

WIRE SIZE			CONNECTOR DESCRIPTION				
AWG	INSUL DIA.	NO. CODE	TYPE	9-POSITION	15-POSITION	25-POSITION	37-POSITION
30-26	1.52 [.060] Max.	1	Plug	---	---	745211-9	---
26-22	1.52 [.060] Max.	2	Receptacle	745201-7 & -9	745205-7	745209-7 & -8	---
			Plug	745203-9 & -11	745207-7	745211-7 & -8	745215-7


Figure 1

1. INTRODUCTION

This instruction sheet covers selection and assembly of the AMPLIMITE HDE-20 Insulated Displacement All-Plastic Connectors. See Figure 1. Read these instructions thoroughly before starting assembly.

For Front Metal Shell Connectors, refer to Instruction Sheet 408-6645.

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

NOTE  All dimensions on this document are in metric units [with U. S. customary units in brackets]. Figures are for reference only and are not drawn to scale.

2. DESCRIPTION

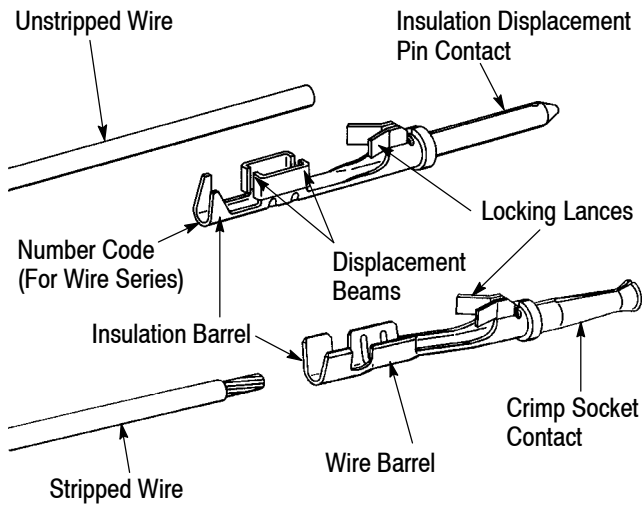
Plug and receptacle connectors are available in 9, 15, 25, and 37 circuit positions. They are designed to terminate discrete wire, jacketed cable, and pre-slit ribbon cable with an insulation thickness that *must not exceed 0.38 mm [.015 in.] at any point*. The conductors can be solid or stranded (7 strands)

ranging from 30 to 22 AWG. Each connector consist of a housing with preloaded, insulation displacement contacts.

The housing features easily accessible contacts, cavity barriers, and contact cavities which are numerically identified on the mating face. The connectors have an internal design that accepts insulation displacement and crimp-type contacts. Crimp contacts are recommended for two-wire circuits, drain wire termination service, etc.

Primary contacts are the insulation displacement type which are pre-assembled in the connectors listed in Figure 1. They feature two locking lances, two insulation displacement beams, a single wraparound (strain-relief) insulation barrel, and a number code inside the insulation barrel that indicates the wire size to be used in the contact. See Figure 2.

Secondary contacts are crimp-type contacts designed for discrete wire applications where more than one wire is required per contact, or where the bare drain wire/braid needs to be terminated. Secondary contacts feature two locking lances, an F-crimp wire barrel, and a wrap-around insulation barrel. See Figure 2.



CONTACT TYPE	WIRE SIZE, AWG	NUMBER CODE	PART NO.	STYLE
Crimp Type	26-22	4	745266-[]	Pin
			745269-[]	Skt
	22-18	3	745267-[]	Pin
			745270-[]	Skt

Figure 2

Accessories for these connectors are available usually in the form of kits and consist of a variety of cable clamp assemblies and connector hardware kits. The instructions for the selection and assembly of the various accessories are packages with each kit. For additional information, contact your TE Connectivity Representative.

3. TERMINATING TOOLS (Figure 3)

Insulation displacement terminating tools hold the connector in place, insert wire into the insulation displacement beams, and form the insulation barrel around the insulation of the wire. The crimp terminating tools hold the contacts in position for wire insertion and termination, and form the wire and

insulation barrel around the wire. There are manual and power assist tools for various types of wire and production requirements. Contact your TE Representative for assistance in selecting tooling to meet your specific needs.

4. TERMINATING PROCEDURE

Determine the size of the wire you are terminating and proceed as follows:

1. Select connector/contacts coded for your wire size. See the table in Figure 1.
2. Select tooling listed in the table in Figure 3.
3. Position the wire in the contact according to the instructions packaged with the tool.
4. Make the termination(s) and inspect to be sure all wires are properly inserted according to Application Specification 114-40002 for insulation displacement contacts, and Application Specification 114-40003 for crimp-type contacts.
5. If specified by your application requirements, attach cable clamp assembly and hardware according to the instructions packaged with the item.



Damaged contacts should not be used. If a damaged contact is evident, it should be cut from the wire and replaced with a new one. Do NOT reterminate contacts.

5. EXTRACTION/INSERTION OF CONTACTS

Extraction/Insertion Tool 91232-1 is available to extract and insert the contacts into the connectors per Instruction Sheet 408-6631.

6. REVISION SUMMARY

- Updated document to corporate requirements.

CONTACT TYPE	WIRE SIZE, AWG	TOOLING	MAX TERMINATIONS PER CYCLE	USED WITH
Insulation Displacement	30-20	58063-2, 58074-1 (Manual Pistol Grip Tool)	1	---
		58063-2, 58075-1 (Pneu Pistol Grip Tool)		
		543157-1, 543426-[] (Manual Tool)	19	91085-2
		543195-1, 543426-1 (Pneu Tool)		91112-3
Crimp	26-22	90398-1 (Hand Tool)	1	---
		567179-2 (Applicator)		354500-1

Figure 3