## SIZE (2.8) FASTON

## 1. INTRODUCTION

This specification covers the requirements for application of Tyco FASTON Terminal 1494208-1, 1494209-1, 1494209-2, 1494210-1, 1494210-2, 1494217-1, 1494218-1, 1494219-1, 1494220-1 and 1930002-2. For specific wire and insulation ranges relative to the products covered in the specification, please refer to appropriate Tyco Customer Drawings.

## 2. NOMENCLATURE



Figure 1

| DR <br> Boris Wong | DATE <br> 20-Oct-2002 | APVD |
| :--- | :--- | ---: |
| S. F. Shum |  |  |$\quad$| DATE |
| ---: |

## 3. CRIMP AND DEIMENSIONAL REQUIREMENTS

### 3.1 Wire Preparation

## A. Strip Length

Insulation shall be stripped as indicated in Table 1.

| For Part Number | Wire Strip Length (Nominal) |
| :---: | :---: |
| $1494208-1$ | 4.8 mm |
| $1494209-1,1494209-2$ | 4.2 mm |
| $1494210-1$ | 4.2 mm |
| $1494210-2$ | 4.2 mm |
| $1494217-1$ | 4.2 mm |
| $1494218-1$ | 4.2 mm |
| $1494219-1$ | 4.2 mm |
| $1494220-1$ | 4.2 mm |
| $1930002-2$ | 6.3 mm |

Table 1
B. Workmanship

Reasonable care shall be taken not to nick, scrape or cut any strands wire during the stripping operation. Filaments of insulation material remaining after stripping should be avoided and shall never extend among the bare conductor.

### 3.2 Carrier Cutoff Tab

Cutoff tab shall not exceed 0.50 mm .
3.3 Wire Barrel Crimp
A. Crimp dimensions

Crimp height and width shall be as shown in Table 2 for machine applications.

| Crimp Height/Width for 1494208-1 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.20 | 1.00 | 1.57 |
| 0.30 | 1.07 | 1.57 |
| 0.50 | 1.17 | 1.57 |


| Crimp Height/Width for 1494209-1 \& 1494209-2 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.20 | 0.92 | 1.778 |
| 0.30 | 0.98 | 1.778 |
| 0.50 | 1.08 | 1.778 |

Crimp Height/Width for 1494210-1 \& 1494210-2

| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| :---: | :---: | :---: |
| 0.30 | 1.30 | 2.032 |
| 0.50 | 1.38 | 2.032 |
| 0.80 | 1.50 | 2.032 |


| Crimp Height/Width for 1494217-1 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.30 | 0.96 | 1.778 |
| 0.50 | 1.01 | 1.778 |
| 0.80 | 1.20 | 1.778 |


| Crimp Height/Width for 1494218-1 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.30 | 1.24 | 2.032 |
| 0.50 | 1.27 | 2.032 |
| 0.80 | 1.44 | 2.032 |


| Crimp Height/Width for 1494219-1 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.30 | 1.11 | 1.778 |
| 0.50 | 1.15 | 1.778 |
| 0.80 | 1.34 | 1.778 |


| Crimp Height/Width for 1494220-1 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.30 | 1.07 | 1.778 |
| 0.50 | 1.17 | 1.778 |
| 0.80 | 1.29 | 1.778 |


| Crimp Height/Width for 1930002-2 |  |  |
| :---: | :---: | :---: |
| Wire Size (Nominal) <br> $\mathrm{mm}^{2}$ | Crimp Height <br> $+/-0.05 \mathrm{~mm}$ | Nominal Crimp <br> Width (mm) |
| 0.32 | 1.06 | 1.778 |
| 0.52 | 1.15 | 1.778 |
| 0.82 | 1.30 | 1.778 |

Table 2
B. Wire Barrel Flash

Wire barrel flash shall not exceed 0.15 mm .
C. Wire Barrel Seam

Wire barrel seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.
D. Bellmouth
(1) Rear bellmouth length shall be 0.20 to 0.60 mm
(2) Front bellmouth length shall not exceed 0.50 mm .

## E. Conductor Location

(1) End of the wire shall be flush with the front end of the wire barrel or extend 1.2 mm maximum after crimping.
(2) Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.

### 3.4 Insulation Barrel Crimp

Reasonable care shall be taken not to cut or break the insulation during the crimping operation. Insulation must extend through insulation barrel with no more than 1.00 mm maximum overhang.

Inspect the insulation crimp as follows:

- Hold the terminal in one hand, and the wire - about 76 mm from the terminal - in the other hand
- Bend the specimen up $90^{\circ}$ and down $90^{\circ}$, one time each (see Figure 2)


Figure 2
If the insulation pulls out during the bend test, the insulation crimp is not tight enough, and must be adjusted to a tighter setting according to the procedure in the instruction material packaged with the tool or machine.

### 3.5 Alignment

A. Straightness
(1) The contact, including the cutoff tab and burr shall not be bent above or below the datum line more than the amount shown in Figure 3.


Figure 3
(2) The side to side bending of the contact shall not exceed the limits specified in Figure 4.


Figure 4

## B. Twist or Roll

Twist or roll of the crimped contact shall not exceed the limits specified in Figure 5.


Figure 5

