

AMPLIMITE Straight Posted Connectors

Quick Reference Guide

We offer one of the broadest, most versatile portfolios of D-subminiature connectors in the market with unrivaled engineering support to address our customer's needs. Our reliable AMPLIMITE straight posted connectors are available in a variety of plating types to satisfy different applications. These connectors are intermateable with any size 20 or 22 D-subminiature connector dimensionally complying with MIL-C-24308.

Features & Benefits

- Flame retardant thermoplastic housing material, UL 94V-0 rated.
- HD-20 straight posted connectors are available in 9, 15, 25, 37 and 50 positions.
- HD-20 connectors with ACTION PIN contacts are available in low, medium and high profiles with integral standoffs.
- Various straight posted connectors offer a choice of through holes, 4-40 threaded inserts or 4-40 fixed female screwlocks.

Applications

- Industrial machinery
- Medical instrumentation
- Computers and peripherals
- RAID storage arrays
- File servers/routers
- Tape storage systems
- Work stations
- On-machine industrial communications
- Personal and handheld devices

How to Select an AMPLIMITE Connector Part Number

The charts on the following pages highlight the AMPLIMITE part numbers with the key product attributes to help identify the correct part for your application. Each section also includes a list of materials to characterize the composition of each part.

HD-20 Full Metal-Shell Straight Posted Connectors

Plug

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Dim. D*	Contact Finish (Plating Code)	Without Grounding Indents	With Grounding Indents	With Clinch Nuts
					0.125	А	-	5745410-1	5749014-1
1	9	1.213	0.984	0.494	0.125	В	5745182-2	-	-
					0.188	А	-	5745410-7	-
2	15	1.541	1.312	0.494	0.125	А	-	5745411-1	-
					0.125	А	-	5745412-1	5745959-1
3	25	2.088	1.852	0.494	0.125	В	5745186-2	-	-
					0.188	А	-	5745412-7	-
4	37	2.729	2.500	0.494	0.125	А	-	5745413-1	-
5	50	0.675	2.400	0.605	0.125	А	-	5745414-1	-
5	50	2.635	2.406	0.605	0.188	А	-	5745414-7	-

Material and Finish

Shell: Steel, tin plated

Insert: 94V-0 rated thermoplastic, black

Pin Contacts (posted): Brass, plated as follows:

A: .000030 gold on mating end, tin on termination end, with entire contact .000050 nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 nickel underplated

* .125 post length is recommended for pc board thickness of .062-.093 max; .188 post length is for recommended pc board thickness of .125

Notes

- 1. All plugs are preloaded with size 20 DF posted pin contacts.
- 2. Special loading of contacts can be arranged upon request.
- 3. Longer post lengths available, consult TE Connectivity.
- 4. All parts are RoHS compliant.



Without Grounding Indents



With Grounding Indents

Receptacle

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Dim. D*	Contact Finish (Plating Code)	With .120 Mounting Holes	With Clinch Nuts
					0.125	А	5745183-1	5747190-2
1	9	1.213	0.984	0.494	0.125	В	5745183-2	5747190-1
ļ !	9	1.213	0.364	0.494	0.188	А	5745173-7	5747190-4
					0.100	В	-	-
					0.128	А	5745185-1	5745820-1
2	15	1.541	1.312	0.494	0.126	В	-	5745820-2
					0.188	А	5745185-7	-
					0.125	А	5745187-1	5745886-1
3	25	2.088	1.852	0.494	0.123	В	-	5745886-2
3	25	2.000	1.052	0.494	0.188	А	5745187-7	-
					0.100	В	5745187-8	-
4	37	2.729	2.500	0.494	0.125	А	5745189-1	5747315-1
4	3/	2.729	2.500	0.494	0.188	А	5745189-7	-
5	50	2.635	2.406	0.605	0.125	А	5745191-1	5747302-1
	30	2.033	2.400	0.005	0.188	А	5745191-7	-

Notes:

- 1. All plugs are preloaded with size 20 DF posted pin contacts.
- 2. Special loading of contacts can be arranged upon request.
- 3. Longer post lengths available, consult TE Connectivity.
- 4. All parts are RoHS compliant.



Material and Finish

Shell: Steel, tin plated

Insert: 94V-0 rated thermoplastic, black

Clinch Nuts: Steel, zinc plated

Pin Contacts (posted): Brass, plated as follows:

A: .000030 gold on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

* .125 post length is recommended for pc board thickness of .062-.093 max.; .188 post length is for recommended pc board thickness of .093-.125



With Clinch Nuts

HD-20 Full Metal-Shell Straight Posted Connectors

Plug

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C*	Contact Finish (Plating Code)	With Standard Mounting Holes	With 4-40 Threaded Inserts	With Retention 4-40 Inserts (for .62 PCB)	With Fixed Female Screwlocks	With Retention 4-40 Screwlocks (for .062 PCB)
				0.125	А	5747871-2	5747871-8	2-5748003-0	1-5747871-4	-
1	9	1.213	.984	0.125	В	-	-	-	1-5747871-3	-
				0.170	А	5747871-4	-	-	1-5747871-6	-
2	15	1.541	1.312	0.125	А	-	5747872-8	-	-	5748026-1
2	15	1.541	1.512	0.170	А	5747872-4	-	-	1-5747872-6	-
				0.125	А	5745968-2	5745968-8	2-5747704-0	1-5745968-4	5748027-1
3	25	2.090	1.852	0.125	В	-	5745968-7	-	1-5745968-3	-
3	25	2.090	1.852	0.170	А	5745968-4	-	-	1-5745968-6	-
				0.170	В	-	-	-	1-5745968-5	-
4	37	2.732	2.500	.125	А	5747375-2	5747375-8	-	-	5787686-1

- 1. All plugs are preloaded with size 20 DF posted pin contacts.
- 2. Male screw retainers are used as mating hardware for connectors with 4-40 female screwloks. 3. PC board hole size is .121 1/- 002 for all retention inserts and screwlocks.
- 4. All parts are RoHS compliant.

Material and Finish

Shell: Steel, tin plated

Housing: 94V-0 rated thermoplastic, black

Threaded Inserts: Brass, unplated

Female Screwlocks: Zinc

Pin Contacts (posted): Brass, plated as follows:

A: .000030 gold on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

* .125 post length is recommended for pc board thickness of .062-.093 max.; .170 post length is for recommended pc board thickness of .093-.125; .250 post length is for special applications



With Threaded Inserts



Female Screwlocks



With Grounding Indents

Material and Finish

Shell: Steel, tin plated Housing: 94V-0 rated thermoplastic, black

Threaded Inserts:

Female Screwlocks: Zinc

Socket Contacts (posted): Phosphor bronze plated as follows:

A: .000030 gold on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

1. All plugs are preloaded with size 20 DF posted pin contacts. 2. Male screw retainers are used as mating hardware for connectors with 4-40 female screwloks.

3. PC board hole size is .121+/-.002 for all retention inserts and screwlocks. 4. All parts are RoHS compliant.

Receptacle

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C*	Contact Finish (Plating Code)	With Standard Mounting Holes	With 4-40 Threaded Inserts	With Retention 4-40 Inserts (for .62 PCB)	With Fixed Female Screwlocks	With Retention 4-40 Screwlocks (for .062 PCB)
				0.105	А	5747150-2	5747150-8	2-5747706-0	1-5747150-4	5750678-1
		1 010	0.004	0.125	В	-	5747150-7	-	1-5747150-3	-
'	9	1.216	0.984		А	5747150-4	-	-	1-5747150-6	-
				0.170	В	-	5747150-9	-	-	-
				0.105	А	5747299-2	5747299-8	2-5747707-0	1-5747299-4	5787683-1
2	15	1.541	1.312	0.125	В	-	5747299-7	-	-	-
				0.710	А	5747299-4	-	-	1-5747299-6	-
				0.105	А	5745967-2	5745967-8	2-5747708-0	1-5745967-4	5748612-1
_	0.5	0.000	1.050	0.125	В	-	5745967-7	1-5745967-0	-	-
3	25	2.090	1.852	0.170	А	5745967-4	1-5745967-0	-	1-5745967-6	-
				0.170	В	-	-	-	1-5745967-5	-
				0.105	А	5747301-2	5747301-8	2-5747709-0	1-5747301-4	5787685-1
4			0.125	В	-	5747301-7	-	-	-	
				0.170	А	-	-	-	1-5747301-6	-

^{* .125} post length is recommended for pc board thickness of .062-.093 max.; .170 post length is for recommended pc board thickness of .93-.125; .250 post length is for special applications



With Standard Mounting Holes



With Threaded Inserts



With Fixed Female Screwlocks



With Rentention

HD-20 Full Metal-Shell Straight Posted Connectors

Plug

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C*	Contact Finish (Plating Code)	With Standard Mounting Holes	With 4-40 Threaded Inserts	With Retention 4-40 Inserts (for .62 PCB)	With Fixed Female Screwlocks	With Retention 4-40 Screwlocks (for .062 PCB)	ŀ
					А	5747150-2	5747150-8	2-5747706-0	1-5747150-4	5750678-1	7
			0 00 4	0.125	В	-	5747150-7	-	1-5747150-3	-	F
1	9	1.216	0.984		А	5747150-4	-	-	1-5747150-6	-	k
				0.170	В	-	5747150-9	-	-	-	E
				0.105	А	5747299-2	5747299-8	2-5747707-0	1-5747299-4	5787683-1	1
2	15	1.541	1.312	0.125	В	-	5747299-7	-	-	-	\
				0.170	А	5747299-4	-	-	1-5747299-6	-	r
				0.105	А	5745967-2	5745967-8	2-5747708-0	1-5745967-4	5748612-1	t
3	25	2 000	1.050	0.125	В	-	5745967-7	1-5745967-0	-	-	r
3	25	2.090	1.852	0.170	А	5745967-4	1-5745967-0	-	1-5745967-6	-	
				0.170	В	-	-	-	1-5745967-5	-	
				0.125	А	5747301-2	5747301-8	2-5747709-0	1-5747301-4	5787685-1	
4	37	2.732	2.500		В	-	5747301-7	-	-	-	
				0.170	А	-	-	-	1-5747301-6	-	

Material and Finish

Housing: 94V-0 rated thermoplastic, black

Threaded Inserts: Brass, unplated

Female Screwlocks: brass, nickel plated

Pin Contacts (posted): Brass, plated as follows:

A: .000030 gold on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 min. nickel underplated



With Threaded Inserts

Notes:

- 1. All plugs are preloaded with size 20 DF posted pin contacts.
- 2. It is recommended that these connectors be secured with
- appropriate hardware to a pc board and/or panel.
- 3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwloks.

4. All parts are RoHS compliant.







With Standard Mounting Hole

Material and Finish

 $\textbf{Housing:}\ 94 \text{V-O}\ \text{rated thermoplastic, black}$

Threaded Inserts: Brass, unplated
Female Screwlocks: brass, nickel plated

Pin Contacts (posted): Brass, plated as follows:

 $\mathbf{A}\textsc{:}\xspace.000030$ gold on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on termination end, with entire contact .000050 min. nickel underplated

Notes:

- 1. All plugs are preloaded with size 20 DF posted pin
- 2. It is recommended that these connectors be secured with appropriate hardware to a pc board and/or panel.
- 3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwloks.
- 4. All parts are RoHS compliant.







With Threaded Inserts

Receptacle

	Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Dim. D*	Contact Finish (Plating Code)	With .120 Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks
						0.125	А	5207826-4	5207841-4	5745076-4
	1	9	1.228	0.984	0.420	0.125	В	5207826-3	5207841-3	5745076-3
,						0.170	А	-	-	5745076-6
						0.125	А	5207827-4	5745057-4	5745077-4
	2	15	1.546	1.312	0.420	0.125	В	5207827-3	5745057-3	5745077-3
						0.170	А	-	-	5745077-6
						0.125	А	5207828-4	5745058-4	5745078-4
	3	25	2 005	1.050	0.420		В	5207828-3	5745058-3	5745078-3
	5	25	2.095	1.852	0.420		А	-	-	5745078-6
						0.170	В	-	-	5745078-5
	4	37	0.777	2.500	0.400	0.125	А	5207829-4	5745059-4	5745079-4
	4	5/	2./3/	2.500	0.420	0.170	А	-	-	5745079-6
	5	50	2647	2 406	0.527	0.125	А	-	-	5745080-4
	Э	50	2.043	2.406	0.527	0.170	А	-	-	5745080-6

^{* .125} post length is recommended for pc board thickness of .062-.093 max.; .170 post length is for recommended pc board thickness of .93-.125; .250 post length is for special applications



With Fixed Female Screwlocks

^{*.125} post length is recommended for pc board thickness of .062-.093 max.; .170 post length is for recommended pc board thickness of .93-.125; .250 post length is for special applications

HD-20 Straight Posted Connectors

Vertical Receptacle

# of Contact Positions	Dim. A	Dim. B	Dim. C	Mounting Hardware	PCB Mounting Style	15μ Gold
9	0.643	0.984	1.212	4-40 inserts	boardlocks	2301838-1
9	0.643	0.984	1.212	4-40 screwlocks	boardlocks	2301838-2
15	0.971	1.312	1.543	4-40 screwlocks	boardlocks	2301840-1
25	1.511	1.854	2.091	4-40 inserts	boardlocks	2301841-1
25	1.511	1.854	2.091	4-40 screwlocks	boardlocks	2301841-2
37	2.159	2.500	2.732	4-40 screwlocks	boardlocks	2301842-1

HD-20 Vertical Plug

# of Contact Positions	Dim. A	Dim. B	Dim. C	Mounting Hardware	PCB Mounting Style	15μ Gold
9	.666	.984	1.213	4-40 inserts	boardlocks	2301826-1
9	.666	.984	1.213	4-40 screwlocks	boardlocks	2301826-2
15	.994	1.312	1.543	4-40 inserts	boardlocks	2301828-1
25	1.534	1.854	2.088	4-40 inserts	boardlocks	2301835-1
25	1.534	1.854	2.088	4-40 screwlocks	boardlocks	2301835-2
37	2.182	2.500	2.732	4-40 screwlocks	boardlocks	2301836-1
44	1.534	1.852	2.091	4-40 inserts	boardlocks	2301847-1

HD-20 Front Metal-Shell Straight Posted Connectors with ACTION PIN Contacts

For .062 min. Thick PC Boards (Receptacle)

Shell Size	# of Contacts	Dim. A	Dim. B	l Dim C	Contact Finish (Plating Code)	With Threaded Inserts	Seating Tool Part #
5	50	2.635	2.406	.620	А	5748485-2	91167-2







With Threaded Inserts



With Fixed Female Screwlocks

For .093 min. Thick PC Boards (Receptacle)

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Contact Finish (Plating Code)	With .120 Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks	Seating Tool Part #
1	9	1.213	.984	.509	А	5747089-2	5747090-2	5747091-2	91164-2
2	15	1.541	1.312	.509	А	5747140-2	5747140-2	5747142-2	91165-2
3	25	2.088	1.852	.509	А	5745922-2	5745925-2	5745928-2	91168-2
4	37	2.729	2.500	.509	А	5747713-2	5747714-2	5747715-2	91166-2
5	50	2.635	2.406	.620	А	5747143-2	5747144-2	5747145-2	91167-2

Material and Finish

Front Shell: Steel, tin plated

Housing: 94V-0 rated thermoplastic, black

Threaded Inserts: Brass, unplated

Female Screwlocks: Zinc

ACTION PIN Contacts (posted): Copper alloy, duplex plated as follows:

A: .000030 gold on mating end, tin on ACTION PIN post surface, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on ACTION PIN post surface, with entire contact .000050 min. nickel underplated

1. All receptacles are preloaded with straight

posted ACTION PIN socket contacts.

2. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

3. All part numbers are RoHS compliant.

HD-20 Front Metal-Shell Straight Posted Connectors with ACTION PIN Contacts

Plug

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Contact Finish (Plating Code)	With .120 Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks	Seating Tool Part #
1	9	1.213	.984	.494	А	-	5786830-1	5787176-1	58274-3
2	15	1.541	1.312	.494	А	-	-	578177-1	58274-6
3	25	2.088	1.852	.494	А	-	5748146-1	5748146-6	58274-1
4	37	2.732	2.500	.494	А	5788458-1	5786534-1	5750060-1	58274-5
5	50	2.635	2.406	.695	А	-	5749892-1	-	58273-1

Material and Finish

Front Shell: Steel, tin plated

Housing: 94V-0 rated thermoplastic, black

Threaded Inserts: Brass, unplated

ACTION PIN Contacts (posted): Copper alloy, duplex plated as follows:

A: .000030 gold on mating end, tin on ACTION PIN post surface, with entire contact .000050 min. nickel underplated

1. All receptacles are preloaded with straight posted ACTION PIN socket contacts. 2. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

3. All part numbers are RoHS compliant.

HD-20 All-Plastic Straight Posted Connectors with ACTION PIN Contacts

For .093 min. Thick PC Boards (Receptacle)

Shell Size	# of Contacts	Dim. A	Dim. B	Dim. C	Dim. D	Profile	Contact Finish (Plating Code)	With Threaded Inserts	With Fixed Female Screwlocks	Seating Tool Part #
1	9	1.221	0.984	0.410	0.395	Low	А	-	5745454-2	91164-1
	9	1.221	0.964	0.410	0.695	High	А	-	5745455-2	91164-3
2	15	1.546	1.312	0.410	0.395	Low	А	-	5747142-2	91165-1
					0.705	1	А	-	5745458-2	91168-1
3	25	2.095	1.852	0.410	0.395	Low	В	-	5745458-1	01100 7
					0.695	High	А	5745465-2	-	91168-3
4	37	2.737	2.500	0.410	0.395	Low	А	-	5745459-2	91166-1
5	50	2.643	2.406	.517	.395	Low	А	-	-	91167-1

For .062 min. Thick PC Boards (Receptacle)

Shell Size	# of Contacts		Dim. B	Dim. C	Dim. D	Profile	Contact Finish (Plating Code)	With Threaded Inserts	Seating Tool Part #
4	37	2.737	2.500	.410	.395	Low	А	5745589-2	91166-1

Material and Finish

Housing: 94V-0 rated thermoplastic, black

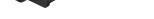
Threaded Inserts: Brass, unplated Female Screwlocks: Brass, nickel plated **ACTION PIN Contacts (posted):** Copper alloy, duplex plated as follows:

A: .000030 gold on mating end, tin on ACTION PIN post surface, with entire contact .000050 min. nickel underplated

B: gold flash on mating end, tin on ACTION PIN post surface, with entire contact .000050 min. nickel underplated



With Standard Mounting Hole





With Threaded Inserts



With Fixed Female Screwlocks

AMPLIMITE Straight Posted Connectors

Resources:

Product Specifications Application Specifications

 108-40025
 114-40023

 108-40014
 114-40026

TE Technical Support Center

USA: 1.800.522.6752 Canada: 1.905.475.6222 52.0.55.1106.0800 Mexico: Latin/S. America: 54.0.11.4733.2200 49.0.6251.133.1999 Germany: UK: 44.0.800.267666 France: 33.0.1.3420.8686 Netherlands: 31.0.73.6246.999 China: 86.0.400.820.6015

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