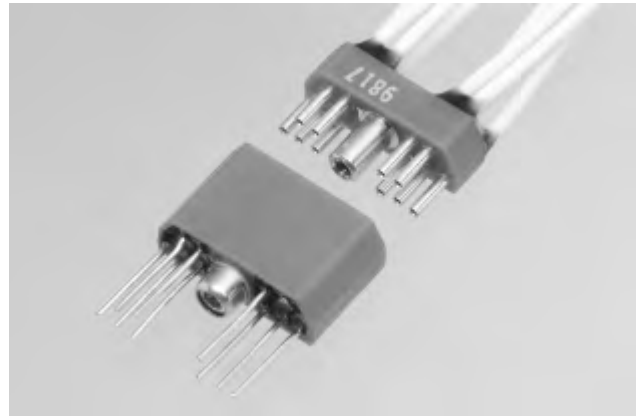


JACKMATE MCJ(M) Series Plastic (Metal) Shell Center Jackscrew Connectors



JACKMATE Connectors are the first Twist Pin contact assemblies designed to accommodate center jackscrews that provide jacking action when mating or unmating the connectors. Although the units were initially developed for high density cord-to-cord or in-line applications, either plug or receptacle can be

adapted to a PC board. The jacking hardware consist of a threaded bushing and a captivated jackscrew which are made of corrosion resistant stainless steel and are molded into the JACKMATE Connector Insulator.

The twist pin contacts are on .050 [1.27] center-to-

center linear spacing and contact terminations are available in solid wire or stranded wire. There is a high degree of flexibility with this JACKMATE connector design for commercial or military applications.

Available on MCJ(M) Series Plastic (Metal) Shells.

JACKMATE MCJ Series Plastic Shell Center Jackscrew Connectors

JACKMATE Technical & Performance Data for Plastic Shell

Electrical

Contact Resistance — The average mated contact resistance is 4 milliohms, with a maximum value of 8 milliohms, using standard 24 AWG solid copper leads when measured directly behind the crimp joints of the mated pin and socket contacts. The average resistance value at 100 microvolts is 4.8 milliohms.

Dielectric Withstanding Voltage (60 Hz rms room temperature) — Solder Pots: 600 VAC at sea level; 150 VAC at 70,000 feet [21,336m] Wire Terminations: 750 VAC at sea level; 200 VAC at 70,000 feet [21,336m].

Corrosion Resistance (Per MIL-STD-202C, Method 101B, Condition B) — Both mated and unmated samples do not

exceed the maximum allowable contact resistance (8 milliohms) when subjected to the 48 hour salt spray test.

Durability — The contact resistance after 500 mating cycles is less than the maximum allowable, 8 milliohms.

Insulation Resistance — Greater than 5,000 megohms at room temperature for the materials listed under "Materials".

Maximum Current Carrying Capacity — No. 24 contact 3 amperes. It must be recognized, however, that all the wires to a connector will not carry their maximum current under all environmental conditions due to wire temperature.

Mechanical

Contact Engaging & Separation Forces — 8.0 oz. max. [2.22N] (eng.), 0.5 oz. min. [1.4N] (sep.).

Environmental

Temperature Range (Operating) — -67°F to 257°F [-55° C to 125° C].

Vibration (Per MIL-STD-202C, Method 204-A, Condition D) — No discontinuity in excess of 1 μ sec. during twelve 20 minute sweeps from 10 to 2000 CPS at .06 double amplitude or 20 G forces, whichever is less.

Materials

Insulator — Glass filled Nylon Type 6.

Contacts — Pin contact: copper alloy and beryllium copper alloy make up the complete construction; Socket contact: copper alloy.

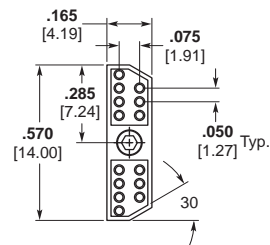
Hardware — Corrosive resistant stainless steel.

Finishes

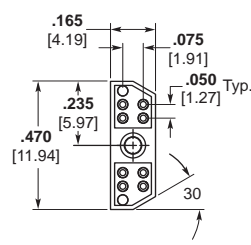
Contacts — Standard finish is 0.000050 [0.00127] gold over copper flash per MIL-G-45204, Type II.

Hardware — Passivated Per QQ-P-35.

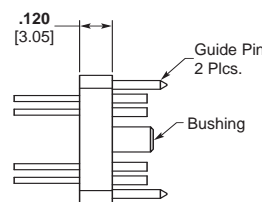
10 & 14 Contact Layout



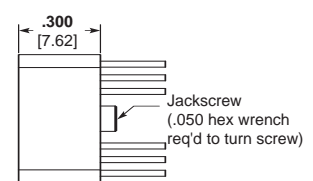
14 Layout



10 Layout

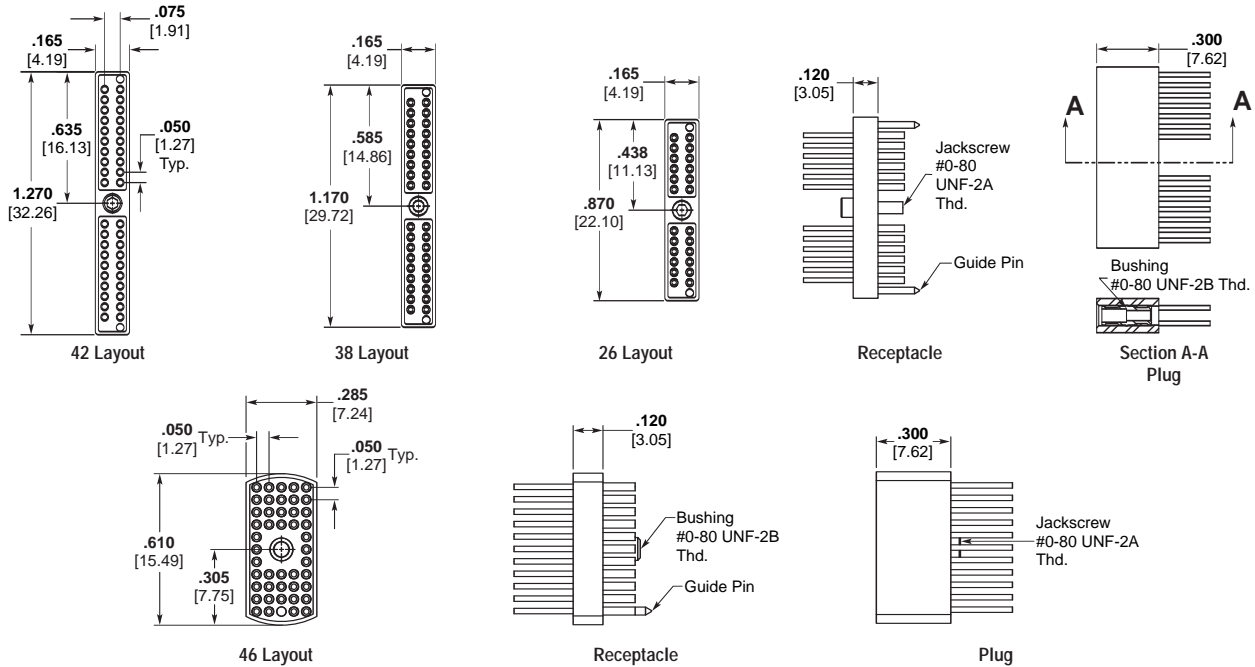


Receptacle

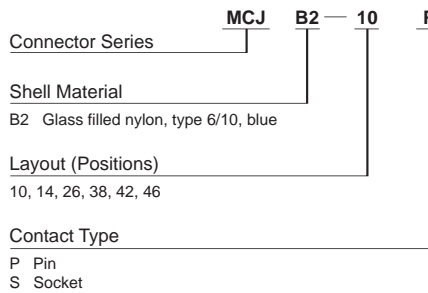


Plug

26, 38 & 46 Contact Layout

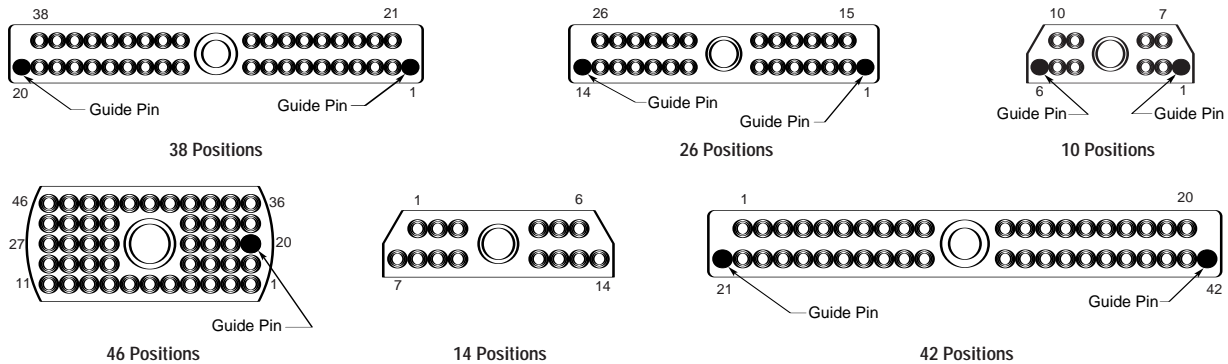


How To Specify



S	Solder pot for 26 AWG maximum stranded wire.
X	Special, does not fit description below.
4	Lead Length in Inches (min.)
L	Insulation Color or Finish
4	1 All white wire
0.5	2 All yellow wire
	3 All gray wire
	4 Gold plated
	5 Tin dipped gold plated
	6 Bare (unfinished)
	7 Color coded per MIL-STD-681, System 1
	8 Special color code
	9 Ten solid color repeating (starts with black)
	Wire Type
	*A Type E, 7 strand
	*B Type ET, 7 strand
	*C Type E, 19 strand
	*D Type ET, 19 strand
	F 7 strand per MIL-C-22759/11 (#28 AWG only)
	G 19 strand per MIL-C-22759/11 26 AWG, 24 AWG
	L Copper, solid
	Q Stranded per MIL-W-22759/33
	*Per MIL-W-16878
	Wire Size
	4—24 AWG 5—25 AWG 6—26 AWG 8—28 AWG 0—30 AWG

Contact Arrangement as Viewed from the Engaging Face of the Pin Side



Guide pin locations illustrated are for standards configuration only. Any location is available. Guide pins are supplied in socket connectors and blank cavities are in pin connector.