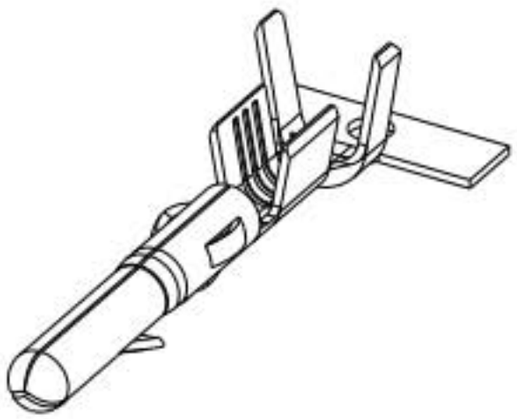
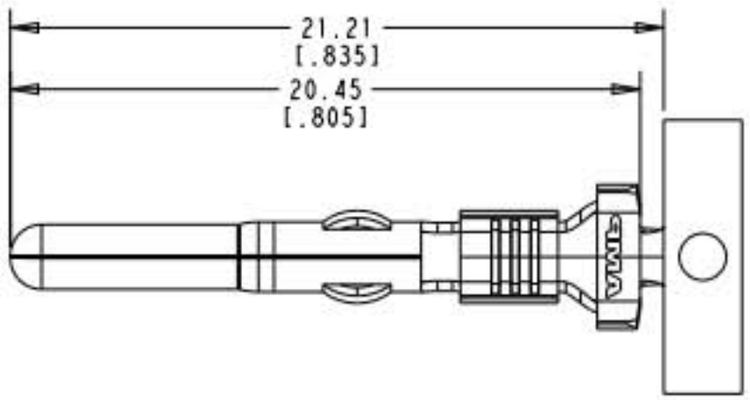
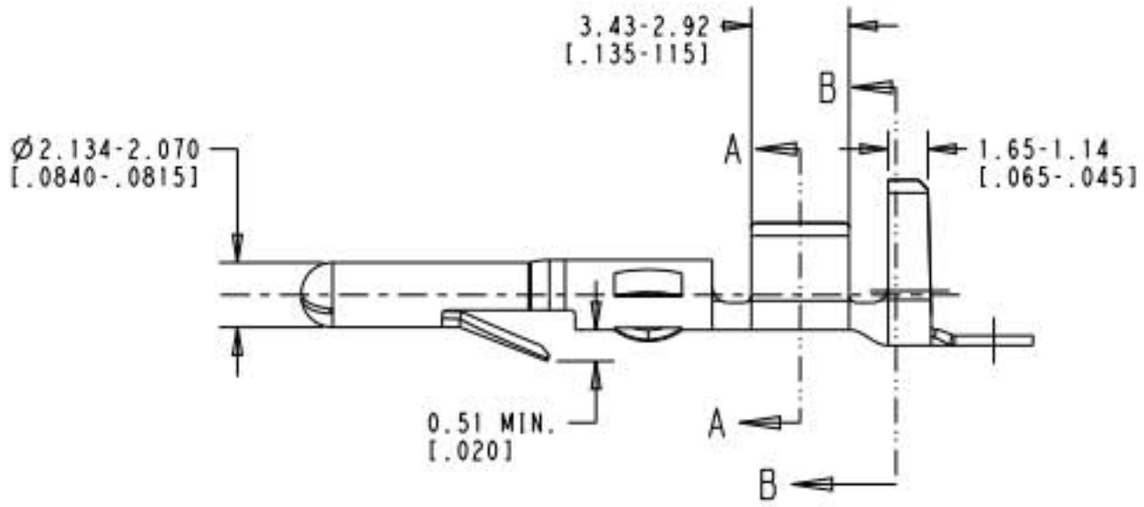
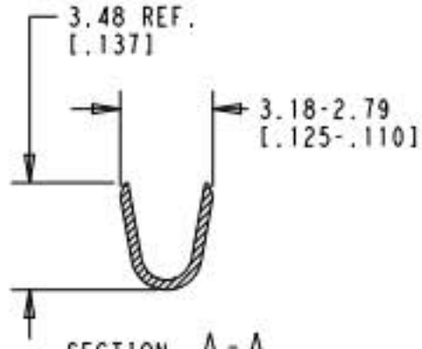
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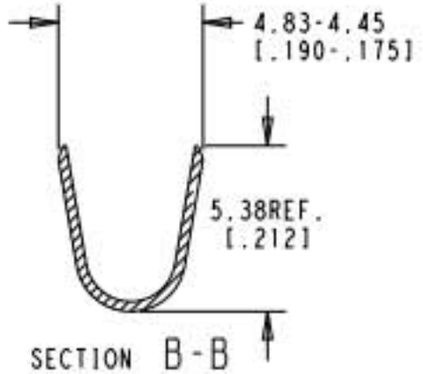
REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	L1	REVISED PER ECR-12-013810	24SEP2012	JR	TM
	L2	REVISED PER ECN-23-233438	020CT2023	WLS	VS











NOTES:

1. WIRE RANGE: 2 WIRES OF 0.8-0.9 mm² [18 AWG] OR 1 WIRE OF 0.8 - 0.9 mm² [18 AWG] AND 1 WIRE OF 1.25 - 1.4 mm² [16 AWG].
2. INSULATION RANGE: 2 WIRES OF 2.92 [.115] MAX DIA EACH, STACKED.
3. DIMENSIONS IN BRACKETS ARE IN INCHES.

勝特力電材超市-龍山店 886-3-5773766
勝特力電材超市-光復店 886-3-5729570
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
http://www.100y.com.tw

PRE-TIN	0.30[.012] PH BRZ	350558-4
PRE-TIN	0.30[.012] BRASS	350558-1
FINISH	MATERIAL	PART NO

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm [INCHES]

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ±-
1 PLC ±-
2 PLC ±0.25[.010]
3 PLC ±-
4 PLC ±-
ANGLES ±1°

MATERIAL: SEE TABLE -

FINISH: SEE TABLE -

DWN T. BECK 20JAN1993
CHK R. SWING 20JAN1993
APVD C. MARTIN 20JAN1993
PRODUCT SPEC 108-1000
APPLICATION SPEC 114-1012
WEIGHT -

TE Connectivity

NAME PIN
COMMERCIAL MATE-N-LOK
-

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-350558	-

CUSTOMER DRAWING | SCALE 5:1 | SHEET 1 OF 1 | REV L2

NOTE
All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ±0.13 [±.005] and angles have a tolerance of ±2°. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of Commercial MATE-N-LOK pin and socket Contacts. These requirements are applicable to hand or automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification, see Figures 4 and 5.

Use the terminology provided in this specification to facilitate inquiries for information. Basic terms and features of this product are provided in Figure 1.

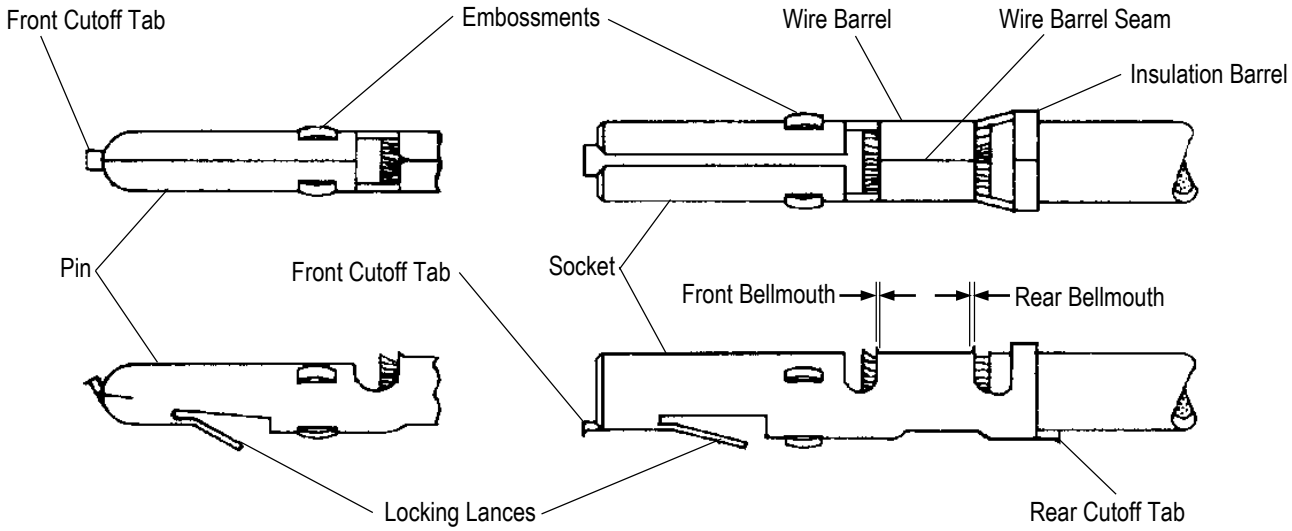


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

Revisions to this application specification include:

- Changed hand tool for first pin and socket in Figure 5

2.2. Customer Assistance

Reference Product Base Part Numbers 61091 and 60909 and Product Code 1340 are representative of Commercial MATE-N-LOK pin and socket contacts. Use of these numbers will identify the product line and help you to obtain product and tooling information when visiting www.te.com or calling the number at the bottom of this page.

2.3. Drawings

Customer drawings for product part numbers are available from www.te.com. Information contained in the customer drawing takes priority.

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2.4. Specifications

Product Specification 108-1000 provides product performance and test results.

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the product material.

B. Shelf Life

The product should remain in the shipping containers until ready for use to prevent deformation to components. The product should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

C. Chemical Exposure

Do not store product near any chemical listed below as they may cause stress corrosion cracking in the material.

Alkalies	Ammonia	Citrates	Phosphates Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites	Tartrates

3.3. Wire Preparation

A. Strip Length

Insulation shall be stripped as indicated in Figures 4 and 5.

B. Workmanship

Reasonable care shall be taken not to nick, scrape, or cut any strands or the solid wire during the stripping process.

3.4. Carrier Cutoff Tab

Front cutoff tab shall not exceed 0.20 mm [.008 in.] and shall be wiped upward toward the centerline on pin contacts. Rear cutoff tab shall not exceed 0.38 mm [.015 in.].

3.5. Wire Barrel Crimp

A. Crimp Dimensions and Type

Crimp height, width, and type shall be as shown in Figures 4 and 5.

B. Tensile Strength

Crimp tensile strength shall be as shown in Figure 4.

C. Wire Barrel Seam

The wire barrel seam shall be closed adequately to confine all strands of the wire. There shall be no loose wire strands embedded in the outside of the wire barrel.

D. Bellmouth

Rear bellmouth length shall be 0.13-0.76 mm [.005-.030 in.]; and front bellmouth length shall be 0.25 mm [.010 in.] maximum.

E. Conductor Location

End of the wire shall be flush with the front end of the wire barrel or extend 1.19 mm [.047 in.] maximum after crimping. Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.

3.6. Insulation Barrel Crimp

A. Crimp Dimensions and Type

Crimp width and type shall be as shown in Figures 4 and 5.

B. Workmanship

Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.7. Locking Lance

Locking lance shall not be deformed.

3.8. Embossments

Embossments on pin contact shall pass through a 2.87 mm [.113 in.] maximum diameter circle; and a 3.68 mm [.145 in.] maximum diameter circle for socket contacts.

3.9. Alignment

A. Axial Concentricity

Crimped insulation barrel shall fall into an area defined by a 4.06 mm [.160 in.] diameter circle whose center is the centerline of the contact as shown in Figure 2, except part number 60989 which shall fall within a 5.08 mm [.200 in. diameter circle.

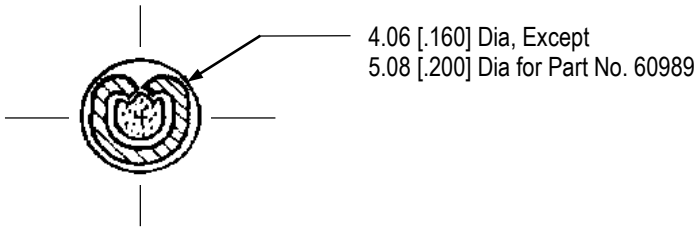


Figure 2

Crimped insulation barrel of two conductor crimped contacts shall fall into an area defined by a 5.33 x 3.94 mm [.210 x .155 in.] rectangle whose vertical center is the centerline of the contact and whose horizontal center is 0.76 mm [.030 in.] above the centerline of the contact as shown in Figure 3.

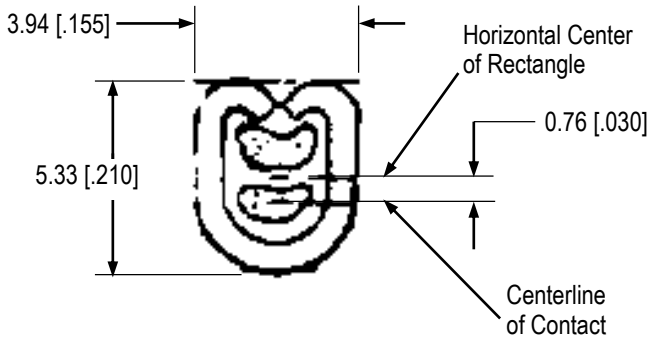


Figure 3

B. Twist and Roll

There shall be no twist or roll in the crimped portion that will impair usage of the contact.

AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS

PART NUMBERS		WIRES		INSUL DIA (MAX)	STRIP LENGTH	WIRE BARREL CRIMP (F CRIMP)			INSULATION BARREL CRIMP	
PIN	SKT	QTY	SIZE			WIDTH	HEIGHT ±0.05 [.002]	TENSILE STRENGTH N [lbf]	WIDTH	TYPE CRIMPER
350079	60909 350078	1	30	1.90 [.075]	4.75-3.96 [.187-.156]	1.40 [.055]	0.79 [.031]	8.90 [2]	2.29 [.090]	F or O
		1	28				0.81 [.032]	13.34 [3]		
		1	26				0.84 [.033]	31.14 [7]		
		1	24				0.89 [.035]	44.48 [10]		
		1	22				0.94 [.037]	66.72 [15]		
61116 61527	61115 61314 170147	1	24	2.54 [.100]	4.75-3.96 [.187-.156]	1.78 [.070]	0.97 [.038]	44.48 [10]	2.54 [.100]	F or O or OV
		1	22				1.02 [.040]	66.72 [15]		
		1	20				1.09 [.043]	88.96 [20]		
		1	18				1.22 [.048]	133.44 [30]		
60528 61118	60527 61117	1	20	3.30 [.130]	4.75-3.96 [.187-.156]	2.29 [.090]	1.19 [.047]	88.96 [20]	3.30 [.130]	F or O
		1	18				1.32 [.052]	133.44 [30]		
		1	16				1.50 [.059]	133.44 [30]		
		1	14				1.75 [.069]	155.68 [35]		
60497 350558	60496 350557	2	18	2.92 [.115]	4.75-3.96 [.187-.156]	2.29 [.090]	1.57 [.062]	133.44 [30]	3.30 [.130]	F
		1	18-16				1.78 [.070]	155.68 [35]		

Figure 4

HAND TOOL WIRE CRIMP DIMENSIONS									
PART NUMBERS		WIRES		INSUL DIA	STRIP LENGTH ±0.38 [.015]	WIRE BARREL CRIMP (F CRIMP)		INSULATION BARREL CRIMP		HAND TOOL
PIN	SKT	QTY	SIZE			WIDTH	HEIGHT ±0.05 [.002]	WIDTH	TYPE CRIMPER	
61174	61173	1	30	1.02-1.90 [.040-.075]	4.75 [.187]	1.40 [.055]	0.851 ±0.051 [.0335 ±.0020]	1.78 [.070]	O	91515-1
		1	28							
		1	26							
		1	24							
		1	22							
60618	60617	1	24	1.52-2.54 [.060-.100]	4.75 [.187]	2.03 [.080]	0.978 ±0.051 [.0385 ±.0020]	2.54 [.100]	F	90123-2†
		1	22							
		1	20							
		1	18				1.24 ±0.05 [.049 ±.002]			
61109	61108	1	24	2.54-3.30 [.100-.130]	4.75 [.187]	1.78 [.070]	0.978 ±0.051 [.0385 ±.0020]	3.30 [.130]	F	90123-4
		1	22							
		1	20							
		1	18				1.24 ±0.05 [.049 ±.002]			
60620	60619	1	20	2.54-3.30 [.100-.130]	4.75 [.187]	2.29 [.090]	1.35 ±0.05 [.053 ±.002]	3.30 [.130]	F	90124-2
		1	18							
		1	16							
		1	14							
350639	350638	2	18	2.92 [.115] Max	4.75 [.187]	2.29 [.090]	1.63 ±0.08 [.064 ±.003]	3.30 [.130]	F	90124-2
		1	18							
		1	16							

† 90123-5 for 1.09-1.90 mm [.043-.075 in.] insulation diameter.

Figure 5