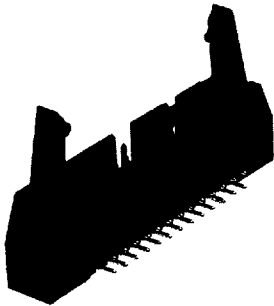
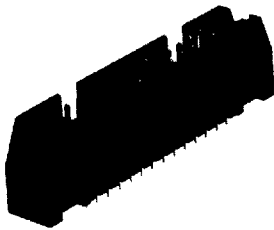


Universal Ejection Style Pin Headers, Military, Center and Dual Polarized .100 x .100 [2.54 x 2.54] Centers

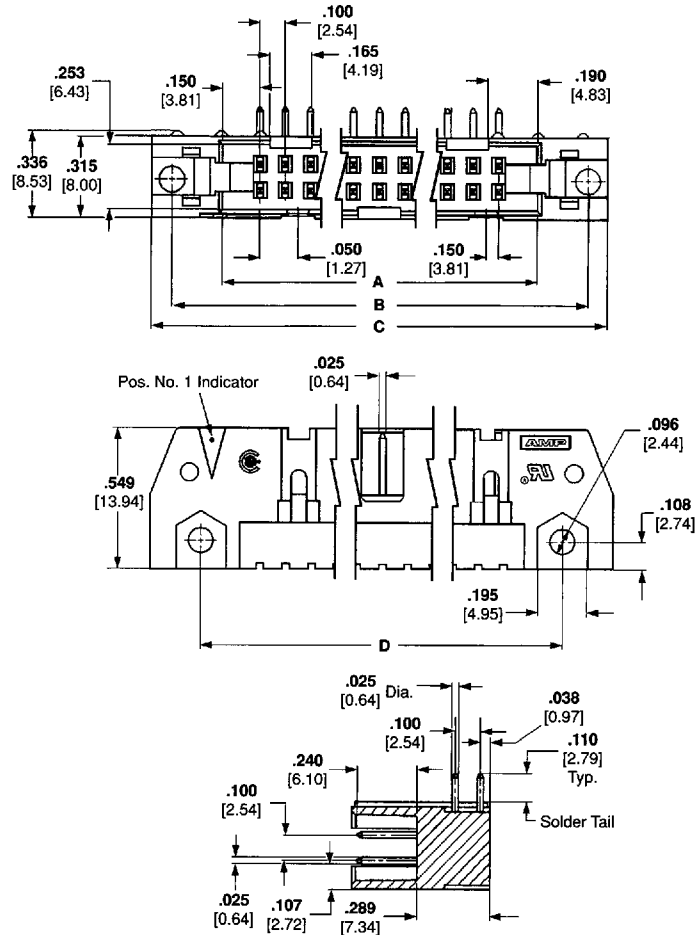
Right-Angle, 4-Sided .025 [0.64] Sq. Posts



Pin Header
with Latches



Pin Header
without Latches



Material and Finish:

Housing & Latches—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze; duplex plated (See chart, page 57)

Related Product Data:

Electrical Characteristics—page 5

Mateable Receptacles: Pages 10 thru 15

Accessories:
Snap-In Polarizer—page 22

Technical Documents:

Product Specifications—
108-40018 Pin Headers
108-40019 Pin Headers with ACTION PIN Contacts
108-40004 Ribbon Cable, PVC Insulated, AMP

Instruction Sheets:

Instructional material covering operation, setup, maintenance, repair, etc. is included with each machine, tool or die set. If this material is required prior to receiving your tooling, call the **AMP Tooling Assistance Hotline 1-800-722-1111** for the applicable documents.

No. of Positions	Dimensions					
	A	B	C	D	E	F
10	.700 17.78	1.100 27.94	1.260 32.00	.860 21.84	.860 21.84	.400 10.16
14	.900 22.86	1.300 33.02	1.460 37.08	1.060 26.92	1.060 26.92	.600 15.24
16	1.000 25.40	1.400 35.56	1.560 39.62	1.180 29.46	1.180 29.46	.700 17.78
20	1.200 30.48	1.600 40.64	1.760 44.70	1.380 34.54	1.380 34.54	.900 22.86
24	1.400 35.56	1.800 45.72	1.960 49.78	1.560 39.62	1.560 39.62	1.100 27.94
26	1.500 38.10	1.900 48.26	2.060 52.32	1.660 42.16	1.660 42.16	1.200 30.48
34	1.900 48.26	2.300 58.42	2.460 62.48	2.060 52.32	2.060 52.32	1.600 40.64
40	2.200 55.88	2.600 66.04	2.760 70.10	2.360 59.94	2.360 59.94	1.900 48.26
50	2.700 68.58	3.100 78.74	3.260 82.80	2.860 72.64	2.860 72.64	2.400 60.98
60	3.200 81.28	3.600 91.44	3.760 95.50	3.360 85.34	3.360 85.34	2.900 73.66
64	3.400 86.36	3.800 96.52	3.960 100.58	3.560 90.42	3.560 90.42	3.100 78.74

- Notes:**
- Pin headers in 10- and 14-position sizes have only one slot for snap-in polarizer (military polarization), located as shown.
 - Pin headers in 10-position size have only slot for dual polarization, located as shown.

Universal Ejection Style Pin Headers, Military, Center and Dual Polarized .100 x .100 [2.54 x 2.54] Centers (Continued)

Ordering Information

When ordering a pin header or pin header kit, use the chart at the right to determine the 6-digit base no. for the desired post length, contact plating and latch configuration (Kits only). Then, complete the part no. or kit no. by adding the proper prefix and/or suffix no. for the desired pin header size. The prefix/suffix nos. for all available sizes (10 thru 64 positions) are listed below.

No. of Pos.	Add to Part No.	
	Prefix	Suffix
10		-1
14		-2
16		-3
20		-4
24		-5
26		-6
34		-8
40		-9
50	1-	-0
60	1-	-1
64	1-	-2

Mounting Information

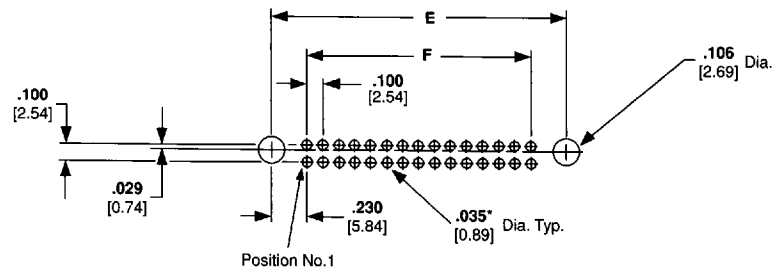
No mounting hardware is supplied by AMP.

Post Length	Contact Plating	Pin Header Part No. (without Latches)	Pin Header Kit No. (with Latches)	
			Latch Part Number 102312-1 Mates with AMP-LATCH Receptacles without Strain Relief	Latch Part Number 102320-1 Mates with AMP-LATCH Receptacles with Strain Relief
.110 2.79	Duplex ¹	102159	499913	499786
	Duplex ²	102160	499345	499141
.155 3.94	Duplex ¹	102161	—	—
	Duplex ²	102162	—	102322

¹000015 [0.00038] gold on mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

²000030 [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.

Note: For information regarding latch/pin header applications and for ordering latches separately, refer to page 64.



Recommended Mounting Hole Pattern

*.035 [0.89] hole dia. for soldering of posts .110 [2.79] and .155 [3.94] long.
.045 [1.14] hole dia. for wrap-type termination of posts .610 [15.49] long.

Pc board thicknesses are : .062 [1.57] for .110 [2.79] long posts,
.125 [3.18] for .155 [3.94] long posts.

Electrical Characteristics and Introduction

Electrical Characteristics

Contact Current Rating--1 ampere (continuous)

Operating Temperature--
-55°C to +105°C

Dielectric Withstanding Voltage--
Receptacles (all)--1000 Volts, RMS
Card Edge Connectors--1000 Volts, RMS
DIP Plugs--300 Volts, RMS
Paddle Board Connectors--500 Volts, RMS
Pin Connectors--500 Volts, RMS
Ejection Style Pin Headers (all)--
1000 Volts, RMS
Ribbon Cable--2000 Volts, RMS

No. of Positions	Cable Centerlines	PCB Area	Mating Height
20	.050	0.47 in. ²	0.565
	1.27	303 mm ²	14.35
	.039	0.134 in. ²	0.390
50	1.00	86.64 mm ²	9.91
	.025	0.213 in. ²	0.584
	0.64	137 mm ²	14.83
	.050	1.01 in. ²	0.565
	1.27	645 mm ²	14.25
	.039	0.335 in. ²	0.390
50	1.00	216 mm ²	9.91
	.025	0.426 in. ²	0.584
	0.64	275 mm ²	14.83

Chart gives an example of a 20-position and a 50-position configuration showing the optimum pc board space and mating connector system height. These factors are of prime importance when you considered the premium placed on system space.

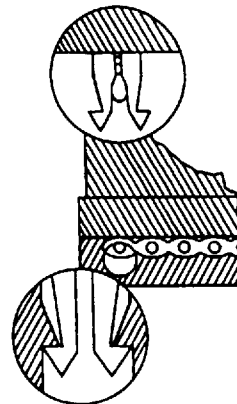
AMP-LATCH Connectors and Mass Termination

AMP-LATCH connectors use insulation displacement contacts (IDC), where each contact has a slotted-beam geometry to mass terminate the conductors. As a wire is pressed down into the slot, the beam tips pierce and displace the insulation. As the conductor is pressed farther into the slot, the contact provides sufficient conductor deformation to achieve a gastight interface.

The design of the contact supplies residual spring pressure to maintain a long term gastight connection. Since the connector **is** gastight, it will not corrode or otherwise degrade from normal environmental exposures.

Just as AMP-LATCH connectors help users derive the full benefits of ribbon cable, one-step application tooling allows them to realize the full productivity of mass termination. AMP offers a full range of die sets and tools, from hand tools to automatic cable assembly machines, to meet every production requirement.

Latching feature of AMP-LATCH Connectors



AMP-LATCH connectors have an additional feature not found in competitive connectors: Contact Latching. As the cable is terminated, a cover snaps down over the contacts.

Each contact individually latches to the cover. Where cable shearing occurs because of inappropriate handling AMP offers the following to protect the cable:

- Pull Tabs
- Strain Reliefs
- Ejection Latches (Mounted on the Headers and Pin Connectors)

*In AMP-LATCH connectors, the normal force (the amount of residual spring pressure the contact exerts against the conductor to maintain a gastight connection) is not supported by the plastic in the cover and is obtained solely by the contact design. The latching is **not** related to IDC normal force.*