

APPLICATION SPECIFICATION

1. SCOPE

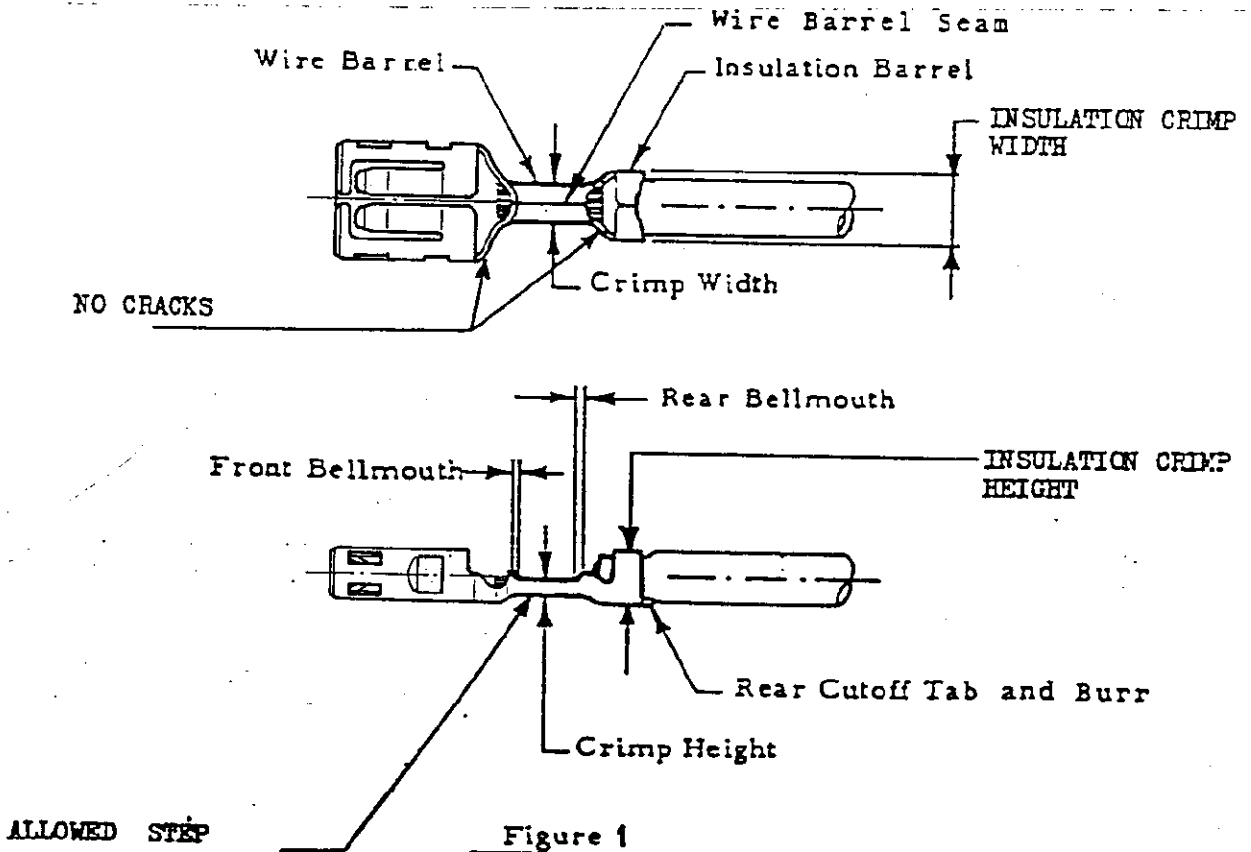
1.1 Content

This specification covers the requirements for application of "RECEPTACLE CONTACT P/N 281881-1 and 281885-1. 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.

1.2 Reference Specification


For applicable performance requirements, see AMP Specification (or equivalent customer specification)

2. NOMENCLATURE



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11C 031 2.81

		DR Bassano 30 Jan. 89		 <b>AMP ITALIA S.p.A.</b> Corso F.lli Cervi, 15 COLLEGNO (TORINO)		
		CHK				
3	ADDED VALUES FOR DOUBLE WIRE CRIMPING.	ECN 1-2047 R.M. 2 OCT 91	APP	LOC I	NO 114-20024	REV 3
2	ADDED INFO. FOR DOUBLE WIRE CRIMPING.	ECN 1-2814 MR - 18 Apr '91				
1	REVISED	6 SEP 89	SHEET 1 OF 4	NAME Rec. Contact for current up to 15 A and 20 A.		
REV	NO DESIGN IN CHG.			APPLICATION SPECIFICATION OF		

### 3. CRIMP AND DIMENSIONAL REQUIREMENTS

#### 3.1 Wire Preparation

##### A. Strip wire 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 .010

##### B. Burr

Burr on cutoff shall not exceed .004

#### 3.3 Wire Barrel Crimp

##### A. Crimp Dimensions and Type

Crimp height, width and type shall be as shown in Figure 4.

##### B. 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.

##### C. Bellmouth

(1) Rear bellmouth length shall be .015 - .025.

(2) Front bellmouth length shall be .005 - .015.

##### D. 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 Cracks

There shall be no cracks between wire barrel/insulation barrel and transition wire barrel/contact portion after crimping. (As indicated in Fig. 1).

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### 3.6 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 in Figure 2.

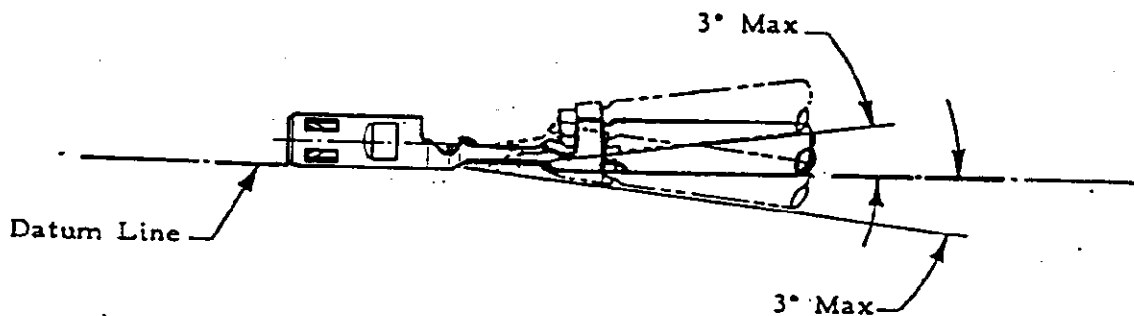


Figure 2

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

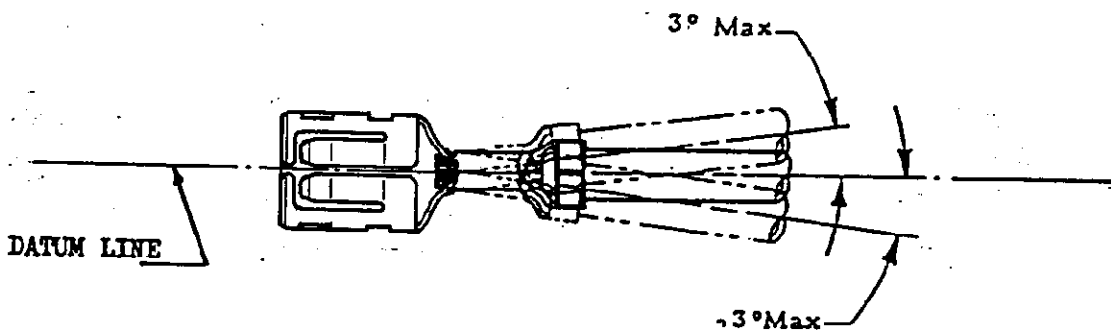


Figure 3

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### B. 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 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.

### C. Twist of Roll

There shall be no twist or roll in crimped portion that will impair usage of the contact.

AMP PART NUMBER OF TERMINAL	WIRES		INSULATION DIAMETER mm (ONLY FOR REF.)	STRIP WIRE LENGTH $\pm .015''$	WIRE BARREL CRIMP			INSULATION BARREL CRIMP		
	N.	SIZE mm			WIDTH	HEIGHT $\pm .001''$	CRIMPER TYPE	WIDTH	HEIGHT	CRIMPER TYPE
281881-1	1	0,5	2,0 - 2,2	.200"	.100"	F	6 $\div$ 6,5	3,4 mm MAX.	special	.051"
	1	0,75	2,2 - 2,4							.055"
	1	1	2,4 - 2,6							.058"
	1	1,5	3,15-3,35							.064"
	2	0,5+0,5	1,5 $\div$ 1,7;1,5 $\div$ 1,7	.220"	.100"	F	6 $\div$ 6,5	2,1 $\div$ 2,5	F	.056"
	2	1+0,5	1,9 $\div$ 2,1;1,5 $\div$ 1,7							.062"
281885-1	1	2,5	3,6 - 3,8 (OR 3-3,2)	.200"	.130"	F	6 $\div$ 6,5	3,8 mm MAX.	special	.064"
	2	1 + 1	1,9 $\div$ 2,1;1,9 $\div$ 2,1	.220"	.130"	F	6 $\div$ 6,5	2,1 $\div$ 2,5	F	.065"
	2	1,5+0,5	2,2 $\div$ 2,4;1,5 $\div$ 1,7							.065"

TYPICAL INSUL. BARREL CROSS SECT. FOR DOUBLE WIRE

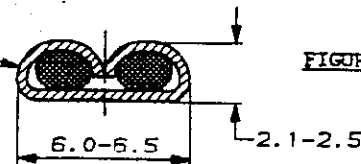
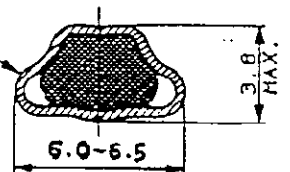


FIGURE 4

TYPICAL INSUL. BARREL CROSS SECT. FOR SINGLE WIRE



\* Values to be defined by July '91.

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