FASTON* Connector,.250" sr. Receptacle Contact (Standard and Piggy-Back versions) & LIF Receptacle contact.

1. SCOPE

This specification covers the requirements for application of .250" sr. FASTON* Receptacle contacts (Standard and Piggy-Back versions) & .250" sr. LIF 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.

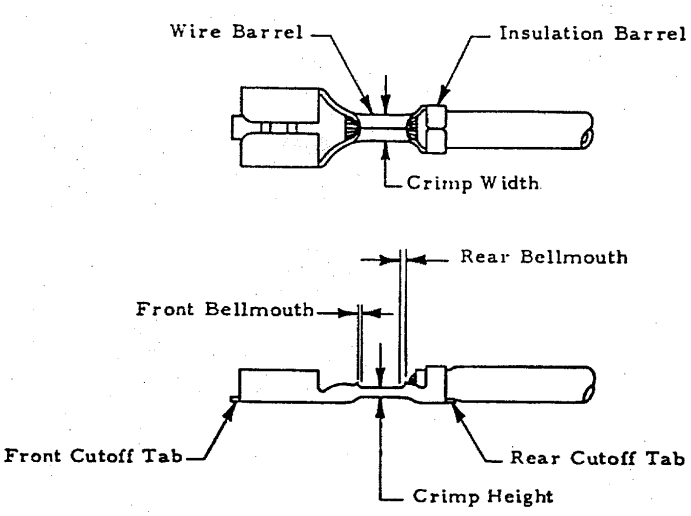
2. PRODUCT FEATURES.

Standard FASTON | L.I.F. FASTON | L.I.F. Receptacle | Piggy-Back FASTON

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 .015 [0.4mm].

B. Burr on cutoff: shall not exceed .005 [0.1mm].

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 .005 [0.1mm].

C. 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 .015-.025 [0.4-0.6 mm].

(2) Front bellmouth length shall be .000-.015 [0.0-0.4 mm].

E. Conductor location:

(3) End of the wire shall be flush with the front end of the wire barrel or extend .030 [0.8mm] 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.

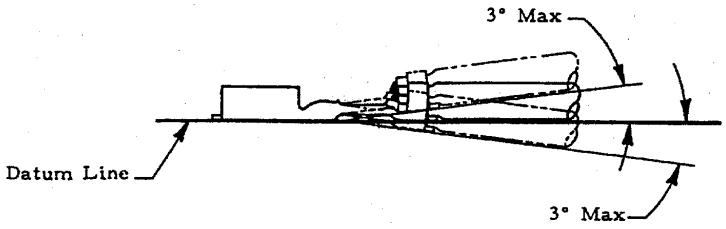


Figure 3

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

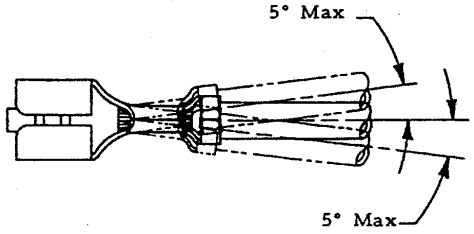


Figure 4

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

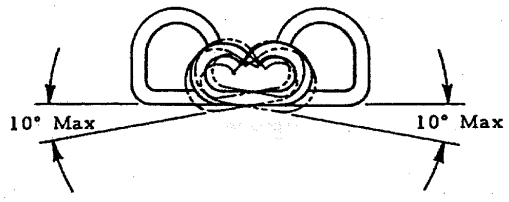


Figure 5

AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS

AMP P/N	AMP PRODUCT SPEC.	LOG	WIRE SIZE (mm2)	INSULATION DIA. mm	STRIP LENGTH APPROX mm	WIRE BARREL CRIMP			INSUL. BARREL CRIMP		
						WIDTH REF. mm	HEIGHT +/-0.03 mm	TYPE	WIDTH REF. mm	HEIGHT REF. mm	TYPE
280000 041771	108-20019 -	780278	0.30 (22AWG) 0.50 (20AWG) 0.65 (20AWG) 0.75 (18AWG) 0.80 (18AWG)	2.30-3.30	5.50	2.3	1.14 1.22 1.27 1.30 1.30	F	3.30	-	F
280001 160256	108-20019 “	780277 680139	0.75 (18AWG) 1.00 (18AWG) 1.50 (16AWG) 2.50 (14AWG)	3.05-4.30	6.00	3.0	1.42 1.52 1.62 1.88	F	4.57	-	F
280001 160256 160808 100605	108-20019 “ “ “	1529016	0.75 1.00 (18AWG) 1.50 (16AWG) 2.50 (14AWG)	3.05-4.30	6.00	2.8*	1.52* 1.63* 1.73* 1.98*	F	4.57	-	F
180363	108-20019	466329	4.00 6.00	3.8-5.1	6.00	4.06	2.41 2.79	F	5.33	-	F
160389	108-20019	-	0.30 0.40 0.50 0.75	2.30-3.05	5.50	2.3	1.24 1.27 1.30 1.42	F	3.30	-	F
160432 160807 100495♠	108-20019 “ 108-19084	677519 1339501	0.50 (20AWG) 0.75 (18AWG) 1.00 (16AWG) 1.50 (14AWG)	2.30-3.30	5.50	2.3	1.45 1.50 1.60 1.65	F	3.3	-	F
100495♠	108-19084	1529009	0.50 0.75 1.00 1.40 1.50	2.30-3.30	5.50	2.3	1.45 1.50 1.60 1.62 1.65	F	3.3	-	F
160301	108-20019	-	4.00 6.00	3.8-5.1	6.20	3.5 4.5	2.51 2.34	F F	4.5 5.3	-	O / F O / F
160465	108-20019	-	0.75 1.00 2x0.50 1.50	3.05-4.30	6.00	2.5	1.65 1.70 1.70 1.80	F	3.9	-	F
160915	108-20019	677820	0.50 0.75 1.00	1.40-2.30	6.00	2.0	1.43 1.50 1.61	F	2.8	-	O V L
160916	108-20019	677819	1.00 1.50 2.00 2.50	2.1-3.1	5.50	2.8	- 1.87 2.01 2.15	F	3.5	-	O V L
160808 100570♠ 160541	108-20019 108-19084 -	878006 677515 677514	1.00 1.50 2.00 2.50	3.05-4.30	6.00	3.05	1.67 1.85 1.95 2.03	F	3.94 4.57 3.94	-	F
160912	108-20019	878421	4.00 5.00 6.00	4.0-5.2	6.50	4.0	2.41 2.51 2.70	F	5.6	-	F
100605♠	108-19076	677862	1.00 1.50 2.00 2.50	3.0-4.3	6.20	3.05	1.53 1.66 1.79 1.91	F	4.57	-	F
280079 PIGGY BACK	108-20019	783166	0.80 1.00 1.50 2.50	3.0-4.3	5.50	2.79	1.44 1.49 1.60 1.75	F	3.93	-	F
160739 PIGGY BACK	108-20019	677756	0.75 (18AWG) 1.00 (17AWG) 1.50 (16AWG) 2x1.00 2.50 (14AWG)	3.0-4.3	5.50	2.79	1.47 1.54 1.67 1.75 1.75	F	4.57	-	F

(*) Preferential data.
(♠) Low Insertion Force version

Figure 6

G12	REVISED PER ECR-23-181224	D.B.	31AUG2023	D.H.	04SEPT2023
G9	ADDED CRIMP CASE 2x0,50mm² FOR TERMINALS 160465	D.C.	23JAN2015	D.C.	23JAN2015
G8	UPDATED	H.Y.	13 JUN 2008	G.T.	13 JUN 2008
G7	UPDATED	H.Y.	28 FEB 2007	G.T.	28 FEB 2007
G6	UPDATED	H.Y.	05 MAY 2006	G.T.	05 MAY 2006
G5	UPDATED	H.Y.	16 MAR 2006	G.T.	16 MAR 2006
G4	UPDATED FOR ET00-0194-02	H.Y.	30 SEP 2002	C.T.	30 SEP 2002
G3	UPDATED FOR ET00-0066-02	H.Y.	12 APR 2002	C.T.	12 APR 2002
G2	UPDATED FOR ET00-0016-02	H.Y.	29 JAN 2002	C.T.	29 JAN 2002
G1	UPDATED FOR ET00-0283-01	H.Y.	26 NOV 2001	C.T.	26 NOV 2001
G	ADDED P/N.s FOR ET00-0149-01	H.Y.	08 JUN 2001	C.T.	08 JUN 2001
F1	UPDATED FOR ET00-0144-01	H.Y.	01 JUN 2001	C.T.	01 JUN 2001
F	ADDED PARTS FOR ET00-0086-01	H.Y.	17 APR 2001	C.T.	17 APR 2001
E	ADDED PARTS FOR ET00-0078-01	H.Y.	05 MAR 2001	C.T.	05 MAR 2001
D	REVISED FOR ET00-0210-00	H.Y.	25 JUL 00	C.T.	25 JUL 00
C	REVISED FOR ET00-0319-99	H.Y.	08 OCT 99	C.T.	08 OCT 99
B	REVISED AND RETYPED FOR ET00-0168-99	H.Y.	17 MAY 99	C.T.	17 MAY 99
rev letter	rev. record	DR	Date	CHK	Date
DR. H. YAALI	DATE 18 MAY 99	APVD G. TARTARI			DATE 18 MAY 99