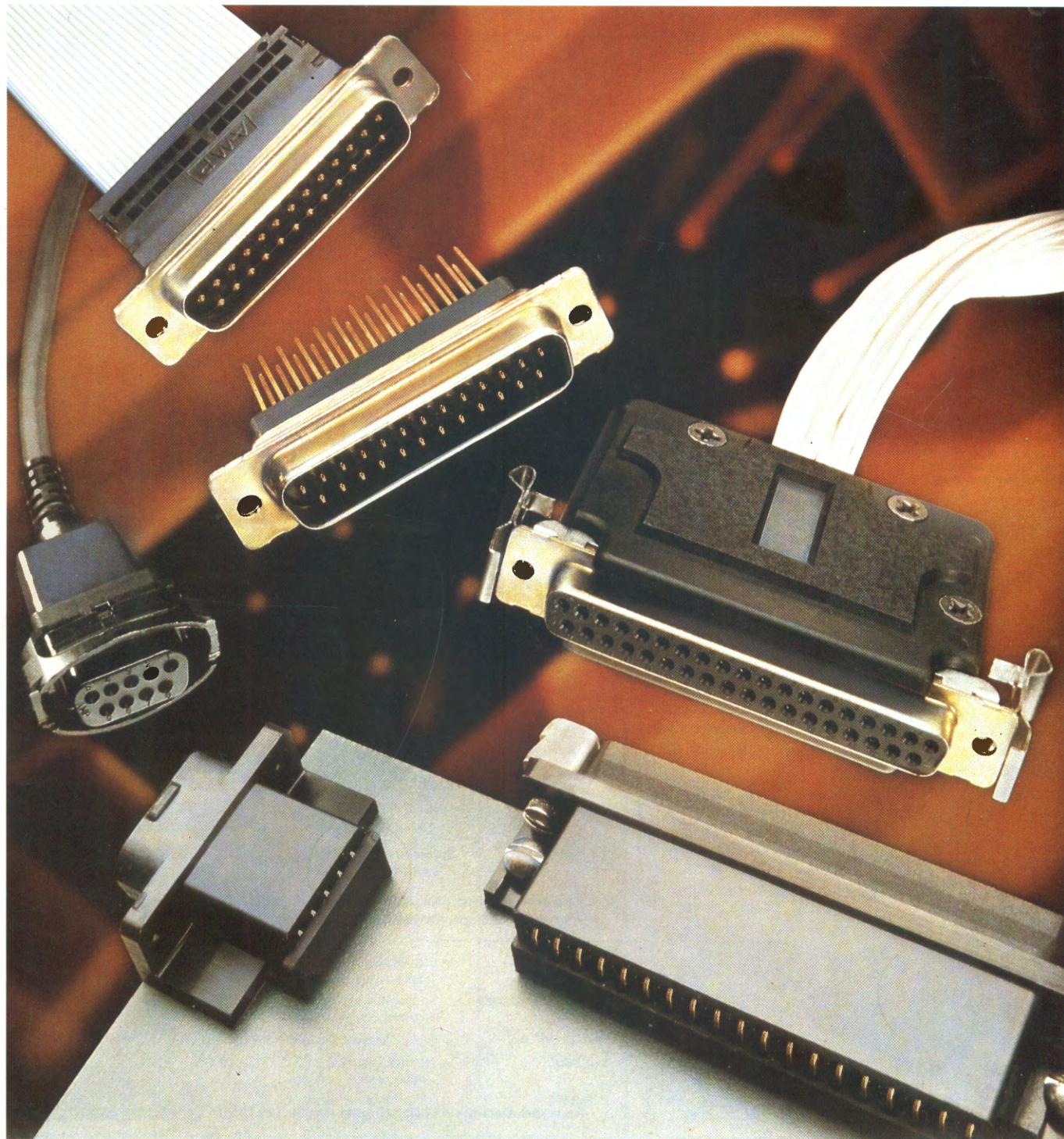


AMP

**AMPLIMITE Subminiature
HD-20 (High Density)
Pin and Socket Connectors**

Data Sheet
81-5025
Issued 11-81

Part Number Matrix



AMP means productivity / Worldwide

AMPLIMITE Subminiature HD-20 Connectors

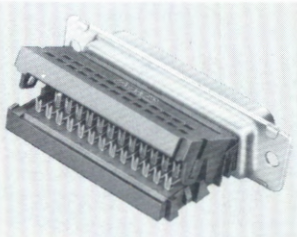
Dimensioning:
All dimensions in inches and millimetres.
Values in brackets are metric equivalents.

European Part Numbers
printed in **bold type**

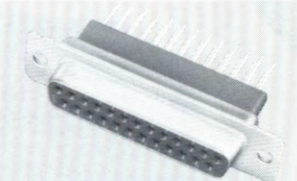
Connector Type



HD-20 Metal-Shell Connectors for Crimp Snap-In Contacts



HDF-20 Metal-Shell Connectors for Flat Ribbon Cable (Edge clinched shell)



HD-20 Metal-Shell Connectors with Straight Posts for Pcb Mount or Wrap-Type Termination (Central clinched shell)



HD-20 Metal-Shell Connectors with Right Angle Posts, Pcb Mount, Hole Size .028 [0.7] Dia. (Central clinched shell)



HDP-20 All-Plastic Connectors with Right Angle Posts, Pcb Mount for Hole Size .028 [0.7] Dia.



HDP-20 All-Plastic Connectors with Straight Posts, Pcb Mount for Hole Size .031 [0.8] Dia.

Part Number Matrix

9 Positions		15 Positions		25 Positions		37 Positions		50 Positions	
Plug	Receptacle	Plug	Receptacle	Plug	Receptacle	Plug	Receptacle	Plug	Receptacle
164526-1	164531-1	164527-1	164532-1	164528-1	164533-1	164529-1	164534-1	164530-1	164535-1
Connectors with central clinched shell									
205204-1	205203-1	205206-1	205205-1	205208-1	205207-1	205210-1	205209-1	205212-1	205211-1
Connectors with edge clinched shell									
745276-1	745277-1	745278-1	745279-1	745280-1	745281-1	745282-1	745283-1	—	—
For 10-conductor cable, one edge conductor serves as a spare				For 26-conductor cable, one edge conductor serves as a spare					
827189-1	827066-1	826744-1	827190-1	827191-1	827017-1	827192-1	826734-1	826816-1	827053-1
827189-2	827066-2	826744-2	827190-2	827191-2	827017-2	827192-2	826734-2	826816-2	827053-2
827189-3	827066-3	826744-3	827190-3	827191-3	827017-3	827192-3	826734-3	826816-3	827053-3
Partnumber Suffix indicates Post Length: -1 (.125[3.2] for pc board mounting) -2 (.394[10.0] for wrap type termination) -3 (.669[17.0] for wrap type termination)									
164492-1	164800-1	164493-1	164801-1	164494-1	164802-1	164495-1	164803-1	164496-1	164804-1
Post row distance .112 [2.84]; post length .125 [3.2]									
166746-1	166751-1	166747-1	166752-1	166748-1	166753-1	166749-1	166754-1	166750-1	166755-1
Post row distance .100 [2.54]; post length .125 [3.2]									
166255-1	—	—	—	166257-1	166262-1	166258-1	166263-1	166259-1	—
						166573-1			
						(Low Profile Version)			
Post row distance .112 [2.84]; post length .125 [3.2] Post length for 166573-1 .110 [2.8]									
208006-2	207826-4	208007-2	207827-4	208008-2	207828-4	208009-2	207829-4	208010-2	207830-4
Post row distance .112 [2.84]; post length .125 [3.2]									

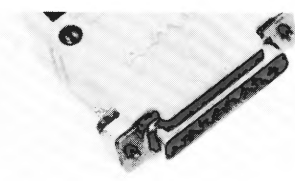

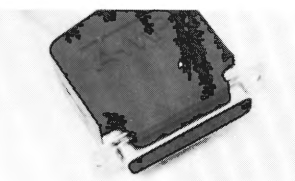
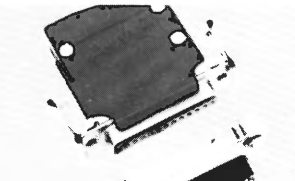
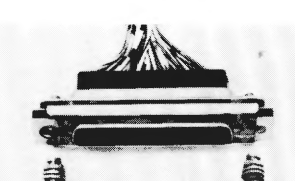
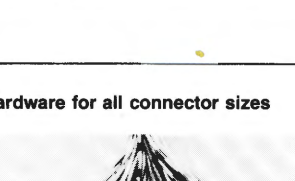

Accessories

Connectors shown for reference only

European Part Numbers
printed in **bold** type

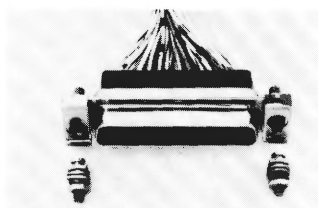
Cable Clamps and Hardware

Part Number Matrix

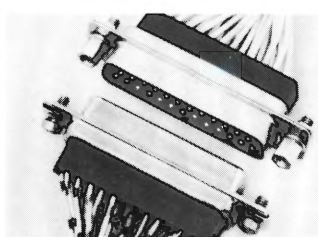
For Connector (Shell Size)	9 Positions (1)	15 Positions (2)	25 Positions (3)	37 Positions (4)	50 Positions (5)
 <p>Two-Piece Cable Clamp Straight/90° Exit (two 4-40 male screws included)</p>	—	206471-1	206472-1	745081-1	745082-1
 <p>One-Piece Cable Clamp Straight/90° Exit</p>	207467-1	207470-1	207345-1	207473-1	207476-1
 <p>One-Piece Cable Clamp Straight/45° Exit (set screw integrated for adjustment of cable support gate)</p>	205729-1	205730-1	205718-1	205731-1	205732-1
 <p>Spring Latch</p>	745011-1	745012-1	745013-1	745014-1	745015-1
 <p>Latching Block (two pieces per package) (Spring Latches may only be used in combination with one-piece cable clamps)</p>	745007-1	745007-1	745007-1	745007-1	745007-2
 <p>One-Piece Slide Latch Clip Assembly</p>	164892-1	164892-2	164892-3	164892-4	164892-5
 <p>Locking Post Assembly (two pieces per package)</p>	164900-2	164900-2	164900-2	164900-2	164900-2

**One-Piece Slide Latch Clip may not be used
in combination with Cable Clamps.**

Hardware for all connector sizes



Two-Piece Slide Latch Clip Assembly (two pieces per package)	206942-1
Locking Post Assembly (two pieces per package)	206514-1



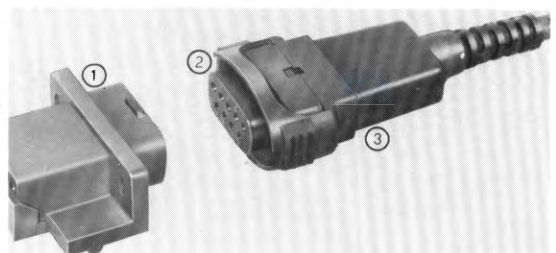
4-40 thread	
Male Screw Retainer (two pieces per package)	205980-1* 166541-1
Female Screwlock (two pieces per package)	205817-1
DIN M3 thread	
Male Screw Retainer (two pieces per package)	166541-2
Female Screwlock (two pieces per package)	166546-1

* Male Screw Retainer 205980-1 may not be used on central clinched metal-shell connectors.

Also available:

9 Pos. HDJ-20 All-Plastic Connectors for Jacketed Cable

- Right-Angle Pc Board Mount Plug Assemblies**
Part No. 745001-1 (tin plated contacts)
Part No. 745001-3 (goldflash contact plating)
- Receptacle Housing**
Part No. 207752-1
- Squeeze-to-Release Cord Guard**
Part No. 745002-2



HD-20 Connector Contacts Precision Formed

Crimp Type Contacts, Snap-In

Contact Size 20 DF,
Pin Diameter .040 [1.02]

Material:
Pin-Brass
Socket-Phosphor Bronze

Finish:
A—selective .000030 [0.8 μm] gold on mating end, remainder gold flash; entire contact .000050 [1.3 μm] nickel undercoating

B—selective .000030 [0.8 μm] gold on mating end, bright tin-lead on terminating end, entire contact .000030 [0.8 μm] nickel undercoating

C—.000100 [2.5 μm] min. tin on entire contact



Insertion/Extraction Tool for Precision Formed Contacts

28-24 AWG [0.08-0.22 mm²]
Wire Size Range, Crimp Type
No. 91067-3

Insertion Replacement Tip

No. 126195-3

Extraction Replacement Tip

No. 126195-5

24-20 AWG [0.2-0.56 mm²]
Wire Size Range, Crimp Type

No. 91067-2

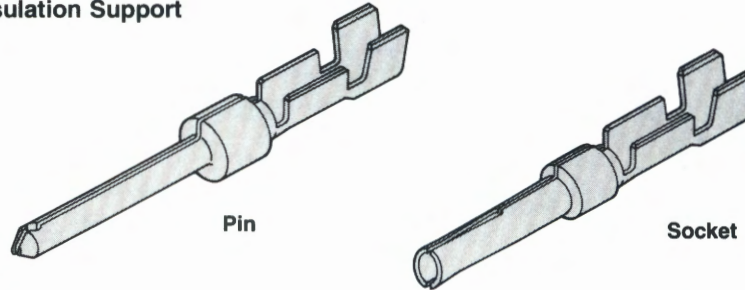
Insertion Replacement Tip

No. 126195-3

Extraction Replacement Tip

No. 126195-4

With Insulation Support



Wire Size Range AWG	Ins.Dia. (max.) Inches	Plating Code	Contact Finish	Automachine Strip Contact No.		Loose Piece Contact No.		Color Code (Loose Piece)	Hand Tool Part. No.
				Pin	Socket	Pin	Socket		
28-24 0.08-0.22	.040 1.0	A	Select.Gold/ Gold flash/ Nickel	66507-3	66505-3	66507-9	66505-9	Blue Dot	655044-1 or 90302-1
		B	Select.Gold/ Nickel/Tin	166054-1	166052-1	166294-1	166292-1		
		C	Tin	1-66507-4	1-66505-4	1-66507-6	1-66505-6		
24-20 0.20-0.56	.060 1.5	A	Select.Gold/ Gold flash/ Nickel	66682-2	66683-2	66682-4	66683-4	Black Dot	90374-1
		A	Select.Gold/ Gold flash/ Nickel	66506-3	66504-3	66506-9	66504-9		
		B	Select.Gold/ Nickel/Tin	166053-1	166051-1	166293-1	166291-1		
		C	Tin	1-66506-4	1-66504-4	1-66506-6	1-66504-6		

Strip contact on mini-reels (500 contacts per reel) for Hand Tool 169424-1 provided with reel-feeding device

28-24 0.08-0.22	.040 1.0	A	Select.Gold/ Gold flash/ Nickel	5-66507-3	5-66505-3
		B	Select.Gold/ Nickel/Tin	5-166054-1	5-166052-1
24-20 0.20-0.56	.060 1.5	A	Select.Gold/ Gold flash/ Nickel	5-66506-3	5-66504-3
		B	Select.Gold/ Nickel/Tin	5-166053-1	5-166051-1



Hand Tool Part No. 169424-1
provided with reel-feeding device

Note: 1. Automachine Strip Contacts are reeled for AMP miniature applicators in terminating machines.
2. 500 pcs. contact strip is reeled for use on hand tool with reel-feeding device No. 169424-1.
3. For contacts wire size 30 AWG [0.05 mm²] please consult AMP.
4. Also available solder cup contacts for 18 AWG [0.9 mm²] max. wire, Loose Piece No.: 66570-3 (Pin); 66569-3 (Socket).

AMP

AMP-Holland B.V.

Rietveldendweg 32
Postadres: Postbus 288
5201 AG 's-Hertogenbosch
Tel.: (073) 200911
Telex: 50150

AMPLIVERSAL

Division of AMP-Holland B.V.
Rietveldendweg 32
Postadres: Postbus 309
5201 AH 's-Hertogenbosch
Tel.: (073) 200888
Telex: 50150

AMP-Belgium

Bedrijfspark Keiberg
Excelsiorlaan 5
1930 Zaventem
Tel. (02) 721.20.20
Telex: 02.22658

AMPLIVERSAL

Division of AMP-Holland B.V.
Bedrijfspark Keiberg
Excelsiorlaan 5
1930 Zaventem
Tel. (02) 721.20.24
Telex: 02.22658