

# Wire to Board Connectors

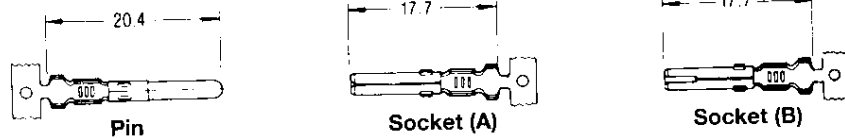
## Commercial MATE-N-LOK Connectors

### Wire Application Side (Panel Mount Applications)

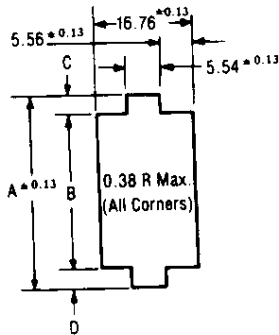
#### Contacts

Pins can be used in cap housings and sockets can be used in plug housings.

**Pin Dia. :** 2.1mm  
**Stock Thickness :**  
 0.3 (or 0.25\*)



#### Plug Housing Panel Cutout 6, 9 and 15 Circuits



No. of Circuits	Dimensions	
	A ±0.13	B
6	21.60	14.50-14.60
9	27.56	20.57-20.70
15	39.37	32.64-32.77

Recommended Panel Thickness  
 6 and 9 Circuits - 0.64-1.4mm  
 15 Circuits - 0.64-1.65mm

#### Note :

- Panel must be punched so that housing enters panel in the same direction as the punch. If it is impossible, the "A" dimensions should be reduced 0.51mm to assure proper housing retention in the panel.
- Both locking legs to be squeezed together and housing to be inserted "straight-in," as opposed to a rocking manner of insertion.
- Panel must not have any material (paint, porcelain, etc.) applied in the mounting hole area that would weaken retention of the housing in the panel. The "A" dimension should be reduced 0.51mm to assure proper housing retention.
- Dimensions "C" and "D" to be equal within a tolerance of 0.13mm.

Wire Range AWG (mm <sup>2</sup> )	Ins. Dia. (Max.)	Socket Type	Material/Finish	Strip Form Contact No.		Loose Piece Contact No.		Hand Tool Part No.
				Pin	Socket	Pin	Socket	
24-18** (0.20-0.89)	2.54	A	Brass/Pre-Tin	61116-1	61314-1	60618-1	60617-1	91512-1 114-1012
			Brass/Nickel, Sel. Gold†	61116-5	61314-5	60618-5	60617-5	
			Brass/Sel. Gold ††	61116-7	61314-7	60618-7	60617-7	
			Phos. Brz./Pre-Tin	61116-4	61314-4	60618-4	60617-4	
			Phos. Brz./Sel. Gold ††	61116-6	61314-6	-	-	
24-18** (0.20-0.89)	2.54	A	Brass/Pre-Tin	-	170147-1	-	170148-1	
			Phos. Brz./Pre-Tin	-	170147-2	-	170148-2	
			Brass/Pre-Tin	-	170120-1	-	170121-1	
20-14 (0.50-2.27)	3.30	B	Phos. Brz./Pre-Tin	-	170120-4	-	170121-4	91504-1 114-1012
			Brass/Pre-Tin	61118-1	61117-1	60620-1	60619-1	
		A	Brass/Nickel, Sel. Gold†	61118-5	61117-5	60620-5	60619-5	
			Brass/Sel. Gold ††	61118-7	61117-7	-	-	
			Phos. Brz./Pre-Tin	61118-4	61117-4	60620-4	60619-4	
			Phos. Brz./Nickel, Sel. Gold†	61118-6	61117-6	-	60619-7	

\* 0.25mm stock thickness

\*\*AWG #24 wire cannot be used for UL applications.

§For use in miniature applicators only.

†Selective gold in mating area and inside wire barrel.

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Extraction Tool Part No. : 1-305183-1 (pins only), 1-305183-2 (sockets only), 465644-1 (both pins and sockets).

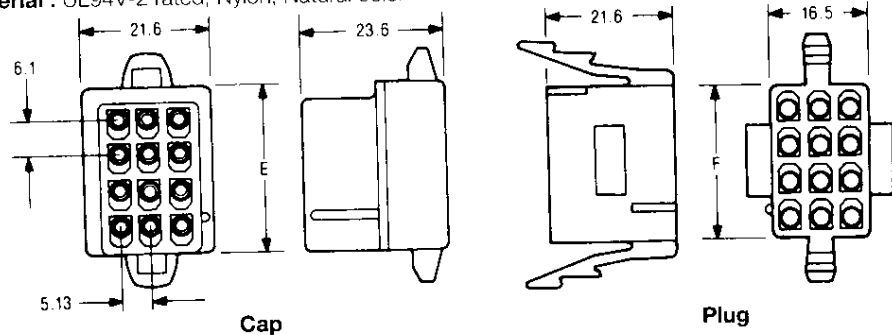
Notes : 1. Wire Strip Length - 4.8mm (hand tool applications) and 4.0mm (machine applications).

Insertion Tool Part No. : 91002-1.

2. Use Part No. 90123-5 for small insulation diameter 1.1mm (min.).

#### Housings 6, 9 and 15 Circuits

Material : UL94V-2 rated, Nylon, Natural color



No. of Circuits	Dimensions		Part No.	
	E	F	Cap Housing	Plug Housing
6	16.9	14.4	1-480276-0	1-171196-0
9	23.0	20.4	1-480277-0	1-171197-0
15	35.1	32.5	1-480324-0	1-480323-0†

† Small wings on both sides are L-shaped, different from other styles.

Note : Unless otherwise indicated, a tolerance is 0.38mm. Other housing colors are available, consult AMP Sales Dept.