

Application Specification

114-5099

Crimping Requirements of HDE-20 Crimp Type Connector

1. Scope

This specification covers the crimping requirements of the crimping contacts of the AMPLIMITE HDE-20 Connectors.

2. Applicable Products

Applicable products covered in this specification are as shown in Fig. 1.

Product No.	Wire Size	Remarks.
173625-2,-4	AWG# 22~# 26	Strip Form
173625-3,-5		Loose Piece
173640-2,-4	AWG# 26~# 30	Strip Form
173640-3,-5		Loose Piece

Fig. 1

3. Nomenclature:

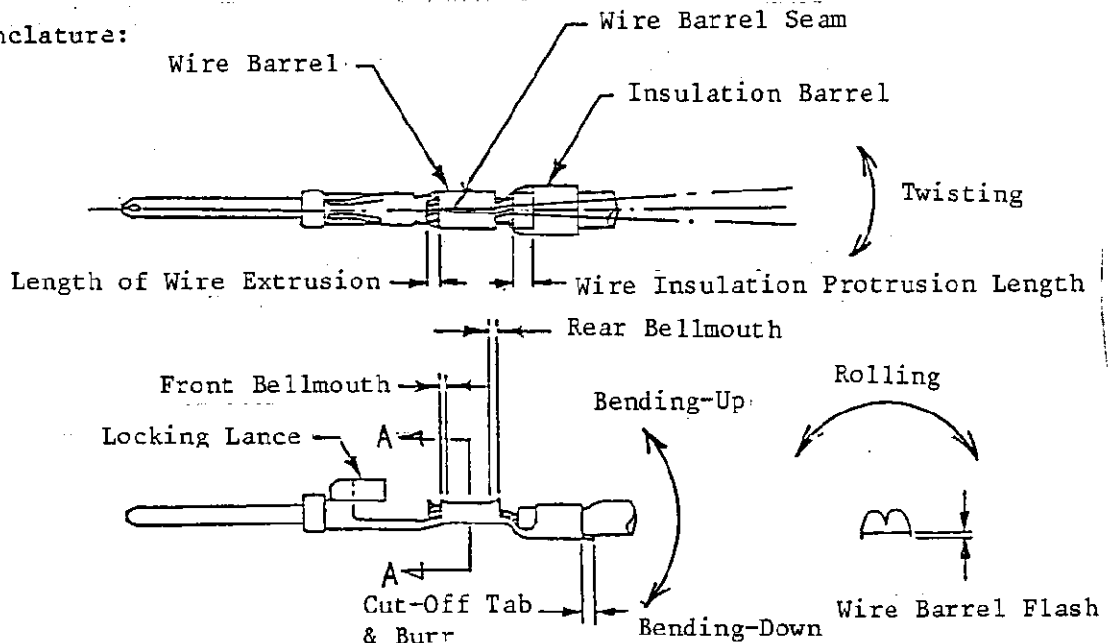


Fig. 2 Nomenclature

DR *[Signature]* 4-9-87
 CHK *[Signature]* 3-9-87
 APP *[Signature]* 2-4-87



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4. Crimping Conditions and Crimp Data (Applicable Tool)

4.1 Wire Stripping Length (Refer to Fig. 3.)

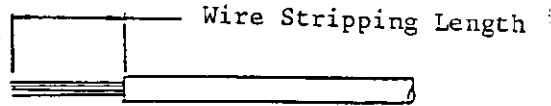
3.9[±]0.5mm

Fig. 3 Wire Stripping Length

4.2 Cut-off Tab Length (Refer to Fig. 2.)

0.3mm max. (Burrs to be 0.08mm max.)

4.3 Wire Barrel Flash Length (Refer to Fig. 2.)

0.25mm max.

4.4 Wire Barrel Seam (Refer to Fig. 2.)

The wire barrel seam must be solidly closed and no strand wire shall be seen in the seam.

4.5 Bellmouth Length (Refer to Fig. 2.)

Front: 0.35mm max.

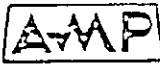
Rear : 0.2mm - 0.6mm

4.6 Wire End Protrusion Length (Refer to Fig. 1.)

0 ~ 1.0_{mm}

4.7 Insulation Protrusion Length (Refer to Fig. 2.)

The end of insulation shall be seen between the wire barrel and the insulation barrel. No part of insulation shall be crimped inside the wire barrel.

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4.8 Locking Lance (Refer to Fig. 2.)

There shall be no deformation after crimping.

4.9 Allowable Limit of Deformation (Bend-Up, Bend-Down, Twisting, Rolling. Refer to Fig. 1.)

The crimped contact must be fit in holes of 2.01mm X 2.84mm.

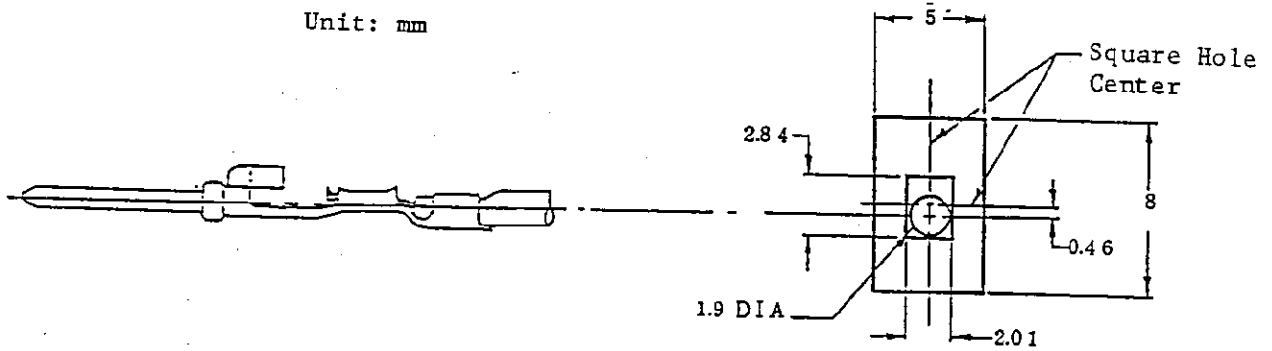


Fig. 4 Gauge (For detail dimensions refer to Fig. 10.)

4.10 Crimp Data (Applicable Tool)

Contact No.	Applicator No.	Wire Size (-AWG)	Insulation Diameter (mm)	Wire Barrel Crimp		Insulation Barrel Crimp	
				Width (mm)	Height (mm)	Width (mm)	Height (mm)
173625 -2,-4	Note (1) 755837-2	# 22	1.0~1.3	1.22 "F"	0.90±0.03	1.57 "F"	1.7 MAX
	Note (2) 755778-1	# 24			0.84±0.03		
		# 26			0.78±0.03		
173640 -2,-4	Note (1) 755780-2	# 26	0.8~1.3	1.07 "F"	0.70±0.03	1.57 "F"	1.5 MAX
	Note (2) 755779-1	# 28			0.66±0.03		
		# 30			0.63±0.03		

* Strip Length 3.9±0.5mm

Note (1) Indicates Mini Applicator (A-O-L).

Note (2) Indicates Slim Line Applicator.

Fig. 5 Applicator

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Contact No.	Handtool No.	Wire Size (AWG)	Insulation Diameter (mm)	Wire Barrel Crimp		Insulation Barrel Crimp	
				Width (mm)	Height (mm)	Width (mm)	Height (mm)
173625 -3,-5	755233-1	# 22	1.0~1.3	1.22 "F"	0.77~0.87	1.57 "F"	1.7 MAX
		# 24			0.77~0.87		
		# 26			0.71~0.81		
173640 -3,-5	755431-1	# 26	0.8~1.3	1.07 "F"	0.67~0.77	1.57 "F"	1.5 MAX
		# 28			0.60~0.70		
		# 30			0.60~0.70		

* Stripping Length 3.9±0.5

Fig. 6 Hand Tool

4.11 Crimp Tensile Strength


Contact No.	Wire Size (AWG)	Tensile Strength (kg min.)
173625	# 22	5.4
	# 24	3.6
	# 26	2.0
173640	# 26	2.5
	# 28	1.5
	# 30	0.8

Fig. 7

4.12 Wire Used

Wire Size (AWG)	Cross-Sectional Area (mm ²)	Diameter of Insulation (mm)	Contact P/N
# 22~# 26	0.140~0.355	1.0~1.3	173625
# 26~# 30	0.054~0.141	0.8~1.3	173640

Fig. 8

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4.13 Applicable Wire Sizes

This specification is evaluated using the following wires.

AWG	Element Wire Composition	Diameter of Insulation	Applicable Specification
22	7/0.254	1.3	UL 1061
24	7/0.203	1.1	UL 1061
26	7/0.16	1.0	UL 1061
28	7/0.127	0.9	UL 1061
30	7/0.102	0.8	UL 1061

Fig. 9

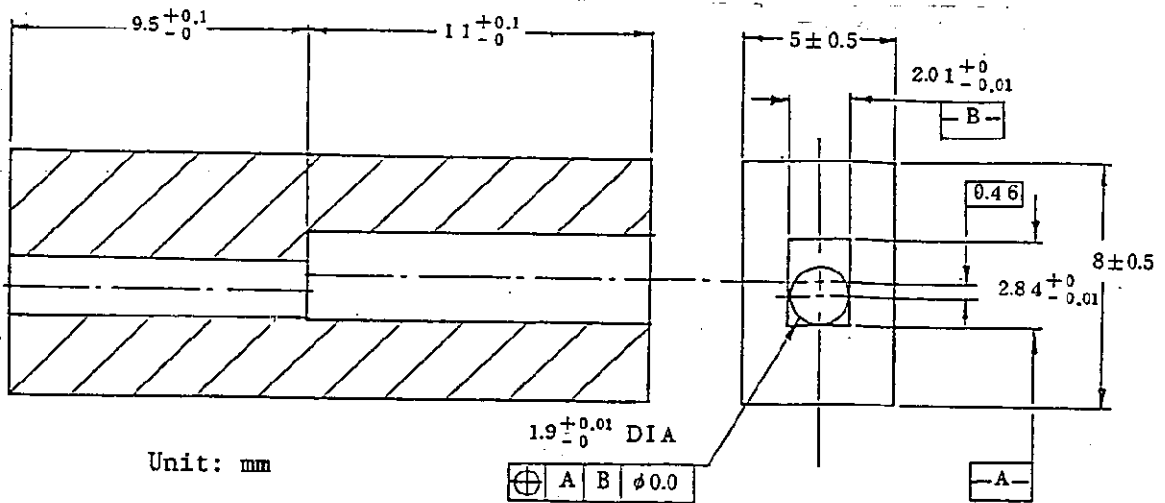


Fig. 10 Dimensions of gauge

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