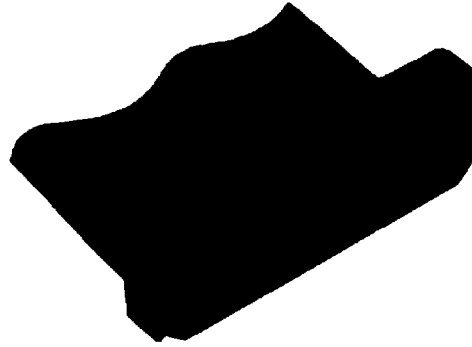


**Novo Receptacles,
Military Polarized***
.100 x .100
[2.54 x 2.54] Centers
**Housing Assembly
with Recessed Cover
(Preassembled) and Strain
Relief (Optional)**



Keying Plug
Part No. 499712-1



(Plugs into Contact)

Keying Plug
Part No. 104072-1



Ten plugs are supplied per strip.
Order quantity reflects the
number of strips required.

Note: 30 Pos. Housing Dim. (Typ.)—1.680 [42.67] L x .240 [6.10] W x .629 [15.98] H

| No. of Pos. | Contact Plating | Strain Relief Part No. | Receptacle (Preassembled) |
|-----------------|---------------------|------------------------|---------------------------|
| 10 | Duplex ¹ | 499252-5 | 499997-1 |
| | Duplex ² | 499252-5 | 746290-1 |
| | Tin ³ | 499252-5 | 746291-1 |
| 14 | Duplex ¹ | 499252-9 | 499997-2 |
| | Duplex ² | 499252-9 | 746290-2 |
| | Tin ³ | 499252-9 | 746291-2 |
| 16 | Duplex ¹ | 499252-8 | 499997-3 |
| | Duplex ² | 499252-8 | 746290-3 |
| | Tin ³ | 499252-8 | 746291-3 |
| 20 | Duplex ¹ | 499252-2 | 499997-4 |
| | Duplex ² | 499252-2 | 746290-4 |
| | Tin ³ | 499252-2 | 746291-4 |
| 24 | Duplex ¹ | 1-499252-0 | 499997-5 |
| | Duplex ² | 1-499252-0 | 746290-5 |
| | Tin ³ | 1-499252-0 | 746291-5 |
| 26 | Duplex ¹ | 499252-3 | 499997-6 |
| | Duplex ² | 499252-3 | 746290-6 |
| | Tin ³ | 499252-3 | 746291-6 |
| 30 | Duplex ¹ | 1-499252-2 | 499997-7 |
| | Duplex ² | 1-499252-2 | 746290-7 |
| | Tin ³ | 1-499252-2 | 746291-7 |
| 34 [†] | Duplex ¹ | 499252-6 | 499997-8 |
| | Duplex ² | 499252-6 | 746290-8 |
| | Tin ³ | 499252-6 | 746291-8 |
| 40 [†] | Duplex ¹ | 499252-1 | 499997-9 |
| | Duplex ² | 499252-1 | 746290-9 |
| | Tin ³ | 499252-1 | 746291-9 |
| 50 [†] | Duplex ¹ | 499252-4 | 1-499997-0 |
| | Duplex ² | 499252-4 | 1-746290-0 |
| | Tin ³ | 499252-4 | 1-746291-0 |
| 60 | Duplex ¹ | 499252-7 | 1-499997-1 |
| | Duplex ² | 499252-7 | 1-746290-1 |
| | Tin ³ | 499252-7 | 1-746291-1 |
| 64 | Duplex ¹ | 1-499252-3 | 1-499997-2 |
| | Duplex ² | 1-499252-3 | 1-746290-2 |
| | Tin ³ | 1-499252-3 | 1-746291-2 |

Mates with—Pin Connectors,
Pages 5008 and 5009; **Universal
Pin Headers,** Pages 5010-5013;
High Temperature Pin Headers,
Page 5012; **Low-Profile Pin
Headers,** Pages 5014-5016;
Pinless Headers, Page 5011.

*These receptacles can be used in applications requiring non-polarization, as well as military polarization.

¹.000015 [0.00038] gold on post/pin mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on post/pin mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

³.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact.

Notes: 1. These receptacles include a housing assembly and recessed cover (preassembled). Strain reliefs may be purchased separately using the component part nos. listed above.

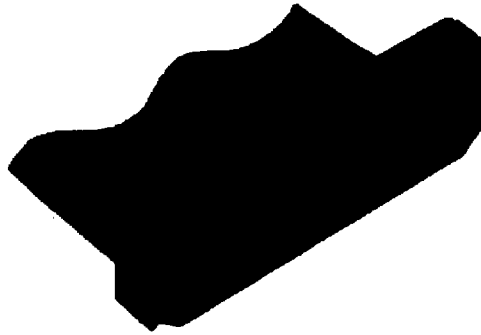
2. Contacts mate with .025 [0.64] square or round pins with .245 [6.22] max. and .175 [4.45] min. lengths.

[†]Economy versions available with gold flash plating: 34 position, **Part No. 111557-8**; 40 position, **Part No. 111557-9**; and 50 position, **Part No. 1-111557-0**. Packaged on tape, 2,000 per box.

Novo Receptacles, Center and Military Polarized*

.100 x .100
[2.54 x 2.54] Centers

Housing Assembly
with Recessed Cover
(Preassembled) and
Strain Relief (Optional)



Keying Plug
Part No. 499712-1



(Plugs into Contact)

Keying Plug
Part No. 104072-1



Ten plugs are supplied per strip.
Order quantity reflects the
number of strips required.

Mates with—Pin Connectors,
Pages 5008 and 5009; Universal
Pin Headers, Pages 5010-5013;
High Temperature Pin Headers,
Page 5012; Low-Profile Pin
Headers, Pages 5014-5016;
Pinless Headers, Page 5011.

* These receptacles can be
used in applications requiring
center polarization.

Note: 30 Pos. Housing Dim. (Typ.)—1.680 [42.67] L x .240 [6.10] W x .629 [15.98] H

| No. of Pos. | Contact Plating | Strain Relief Part No. | Receptacle (Preassembled) |
|-----------------|---------------------|------------------------|---------------------------|
| 10 | Duplex ¹ | 499252-5 ✓ | 746285-1 |
| | Duplex ² | 499252-5 | 746288-1 |
| | Tin ³ | 499252-5 | 746286-1 |
| 14 | Duplex ¹ | 499252-9 ✓ | 746285-2 |
| | Duplex ² | 499252-9 | 746288-2 |
| | Tin ³ | 499252-9 | 746286-2 |
| 16 | Duplex ¹ | 499252-8 | 746285-3 |
| | Duplex ² | 499252-8 | 746288-3 |
| | Tin ³ | 499252-8 | 746286-3 |
| 20 | Duplex ¹ | 499252-2 | 746285-4 |
| | Duplex ² | 499252-2 | 746288-4 |
| | Tin ³ | 499252-2 | 746286-4 |
| 24 | Duplex ¹ | 1-499252-0 | 746285-5 |
| | Duplex ² | 1-499252-0 | 746288-5 |
| | Tin ³ | 1-499252-0 | 746286-5 |
| 26 | Duplex ¹ | 499252-3 | 746285-6 |
| | Duplex ² | 499252-3 | 746288-6 |
| | Tin ³ | 499252-3 | 746286-6 |
| 30 | Duplex ¹ | 1-499252-2 | 746285-7 |
| | Duplex ² | 1-499252-2 | 746288-7 |
| | Tin ³ | 1-499252-2 | 746286-7 |
| 34 [†] | Duplex ¹ | 499252-6 | 746285-8 |
| | Duplex ² | 499252-6 | 746288-8 |
| | Tin ³ | 499252-6 | 746286-8 |
| 40 [†] | Duplex ¹ | 499252-1 | 746285-9 |
| | Duplex ² | 499252-1 | 746288-9 |
| | Tin ³ | 499252-1 | 746286-9 |
| 50 [†] | Duplex ¹ | 499252-4 | 1-746285-0 |
| | Duplex ² | 499252-4 | 1-746288-0 |
| | Tin ³ | 499252-4 | 1-746286-0 |
| 60 | Duplex ¹ | 499252-7 | 1-746285-1 |
| | Duplex ² | 499252-7 | 1-746288-1 |
| | Tin ³ | 499252-7 | 1-746286-1 |
| 64 | Duplex ¹ | 1-499252-3 | 1-746285-2 |
| | Duplex ² | 1-499252-3 | 1-746288-2 |
| | Tin ³ | 1-499252-3 | 1-746286-2 |

¹.000015 [0.00038] gold on post/pin mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on post/pin mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

³.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact.

Notes: 1. These receptacles include a housing assembly and recessed cover (preassembled). Strain reliefs may be purchased separately using the component part nos. listed above.

2. Contacts mate with .025 [0.64] square or round pins with .245 [6.22] max. and .175 [4.45] min. lengths.

[†]Economy versions available with gold flash plating: 34 position, Part No. 111556-8; 40 position, Part No. 111556-9; and 50 position, Part No. 1-111556-0. Packaged on tape, 2,000 per box.

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

**Card Edge Connectors
Without Mounting Ears,
With Split Single
Beam Contacts**

**Housing Assembly
with Cover
(Preassembled)**



Note: 30 Pos. Housing Dim. (Typ.)—1.960 [49.78] L x .404 [10.26] W x .878 [22.30] H

| No. of Pos. | Contact Plating | Connectors (Preassembled) | |
|-----------------|---------------------|---------------------------|---|
| | | Without Mounting Ears | Without Ears With Molded Key ³ |
| 10 | Duplex ¹ | 111110-8 | 111112-8 |
| | Duplex ² | 111109-8 | 111111-8 |
| 14 | Duplex ¹ | 111110-9 | 111112-9 |
| | Duplex ² | 111109-9 | 111111-9 |
| 16 | Duplex ¹ | 1-111110-0 | 1-111112-0 |
| | Duplex ² | 1-111109-0 | 1-111111-0 |
| 20 | Duplex ¹ | 111110-6 | 111112-6 |
| | Duplex ² | 111109-6 | 111111-6 |
| 26 | Duplex ¹ | 111110-5 | 111112-5 |
| | Duplex ² | 111109-5 | 111111-5 |
| 30 | Duplex ¹ | 111110-4 | 111112-4 |
| | Duplex ² | 111109-4 | 111111-4 |
| 34 [†] | Duplex ¹ | 111110-3 | 111112-3 |
| | Duplex ² | 111109-3 | 111111-3 |
| 40 | Duplex ¹ | 111110-2 | 111112-2 |
| | Duplex ² | 111109-2 | 111111-2 |
| 44 | Duplex ¹ | 1-111110-2 | 1-111112-2 |
| | Duplex ² | 1-111109-2 | 1-111111-2 |
| 50 | Duplex ¹ | 111110-1 | 111112-1 |
| | Duplex ² | 111109-1 | 111111-1 |
| 60 | Duplex ¹ | 111110-7 | 111112-7 |
| | Duplex ² | 111109-7 | 111111-7 |
| 64 | Duplex ¹ | 1-111110-1 | 1-111112-1 |
| | Duplex ² | 1-111109-1 | 1-111111-1 |

¹.000015 [0.00038] gold on pc board mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on pc board mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire contact underplated .000050 [0.00127] nickel.

³Intercontact keying plug is molded between positions 3, 4, 5, and 6.

Notes: 1. These connectors include a housing assembly and cover (preassembled).

2. Keying plugs can be molded in other positions, consult AMP.

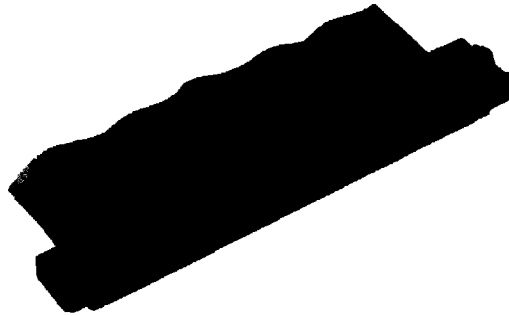
[†]Economy version available with gold-flash plating, Part No. 111559-3. Packaged on tape, 1,500 per box.

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

EUROLATCH Receptacles
64 Position
(Three-Row Housings,
Two Rows Loaded)

METRIC

Housing Assembly
with Cover
(Preassembled)



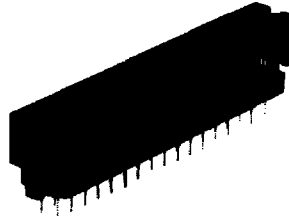
Mates with—Eurocard Type C and
Type R Pin Connectors in Section 3

Note: 64 Pos. Housing Dim. (Typ.)—
94.74 [3.730] L x 10.49 [.413] W
x 18.57 [.731] H

| Contact Rows Loaded | Receptacle Kit No. (Preassembled) |
|---------------------|-----------------------------------|
| A and C | 746603-1 |
| A and B | 746603-2 |
| B and C | 746603-3 |

DIP Plugs
.100 x .100 [2.54 x 2.54]
Centers*

Housing Assembly
with Cover
(Preassembled)



Note: 30 Pos. Housing Dim. (Typ.)—1.680 [42.67] L x .278 [7.06] W x .253 [6.43] H

| No. of Pos. | DIP Plugs | |
|-------------|-----------------------------------|------------------------------------|
| | (Preassembled) with Straight Legs | (Preassembled) with Retention Legs |
| 10 | 746610-1 | 111382-1 |
| 14 | 746610-2 | 111382-2 |
| 16 | 746610-3 | 111382-3 |
| 20 | 746610-4 | 111382-4 |
| 24 | 746610-5 | 111382-5 |
| 26 | 746610-6 | 111382-6 |
| 30 | 746610-7 | 111382-7 |
| 34 | 746610-8 | 111382-8 |
| 40 | 746610-9 | 111382-9 |
| 44 | 1-746610-3 | 1-111382-3 |
| 50 | 1-746610-0 | 1-111382-0 |
| 60 | 1-746610-1 | 1-111382-1 |
| 64 | 1-746610-2 | 1-111382-2 |

Note: All plug kits include a housing assembly and cover (preassembled).

*Select sizes are also available on .100 x .300 [2.54 x 7.62] and .100 x .600 [2.54 x 15.24] centers. Consult AMP.

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

Universal I/O Pin Connectors without Mounting Ears



Without Latches



With Latches

Note: 30 Pos. Housing Dim. (Typ.)—
2.072 [52.63] L x .330 [8.38] W
x .754 [19.15] H

Mates with—Novo Receptacles,
Pages 5004 and 5005.

Contact Plating Code—

A—Duplex plated .000015 [0.00038] gold
B—Duplex plated .000030 [0.00076] gold

Base Part Numbers

| Part No. without Latches | Contact Plating Code | Pin Connector Kit Nos. (with Latches Preassembled) | | | |
|--------------------------|----------------------|--|--|--|---|
| | | Latch Part Number 111451-1 Standard Cover | Latch Part Number 111451-2 Special Cover | Latch Part Number 111451-3 Strain Relief | Latch Part Number 111451-4 Shielded Connector |
| 111445 | A | 111491 | 111497 | 111503 | 111508 |
| 111446 | B | 111492 | 111498 | 111504 | 111509 |

Notes: 1. The connector kits include a housing, recessed cover and latches (preassembled). See tables below for ordering latches and strain reliefs separately.
2. No slot on end with position No.1 indicator for 10 and 14 position connectors.
3. No slot for snap-in polarizer on end with position No.1 indicator for 10 and 14 position connectors.

Prefixes and Suffixes

| No. of Pos. | Prefix | Suffix |
|-------------|--------|--------|
| 10 | | -1 |
| 14 | | -2 |
| 16 | | -3 |
| 20 | | -4 |
| 24 | | -5 |
| 26 | | -6 |
| 30 | | -7 |
| 34 | | -8 |
| 40 | | -9 |
| 44 | 1- | -0 |
| 50 | 1- | -1 |
| 60 | 1- | -2 |
| 64 | 1- | -3 |

Strain Relief

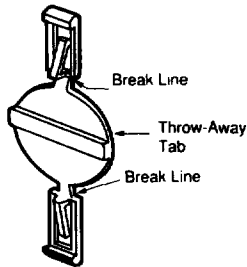
| No. of Pos. | Part Number |
|-------------|-------------|
| 10 | 111547-1 |
| 14 | 111547-2 |
| 16 | 111547-3 |
| 20 | 111547-4 |
| 24 | 111547-5 |
| 26 | 111547-6 |
| 30 | 111547-7 |
| 34 | 111547-8 |
| 40 | 111547-9 |
| 44 | 1-111547-0 |
| 50 | 1-111547-1 |
| 60 | 1-111547-2 |
| 64 | 1-111547-3 |

Latches

| Part Number |
|------------------------------------|
| 111451-1 (For Standard Cover) |
| 111451-2 (For Special Cover) |
| 111451-3 (For Strain Relief Cover) |
| 111451-4 (For Shielded Cover) |

Polarizer, Snap-In

Part Nos.:
499991-2 (bulk packed, 50 to pack)
499991-3 (bulk packed, 1000 to box)
The snap-in polarizer provides military polarization.

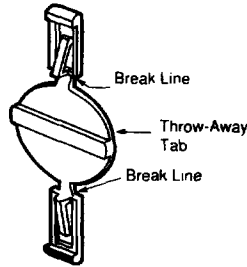


Universal I/O Pin Connectors with Slotted Mounting Ears

Note: 30 Pos. Housing Dim. (Typ.)—
2.476 [62.89] L x .330 [8.38] W
x .749 [19.02] H

Polarizer, Snap-In

Part Nos.:
499991-2 (bulk packed, 50 to pack)
499991-3 (bulk packed, 1000 to box)
The snap-in polarizer provides military polarization.



Mates with—Novo Receptacles, Pages 5004 and 5005.

Contact Plating Code—

A—Duplex plated .000015 [0.00038] gold
B—Duplex plated .000030 [0.00076] gold



Without Latches



With Latches

Base Part Numbers

| Part No. without Latches | Contact Plating Code | Pin Connector Kit Nos. (with Latches Preassembled) | | | |
|--------------------------|----------------------|--|--|--|---|
| | | Latch Part Number 111451-1 Standard Cover | Latch Part Number 111451-2 Special Cover | Latch Part Number 111451-3 Strain Relief | Latch Part Number 111451-4 Shielded Connector |
| 111447 | A | 111493 | 111499 | 111505 | 111510 |
| 111448 | B | 111494 | 111500 | 111506 | 111511 |

Notes: 1. The connector kits include a housing, recessed cover and latches (preassembled). See table below to order latches separately.
2. No slot on end with position No.1 indicator for 10 and 14 position connectors.
3. No slot for snap-in polarizer on end with position No.1 indicator for 10 and 14 position connectors.

Prefixes and Suffixes

| No. of Pos. | Prefix | Suffix |
|-------------|--------|--------|
| 10 | | -1 |
| 14 | | -2 |
| 16 | | -3 |
| 20 | | -4 |
| 24 | | -5 |
| 26 | | -6 |
| 30 | | -7 |
| 34 | | -8 |
| 40 | | -9 |
| 44 | 1- | -0 |
| 50 | 1- | -1 |
| 60 | 1- | -2 |
| 64 | 1- | -3 |

Latches

| Part Number |
|------------------------------------|
| 111451-1 (For Standard Cover) |
| 111451-2 (For Special Cover) |
| 111451-3 (For Strain Relief Cover) |
| 111451-4 (For Shielded Cover) |

Universal I/O Pin Connectors, Mounting Ears with Threaded Inserts

Note: 30 Pos. Housing Dim. (Typ.)—
2.476 [62.89] L x .330 [8.38] W
x .749 [19.02] H

Mates with—Novo Receptacles, Pages 5004 and 5005.

Contact Plating Code—

A—Duplex plated .000015 [0.00038] gold
B—Duplex plated .000030 [0.00076] gold



Without Latches



With Latches

Base Part Numbers

| Part No. without Latches | Contact Plating Code | Pin Connector Kit Nos. (with Latches Preassembled) | | | |
|--------------------------|----------------------|--|--|--|---|
| | | Latch Part Number 111451-1 Standard Cover | Latch Part Number 111451-2 Special Cover | Latch Part Number 111451-3 Strain Relief | Latch Part Number 111451-4 Shielded Connector |
| 111449 | A | 111495 | 111501 | 111507 | 111512 |
| 111450 | B | 111496 | 111502 | 111468 | 111513 |

Notes: 1. The connector kits include a housing, recessed cover and latches (preassembled). See table below to order latches separately.
2. No slot on end with position No.1 indicator for 10 and 14 position connectors.
3. No slot for snap-in polarizer on end with position No.1 indicator for 10 and 14 position connectors.

Prefixes and Suffixes

| No. of Pos. | Prefix | Suffix |
|-------------|--------|--------|
| 10 | | -1 |
| 14 | | -2 |
| 16 | | -3 |
| 20 | | -4 |
| 24 | | -5 |
| 26 | | -6 |
| 30 | | -7 |
| 34 | | -8 |
| 40 | | -9 |
| 44 | 1- | -0 |
| 50 | 1- | -1 |
| 60 | 1- | -2 |
| 64 | 1- | -3 |

Latches

| Part Number |
|------------------------------------|
| 111451-1 (For Standard Cover) |
| 111451-2 (For Special Cover) |
| 111451-3 (For Strain Relief Cover) |
| 111451-4 (For Shielded Cover) |

SOURCE: Catalog 82012

Specifications
subject to change.

1-800-522-6752
Product Information Center/ AMP FAX Service

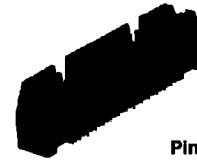
1-800-722-1111
Tooling/Technical Assistance Center

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

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



Pin Header with Latches



Pin Header without Latches

Note: 30 Pos. Housing Dim. (Typ.)—2.260 [57.40] L x .336 [8.53] W x .549 [13.94] H

Straight-Thru, 4-Sided
.025 [0.64] Sq. Posts

| Post Length | Contact Plating | Pin Header Part No. (without Latches) | Pin Header Kit No. (with Latches) | |
|--------------|-------------------------|---------------------------------------|-----------------------------------|----------------------------|
| | | | Short Latch 102312-1 | Str. Relief Latch 102320-1 |
| .110 2.79 | Duplex ¹ | 102153 | 499910 | 499922 |
| | Duplex ² | 102154 | 499160 | 499206 |
| | Bright Tin ³ | 499703 | 746214 | — |
| .155 3.94 | Duplex ¹ | 102155 | 499911 ⁴ | 499923 |
| | Duplex ² | 102156 | 499374 ⁵ | 102321 |

¹.000015 [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.

².000030 [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.

³.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact.

⁴ Not available in 30 positions.

⁵ Not available in 30 and 60 positions.

Notes: 1. For information regarding latch/pin header applications and for ordering latches separately, refer to page 5013.

2. Pin headers in 10- and 14-position sizes have only one slot for snap-in polarizer (military polarization).

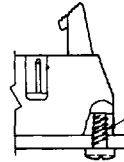
3. Pin headers in 10-position size have only slot for dual polarization.

Mates with—Novo Receptacles,
Pages 5004 and 5005.

| No. of Pos. | Add to Part No. Prefix | Add to Part No. Suffix |
|-------------|------------------------|------------------------|
| 10 | -1 | |
| 14 | -2 | |
| 16 | -3 | |
| 20 | -4 | |
| 24 | -5 | |
| 26 | -6 | |

| No. of Pos. | Add to Part No. Prefix | Add to Part No. Suffix |
|-------------|------------------------|------------------------|
| 30 | -7 | |
| 34 | -8 | |
| 40 | -9 | |
| 50 | 1- | -0 |
| 60 | 1- | -1 |
| 64 | 1- | -2 |

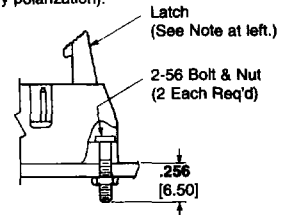
Note: 2-56 bolts and nuts may be used to mount pin headers with and without latches. If latches are to be used, the bolts must be positioned in the pin headers before the latches are installed.



4-24 Self-Tapping Screw (2 Each Req'd)

Pin Header Mounting using 4-24 Self-Tapping Screws:

Part Nos.
19156-1 (for .062 [1.57] Thick Pc Board)
19156-2 (for .093 [2.36] Thick Pc Board)
19156-3 (for .125 [3.18] Thick Pc Board)



Pin Header Mounting with 2-56 Bolts and Nuts:
Part No. 746383-1 (Bolt Only)
Kit No. 102198-1 (Bolt and Nut, 2 Each per Kit)

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

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



Pin Header Without Latches

Note: 30 Pos. Housing Dim. (Typ.)—2.260 [57.40] L x .336 [8.53] W x .549 [13.9] H

Straight-Thru, 4-Sided
.025 [0.64] Sq. Posts

| Post Length | Contact Plating | Part Numbers |
|--------------|---------------------|---|
| | | For .093-.125 [2.36-3.18] Thick Pc Board Pin Header |
| .174 4.42 | Duplex ¹ | 499984 ² |
| | Duplex ² | 499582 |

¹.000015 [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.

².000030 [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.

³ Not available in 24 positions.

Notes: 1. For information regarding latch/pin header applications and for ordering latches separately, refer to page 5013.

2. Pin headers in 10- and 14-position sizes have only one slot for snap-in polarizer (military polarization).

3. Pin headers in 10-position size have only slot for dual polarization.

Mates with—Novo Receptacles,
Pages 5004 and 5005.

| No. of Pos. | Add to Part No. Prefix | Add to Part No. Suffix |
|-------------|------------------------|------------------------|
| 10 | -1 | |
| 14 | -2 | |
| 16 | -3 | |
| 20 | -4 | |
| 24 | -5 | |
| 26 | -6 | |

| No. of Pos. | Add to Part No. Prefix | Add to Part No. Suffix |
|-------------|------------------------|------------------------|
| 30 | -7 | |
| 34 | -8 | |
| 40 | -9 | |
| 50 | 1- | -0 |
| 60 | 1- | -1 |
| 64 | 1- | -2 |

Insertion/Extraction Tool
Part No. 91241-1
(includes Insertion/Extraction Tip
Part No. 126961-1 and
Extraction Tip **Part No. 126961-2**)

**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

Note: 30 Pos. Housing Dim. (Typ.)—2.260 [57.40] L x .336 [8.53] W x .549 [13.94] H

Mates with—Novo Receptacles,
Pages 5004 and 5005.

| Post Length | Contact Plating | Pin Header Part No. (without Latches) | Pin Header Kit No. (with Latches) | |
|-------------|---------------------|---------------------------------------|-----------------------------------|----------------------------|
| | | | Short Latch 102312-1 | Str. Relief Latch 102320-1 |
| .110 | Duplex ¹ | 102159 | 499913 | 499786 |
| 2.79 | Duplex ² | 102160 | 499345 ³ | 499141 |
| .155 | Duplex ¹ | 102161 | — | — |
| 3.94 | Duplex ² | 102162 | — | 102322 ⁴ |

¹.000015 [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.

².000030 [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.

³ Not available in 24 and 64 positions.

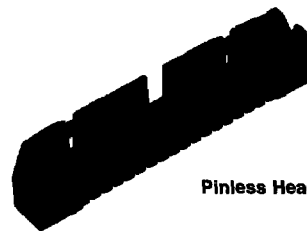
⁴ Not available in 24 and 30 positions.

Notes: 1. For information regarding latch/pin header applications and for ordering latches separately, refer to page 5013.
2. Pin headers in 10- and 14-position sizes have only one slot for snap-in polarizer (military polarization).
3. Pin headers in 10-position size have only slot for dual polarization.

| No. of Pos. | Add to Part No. | |
|-------------|-----------------|--------|
| | Prefix | Suffix |
| 10 | | -1 |
| 14 | | -2 |
| 16 | | -3 |
| 20 | | -4 |
| 24 | | -5 |
| 26 | | -6 |

| No. of Pos. | Add to Part No. | |
|-------------|-----------------|--------|
| | Prefix | Suffix |
| 30 | | -7 |
| 34 | | -8 |
| 40 | | -9 |
| 50 | 1- | -0 |
| 60 | 1- | -1 |
| 64 | 1- | -2 |

**Universal Ejection Style
Pinless Headers,
Military, Center and
Dual Polarized**
.100 x .100 [2.54 x 2.54]
Centers
Straight-Thru, 4-Sided
.025 [0.64] Sq. Posts
(without latches)



Pinless Header

Note: 30 Pos. Housing Dim. (Typ.)—2.260 [57.40] L x .315 [8.00] W x .549 [13.9] H

| No. of Pos. | Pinless Header Part Nos. | |
|-------------|-----------------------------|---------------------------------|
| | Press-Fit Without Standoffs | Clearance-Fit Without Standoffs |
| 10 | 499726-1 | 102142-6 |
| 14 | 499726-2 | 102142-8 |
| 16 | 499726-3 | 102142-9 |
| 20 | 499726-4 | 102142-1 |
| 24 | 499726-5 | 1-102142-0 |
| 26 | 499726-6 | 102142-2 |
| 30 | 499726-7 | 1-102142-1 |
| 34 | 499726-8 | 102142-3 |
| 40 | 499726-9 | 102142-4 |
| 50 | 1-499726-0 | 102142-5 |
| 60 | 1-499726-1 | 102142-7 |
| 64 | 1-499726-2 | 1-102142-3 |

Notes: 1. 10- and 14-position pinless headers have only one slot for snap-in polarizer (military polarization).
2. 10-position pinless headers have only one slot for dual polarization.
3. For information regarding latch/pin header applications and for ordering latches separately, refer to page 5013.

SOURCE: Catalog 82012

Specifications
subject to change.

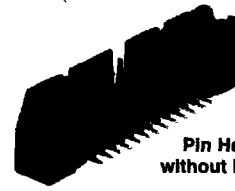
1-800-522-6752
Product Information Center/ AMP FAX Service

1-800-722-1111
Tooling/Technical Assistance Center

**Universal Ejection Style
Pin Headers,
Center and
Military Polarized
.100 x .100 [2.54 x 2.54]
Centers
Right-Angle, 3-Sided
.025 [0.64] Sq. Posts**



Pin Header
with Latches



Pin Header
without Latches

Note: 30 Pos. Housing Dim. (Typ.)—
2.260 [57.40] L x .292 [7.42] W
x .549 [13.94] H

| Post Length | Contact Plating | Pin Header Part No. (without Latches) | Pin Header Kit No. (with Latches) |
|-------------|---------------------|---------------------------------------|-----------------------------------|
| | | | Str. Relief Latch 102320-1 |
| .110 | Duplex ¹ | 746101 | — |
| 2.79 | Duplex ² | 746143 | 746179 |

Mates with—Novo Receptacles,
Pages 5004 and 5005.

¹ .000015 [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.
² .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.

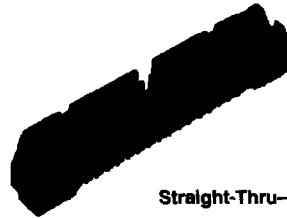
Notes: 1. Pin headers in 10- and 14-position sizes have only one slot for snap-in polarizer (military polarization).
2. For information regarding latch/pin header applications and for ordering latches separately, refer to page 5013.

| No. of Pos. | Add to Part No. | |
|-------------|-----------------|--------|
| | Prefix | Suffix |
| 10 | | -1 |
| 14 | | -2 |
| 16 | | -3 |
| 20 | | -4 |
| 24 | | -5 |
| 26 | | -6 |

| No. of Pos. | Add to Part No. | |
|-------------|-----------------|--------|
| | Prefix | Suffix |
| 34 | | -8 |
| 40 | | -9 |
| 50 | 1- | -0 |
| 60 | 1- | -1 |
| 64 | 1- | -2 |

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

**High Temperature,
Thru-Hole (SMT Compatible)
Universal Ejection Style
Pin Headers
.100 x .100 [2.54 x 2.54]
Centers
Straight-Thru and
Right-Angle, 4-Sided
.025 [0.64] Sq. Posts**



Straight-Thru—4-Sided



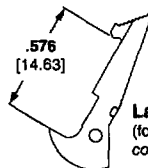
Right-Angle—4-Sided

Note: 30 Pos. Housing Dim. (Typ.)—
2.260 [57.40] L x .340 [8.64] W
x .549 [13.94] H

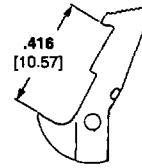
| No. of Pos. | Part Numbers | |
|-------------|---------------|-------------|
| | Straight-Thru | Right-Angle |
| 10 | 111008-1 | 111105-1 |
| 14 | 111008-2 | 111105-2 |
| 16 | 111008-3 | 111105-3 |
| 20 | 111008-4 | 111105-4 |
| 24 | 111008-5 | 111105-5 |
| 26 | 111008-6 | 111105-6 |
| 34 | 111008-8 | 111105-8 |
| 40 | 111008-9 | 111105-9 |
| 50 | 1-111008-0 | 1-111105-0 |
| 60 | 1-111008-1 | 1-111105-1 |
| 64 | 1-111008-2 | 1-111105-2 |

Notes: 1. 10- and 14-position pin headers have only one slot for snap-in polarizer (military polarization).
2. 10-position pin headers have only one slot for dual polarization.

Latches



Latch Part No. 111338-1
(for use with receptacles with recessed cover and strain relief.)

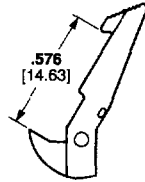


Latch Part No. 111293-1
(for use with receptacles with recessed cover.)

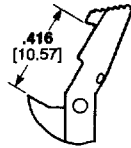
Latches for Ejection Style Pin Headers and Pinless Headers

Latch/Pin Header Applications

Latches



Latch Part No. 102320-1
(without Push Tabs, see Fig. 1)



Latch Part No. 102312-1
(without Push Tabs, see Fig. 2)

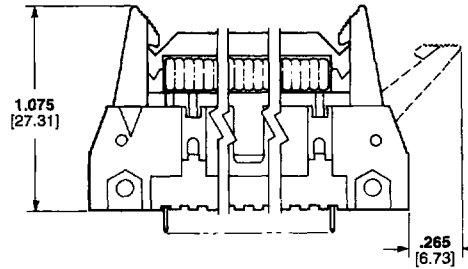


Fig. 1—Use Latch Part No. 102320-1 for AMP
Receptacles with Recessed Cover and
Strain Relief.

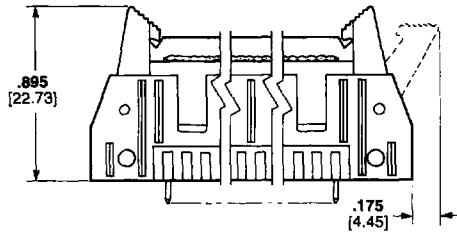
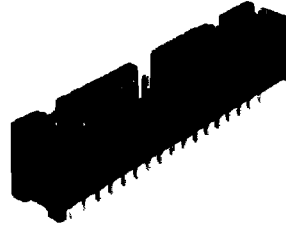


Fig. 2—Use Latch Part No. 102312-1 for AMP
Receptacles with Recessed Cover.

5
Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

**Low Profile Headers—
Shrouded with
.150 [3.81] End Dimension
Double Row, .100 x .100
[2.54 x 2.54] Centers**

**.025 [0.64] Square
Straight Post**



Note: 34 Pos. Housing Dim. (Typ.)—2.000 [50.80] L x .360 [9.14] W x .385 [9.78] H

Mates with—Novo Receptacles, Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, AMPMODU MT Connectors with Ejection Covers.

| No. of Pos. | Post Plating/Part No. | |
|-------------|-----------------------|---------------------|
| | Duplex ¹ | Duplex ² |
| 10 | 103308-1 | 103309-1 |
| 14 | 103308-2 | 103309-2 |
| 16 | 103308-3 | 103309-3 |
| 20 | 103308-5 | 103309-5 |
| 26 | 103308-6 | 103309-6 |
| 34 | 103308-7 | 103309-7 |
| 40 | 103308-8 | 103309-8 |
| 44 | 103308-9 | 103309-9 |
| 50 | 1-103308-0 | 1-103309-0 |
| 60 | 1-103308-2 | 1-103309-2 |

¹.000015 [0.00039] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area with entire post underplated .000050 [0.00127] nickel.

**.025 [0.64] Square
Right-Angle Post**

Mates with—Novo Receptacles Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, AMPMODU MT Connectors with Ejection Covers.



Note: 34 Pos. Housing Dim. (Typ.)—2.000 [50.80] L x .360 [9.14] W x .385 [9.78] H

| No. of Pos. | Contact Plating | Part No. |
|-------------|---------------------|------------|
| 10 | Duplex ¹ | 103310-1 |
| | Duplex ² | 103311-1 |
| 14 | Duplex ¹ | 103310-2 |
| | Duplex ² | 103311-2 |
| 16 | Duplex ¹ | 103310-3 |
| | Duplex ² | 103311-3 |
| 20 | Duplex ¹ | 103310-5 |
| | Duplex ² | 103311-5 |
| 26 | Duplex ¹ | 103310-6 |
| | Duplex ² | 103311-6 |
| 34 | Duplex ¹ | 103310-7 |
| | Duplex ² | 103311-7 |
| 40 | Duplex ¹ | 103310-8 |
| | Duplex ² | 103311-8 |
| 44 | Duplex ¹ | 103310-9 |
| | Duplex ² | 103311-9 |
| 50 | Duplex ¹ | 1-103310-0 |
| | Duplex ² | 1-103311-0 |
| 60 | Duplex ¹ | 1-103310-2 |
| | Duplex ² | 1-103311-2 |

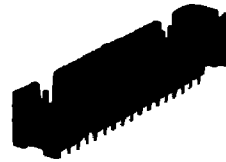
¹.000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area with entire post underplated .000050 [0.00127] nickel.

**Low Profile Headers—
Shrouded High Temperature
Housings, with .150 [3.81]
End Dimension**

**Double Row, .100 x .100
[2.54 x 2.54] Centers**

**.025 [.064] Square
Straight Post (with Board
Retention Feature)**



Note: 26 Pos. Housing Dim. (Typ.)—1.600 [40.64] L x .370 [9.40] W x .385 [9.78] H

| No. of Pos. | Contact Plating | Part No. |
|-------------|---------------------|------------|
| 10 | Duplex ¹ | 104338-1 |
| | Duplex ² | 104339-1 |
| 14 | Duplex ¹ | 104338-2 |
| | Duplex ² | 104339-2 |
| 16 | Duplex ¹ | 104338-3 |
| | Duplex ² | 104339-3 |
| 20 | Duplex ¹ | 104338-4 |
| | Duplex ² | 104339-4 |
| 24 | Duplex ¹ | 104338-5 |
| | Duplex ² | 104339-5 |
| 26 | Duplex ¹ | 104338-6 |
| | Duplex ² | 104339-6 |
| 34 | Duplex ¹ | 104338-7 |
| | Duplex ² | 104339-7 |
| 40 | Duplex ¹ | 104338-8 |
| | Duplex ² | 104339-8 |
| 50 | Duplex ¹ | 104338-9 |
| | Duplex ² | 104339-9 |
| 60 | Duplex ¹ | 1-104338-0 |
| | Duplex ² | 1-104339-0 |

¹.000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

Mates with—Novo Receptacles, Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, and AMPMODU MT Connectors with Ejection Covers.

**.025 [0.64] Square
Right-Angle Post
(with Board Retention Feature)**



Note: 26 Pos. Housing Dim. (Typ.)—1.600 [40.64] L x .370 [9.40] W x .385 [9.78] H

| No. of Pos. | Contact Plating | Part No. |
|-------------|---------------------|------------|
| 10 | Duplex ¹ | 104340-1 |
| | Duplex ² | 104341-1 |
| 14 | Duplex ¹ | 104340-2 |
| | Duplex ² | 104341-2 |
| 16 | Duplex ¹ | 104340-3 |
| | Duplex ² | 104341-3 |
| 20 | Duplex ¹ | 104340-4 |
| | Duplex ² | 104341-4 |
| 24 | Duplex ¹ | 104340-5 |
| | Duplex ² | 104341-5 |
| 26 | Duplex ¹ | 104340-6 |
| | Duplex ² | 104341-6 |
| 34 | Duplex ¹ | 104340-7 |
| | Duplex ² | 104341-7 |
| 40 | Duplex ¹ | 104340-8 |
| | Duplex ² | 104341-8 |
| 50 | Duplex ¹ | 104340-9 |
| | Duplex ² | 104341-9 |
| 60 | Duplex ¹ | 1-104340-0 |
| | Duplex ² | 1-104341-0 |

¹.000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

².000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel.

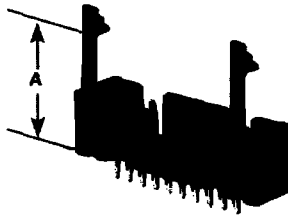
Mates with—Novo Receptacles, Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, and AMPMODU MT Connectors with Ejection Covers.

5
Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

Low Profile Headers— Shrouded with Ejection Latches and .150 [3.81] End Dimension

**Double Row, .100 x .100
[2.54 x 2.54] Centers
.025 [0.64] Square
Straight Post**

Mates with—Novo Receptacles, Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, and AMPMODU MT Connectors with Ejection Covers.



Note: 34 Pos. Housing Dim. (Typ.)—2.000 [50.80] L x .360 [9.14] W x .385 [9.78] H

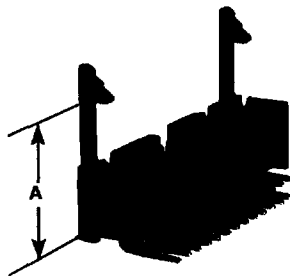
| No. of Pos. | Latching Height A | Part No. Duplex ¹ |
|-------------|-------------------|------------------------------|
| 10 | .585 [14.9] | 104128-1 |
| | .435 [11.0] | 104313-1 |
| 14 | .585 [14.9] | 104128-2 |
| | .435 [11.0] | 104313-2 |
| 16 | .585 [14.9] | 104128-3 |
| | .435 [11.0] | 104313-3 |
| 20 | .585 [14.9] | 104128-4 |
| | .435 [11.0] | 104313-4 |
| 26 | .585 [14.9] | 104128-5 |
| | .435 [11.0] | 104313-5 |
| 34 | .585 [14.9] | 104128-6 |
| | .435 [11.0] | 104313-6 |
| 40 | .585 [14.9] | 104128-7 |
| | .435 [11.0] | 104313-7 |
| 44 | .585 [14.9] | 104128-8 |
| | .435 [11.0] | 104313-8 |
| 50 | .585 [14.9] | 104128-9 |
| | .435 [11.0] | 104313-9 |
| 60 | .585 [14.9] | 1-104128-0 |
| | .435 [11.0] | 1-104313-0 |

¹.000030 [0.00076] gold on contact area.

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)

.025 [0.64] Square Right-Angle Post

Mates with—Novo Receptacles, Pages 5004 and 5005; Flat Flexible Film Connectors, AMPMODU Wire-Applied Receptacles, and AMPMODU MT Connectors with Ejection Covers.



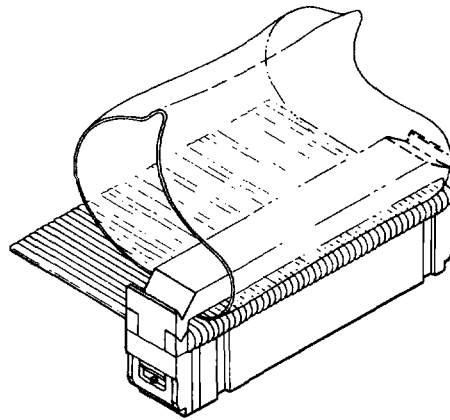
Note: 34 Pos. Housing Dim. (Typ.)—2.000 [50.80] L x .360 [9.14] W x .385 [9.78] H

| No. of Pos. | Latching Height A | Part No. Duplex ¹ |
|-------------|-------------------|------------------------------|
| 10 | .585 [14.9] | 104130-1 |
| | .435 [11.0] | 104315-1 |
| 14 | .585 [14.9] | 104130-2 |
| | .435 [11.0] | 104315-2 |
| 16 | .585 [14.9] | 104130-3 |
| | .435 [11.0] | 104315-3 |
| 20 | .585 [14.9] | 104130-4 |
| | .435 [11.0] | 104315-4 |
| 26 | .585 [14.9] | 104130-5 |
| | .435 [11.0] | 104315-5 |
| 34 | .585 [14.9] | 104130-6 |
| | .435 [11.0] | 104315-6 |
| 40 | .585 [14.9] | 104130-7 |
| | .435 [11.0] | 104315-7 |
| 44 | .585 [14.9] | 104130-8 |
| | .435 [11.0] | 104315-8 |
| 50 | .585 [14.9] | 104130-9 |
| | .435 [11.0] | 104315-9 |
| 60 | .585 [14.9] | 1-104130-0 |
| | .435 [11.0] | 1-104315-0 |

¹.000030 [0.00076] gold on contact area.

Accessories

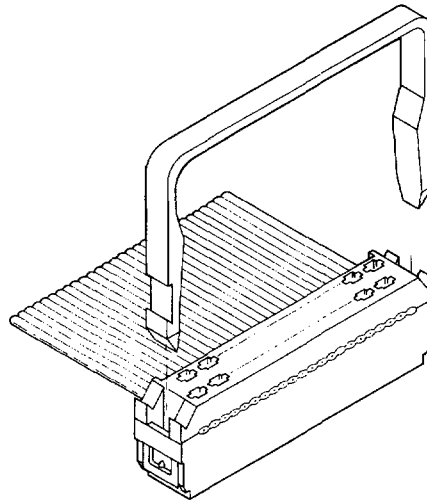
Pull Tabs, Permanent (for Receptacles and Pin Connectors)



| No. of Pos. | Pull Tab Part No. |
|-------------|-------------------|
| — | 88450-1* |
| 10 | 88450-2 |
| 14 | 88450-3 |
| 16 | 88450-4 |
| 20 | 88450-5 |
| 24 | 88450-6 |
| 26 | 88450-7 |
| 30 | 1-88450-2 |
| 34 | 88450-8 |
| 40 | 88450-9 |
| 50 | 1-88450-0 |
| 60 | 1-88450-1 |

*120 [3048] L; cut to desired length.
Notes: 1. This pull tab is installed manually between the cover and strain relief.
 2. Use with Novo Receptacles, Pages 5004 and 5005; and Universal I/O Pin Connectors, Pages 5008 and 5009.

Pull Tabs, Snap-In (for Receptacles without Strain Relief)

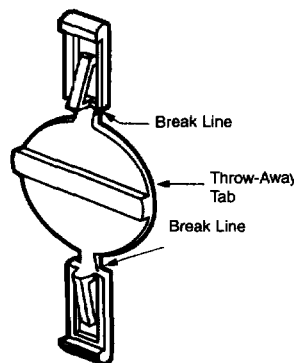


| No. of Pos. | Pull Tab Part No. |
|-------------|-------------------|
| 10 | 746601-1 |
| 14 | 746601-2 |
| 16 | 746601-3 |
| 20 | 746601-4 |
| 24 | 746601-5 |
| 26 | 746601-6 |
| 30 | 746601-7 |
| 34 | 746601-8 |
| 40 | 746601-9 |
| 44 | 1-746601-0 |
| 50 | 1-746601-1 |
| 60 | 1-746601-2 |
| 64 | 1-746601-3 |

Note: Use with Novo Receptacles, Pages 5004 and 5005.

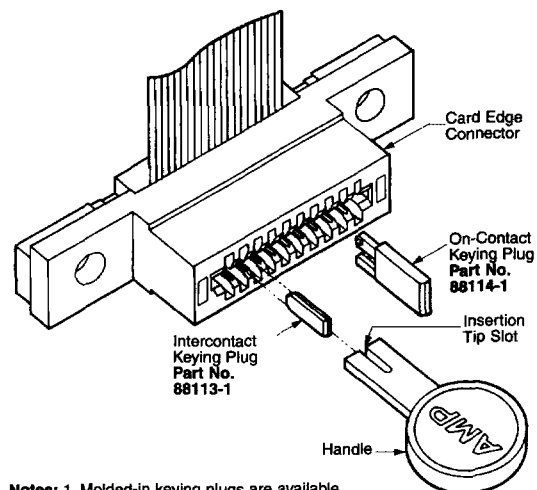
Polarizer, Snap-In (for Pin Connectors, Universal Pin and Pinless Headers and Low Profile Pin Headers)

Part Nos.:
 499991-2 (packaged 50 per bag)
 499991-3 (packaged 1,000 per box)



The snap-in polarizer provides military polarization for Pin Connectors (without detent windows), Pages 5008 and 5009; Universal Pin and Pinless Headers, Pages 5010-5013; and Low Profile Pin Headers, Pages 5014-5016.

Keying Plug (for Card Edge Connectors)



Notes: 1. Molded-in keying plugs are available for card edge connectors between position 3, 4, and 5, 6. Consult AMP.
 2. Use with Card Edge Connectors, Pages 5006.

Insertion Tool Part No. 91233-1

Ribbon and Flat Cable Connectors
Ribbon Cable Connector System (AMP-LATCH)