1.0 OBJECTIVE

This specification provides information and requirements regarding customer application of Barklip I/O cable connectors. This specification is intended to provide general guidance for application process development. It is recognized that no single application process will work under all customer scenarios and that customers will develop their own application processes to meet their needs. However, if these application processes differ greatly from the one recommended, AICC cannot guarantee results.

2.0 SCOPE

This specification provides information and requirements regarding customer application of Barklip I/O cable connectors. These connectors provide a means of bringing high current from Bus Bar conductors to cable connectors

3.0 GENERAL

This document is meant to be an application guide. If there is a conflict between the product drawings and specifications, the drawings take precedence

4.0 DRAWINGS AND APPLICABLE DOCUMENTS

- AFCI PRODUCT SPECIFICATION GS-12-1222

Product drawings and **Amphenol's GS-12-1222** Product Specification are available at www.amphenol-icc.com In the event of a conflict between this application specification and the drawing, the drawing will take precedence. Customers are advised to refer to the latest revision level of AFCI product drawings for appropriate details.

5.0 APPLICATION REQUIREMENTS

5.1 Connectors Mating Part (Bus Bar)

The Bus Bar Power Conductors shall comply with the following requirements:

Recommended material: Copper, solid blade

Material Thickness: 3.0±0.1 mm

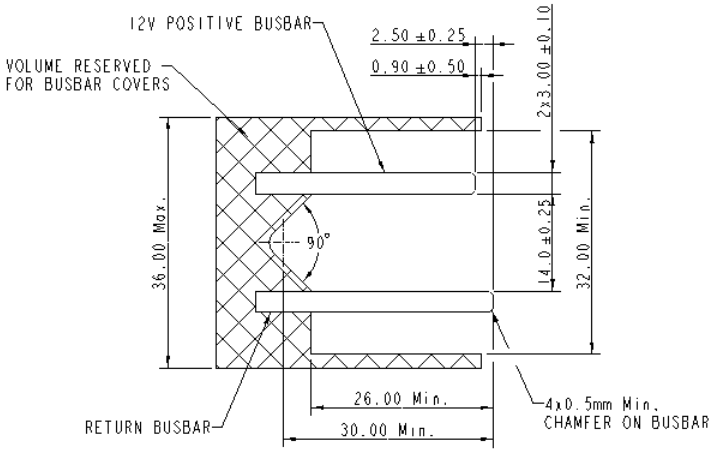
Common stock width: 30.0 mm minimum

Nominal pitch at contacting area: 17 mm

Surface roughness in contact area: Ra 1.6 µm maximum

Plating in contact area: 3 µm min Silver over 1.27 µm min Nickel

Mating edges: 0.5 mm minimum, rounded or chamfered



5.2 General Application

Blind mate: this connector can handle adverse tolerances and allowing reliable mating to misaligned Bus Bar

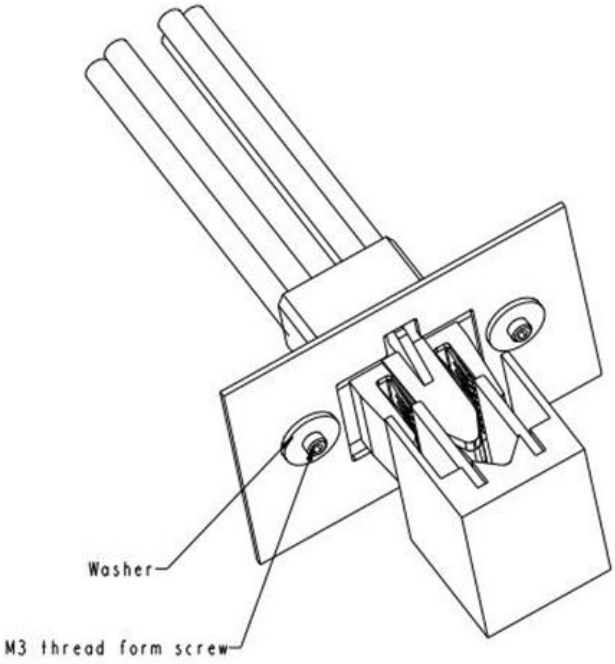
Bus Bar misalignment: ± 2.97 mm.

Mates directly to a dual pole power Bus Bar

Ideal for high current Bus Bar power supply/distribution applications

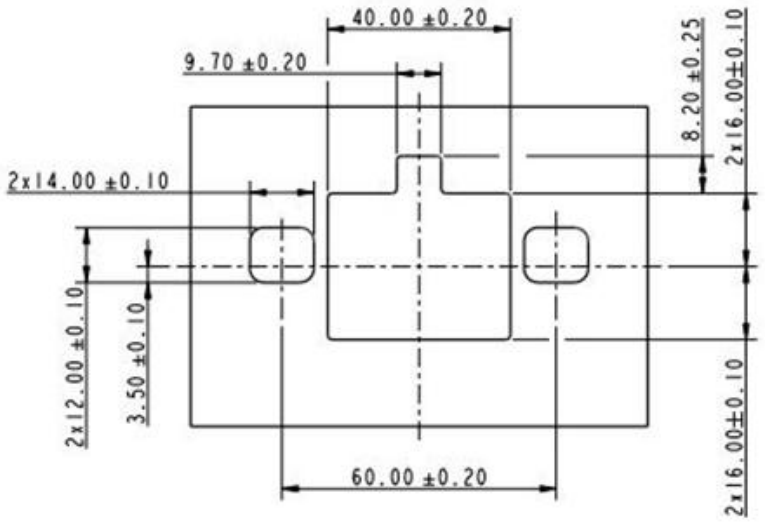
5.3 Connector assembled part

The assembled picture of 10129052 is shown in following:



5.4 Connector mounting panel

Recommended mounting panel is shown in following:

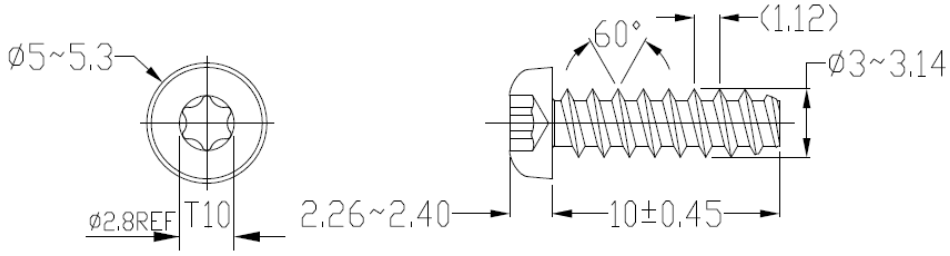


5.5 Connector fixing part

5.5.1 Screw

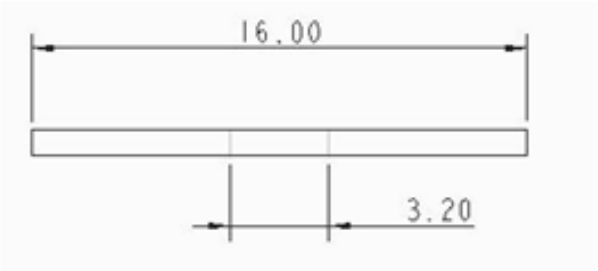
Recommended screw is shown in following:

M3 pan head thread forming screw (self-tapping screw)



5.5.2. Washer

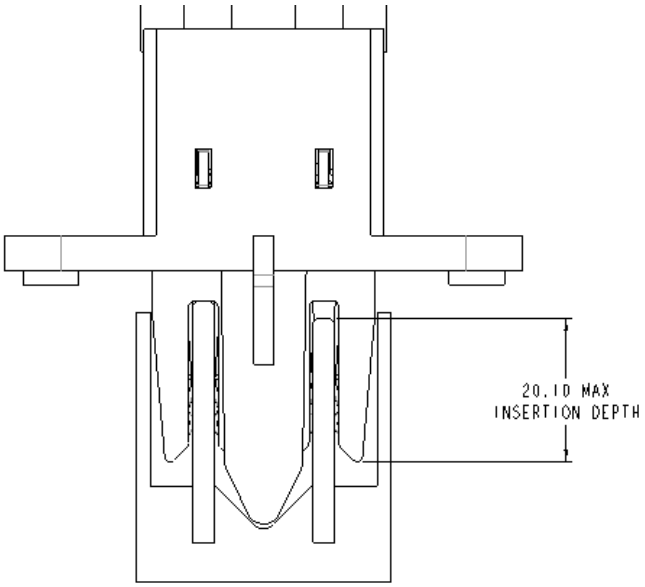
Recommended washer is shown in following:



5.6 Connector Mating

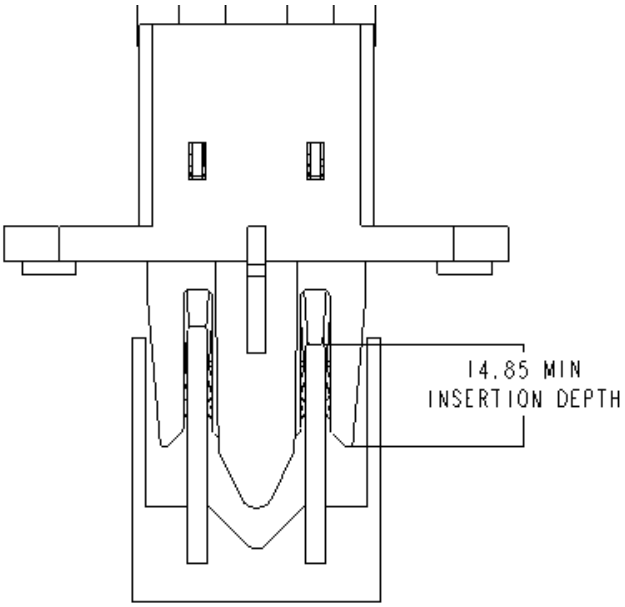
5.6.1 Maximum Mating Depth

The maximum mating depth to be 20.10mm to prevent damage to connector and Bus Bar



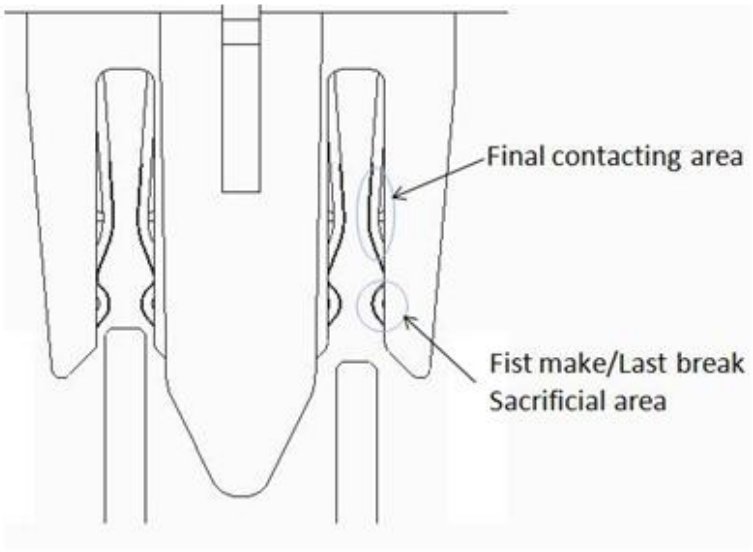
5.6.2 Minimum Mating Depth

The minimum required mating depth to be 14.85 mm to ensure a reliable connection



6.0 Explanation of uncommon or unusual characteristics

Spark spots at the contact entrance are not detrimental. This sacrificial area is designed as “first make / last break” –point, in order to prevent spark spots damage on the final contacting areas (situated deeper in the connector).



7.0 RECORD RETENTION

REV	PAGE	DESCRIPTION	EC#	DATE
A	ALL	Release Application Specification	N/A	2020-06-24