



**NOTE**

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters. Unless otherwise specified, dimensions have a tolerance of  $\pm 0.13$  and angles have a tolerance of  $\pm 2^\circ$ . Figures are not drawn to scale.

## 1. INTRODUCTION

This specification covers the requirements for application of GET 0.64-mm pin and socket terminals for GET connectors. Each terminal features an insulation barrel and wire barrel. The wire barrel has serrations that help retain the wire to the terminal after crimping. The terminal is held in the connector when the internal locking mechanism engages the locking surface of the terminal. The socket terminal has a tapered lead-in mating end to help guide the terminal when mating.

Application requirements for these terminals apply terminating using hand tools and automatic machines.

Basic terms and features of this product are provided in Figure 1.

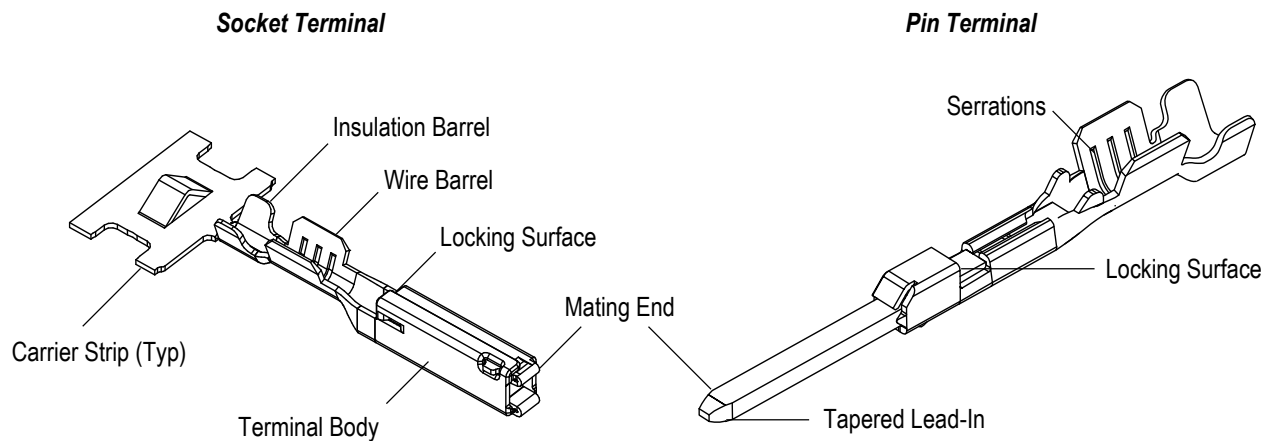


Figure 1

## 2. REFERENCE MATERIAL

### 2.1. Revision Summary

Revisions to this application specification include:

- ◆ Updated Section 5.2 Hand Tool

### 2.2. Customer Assistance

Reference Product Base Part Number 1393364 and Product Code M075 are representative of GET 0.64-mm pin and socket terminals for GET connectors. Use of these numbers will identify the product line and help you obtain product and tooling information when visiting [www.te.com](http://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](http://www.te.com).

### 2.4. Instructional Material

Instruction sheets (408-series) and (411-series) provide product assembly instructions or tooling setup and operation procedures. Instructional material that pertain to this product are:

- 408-3295 Preparing Reel of Contacts for Application Tooling
- 408-7424 Checking Terminal Crimp Height or Gaging Die Closure
- 408-8053 Conversion Guide for Miniature Quick-Change Applicators
- 408-8059 General Preventative Maintenance for Applicators
- 408-8598 GET Female Connector (Sealed)
- 408-8599 GET Female Connector (Unsealed)
- 408-8599-1 Positioning Contact Locking Spacer
- 408-8600 Mounting and Dismounting GET Connector Male (Unsealed) Connector
- 408-9816 Handling of Reeled Products
- 411-18350 GET Hand Crimping Pliers 6-1393462-4 and 6-1393462-5

### 3. REQUIREMENTS

#### 3.1. 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

##### D. Reeled Terminals

Store coil wound reels horizontally and traverse wound reels vertically.

#### 3.2. Material

The socket is made from 7025 copper alloy available with gold, tin, or silver plating. The pin is made from 425 brass available with gold, tin, or silver plating.

#### 3.3. Wire Size and Preparation

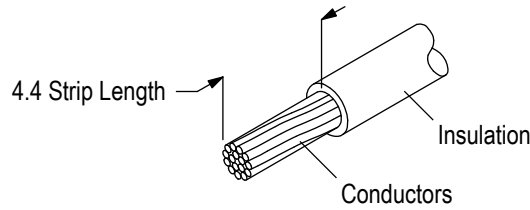
The terminals will accept stranded wire sizes given in Figure 2.



##### **CAUTION**

*The wire conductor must not be nicked, scraped, or cut during the stripping operation.*

Wire stripping tool jaws may leave corrugated indentations on the surface of the wire insulation. This is especially severe with cross-linked polyethylene (high-temperature) insulation.



Note: Not to Scale

WIRE SIZE		WIRE INSULATION DIAMETER
AWG	STANDARD METRIC (mm <sup>2</sup> )	
—	0.22	1.1-1.2
—	0.35	1.3-1.4
22	—	1.65 Max
—	0.5	1.4-1.6
—	0.75	1.7-1.9
20	—	1.9 Max
18	—	2.06 Max

Figure 2

### 3.4. Crimp

The terminal must be crimped according to the instructions packaged with the tool or machine. The crimped terminal must meet the following requirements.

#### A. Wire Barrel Crimp

The crimp applied to the wire barrel must be the most compressed area of the terminal. The terminal wire barrel crimp height must be within the dimension provided in Figure 3.

#### B. Effective Crimp Length

For optimum crimp effectiveness, the wire barrel crimp must be within the area shown in Figure 3. Effective crimp length shall be defined as that portion of the wire barrel, excluding the rear bellmouth, fully formed by the crimp tooling.

#### C. Bellmouths

There shall be no front bellmouth. The rear bellmouth shall conform to the dimension given in Figure 3.

#### D. Cutoff Tab and Burr

There shall be no burr. The cutoff tab must not exceed the dimension given in Figure 3.

#### E. Wire Barrel Flash

The wire barrel flash shall not exceed the dimension given in Figure 3.

#### F. Insulation Barrel Crimp

The insulation barrel shall grip the insulation firmly without fully cutting into it. Care must be taken to prevent cutting, nicking, or scraping of the insulation. Light piercing of the insulation may occur for insulation diameters of 1.7 or larger. The wire insulation shall not be crimped into the terminal wire barrel. There shall be no insulation in the seam of the crimp. The crimp height may not exceed the dimension given in Figure 3.

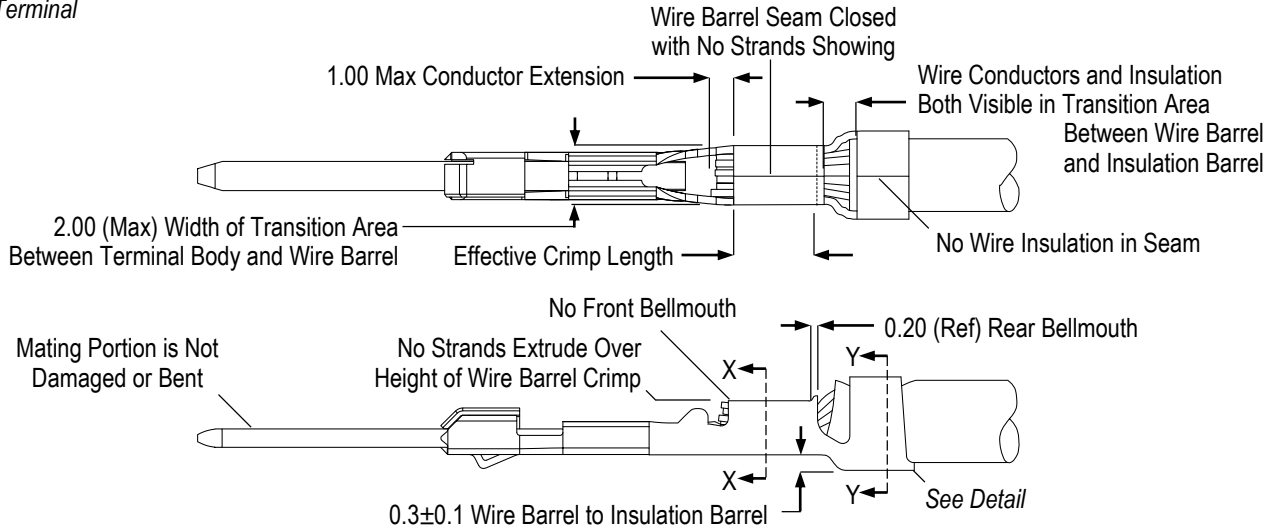


**NOTE**

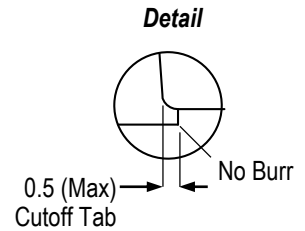
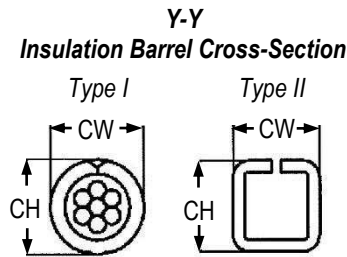
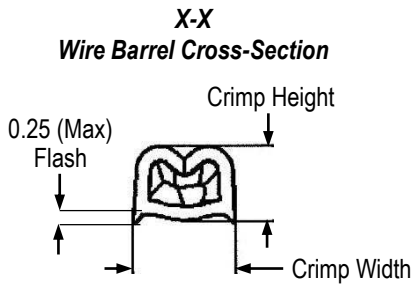
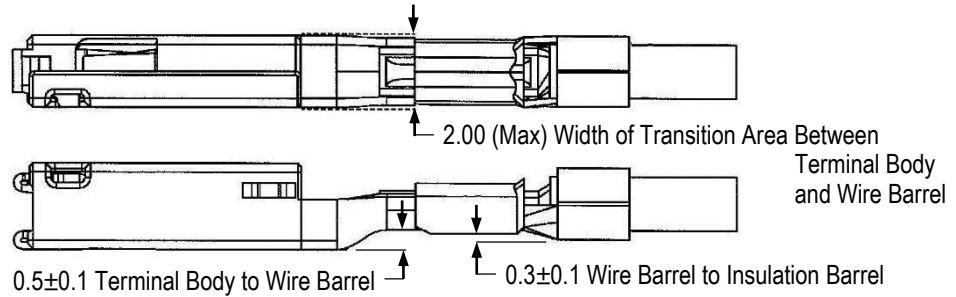
*Corrugated indentations left by the wire stripping tool jaws are acceptable on the surface of the wire insulation.*

**Crimp Requirements**

Pin Terminal



Socket Terminal  
(Unless Otherwise Stated,  
Pin Terminal Crimp  
Requirements Also Apply)



WIRE SIZE		TERMINAL				
AWG	STANDARD METRIC (mm <sup>2</sup> )	WIRE BARREL		INSULATION BARREL		
		CRIMP WIDTH (Ref)	CRIMP HEIGHT ±0.04	TYPE	CRIMP HEIGHT (CH)	CRIMP WIDTH (Ref) (CW)
—	0.22	1.4+0.1/-0	0.89	I	1.9 Max	1.78±0.15
—	0.35		0.97			
22	—		0.95			
—	0.5	1.78+0.15/-0	1.02	II	2.1 Max	1.73-2.05
—	0.75		1.10			
20	—		1.02			
18	—		1.12			

**Note:** The applied crimp dimension (within the functional range of the product) is dependent on the tooling. For automatic machine terminating, refer to the documentation (applicator logs and instruction sheets) supplied with the tooling for the applied crimp height.

Figure 3

**G. Conductor Extension**

No strands may extrude over the height of the wire barrel crimp. The conductors may extend beyond the wire barrel to the dimension given in Figure 3.

**H. Wire Barrel Seam**

The wire barrel seam must be closed with no evidence of loose wire strands visible in the seam.

**I. Transition Areas**

The width of the transition area between the terminal body and wire barrel must not exceed the dimension given in Figure 3.

The wire conductor and insulation must be visible within the transition area between the wire barrel and insulation barrel. See Figure 3.

**J. Twist and Roll**

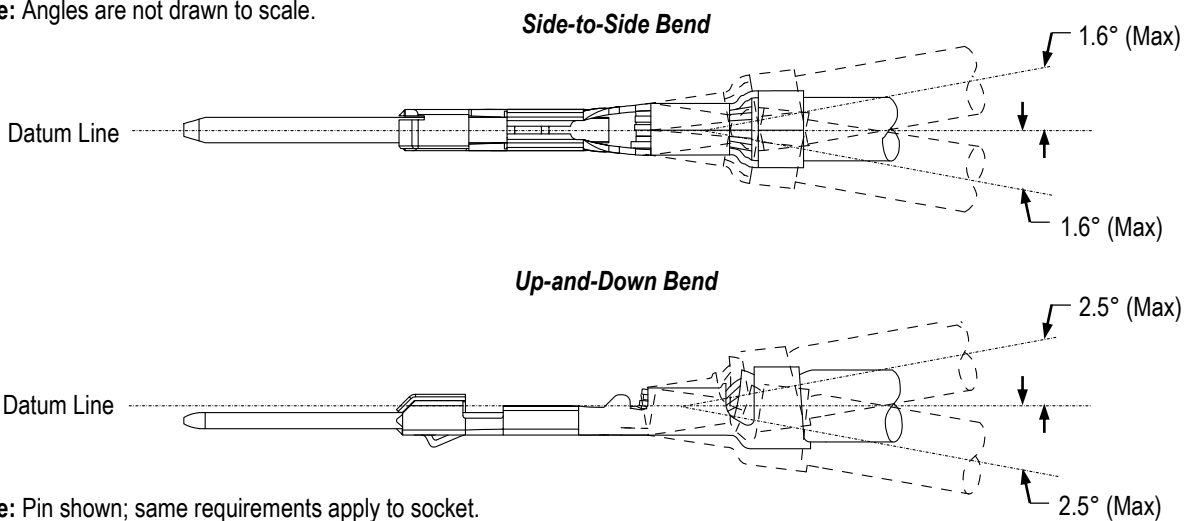
The wire barrel may be twisted relative to the terminal body to a maximum of 5 degrees. There shall be no evidence of deformation or other damage to the mating portion of the crimped terminal.

**K. Straightness**

The force applied during crimping may cause some bending between the wire barrel and the mating portion of the terminal. The terminal must not be bent beyond the limits given in Figure 4.

**i** **NOTE**  
*Periodic inspections must be performed to ensure that crimped terminal formation is consistent.*

**Note:** Angles are not drawn to scale.



**Note:** Pin shown; same requirements apply to socket.

Figure 4

**3.5. Replacement and Repair**

Damaged or defective terminals must not be used. A terminal can be cut from the wire and replaced with a new one.

**4. QUALIFICATION**

GET 0.64-mm pin and socket terminals for GET connectors do not required agency approval.

## 5. TOOLING

Part numbers and instructional material for manual tools are given in Figure 5.

### 5.1. Automatic Machine

Call the number at the bottom of page 1 for a list of automatic machines and applicators applicable to these terminals.

### 5.2. Hand Tool

Hand crimping tools are designed for prototype and repair.

The hand crimping pliers has a die assembly with two crimping chambers that crimps a terminal onto pre-stripped wire. The pliers feature a locator and ratchet release.

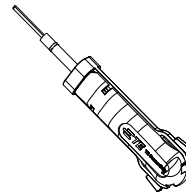
Crimp height and crimp width (for hand crimp tools only) are shown on Customer drawing 6-1393462-4 and 6-1393462-5.

### 5.3. Extraction Tool

The extraction tool is designed to remove a terminal from the connector by releasing the locking lance without overstressing the terminal.



GET Hand Crimping Pliers  
(See Table) (411-18350)



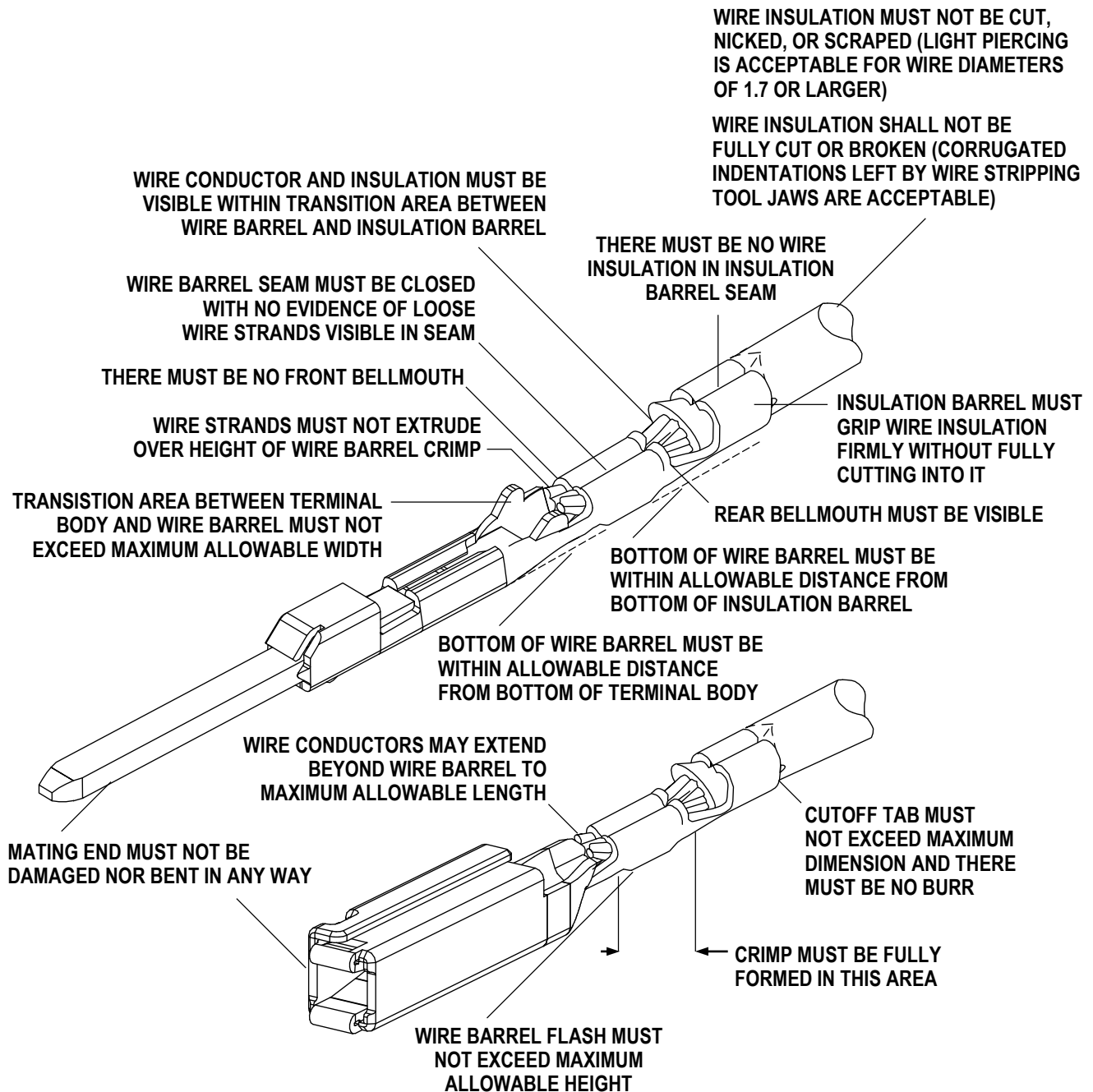
Extraction Tool 3-1579007-6  
Refer to 408-8598 (Female Sealed Connector),  
408-8599 (Female Unsealed Connector), or  
408-8600 (Male Unsealed Connector)

WIRE SIZE		PLIERS
AWG	STANDARD METRIC (mm <sup>2</sup> )	
22	0.22-0.35	6-1393462-4 (GET A; Red)
20-18	0.5-0.75	6-1393462-5 (GET B; Blue)

Figure 5

## 6. VISUAL AID

The illustration below shows a typical application of GET 0.64-mm pin and socket terminals for GET connectors. This illustration should be used by production personnel to ensure a correctly applied product. Applications which do not appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product or tooling.



**FIGURE 6. VISUAL AID**