

FASTON* Connector, .110" sr.s Receptacle Contact.**1. SCOPE**

This specification covers the requirements for application of FASTON* Connectors, .110" sr.s receptacle contacts. These requirements are applicable to automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification see figure 6.

1.1 REFERENCE SPECIFICATION.

For applicable performance requirements, see AMP Product specification listed in Figure 6.

1.2 TERMINAL VOLTAGE RATING

Voltage rating is based upon dielectric strength between the terminal and other voltage potential conductors. For these un-insulated terminals, this dielectric strength is determined by 1) the wire insulation used, 2) the housing used (if any), and 3) the application spacings. These appliance business unit terminals with an insulation barrel crimp are designed for UL 1015 wire with insulation rated for 600 volts; so, this is the voltage rating assigned to these terminals. Clearly, if higher dielectric strength wire insulation, larger spacings, and possibly an optional housing are used, larger voltages can be used.

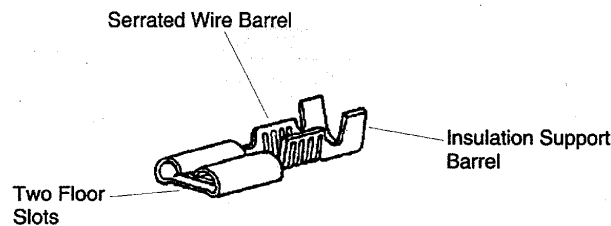
2. PRODUCT FEATURES.

Figure 1

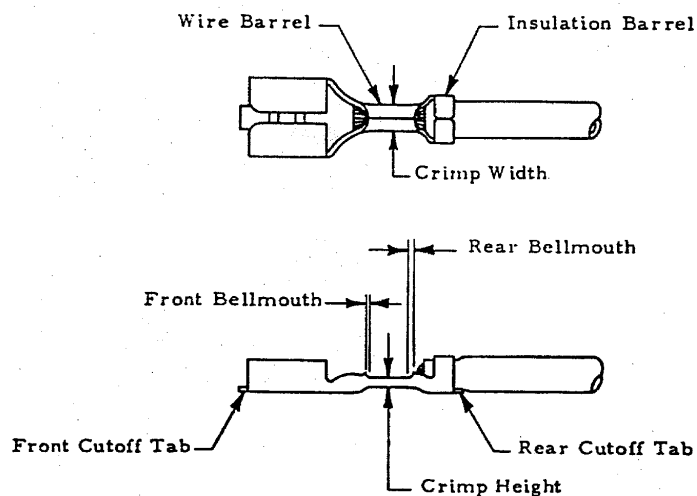
3. NOMENCLATURE

Figure 2

4. CRIMP AND DIMENSIONAL REQUIREMENTS.

4.1 Wire preparation

- A. **Strip length:** Insulation shall be stripped as indicated in Figure 6.
- B. **Workmanship:** Reasonable care shall be taken not to nick, scrape or cut any strands during the stripping operation.

4.2 Carrier Cutoff Tab and Burr

- A. **Cutoff Tab:** shall not exceed .02 [0.5 mm. max.].
- B. **Burr on cutoff:** shall not exceed .006 [0.15 mm. max.].

4.3 Wire Barrel Crimp.

- A. **Crimp Dimensions and Type:** Crimp height, width and type shall be as shown in Figure 6.
- B. **Wire barrel flash:** Shall not exceed .006 [0.15 mm. max.].
- C. **Wire barrel seam:** shall not 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 .010-.0256 [0.4-0.65 mm].
 - (2) Front bellmouth length shall not exceed .0256 [0.65 mm].
- E. **Conductor location:**
 - (3) End of the wire shall be flush with the front end of the wire barrel or extend .0015 [0.4mm] maximum after crimping.
 - (4) 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.

4.4 Insulation Barrel Crimp.

- A. **Crimp Dimensions and Type:** Crimp width and type shall be as shown in Figure 6.
- B. **Workmanship:** Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

4.5 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.

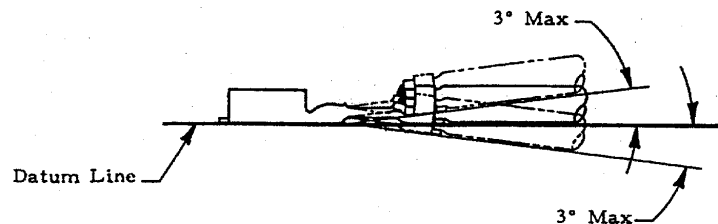


Figure 3

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

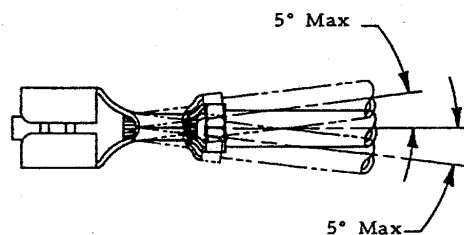


Figure 4

- B. **Twist or Roll:** Twist or Roll of the crimped contact shall not exceed the limits specified in Figure 5.

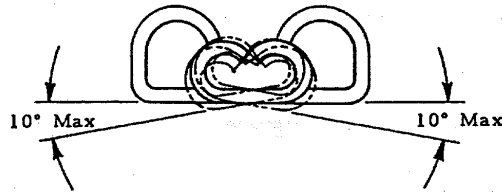


Figure 5

AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS

AMP P/N	LOG	AMP PRODUCT SPEC.	WIRE SIZE mm2	INSULATION DIA. mm	STRIP LENGTH APPROX. mm	WIRE BARREL CRIMP			INSUL. BARREL CRIMP		
						WIDTH REF. mm	HEIGHT mm	TYPE	WIDTH REF. mm	HEIGHT REF. mm	TYPE
160196 160303 160315 160316 160354 160520	677610	108-20019	0.50 0.40 0.30	1.3-2.0	4.00	1.40	1.09 0.97 0.91	F	2.29	-	F
180423 180437 280429	780749	108-20019	1.50 1.00 0.75 0.50	1.5-2.8	3.00	2.03	1.40 1.32 1.27 1.22	F	3.56	-	F
180420 180436	780750	108-20019	0.50 0.35 0.20	1.0-2.0	3.00	1.57	1.14 1.07 0.99	F	2.29	-	F
180457	878179	108-20019	1.50 (AWG16) 1.00 0.75 (AWG18) 0.50 (AWG20)	1.5-3.6	3.00	2.03	1.59 (1.52) 1.41 1.32 (1.34) 1.23 (1.24)	F	3.56	-	F
160615 160765 160772 160794 160822	677609 1531004		(AWG22) (AWG24) (AWG26)	1.0-2.0	2.40-3.20	1.40	(0.81) (0.76) (0.71)	F	2.29	-	F
160666	1529259 677589		(AWG22) (AWG24) (AWG26)	0.89-1.65	3.20-4.00	1.40	(0.81) (0.74) (0.66)	F	2.03	-	F
160597 160600 160737 160747	1529139		(AWG30) (AWG28) (AWG26)	0.76-1.27	2.40-3.20	1.40	(0.66) (0.66) (0.66)	F	1.78	-	F
160780 160839	1339764		1.50 1.00 0.75 0.50	2.0-3.0	3.58-4.34	1.78	1.30 1.17 1.12 1.07	F	3.30	-	F
160484 160415 160528 160533 160534 160555	1529014		1.00 0.75 (18AWG) 0.70 0.50 (20AWG)	2.0-3.0	3.10-3.90	1.78	1.04 0.99 0.99 0.99 0.94 0.94	F	3.05	-	F
160534	4150132		FLRY 0.5	1.5							OV

Figure 6

B7	REVISED PER ECR-23-181224	D.B.	31 AUG 2023	D.H.	04 SEP 2023
B6	REVISED PER ECR-22-136277	D.B.	09 MAY 2022	E.W.	09 MAY 2022
B5	ADDED NEW P/N.s	H.Y.	13 NOV 2007	G.T.	13 NOV 2007
B4	ADDED NEW P/N.s	H.Y.	27 SEP 2005	G.T.	27 SEP 2005
B3	CORRECTED CRIMP HIGH ON LOG 1529139	H.Y.	12 APR 2005	G.T.	12 APR 2005
B2	ADDED NEW P/N.s	H.Y.	31 MAR 2005	G.T.	31 MAR 2005
B1	ADDED NEW P/N.s, ET00-0003-05	H.Y.	05 JAN 2005	G.T.	05 JAN 2005
B	REVISED, ET00-0116-01	H.Y.	07 MAY 2001	C.T.	07 MAY 2001
A	NEW EMISSION, ET00-0086-01	H.Y.	17 APR 2001	C.T.	17 APR 2001
rev letter	rev. record	DR	Date	CHK	Date
DR. H. YAALI	DATE 03 APR 2001	APVD C. TARTARI	DATE 03 APR 2001		