

Crimping of 040Ⅲ Unsealed Contact,Receptacle

The performance of applicable product is guaranteed only when processed by proper application tooling and condition described in this specification and/or AMP recognized ones. No product is guaranteed when processed with the other tool or condition.

1. Scope

This specification covers the requirements for crimping of .040Ⅲ Unsealed Contact ,Receptacle.

2. Applicable Contacts

Contact Part Numbers*		Description	Finish	Applicable Wires
Strip Form	Loose Piece			
316836	1376700	Receptacle (S)	Tin-plated	AVS 0.3~0.5** AVSS/CAVS 0.3~0.85 CAVUS 0.3~0.85
1565915	--			
316837	1376701		Gold-plated	
316838	1376702	Receptacle (M)	Tin-plated	AVS 0.5 AVSS/CAVS 0.85~1.25 CAVUS 1.25
1565916	--			
1123653	1376704	Receptacle (MS)	Tin-plated	AVSS/CAVS 0.85 CAVUS 0.85
1318434	--	Receptacle (MS)	Gold-plated	ABAVX 0.75f
1674769	--	Receptacle (ML)	Tin-plated	AVSS/CAVS/CAVUS 1.25 CHFUS 1.5 HFSS 1.5f
1717172	--	Receptacle (SS)	Tin-plated	CHFUS 0.22

NOTE * Part number is consisted from listed base number and 1 digit numeric prefix and suffix with dash. Refer to catalog or customer drawing for specific part numbers for each base number. When prefix is zero, zero and dash omitted.

**For Applicator crimping only with 0.5mm² AVS wire. Not for Hand tool crimping.

3. Nomenclature

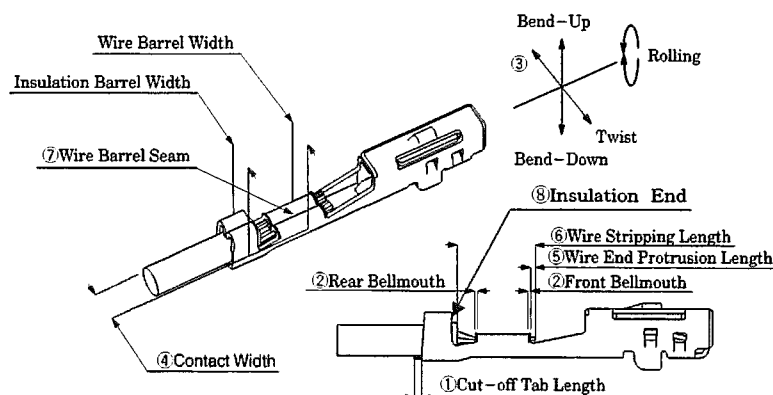


Fig. 1

4. Crimping Condition

4.1 Applicator Crimp

Applicable Receptacle P/N			Receptacle (S) 316836 316837 1565915	Receptacle (M) 316838 1565916	Receptacle (MS) 1123653	Receptacle (MS) 1318434	Receptacle (ML) 167476 9	Receptacle (SS) 1717172	Remarks
Crimp Condition									
1	Cut-off Tab Length		0.5 mm Max.					0.2~0.7mm	Fig.1-①
2	Bell mouth	Front	0.2 mm Max.				0.4mm Max.	(2)	Fig.1-②
		Rear	0.2~0.5mm		0.2~0.6mm	0.2~0.6mm	0.2~0.5mm		
3	Deformation After Crimping	Bend	-1° , +2° Max.						Fig.1-③
		Twist	±4° Max.						
		Rolling	±10° Max.						
4	Contact Width after Crimping		2mm Max. (1)	2.7mmMax.	2mmMax. (1)	2.6mmMax. (1)	2.7mmMa x. (1)	2mm Max.	Fig.1-④
5	Wire End Protrusion Length		0~1 mm						Fig.1-⑤
6	Wire Insulation Stripping Length (before crimping)		4~4.5 mm	4.5~5 mm	4~4.5 mm	4~4.5 mm	4.5~5 mm	3~3.5 mm	Fig.1-⑥
7	Wire Barrel Seam		Seam must be neatly closed. (No strand looses out of the seam.)						Fig.1-⑦
8	Insulation End		Insulation End must be between Wire barrel and Insulation Barrel						Fig.1-⑧

NOTE (1) For crimping on 0.5mm² AVS or 0.85mm² AVSS/CAVS or 1.5mm²HFSS wires.

It is permissible only for the insulation to exceed it.

(2) The bell mouse can check by viewing.

4.2 Hand Tool Crimp

Applicable Receptacle P/N			Receptacle (S) 1376700 1376701	Receptacle (M) 1376702	Receptacle (MS) 1376704	Remarks
Crimp Condition						
1	Bell mouth	Front	0.4 mm Max			Fig.1-②
		Rear	0.1~0.6 mm			
2	Deformation After Crimping	Bend	±5° Max.			Fig.1-③
		Twist	±4° Max.			
		Rolling	±10° Max.			
3	Contact Width after Crimping ⁽¹⁾		2mmMax. ⁽²⁾	2.7mmMax.	2mmMax. ⁽²⁾	Fig.1-④
4	Wire End Protrusion Length		0~1 mm			Fig.1-⑤
5	Wire Insulation Stripping Length		4.0~4.5 mm (Before crimping)	4.5~5 mm (Before crimping)	4.0~4.5 mm (Before crimping)	Fig.1-⑥
6	Wire Barrel Seam		Seam must be neatly closed (No strand looses out of the seam.)			Fig.1-⑦
7	Insulation End		Insulation End must be between Wire barrel and Insulation Barrel			Fig.1-⑧

NOTE (1) There is possibility of the dimension is different caused of the ability of operator. Make sure the contact must be inserted smoothly into the Plug housing.

(2) For crimping on 0.5mm² AVS or 0.85mm² AVSS/CAVS wires, it is permissible only for the insulation to exceed it.

5. Crimp Data

5.1 Applicator Crimp

Contact Part Number (Strip Form)	Wire Size (Nominal)	Applicator Part Number	Wire Barrel Crimp (mm)			Insulation Barrel Crimp (mm)			Crimp Tensile Strength ⁽²⁾ (N)
			Width ⁽³⁾	Height ⁽¹⁾	Disk Ltr.	Width ⁽³⁾	Height ⁽¹⁾	Disk Ltr.	
316836	0.3	234588-2	1.78"F"	0.94	C	1.78"F"	See Para. 6	See Para. 6	59 Min.
316837	0.5			1.03	B				88 Min.
1565915 (S)	0.85			1.17	A				127 Min.
316838	0.5	919171-2	2.03"F"	1.07	C	2.40"F"	See Para. 6	See Para. 6	88 Min.
1565916 (M)	0.85			1.19	B				127 Min.
	1.25			1.35	A				176 Min.
1123653 (MS)	0.85	1276072-2	1.78"F"	1.19	D	1.78"F"	See Para. 6	See Para. 6	127 Min.
1318434 (MS)	0.75f	1276587-2	1.78"F"	1.12	B	2.29"F"	See Para. 6	See Para. 6	127 Min.
1674769 (ML)	1.25	1596789-2	2.16"F"	1.32	B	2.29"O"	See Para. 6	See Para. 6	176 Min.
	1.5			1.35	A				200 Min.
	1.5f				A				200 Min.
1717172 (SS)	0.22	1596933-2	1.40"F"	0.86 *	C	1.40"F"	See Para. 6	See Para. 6	30 Min

NOTE (1) Wire barrel crimp height to be within ± 0.05

(But the wire barrel crimp height of * mark to be within ± 0.03)

(2) Crimp tensile strength includes the wire grip of insulation barrel crimp.

(3) The crimp width dimensions are not the product width after crimping, but given by the width of crimper slot for reference.

5.2 Hand Tool Crimp

Contact Part Number (Loose Piece)	Wire size (Nominal)	Hand Tool Part Number	Insulation Diameter (mm)	Crimp Symbol	Wire Barrel Crimp Height (mm) ⁽¹⁾	Crimp Tensile Strength ⁽²⁾ (N)
1376700	0.3	1463383-1	1.1-1.8	22-20	0.78-0.94	59 Min.
1376701 (S)	0.5		1.3-1.8		0.78-1.03	88 Min.
	0.85		1.5-1.8	18	0.87-1.15	127 Min.
1376702 (M)	0.5	934193-2	2.0-2.1	20-18	0.89-1.08	88 Min.
	0.85		1.8-1.9		0.89-1.19	127 Min.
	1.25		1.8-2.2	16	1.06-1.40	176 Min.
1376704 (MS)	0.85	1463564-1	1.5-1.8	18	1.02-1.22	127 Min.

NOTE (1) This tool is for maintenance. The different dimension may be caused according to the ability of operator. Except for the purpose above, you should use the applicator.

(2) Crimp Tensile Strength includes the wire grip of insulation barrel crimp.

6. Insulation Barrel Crimp Data

Contact Part Number (Strip Form)	Wire Size (Nominal)	AVS		AVSS/CAVS		CAVUS		ABAVX		CHFUS		HFSS	
		Height (mm) (2)	Disk Ltr. (Ref.)	Height (mm) (2)	Disk Ltr. (Ref.)	Height (mm) (2)	Disk Ltr. (Ref.)	Height (mm) (2)	Disk Ltr. (Ref.)	Height (mm) (2)	Disk Ltr. (Ref.)	Height (mm) (2)	Disk Ltr. (Ref.)
316836 316837 1565915 (S)	0.3	2.45	2	2.29	3	2.17	5	--	--	--	--	--	--
	0.5	2.53 (3)	2	2.37	3	2.25	5	--	--	--	--	--	--
	0.85	--	--	2.45 (3)	4	2.33	5	--	--	--	--	--	--
316838 1565916 (M)	0.5	2.14	2	--	--	--	--	--	--	--	--	--	--
	0.85	--	--	2.00	5	--	--	--	--	--	--	--	--
	1.25	--	--	2.22	4	2.00	7	--	--	--	--	--	--
1123653 (MS)	0.85	--	--	2.70	3	2.60	4	--	--	--	--	--	--
1318434 (MS)	0.75f	--	--	--	--	--	--	2.60	4	--	--	--	--
1674769 (ML)	1.25	--	--	2.60	2	2.30	3	--	--	--	--	--	--
	1.5	--	--	--	--	--	--	--	--	2.30	3	--	--
	1.5f	--	--	--	--	--	--	--	--	--	--	2.60	2
1717172 (SS)	0.22	--	--	--	--	--	--	--	--	1.63	6	--	--

- NOTE** (1) -- marks indicate the wires being not applicable to this listing.
- (2) Insulation barrel crimp height and applicable disk letter (reference) are applied to applicator crimp only with the tolerance of $\pm 0.1\text{mm}$.
- (3) For crimping small type contacts on 0.5mm^2 AVS wires or 0.85mm^2 AVSS/CAVS wires, a slight cut – in of insulation barrel into insulation is permissible, for this causes no problem in actual use. And that is often un-applicable according to the each application connectors.

7. Applicable Wire Data

Wire Size (Nominal)	Number/ Diameter of conductor (mm)	Calculated Cross sectional Area (mm ²)	Insulation Diameter (mm)											
			AVS		AVSS/CAVS		CAVUS		ABAVX		CHFUS		HFSS	
			STD.	MAX.	STD.	MAX.	STD.	MAX.	STD.	MAX.	STD.	MAX.	STD.	MAX.
0.22	7/Circular Compressed	0.22	--	--	--	--	--	--	--	--	1.0	1.1	--	--
0.3	7/0.26	0.37	1.8	1.9	1.4	1.5	1.1	1.2	--	--	--	--	--	--
0.5	7/0.32	0.56	2.0	2.1	1.6	1.7	1.3	1.4	--	--	--	--	--	--
0.75f	30/0.18	0.76	--	--	--	--	--	--	2.5	2.6	--	--	--	--
0.85	11/0.32	0.88	2.2	2.3	1.8	1.9	1.5	1.6	--	--	--	--	--	--
1.25	16/0.32	1.29	2.5	2.6	2.1	2.2	1.8	1.9	--	--	--	--	--	--
1.5	16/0.35	1.54	--	--	--	--	--	--	--	--	1.8	2.1	--	--
1.5f	37/0.225	1.47	--	--	--	--	--	--	--	--	--	--	2.2	2.4

- NOTE** (1) Please follow the clause “6” about applicable wires of each connectors.
- (2) Please follow the instruction sheet or specification of each application connector.
- Because that is often different from that of the application connector.