

**FASTIN-FASTON* Connectors, .110", .250", .312" & .375" srs.
TAB & RECEPTACLE CONTACTS**

1. SCOPE

This specification covers the requirements for application of .110", .250", .312" and .375" series FASTIN-FASTON* Tab & 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 4.

1.1 Reference Specification

For applicable performance requirements, see AMP Product Specification 108-20020.

2. NOMENCLATURE

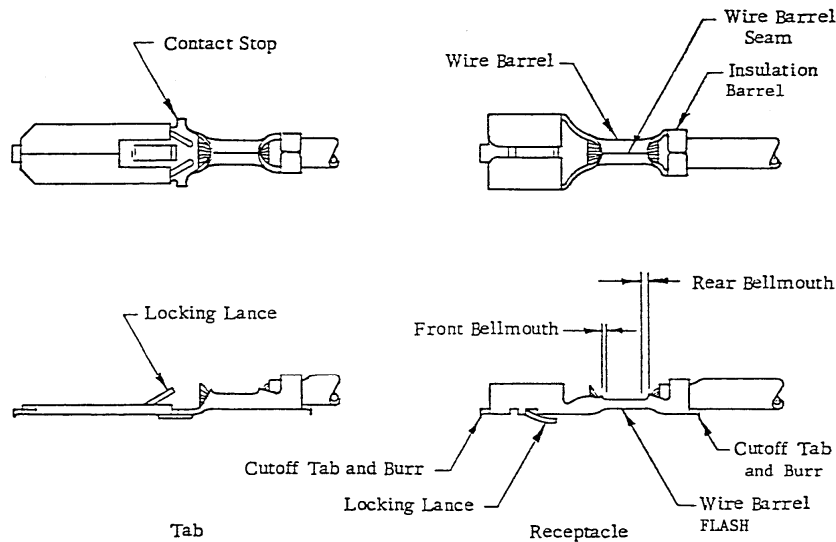


Figure 1

3. CRIMP AND DIMENSIONAL REQUIREMENTS

3.1 Wire Preparation

A- **Strip Length:** Insulation shall be stripped as indicated in Figure 4.

B- **Workmanship:** Reasonable care shall be taken not to nick, scrape or cut any strands during the stripping operation.

3.2 Carrier Cutoff Tab and Burr.

A- **Cutoff Tab:** Cutoff tab shall not exceed .015.

B- **Burr:** Burr on cutoff shall not exceed .005.

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3.3 Barrel Crimp.

- A- **Crimp Dimensions and Type:** Crimp height, width and type shall be as shown in Figure 4.
- B- **Wire Barrel Flash:** Shall not exceed .005.
- 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 .010-.030.
 - (2) Front bellmouth length shall be .005-.025.
- E- **Conductor location:**
 - (1) End of the wire shall be flush with the front end of the wire barrel or extend .030 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.

- A- **Crimp Dimensions and Type:** Crimp width and type shall be as shown in Figure 4.
- B- **Workmanship:** Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.5 Locking Lance.

Locking lance shall not be deformed and shall meet requirements of product drawing after crimping.

3.6 Contact Stop.

Contact stop shall not be deformed and shall meet requirements of product drawing after crimping.

3.7 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 2.

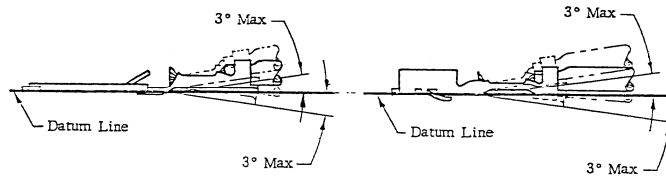


Figure 2

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

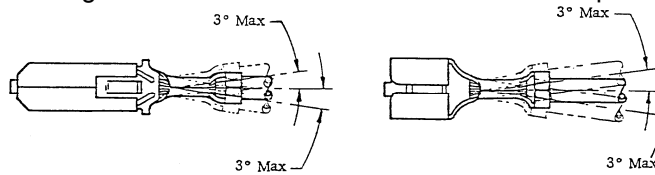


Figure 3

- B- **Twist or Roll:** There shall be no twist or roll in crimped portion that will impair usage of the contact.
- C- **Assembly.** The following list of do's and don'ts are to be followed when assembling contacts into housing cavities.

(1) **do's:**

- a) Do insert contacts fully.
- b) Do check for proper insertion by pulling back lightly.
- c) Do ensure proper handling of contacts to eliminate lance deformation.

(2) **Don'ts:**

- a) Don't insert contact into housing at an angle.
- b) Don't rock connectors while mating.
- c) Don't tie harness closer than 1.50 inches to back of housing.
- d) Don't dress wires sharply to one side of housing.

AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS

S E R I E S	L O G	PART N°		WIRES		INSULATION DIA.	STRIP LENGHT APPROX.	WIRE BARREL CRIMP			INSULATION BARREL CRIMP	
		TAB	REC.	N°	SIZE mm2			WIDTH	HEIGHT	T Y P E	WIDTH	T Y P E
.110"		188352 160743 160762		1	0.50	.090-.120	.180	.090	.058	F	.130	F
				1	20 (AWG)				.058			
				1	0.75				.060			
				1	18 (AWG)				.062			
				1	1.00				.062			
				1	16 (AWG)				.069			
				1	1.50				.069			
.110"		160887		1	0.50	.055-.090	.177	.080	.056	F	.110	O V
				1	0.70				.059			
				1	0.75				.060			
				1	0.85				.061			
				1	1.00				.063			
.110"		160926		1	1.50	.083-.122	.180	.110	.067	F	.140	O V
				1	2.00				.072			
				1	2.50				.078			
.110"		160888		1	1.00	.075-.090	.180	.090	.061	F	.110	O V
				1	1.25				.065			
				1	1.35				.066			
				1	1.50				.068			
.110"			160366	1	0.20	.040-.080	.158	.062	.032	F	.080	F
				1	24 (AWG)				.032			
				1	0.30				.035			
				1	22 (AWG)				.035			
				1	0.40				.037			
				1	0.50				.039			
				1	20 (AWG)				.039			
.110"			160864	1	0.50	.055-.090	.158	.070	.041	F	.100	O V
				1	0.70				.045			
				1	0.75				.046			
				1	0.85				.047			
				1	1.00				.050			
.110"		160776		1	26 (AWG)	-	-	.070	.038	F	-	-
				1	24 (AWG)				.039			
				1	22 (AWG)				.042			
.110"		160923		1	0.20	.040-.063	.180	.070	.043	F	.090	F
				1	0.25				.044			
				1	0.35				.046			
				1	0.50				.049			
.250"	785314	280096		1	0.35	.090-.130	.218	.080	.053	F	.130	F
				1	0.50				.055			
				1	0.75				.057			
.250"	785316		280095	1	0.35	.090-.130	.218	.080	.046	F	.130	F
				1	0.50				.049			
				1	0.75				.051			
.250"	785129		282178	1	0.35	.057-.075	.218	.080	.046	F	.120	F
				1	0.50				.049			
				1	0.75				.051			
.250"	687839	42098 42460 280081 280425		1	0.75	.120-.160	.218	.110	.057	F	.160	F
				1	1.00				.060			
				1	1.50				.065			
				1+1	0.75+0.75				.065			
				1	2.50				.075			

AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS
(continuation)

S E R I E S	L O G	PART N°		WIRES		INSULATION DIA.	STRIP LENGHT APPROX.	WIRE BARREL CRIMP			INSULATION BARREL CRIMP	
		TAB	REC.	N°	SIZE mm2			WIDTH	HEIGHT	T Y P E	WIDTH	T Y P E
.250"	785320		42100 280098 280923 180375 284340 293212	1	0.75	.120-.160	.218	.100	.049	F	.180	F
				1	1.0				.052			
				1	1.5				.056			
				1	2.5				.064			
				-	-				-			
.250"	785127		282171 282176 282177	1	1.0	.075-.118	.218	.100	.052	F	.140	F
				1	1.5				.056			
				1	2.0				.060			
				1	2.5				.064			
.250"	677705	180352 280080		1+1	1.5+1.5	.135-.200	.240	.160	.072	F	.210	F
				1	4.0				.077			
				1	5.0				.085			
				1	6.0				.092			
.250"	466675		180560 180351	1+1	1.5+1.5	.135-.200	.240	.160	.072	F	.210	F
				1	4.0				.077			
				1	5.0				.085			
				1	6.0				.092			
.250"	7-1529168-1		180351	1+1	1.5+1.5	.135-.200	.240	.160	.072	F	.210	F
					4.0				.077			
					2.5+1.5				.077			
					5.0				.085			
					2.5+2.5				.085			
					[10AWG]				.087			
					6.0				.092			
.250"	785126	282170		1	1.0	.075-.118	.216	.110	.060	F	.155	F
				1	1.5				.065			
				1	2.0				.070			
				1	2.5				.075			
.250"	785135	282186		1	0.35	.057-.075	.216	.080	.053	F	.120	F
				1	0.50				.055			
				1	0.75				.057			
.250"		160645 160691		1	0.30(22AWG)	.085-.125	.218	.090	.045	F	.140	F
				1	0.50(20AWG)				.048			
				1	0.75(18AWG)				.052			
.312"			160920	1	3.00	.130-.177	.255	.130	.085	F	.210	F
				1	3.50				.089			
				1	4.00				.093			
.312"			160557	1	0.50	.090-.130		.090	.056	F	.130	F
				1	0.75				.058			
				1	1.00				.060			
				1	1.50				.062			
.375"		280075		1+1	0.75+2.50	.150-.200	.270	.160	.106	F	.250	F
				1	4.00				.118			
				1	6.00				.126			
.375"	785489		280077 280756	1	3.00	.118-.200	.270	.160	.110	F	.250	F
				1	4.00				.118			
				1	6.00				.126			
.375"	1529063 1339559		280756	1	4.00	.118-.200	.270	.160	.102	F	.250	F
				1	6.00				.110			
.375"	1529095		280756	1	4.00	.118-.200	.270	.180	.095	F	.250	F
				1	5.00				.102			
				1	6.00				.109			
.375"	783282	280074		1	6.00	.200-.275	.280	.180	.127	F	.300	F
				1	10.0				.143			
.375"	782678		280755 281089 280076 281091	1	6.00	.200-.275	.280	.180	.127	F	.300	F
				1+1	6.00+2.50				.138			
				1	10.0				.143			
.375"	1529136		280755 280076 281091	1	6.00	.200-.275	.260	.180	.127	F	.300	F
				1	8.00				.135			
				1	8.50				.138			
				1	10.0				.143			

Figure 4