

NOTE		
	i	

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  $\pm 0.13$  [ $\pm .005$ ] and angles have a tolerance of  $\pm 2^{\circ}$ . Figures and illustrations are for identification only and are not drawn to scale.

# 1. INTRODUCTION

This specification covers the requirements for application of wire to TE Connectivity MTA (Mass Termination Assembly 100 connectors. These requirements are applicable to hand or automatic machine application tools. Specific wire and insulation ranges relative to the products covered in this specification are 28-22 AWG tipplated solid, concentric fused stranded and concentric stranded wire with standard PVC thermoplastic insulation having a maximum insulation diameter of 1.52 mm [.060 in.] when terminated one position at a time, or 1.27 mm [.050 in.] when mass terminating. Stranded wire approved by TE engineering per Underwriters Laboratories Inc. (UL) Style 1007 and 1061 is 24-22 AWG 7 and 19 stranded, and 28-26 AWG 7 stranded. Other wire sizes, styles, and insulation materials shall be approved by TE.

When corresponding with TE Personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in Figure 1.



Figure 1

# 2. REFERENCE MATERIAL

2.1. Revision Summary

- Updated document to corporate requirements
- New logo

# 2.2. Customer Assistance

Reference base product part number 640440 and product code 1537 are representative numbers of MTA 100 connectors. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local TE Representative or, after purchase, by calling the Tooling Assistance Center or Product Information number at the bottom of this page.

TE Connectivity, TE connectivity (logo), and TE (logo) are trademarks. Other logos, product and/or Company names may be trademarks of their respective owners.



# 2.3. Drawings

Customer Drawings for specific products are available from the service network. The information contained in Customer Drawings takes priority if there is a conflict with this specification or with any other technical documentation supplied by TE.

# 2.4. Specifications

Product Specification 108-1050 provides performance and test information.

# 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 connector material.

#### B. Shelf Life

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

#### C. Chemical Exposure

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

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

#### 3.3. Wire Termination

After termination, wire shall meet the requirements specified in Figure 2.



Figure 2

# 3.4. Contact Damage

There shall be no evidence of physical damage or distortion to any portion of the contact after wire termination.



# 3.5. Housing Damage

There shall be no cracks, breaks, or other visible damage to the housing due to wire termination.

Skiving of plastic on the inside wall of the housing cavity is permissible, provided that conditions specified in the previous statement are met.

# 3.6. Broken Strands

There shall be no broken strands in the conductor after termination.

# 3.7. Exposed Conductor

Exposed conductors shall not exceed the limits specified in Figure 3 after termination.



Figure 3

# 3.8. Conductor Insulation

Conductor insulation shall be contained within the confines of the insulation strain relief as indicated in Figure 4.



Figure 4

CONNECTOR ASSEMBLY PART NUMBERS†	WIRE SIZE (AWG)	
640440	22	
640441	24	
640442	26	
640443	28	

†For other connector styles and plating types, consult TE Engineering.