



# 110 LOW PROFILE POSITIVE LOCK RECEPTACLE & HOUSINGS

# For Gas Igniter Applications

TE Connectivity (TE) quick disconnect terminals and housings have been industry leaders for years. TE continues to reinvent the product line to meet the changing trends. Recognizing that applications are getting smaller and requiring the assurance of a Positive Lock terminal, TE is pleased to continue enhancing and expanding our 110 low profile Positive Lock receptacle and housings. These newer products come with the same strong engineering support and high quality that TE has provided for over 50 years.

#### RECEPTACLE FEATURES

- Tab insertion confirmation audible "snap" that can also be felt to assure tab insertion
- Low insertion / withdrawal force assembly is safe and easy and tab-damage risk is reduced
- Fast connect / disconnect smooth insertion-tab mating and return back to original position
- Enhanced contact surface design excellent electrical performance along with low insertion force
- UL recognized (file E28476)

### **ELECTRONIC GAS IGNITER APPLICATIONS:**

- Cooking ranges
- Gas grills
- Similar applications where a gas flame must be ignited

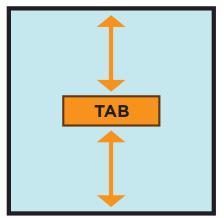
#### HOUSING FEATURES

- Centers the receptacle for improved mating
- Provides insulation to a Positive Lock receptacle
- The larger gripping and pushing surfaces for fingers allows for a ergonomically-friendly housing
- Accommodates the low insertion force, high retention force Positive Lock Mark III receptacle
- Fits within the confines of gas ingiter's terminal cavity
- Choice of two lengths (1.0 or 0.75 in.) allows matching the requirements of the igniter being used
- UL recognized (file E28476)

Gas igniter designs are not standardized across manufacturers; however, they typically use  $.110 \times .032$  in. tabs within cavities or shrouds for electrical connections. TE already offers a receptacle and housing specifically designed for this requirement, but a longer housing was needed for some applications. The new housing is 1.0 in. long, while the existing housing is 0.78 in. long. The same Positive Lock receptacle is used with either housing.

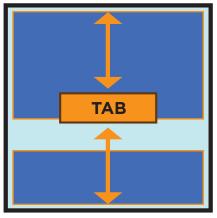
For Gas Igniters

Close tolerances within the terminal shrouds or cavities of gas igniters require precise fitting of the housing and receptacle to permit proper mating with the tab. In the images below, light blue indicates space within the gas igniter shroud or cavity. Dark blue indicates the face of a receptacle housing.



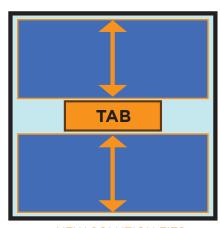
**SMALLER SPACES** 

Many of today's gas igniters have their tabs centered within a shroud. As these designs are modified for increased space efficiency, the clearance around the tabs is becoming smaller.



SOME DO NOT FIT

Traditional Positive Lock housing's design does not center the receptacle within the housing, nor does it center the housing onto the tab. For tabs centered within shrouds, this style product often does not fit.



**NEW SOLUTION FITS** 

The design of TE's new low profile Positive Lock receptacle and housing centers the receptacle in the housing. It also centers the housing onto the tab. This allows the necessary clearance all around the tab.

#### 1742975-1 110 LOW PROFILE POSITIVE LOCK MARK III RECEPTACLE

- 22 18 AWG
- .080 .120 (2.03 3.05) insulation diameter range
- Tin plated brass
- Insertion force 4 6 lbs (1.8 2.7 kg)
- Stock thickness 0.010 (0.25)

#### 1969534-1 110 LOW PROFILE POSITIVE LOCK MARK III HOUSING

- V-0 130°C Nylon material, natural color
- Length is .78 inch (19.81)
- Housing is lower profile than traditional Positive Lock housing
- New design centers receptacle within the housing, allowing symmetrical clearance from the tab to the plastic shroud around tab



#### 2232942-1 110 LOW PROFILE POSITIVE LOCK MARK III HOUSING

- V-0 130°C Nylon material, natural color
- Length is 1 inch (25.4)
- · Housing is lower profile than traditional Positive Lock housing
- New design centers receptacle within the housing, allowing symmetrical clearance from the tab to the plastic shroud around tab





## 110 Low Profile Positive Lock Receptacle & Housings

For Gas Igniters

#### **DESIGN-IN QUESTIONS**

- 1. Do you need to make a connection to a gas igniter in your design?
- 2. Does the gas igniter have .110 x .032 in. tabs inside small shrouds on top of the igniter or within cavities in the igniter?
- 3. Are you looking for a more ergonomic way to apply the receptacles to the tabs?
- 4. Do you need to prevent the terminal from being pulled loose from the igniter?

If the answers are "yes," TE's 110 low profile Positive Lock receptacle and housings likely represent a solution for the application. Depending on your particular application, you may select the new 1 in. long housing (2232942-1) or the 0.78 in. long housing (1969534-1). Either works with the 110 low profile Positive Lock receptacle (1742975-1).



**A:** 1969534-1, 110 Positive Lock Mark III housing--0.78 in. long

**B:** 2232942-1, 110 Positive Lock Mark III housing-- 1 in. long

C: 2232942-1, 110 Positive Lock Mark III housing-- 1 in. long with 1742975-1, 110 Positive Lock Mark III receptacle applied

**D:** 1969534-1, 110 Positive Lock housing-0.78 in. long with 1742975-1, 110 Positive Lock receptacle applied

**E:** 1742975-1, 110 Positive Lock Mark III receptacle applied to wire

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