Crimping of Sealed 0.64 Receptacle Contact

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

1. Scope

This specification covers the requirements for crimping of Sealed 0.64 Receptacle Contact.

2. Applicable Contacts

TE Part numbers		Finish	Applicable Wires	Applicable Wire Seal (TOYOTA Part Numbers)
Strip Form	Loose Piece			
1612290-1		Pre-Tin	CAN 0.22mm^2	90980-09996
			CHFUS 0.35mm^2	90980-09A75
1612290-2		Selective Gold	AVSS/AVSSH/AVSSX/CAVS 0.3mm^2 AESSX 0.3mm^2	90980-09A76
2040168-1		Pre-Tin	AVSS/AVSSH/AVSSX/CAVS/AESSX 0.5mm^2	90980-09996
2040168-2		Selective Gold	CHFUS 0.5mm^2	90980-09A75

3. Construction

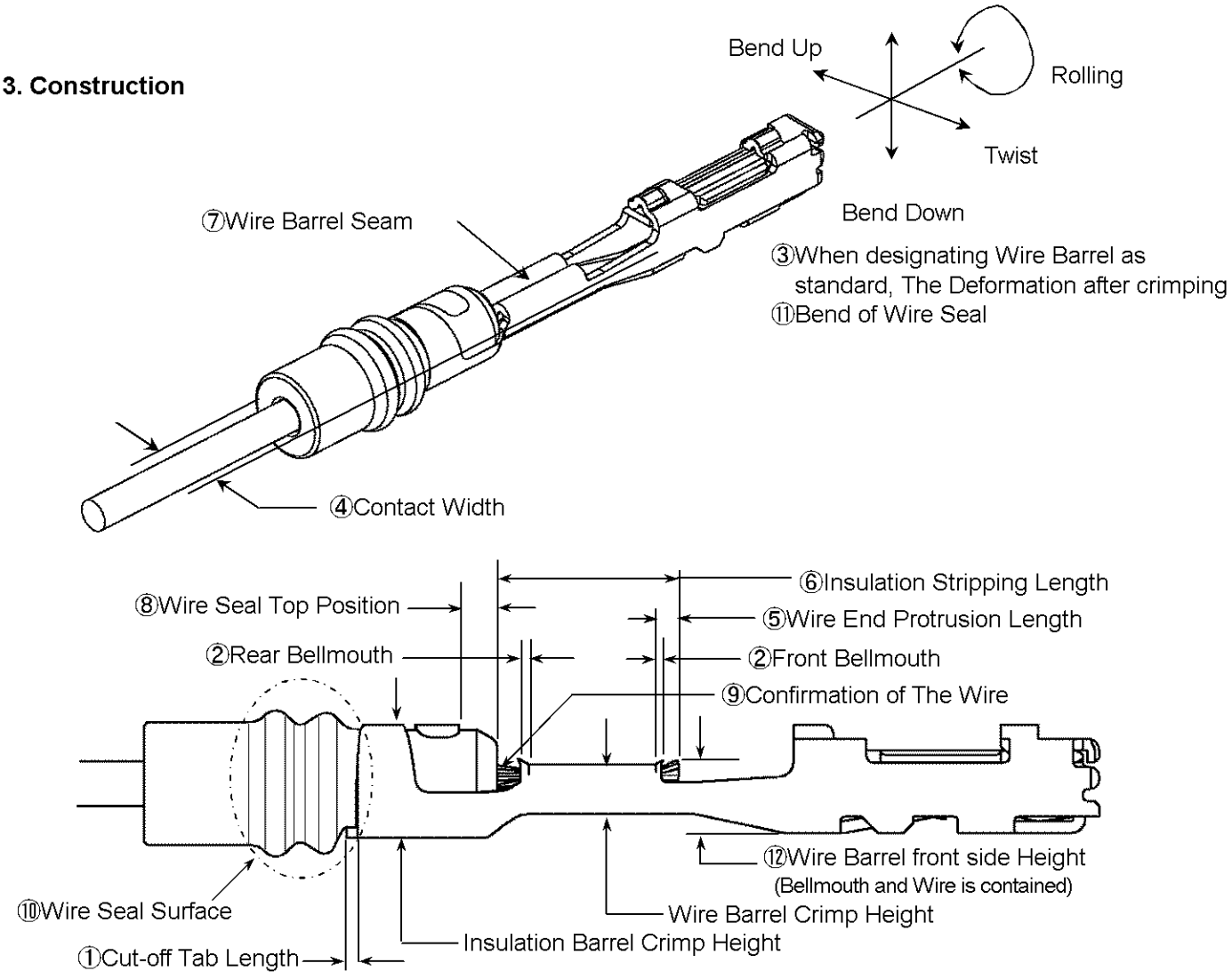


Fig.1

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4. Crimping Condition

Applicator Crimp

	Check Items		CAN 0.22	CHFUS 0.35 AVSS/AVSSH/AESSX /CAVS 0.3	CHFUS/AVSS/ AVSSH/CAVS 0.5 AESSX	Remarks
1	Cut-off Tab Length		0.3mmMax.			Fig.1－①
2	Bellmouth	Front	0.2mmMax.			Fig.1－②
		Rear	0.1～0.4 mm			
3	When designating Wire Barrel as standard, The Deformation after Crimping	Bend	Up: 1°Max.／Down: 2°Max.			Fig.1－③
		Twist	±3°Max.			
		Rolling	±5°Max.			
4	Contact Width after Crimping		1.6mmMax.			Fig.1－④
5	Wire End Protrusion Length		0～1 mm			Fig.1－⑤
6	Insulation Stripping Length		4±0.25 mm（Before Crimping）			Fig.1－⑥
7	Wire Barrel Seam		Seam shall be closed. (No strand looses out of the seam)			Fig.1－⑦
8	Wire Seal Top Position		Protruding from front side of insulation barrel 0.4～1.0mm			Fig.1－⑧
9	Wire Position		The wire shall be verified by visual inspection between the insulation barrels from the wire barrel.			Fig.1－⑨
10	Wire Seal Surface		There are no harmful surface defects which have an influence on water sealed performance. (Scratch, Crack etc.)			Fig.1－⑩
11	Bend of Wire Seal	Twist	±3°Max.			Fig.1－⑪
		Bend	Up: 10°Max.／Down: 2°Max.			
12	Wire Barrel front side Height (Bellmouth and Wire is contained)		1.6mm Max.			Fig.1－⑫

5. Crimp Data

Applicator Crimp

Contact Part Number (Strip Form)	Wire Size (Nominal)	Applicator Part Number	Wire Barrel Crimp (mm)		Insulation Barrel Crimp (mm)		Crimp Tensile Strength(N)
			Width[3]	Height	Width[2][3]	Height	
1612290-1 1612290-2	CAN 0.22	Old part No.[6] 1596932-2	1.4 "F"	0.85[1]	2.29 "O"	Refer to Section 6	30Min.
	0.3 0.3f			0.96[1]			50Min.
	CHFUS 0.35						
2040168-1 2040168-2	CHFUS 0.5 0.5 0.5f	2088862-2 Old part No.[6] 2047610-2		1.1[5]			70Min.

NOTE (1) Wire Barrel Crimp Height to be within ±0.04mm.

(2) Insulation Barrel Crimp Width to be within ±0.1mm

(3) Crimp Width dimensions are not the product width after crimping, but they are given by the width of crimper slot for reference. Wire Barrel Crimp Width $1.45\,^{+0.15}_{0}$ mm (Reference Only)

(4) Wire Barrel Crimp Height to be within ±0.03mm.

(5) Wire Barrel Crimp Height to be within ±0.05mm.

(6) Please contact to sales desk because of obsoleted part.

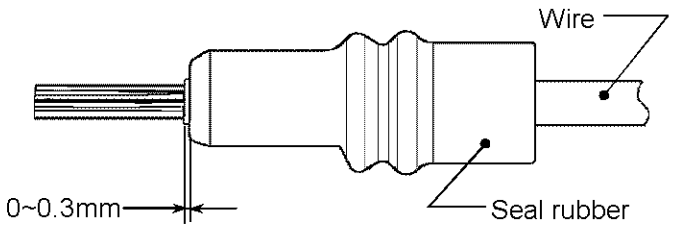
6. Crimp Data of Insulation Barrel

Contact Part Number (Strip Form)	Wire Size (Nominal)	CAN	CHFUS	AVSS/ CAVS	AVSSX/ AVSSH
		Height (mm)	Height (mm)	Height (mm)	Height (mm)
1612290-1 1612290-2	0.22	2.2	-	-	-
	0.3 0.3f 0.35	-	2.3	2.3	2.3
2040168-1 2040168-2	0.5 0.5f	-	2.4	2.4	2.4

NOTE (1) Insulation Barrel Crimp Height to be within ±0.05mm

7. Seal Rubber Installation

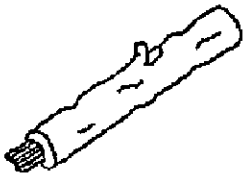
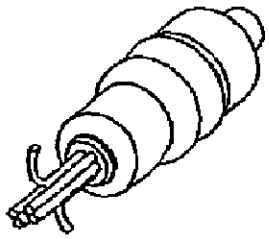
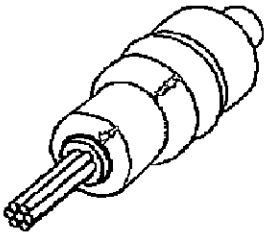
The length of the protruding wire insulation from the edge of Seal Rubber which inserted to cable wire shall be within 0~0.3mm. (Refer to the illustration below)



8. Notics of Seal Rubber Crimping

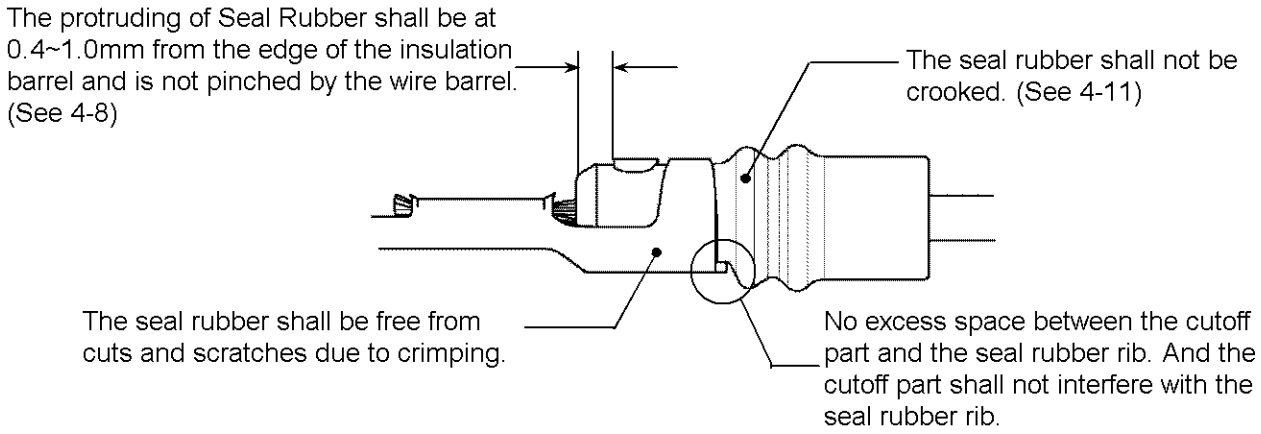
The wire and seal rubbers illustrated below shall be reworked or replaced in order to be cause of water leakage.

【Before Crimping】

 The strands shall not be frayed.	 The strands shall be free from nick and breakage.	 The insulation shall be round without scratches and dents.
 The strand shall not be frayed.	 The seal rubber shall be free from scratches.	 The seal rubber shall not be crooked.

【After Crimping】

The wire barrel shall not pinch the seal rubber and the wire insulation.



9. Applicable Wire Data

Wire Size (Nominal)	Number /Diameter (mm) of Conductor	Calculated Cross sectional Area (mm^2)	Insulation Diameter (mm)									
			CAN		CHFUS		AVSS/ AVSSH/ CAVS		AESSX		AVSSX	
			STD.	Max.	STD.	Max.	STD.	Max.	STD.	Max.	STD.	Max.
CAN 0.22	7/ circular compression	0.2199	1.4	1.5	—	—	—	—	—	—	—	—
0.3	7/0.26	0.3716	—	—	—	—	1.4	1.5	—	—	—	—
CHFUS 0.35	7/ circular compression	0.3436	—	—	1.10	1.20	—	—	—	—	—	—
0.3f	19/0.16	0.3821	—	—	—	—	1.4	1.5	1.4	1.5	1.4	1.5
CHFUS 0.5	7/ circular compression	0.4948	—	—	1.25	1.40	—	—	—	—	—	—
0.5	7/0.32	0.5629	—	—	—	—	1.6	1.7	—	—	—	—
0.5f	19/0.19	0.5387	—	—	—	—	1.6	1.7	—	—	1.6	1.7