

Composite P-Clamps with Chloroprene Cushion

1. INTRODUCTION

This specification covers the requirements for application of TE Connectivity P-Clamps, component number THA-PDKG-XX, where -XX indicates a nominal inside diameter of the cushion measured in 1/16ths inches.

This family of products incorporates a chloroprene cushion material. Care must be taken to ensure environmental compatibility with environmental and fluid exposure requirements specific to the application.

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

1. Locking Pin (30% GF PEEK, natural, virgin material)
2. Upper Clamp Member (30% GF PEEK, black, reprocessed material)
3. Cushion (Chloroprene, modified. Meets the requirements of SAE AMS3207)
4. Lower Clamp Member (30% GF PEEK, black, reprocessed material)
5. Hinge Pin (5056-H32 Aluminum per ASTM B211-12, Chemical conversion coating per MIL-DTL-5541, Type 1, Class 3, Clear)
6. Adhesive, not visible
7. Protective coating, visible at hinge when opened

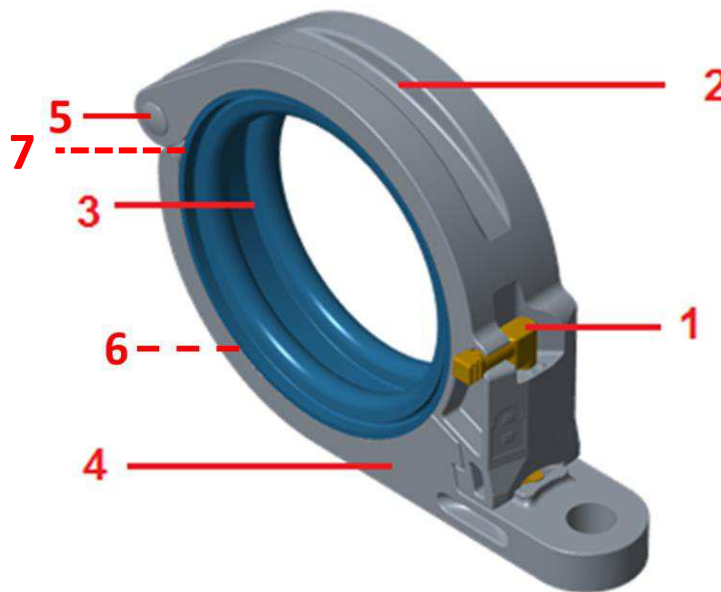


Figure 1 - P-Clamp Design

2. REFERENCE MATERIAL

2.1. Customer Drawings

Customer drawings for product part numbers are available from www.te.com.

Referenced documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. In the event of conflict between the

requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

2.2. Specifications

Product Specification 108-163025 provides product performance and test results.

Fluid resistance has been tested in accordance with TE Connectivity Qualification Test Plan 109-163005 which includes general purpose fluids used on aircraft.

TE Connectivity p-clamps meet typical smoke generation and toxic gas generation testing requirements as required in aircraft and aerospace applications.



CAUTION Chloroprene cushion material is not resistant to phosphate ester-based fluids.



CAUTION Chloroprene cushion material is not recommended for use on titanium tubing.

3. REQUIREMENTS

3.1. Safety



DANGER To avoid personal injury, product must be handled with care as mating edges may be sharp.

3.2. Operating Temperature Limitations

Product is design and tested to operate in a temperature range from -65°C to +85°C [-85°F to +185°F]. Temperatures outside this range shall be validated by the customer.

3.3. Material

See Figure 1.

3.4. Storage

- Products can withstand storage temperatures within the operating temperature range of -65°C to +85°C [-85°F to +185°F], but typical ambient warehouse storage temperatures are recommended.
- It is recommended that product remain in the shipping containers until ready for use.
- It is recommended that product be stored in a closed and latched condition prior to installation.
- It is recommended that product be used on a first in, first out basis.

3.5. Mounting Surfaces

The customer shall provide mounting surfaces as defined in TE Connectivity Installation Instructions, document number 408-163028.

3.6. Mounting Locations

The customer shall select mounting locations as defined in TE Connectivity Installation Instructions, document number 408-163028.

3.7. Mounting Hardware

The customer shall provide mounting hardware as defined in TE Connectivity Installation Instructions, document number 408-163028.

3.8. Product Size Selection

Product sizing shall be determined by the customer as defined in TE Connectivity Installation Instructions, document number 408-163028.

3.9. Repair and Replacement

Damaged or defective product shall not be used. This product contains no user serviceable parts.

4. QUALIFICATION

TE Connectivity P-Clamp qualification testing was performed in accordance with TE Connectivity Qualification Test Plan 109-163005 and as reported in TE Connectivity Qualification Test Report 501-163032.

5. TOOLING

5.1. Mounting of the Product to the Supporting Structure:

The following tools are recommended for mounting of the product to a given structure:

Fastener torque wrench capable of meeting customer defined torque specification.

Fastener drive bit for torque wrench, compatible with the customer's fastener drive type.

5.2. Installation of Materials within the Product:



CAUTION The product shall be closed and latched by hand. The use of tools or auxiliary apparatus to aid in the closure of the product is not recommended by TE Connectivity.



CAUTION Prior to engaging the secondary locking pin, ensure that materials to be supported are centrally located in the cushion area and not between the ends of the cushion. Relocate materials to be supported as required.