






## AMPLIMITE Subminiature D Connectors

Catalogue 1654741

Revised 1-04

### HDF-20 IDC Mass Termination Connector for Flat Ribbon Cable, .050 [1.27] Conductor Centres

#### Product Facts

- Available in all 5 standard shell sizes
- Selection of through holes, 4-40 threaded inserts or 4-40 threaded self-locking inserts
- Option of 90° or 180° cable exit
- Low terminated height from the mounting flange to the back of the connector
- Visual inspection of termination possible
- Fluted cover provides positive alignment of cable prior to termination
- Wide range of application tooling—from portable hand tool to bench mounted pneumatic semi-automatic equipment
- Patented insulation displacement contact latches into the connector cover
- Contact design provides a “gastight” termination
- Contacts accept 28 AWG [0.08mm<sup>2</sup>] solid and stranded, and 26 AWG [0.15mm<sup>2</sup>] solid and stranded round conductor flat ribbon cable on .050 [1.27] centres
- Qualified to Battelle Level III environments
- Contacts are duplex plated with gold on the mating end and tin-lead on the termination end
- Recognised under the Component Program of Underwriters Laboratories Inc.,  File No. E28476
- Listed under Underwriters Laboratories Inc., Standard 1863, Communication Circuit Accessories,  File No. E81956
- Certified by Canadian Standards Association,  File No. LR 7189





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### Plug Assemblies (with Grounding Indents)



Housing and Covers are  
Preassembled; Cable Stabiliser  
is Separate.

#### Material and Finish:

**Front Shell**—Steel, tin plated

**Housing, Cover & Cable  
Stabiliser**—Black thermoplastic,  
94V-0 rated

**Threaded Inserts**—Brass, unplated

**Contacts**—Phosphor bronze, duplex  
plated .000030 [0.00076] gold on  
mating end, .000100-.000200 [0.00254-  
0.00508] bright tin-lead on termination  
end, with entire contact underplated  
.000050 [0.00127] nickel

#### Technical Documents:

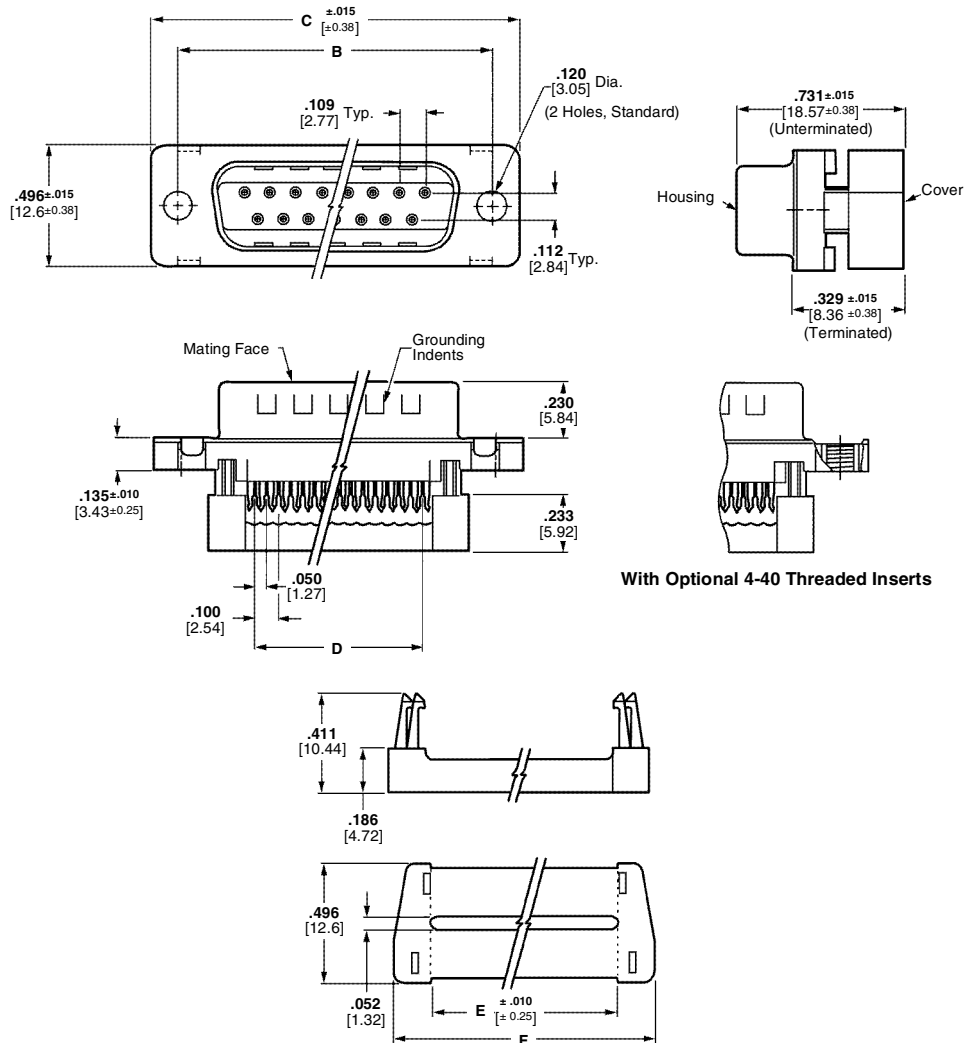
##### Product Specifications

108-40004 Ribbon Cable, PVC  
Insulated, AMP  
108-40012 HDF-20 Low Profile  
Connectors

##### Application Specification

114-40005 Ribbon Cable Connectors

### HDF-20 Low Profile Metal-Shell Connectors (for Round Conductor Flat Ribbon Cable)



Optional Cable Stabiliser—90° or 180° Exit

No. of Contact Positions (Shell Size)	Dimensions					Optional Cable Stabiliser Part Numbers	Plug Assembly Part Numbers	
	B	C	D	E	F		With Standard Mounting Holes	With Threaded Inserts
9 (1)	.984 24.99	1.216 30.89	.400 10.16	.480 12.19	.759 19.28	747275-4	747306-4	747043-4
15 (2)	1.312 33.32	1.541 39.14	.700 17.78	.780 19.81	1.087 27.61	747275-3	747306-3	747043-3
25 (3)	1.852 47.04	2.090 53.09	1.200 30.48	1.280 32.51	1.623 41.22	747275-2	747306-2	747043-2
37 (4)	2.500 63.50	2.732 69.39	1.800 45.72	1.880 47.75	2.275 57.78	747275-1	747306-1	747043-1

**Note:** All plug assemblies are supplied with housing and cover preassembled (shown above).



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### HDF-20 Low Profile Metal-Shell Connectors (for Round Conductor Flat Ribbon Cable)

#### Socket Assemblies



Housing and Covers are  
Preassembled; Cable Stabiliser  
is Separate.

#### Material and Finish:

**Front Shell**—Steel, tin plated

**Housing, Cover & Cable  
Stabiliser**—Black thermoplastic,  
94V-0 rated

**Threaded Inserts**—Brass, unplated

**Socket Contacts**—Phosphor bronze,  
duplex plated .000030 [0.00076] gold  
on mating end, .000100-.000200  
[0.00254-0.00508] bright tin-lead on  
termination end, with entire contact  
underplated .000050 [0.00127] nickel

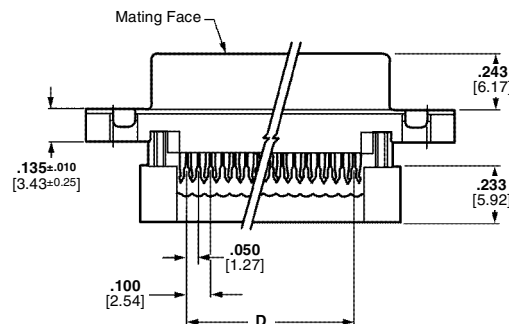
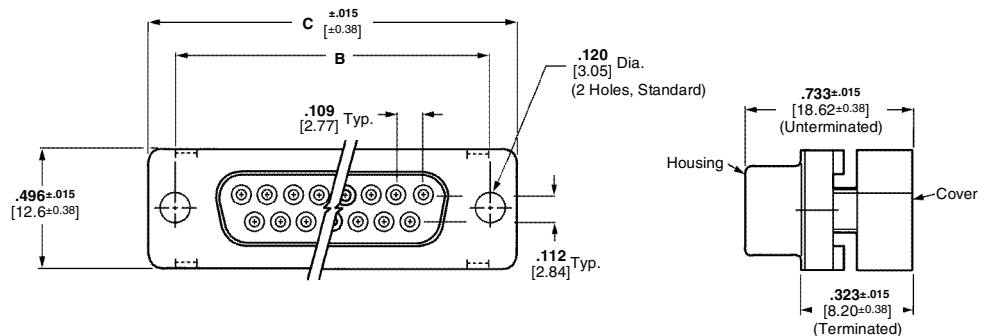
#### Technical Documents:

##### Product Specifications

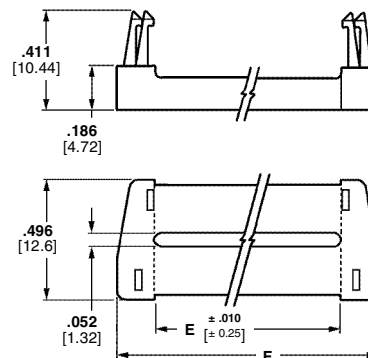
108-40004 Ribbon Cable, PVC  
Insulated, AMP  
108-40012 HDF-20 Low Profile  
Connectors

##### Application Specification

114-40005 Ribbon Cable Connectors



With Optional 4-40 Threaded Inserts



Optional Cable Stabiliser—90° or 180° Exit

No. of Contact Positions (Shell Size)	Dimensions					Optional Cable Stabiliser Part Numbers	Socket Assembly Part Numbers	
	B	C	D	E	F		With Standard Mounting Holes	With Threaded Inserts
9 (1)	.984 24.99	1.216 30.89	.400 10.16	.480 12.19	.759 19.28	747275-4	747303-4	747052-4
15 (2)	1.312 33.32	1.541 39.14	.700 17.78	.780 19.81	1.087 27.61	747275-3	747303-3	747052-3
25 (3)	1.852 47.04	2.090 53.09	1.200 30.48	1.280 32.51	1.623 41.22	747275-2	747303-2	747052-2
37 (4)	2.500 63.50	2.732 69.39	1.800 45.72	1.880 47.75	2.275 57.78	747275-1	747303-1	747052-1

**Note:** All plug assemblies are supplied with housing and cover preassembled (shown above).



## AMPLIMITE Subminiature D Connectors

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### HDF-20 Low Profile All-Plastic Connectors (for Round Conductor Flat Ribbon Cable)

#### Plug Assemblies



Housing and Covers are  
Preassembled; Cable Stabiliser  
is Separate.

#### Material and Finish:

**Housing, Cover & Cable Stabiliser**—Black thermoplastic, 94V-0 rated

**Threaded Inserts**—Brass, unplated

**Pin Contacts**—Phosphor bronze, duplex plated .000030 [0.00076] gold on mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel

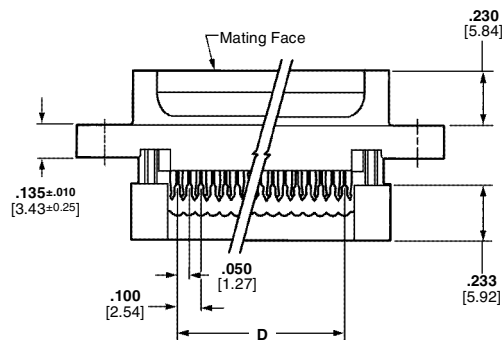
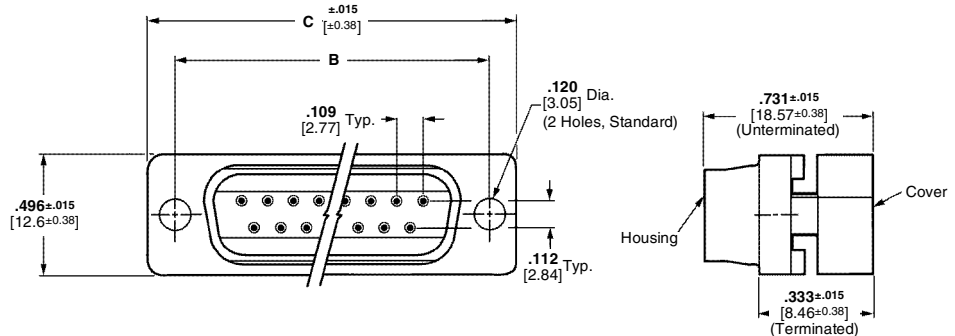
#### Technical Documents:

##### Product Specifications

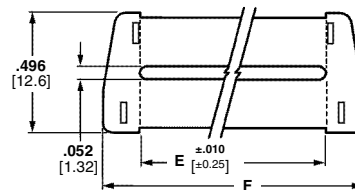
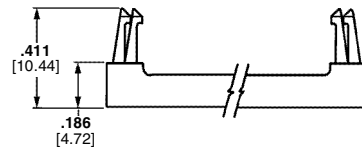
108-40004 Ribbon Cable, PVC Insulated, AMP  
108-40012 HDF-20 Low Profile Connectors

##### Application Specification

114-40005 Ribbon Cable Connectors



With Optional 4-40 Threaded Inserts



Optional Cable Stabiliser—90° or 180° Exit

No. of Contact Positions (Shell Size)	Dimensions					Optional Cable Stabiliser Part Numbers	Plug Assembly Part Numbers	
	B	C	D	E	F		With Standard Mounting Holes	With Threaded Inserts
9 (1)	.984 24.99	1.216 30.89	.400 10.16	.480 12.19	.759 19.28	747275-4	747321-4	747053-4
15 (2)	1.312 33.32	1.541 39.14	.700 17.78	.780 19.81	1.087 27.61	747275-3	747321-3	747053-3
25 (3)	1.852 47.04	2.090 53.09	1.200 30.48	1.280 32.51	1.623 41.22	747275-2	747321-2	747053-2
37 (4)	2.500 63.50	2.732 69.39	1.800 45.72	1.880 47.75	2.275 57.78	747275-1	747321-1	747053-1

Note: All plug assemblies are supplied with housing and cover preassembled (shown above).



## AMPLIMITE Subminiature D Connectors

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### HDF-20 Low Profile All-Plastic Connectors (for Round Conductor Flat Ribbon Cable)

#### Socket Assemblies



Housing and Covers are  
Preassembled; Cable Stabiliser  
is Separate.

#### Material and Finish:

**Housing, Cover & Cable  
Stabiliser**—Black thermoplastic,  
94V-0 rated

**Threaded Inserts**—Brass, unplated

**Socket Contacts**—Phosphor bronze,  
duplex plated .000030 [0.00076] gold  
on mating end, .000100-.000200  
[0.00254-0.00508] bright tin-lead on  
termination end, with entire contact  
underplated .000050 [0.00127] nickel

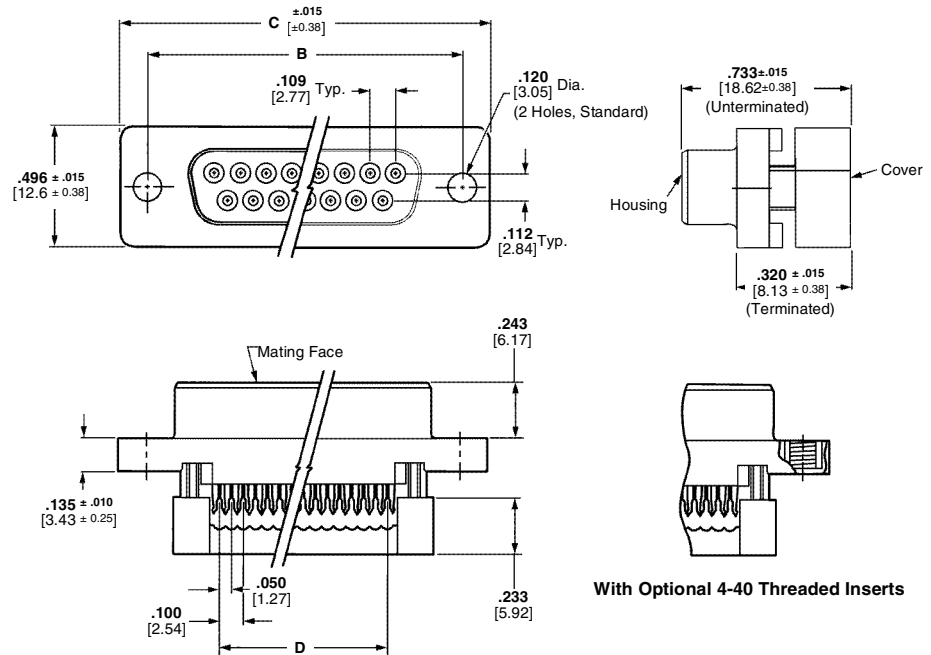
#### Technical Documents:

##### Product Specifications

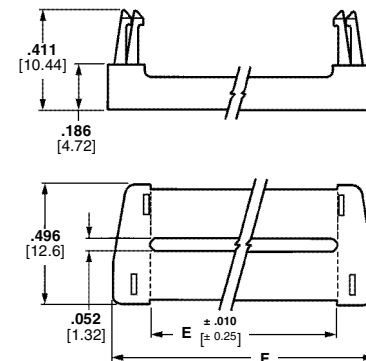
108-40004 Ribbon Cable, PVC  
Insulated, AMP  
108-40012 HDF-20 Low Profile  
Connectors

##### Application Specification

114-40005 Ribbon Cable Connectors



With Optional 4-40 Threaded Inserts



Optional Cable Stabiliser—90° or 180° Exit

No. of Contact Positions (Shell Size)	Dimensions					Optional Cable Stabiliser Part Numbers	Socket Assembly Part Numbers	
	B	C	D	E	F		With Standard Mounting Holes	With Threaded Inserts
9 (1)	.984 24.99	1.216 30.89	.400 10.16	.480 12.19	.759 19.28	747275-4	747318-4	747051-4
15 (2)	1.312 33.32	1.541 39.14	.700 17.78	.780 19.81	1.087 27.61	747275-3	747318-3	747051-3
25 (3)	1.852 47.04	2.090 53.09	1.200 30.48	1.280 32.51	1.623 41.22	747275-2	747318-2	747051-2
37 (4)	2.500 63.50	2.732 69.39	1.800 45.72	1.880 47.75	2.275 57.78	747275-1	747318-1	747051-1

**Note:** All plug assemblies are supplied with housing and cover preassembled (shown above).