



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 ± 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 Push-Grip connector. The connector is available with 2 through 6 circuit positions. The connector features a housing that contains a spring contact and wire port for each circuit and a test port for continuity. The wire port is designed to guide the wire into the spring contact for termination.

This connector provides low insertion force of conductors and high force of accidental removal of conductors.

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

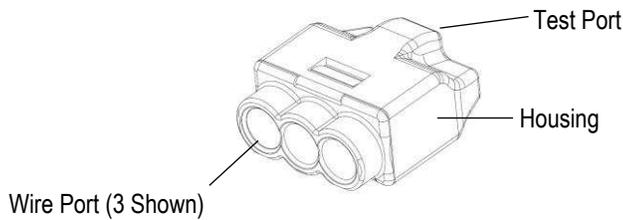


Figure 1a: Push Grip Part Number series 2324697

POSITION	COLOR
2	Yellow
3	Orange
4	Grey
5	Blue
6	Purple

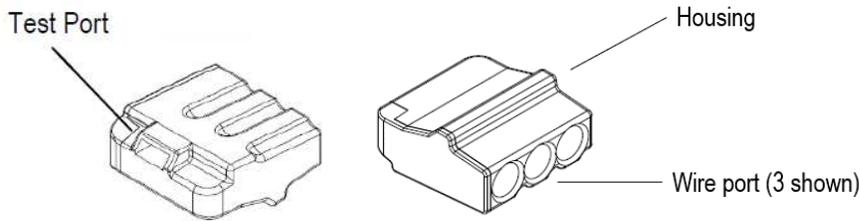


Figure 1b: Push Grip Part Number series 2362252

POSITION	COLOR
2	Orange
3	Orange
4	Orange
5	Orange
6	Orange

2. REFERENCE MATERIAL

2.1. Revision Summary

Initial release of application specification

2.2. Customer Assistance

Reference Product Base Part Number 2324697-x and Part Number 2362252-x as well as Product Code 5000 are representative of Push-Grip connectors. 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.

2.4. Specifications

Product Specification [108-133106](#) provides product performance and test results.

2.5. Instructional Material

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

- [408-133106](#) Push-Grip Connector
- [408-133129](#) Compact Push Grip Connector

3. REQUIREMENTS

3.1. Safety

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

3.2. Operating Temperature

The connector is designed to operate in a temperature range of -40° to 105°C [-40° to 221°F].

3.3. Material

The housing is made of UL 94V-0 rated thermoplastic. The contacts are made of tin-plated copper alloy with spring steel reinforcement.

3.4. Storage

A. 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.

B. 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

3.5. Wire Selection and Preparation

The connector accepts the wire sizes and types given in the tables as shown in Figure 2a and Figure 2b.

The wire must be stripped to the dimension given in Figure 2a and Figure 2b. The conductor strand or single strands must not be cut or pulled during the stripping operation.



CAUTION

Wire sizes, types, and strip length given must be observed in order to provide reliable electrical connection of wire to connector.

After wire preparation, the following must be ensured.

- Conductors must not be nicked, bent, or splayed as shown in Figure 2a and Figure 2b.
- There must be no conductor insulation remaining on the stripped conductors.
- Single strands of the conductor must not protrude from the conductor bundle (no loose strands).

- For Push Grip Part Number series 2324697:

WIRE SIZE	WIRE TYPE	WIRE SIZE	WIRE TYPE
20 AWG	Single Strand Solid Copper	0.5 mm ² tinned	Single Strand Solid Copper
	Tinned Strands Stranded		Strands Stranded
18 AWG	Single Strand Solid Copper	0.75 mm ²	Single Strand Solid Copper
	≤ 7 Strands Stranded or tinned		≤ 7 Strands Stranded or tinned
16 AWG	Single Strand Solid Copper	1.5 mm ²	Single Strand Solid Copper
	≤ 18 Strands Stranded or tinned		≤ 18 Strands Stranded or tinned
14 AWG	Single Strand Solid Copper	2.5 mm ²	Single Strand Solid Copper
	≤ 18 Strands Stranded or tinned		≤ 18 Strands Stranded or tinned

Stranded Shown; Same Applies to Solid
Note: Not to Scale

Acceptable

11.0 mm max Strip Length

Not Acceptable

Bent Conductor

Splayed Conductor

Loose Strands

Figure 2a

- For Push Grip Part Number series 2362252:

WIRE SIZE	WIRE TYPE
22 AWG	Single Strand Solid Copper
	Tinned Strands Stranded
20 AWG	Single Strand Solid Copper
	Tinned Strands Stranded
18 AWG	Single Strand Solid Copper
	Tinned Strands Stranded
16 AWG	Single Strand Solid Copper
	Tinned Strands Stranded
14 AWG	Single Strand Solid Copper
	Tinned Strands Stranded
12 AWG	Single Strand Solid Copper

Stranded Shown; Same Applies to Solid
Note: Not to Scale

Acceptable

11.0 mm max Strip Length

Not Acceptable

Bent Conductor

Splayed Conductor

Loose Strands

Figure 2b

— The wire must be inserted into the housing immediately or the conductor end must be protected against contaminants and strands separating from the bundle, such as partial pull-off of insulation.

3.6. Termination

Each wire must be installed into the connector according to the following.

- The conductor end(s) must be aligned with a wire port of the housing, then inserted until resistance to further insertion is felt. Then, force must be applied. to further insert the conductor(s) into the housing and

engage the spring contacts until abrupt resistance is felt. The abrupt resistance indicates that the conductor(s) are fully inserted. The conductor(s) cannot be exposed outside of the wire port.

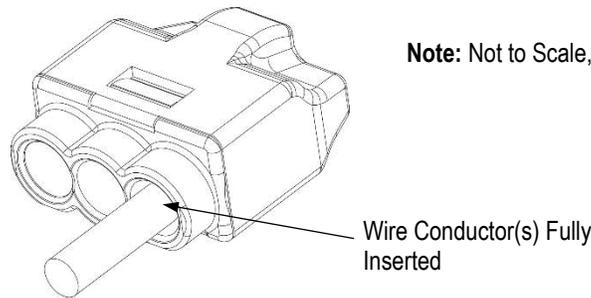


NOTE

Each wire port can accept only one wire.

2. The wire must be gently pulled back to ensure that the conductor(s) has engaged the spring contacts.

The terminated connector must meet the requirements given in 3.



Note: Not to Scale, Part Number series 2324697 shown

Figure 3

3.7. Replacement and Repair

The connectors are not repairable. Defective or damaged connectors must not be used. Wire having skived, deformed, or cut strands must not be used. The connector must not be re-used by removing the wires.

4. TOOLING

No tooling is required.

5. VISUAL AID

The illustration below shows a typical application of Push-On Push-Grip connector. 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.

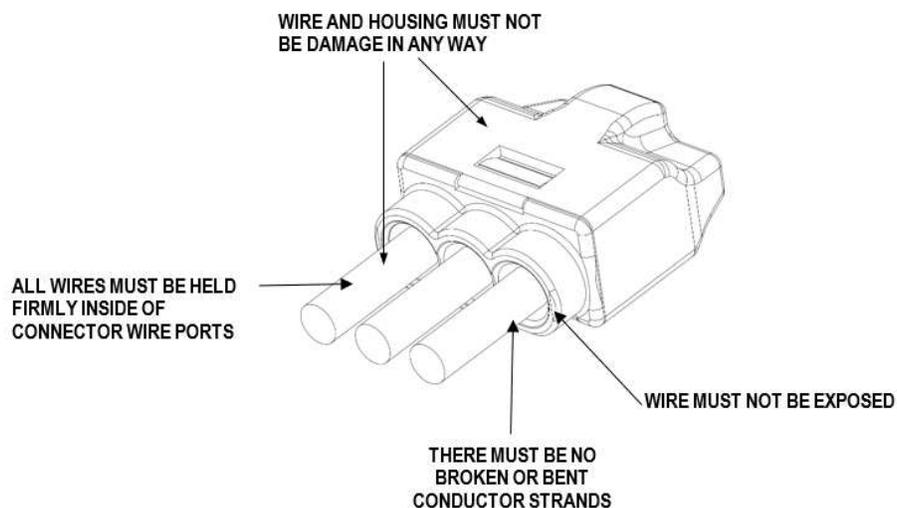


Figure 4 (Part Number series 2324697 shown)