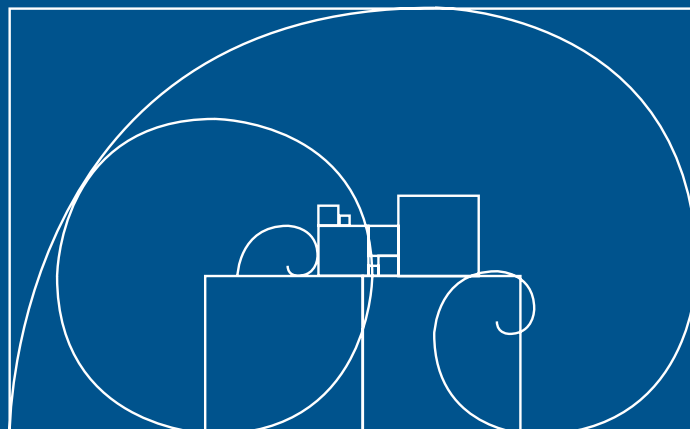


# COMMERCIAL

Barrier Blocks  
Circular Mini DIN  
BNC

Jones Plugs  
Edge Connectors



# Cinch

Cinch Commercial Products, consisting of Jones Plugs and Sockets, Barrier Blocks, Edge Cards, Two-Piece Commercial Dins, Mini Din Plugs, and their newest addition the 75Ω Press-Fit BNC Receptacle, provide a wide variety of connectors for the purchaser and designer to choose from.

The Jones Plugs and Sockets have been utilized for decades and provide a quick, reliable, and economical means of solving your higher current-carrying capacity needs. Available in two series (300 and 2,400), these connectors can be found in data processing controls; amusement and vending machines; medical, communication, and test equipment; as well as industrial controls and heavy-duty, battery-powered equipment. Both series are available in a variety of cable and panel mounting options.

Cinch Barrier Blocks are designed to simplify wiring work by reducing splicing, preventing current leaks and short circuits, and increasing insulation. Available in a variety of densities, these barrier blocks can be found in applications ranging from industrial controls to switching systems.

Designed specially for applications where space is at a premium, the Cinch Mini Din family is ideal for personal computers, keyboard-mouse interface, hand-held electronic equipment, office-automation equipment, and audio and video equipment. Available in sizes 3 through 8 contact, the Cinch Mini Din family includes a fully shielded cable mounted plug in various cable lengths or cable mounted plug components for customers with high-volume assembly and overmold capabilities.

Cinch Edge Card Connectors are available in a variety of styles on both .100 or .156 center spacing.

The newest addition to the commercial family, the 75Ω Press-Fit BNC Receptacle is designed around a unique patented press-fit design that allows for multiple insertion into a backplane without loss of mechanical retention or electrical performance.

When looking for time reliability to solve your commercial interconnect needs, look no further than Cinch Connectors. Whether it's a Jones Plug and Socket, Barrier Block, Edge Card, Mini Din plug, or our newest addition, the 75Ω BNC Press-Fit connector, you will always know years of customer satisfaction stand behind the product you chose.

## FEATURES

- *Interposing barriers between terminals yield higher electrical ratings and provide additional protection against frayed wire shorting.*
- *A wide variety of barrier blocks makes it possible to select the combination of mechanical and electrical characteristics that best meet the exact requirements of your application.*
- *A wide selection of optional terminals and fanning strips permits the equipment designer to choose the method of termination most suitable for his environmental specifications and manufacturing requirements.*

## MATERIALS

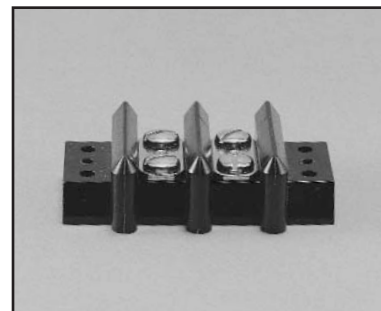
**Insulation Material:** Molded monoblock, general purpose phenolic, black, UL Rated 94V-1

**Eyelets:** Material - Brass  
Plating - Nickel

**Screws:** Material - Steel  
Plating - Nickel over copper flash

**Solder Terminals:** Material - Brass  
Plating - Electro-Tin

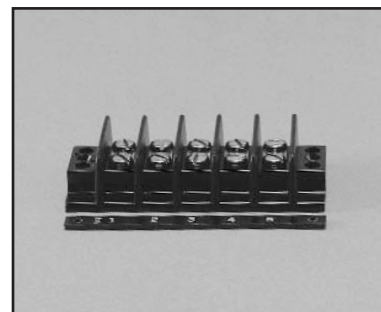
**Marker Strip Material:** Nema Grade XPC, UL Rated 94V-O



## ENVIRONMENTAL

**Operating Temperature:** -55° to +300°F

**Certifications:** UL Recognized - File E61245  
CSA - LR 31996



Marketed exclusively through distribution.

## TERMINAL BLOCK QUICK REFERENCE

| Center-to-Center<br>Series Spacing | Number<br>of<br>Terminals | Single or<br>Double<br>Row | Screw<br>Size | Operating<br>Voltage | Current<br>Rating | Max.<br>Wire<br>Size | Max.<br>Watts/<br>Terminal | Voltage<br>Rating<br>w/Marker | Voltage<br>Rating<br>w/o Marker | Marker<br>Strip<br>Mounting |        |
|------------------------------------|---------------------------|----------------------------|---------------|----------------------|-------------------|----------------------|----------------------------|-------------------------------|---------------------------------|-----------------------------|--------|
| 140                                | .375                      | 1-25                       | Double        | 5-40                 | 250 Volts         | 15 Amps              | #16                        | 3750                          | 2000                            | 1100                        | Bottom |
| 141                                | .438                      | 1-20                       | Double        | 6-32                 | 250 Volts         | 20 Amps              | #14                        | 5000                          | 2400                            | 1100                        | Bottom |
| 142                                | .563                      | 1-17                       | Double        | 8-32                 | 250 Volts         | 30 Amps              | #10                        | 7500                          | 2600                            | 1600                        | Bottom |
| 150                                | .688                      | 1-10                       | Double        | 10-32                | 250 Volts         | 40 Amps              | #10                        | 10,000                        | 2400                            | 1500                        | Bottom |
| 151                                | .875                      | 1-8                        | Double        | 12-32                | 250 Volts         | 50 Amps              | #8                         | 12,500                        | 3400                            | 1800                        | Bottom |
| 152                                | 1.125                     | 1-6                        | Double        | 1/4-28               | 250 Volts         | 70 Amps              | #6                         | 54,000                        | 3800                            | 2100                        | Bottom |
| 164                                | .375                      | 1-21                       | Double        | 6-32                 | 250 Volts         | 15 Amps              | #14                        | 3750                          | 2000                            | 1100                        | Bottom |
| 540                                | .375                      | 2-31                       | Double        | 5-40                 | 600 Volts         | 15 Amps              | #16                        | 3750                          | 2300                            | 2300                        | Top    |
| 541                                | .438                      | 2-30                       | Double        | 6-32                 | 600 Volts         | 20 Amps              | #14                        | 5000                          | 2800                            | 2800                        | Top    |
| 542                                | .563                      | 2-26                       | Double        | 8-32                 | 600 Volts         | 30 Amps              | #10                        | 7500                          | 4000                            | 4000                        | Top    |
| 176                                | .375                      | 2-10                       | Single        | 5-40                 | 250 Volts         | 15 Amps              | #16                        | 3750                          | N/A                             | 1100                        | N/A    |

Marketed exclusively through distribution.

## Barrier Blocks Series 140

.375 Density, 5-40 x 3/16"  
BH Screw, Open Bottom,  
Double Row

# Cinch

### Electrical Characteristics

**Voltage Rating:** 250 VAC RMS maximum

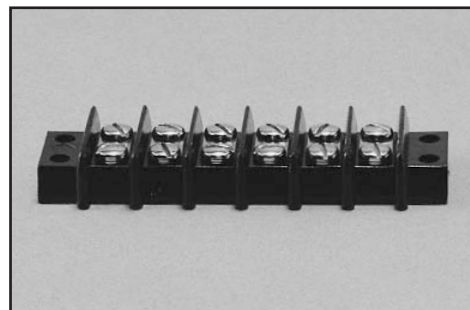
**Current Rating:** 15 Amps maximum

**Maximum Watts Per Terminal:** 3750

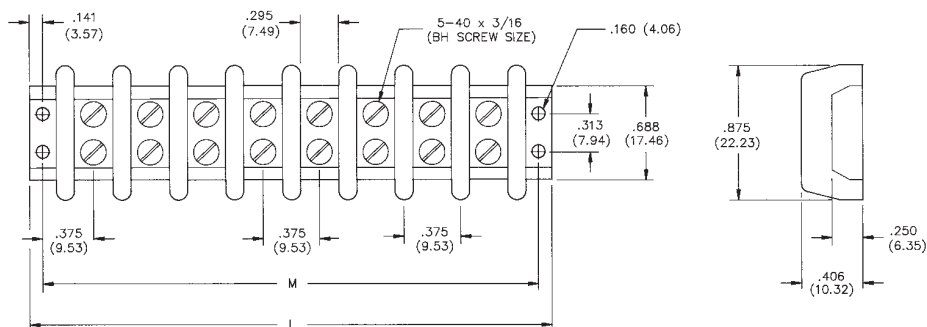
### Mechanical Characteristics

**Maximum Wire Size:** #16 AWG

**Recommended Tightening Torque:** 9 lb.-in.



### Dimensions



### Ordering Information

| No. of<br>Terminals | Standard Screw<br>Catalog No. | "M"<br>Dim. | "L"<br>Dim. |
|---------------------|-------------------------------|-------------|-------------|
| 1                   | 1-140                         | .750        | 1.032       |
| 2                   | 2-140                         | 1.125       | 1.407       |
| 3                   | 3-140                         | 1.500       | 1.782       |
| 4                   | 4-140                         | 1.875       | 2.157       |
| 5                   | 5-140                         | 2.250       | 2.532       |
| 6                   | 6-140                         | 2.625       | 2.907       |
| 7                   | 7-140                         | 3.000       | 3.282       |
| 8                   | 8-140                         | 3.375       | 3.657       |
| 9                   | 9-140                         | 3.750       | 4.032       |
| 10                  | 10-140                        | 4.125       | 4.407       |
| 11                  | 11-140                        | 4.500       | 4.782       |
| 12                  | 12-140                        | 4.875       | 5.157       |
| 13                  | 13-140                        | 5.250       | 5.532       |
| 14                  | 14-140                        | 5.625       | 5.907       |
| 15                  | 15-140                        | 6.000       | 6.282       |
| 16                  | 16-140                        | 6.375       | 6.657       |
| 17                  | 17-140                        | 6.750       | 7.032       |
| 18                  | 18-140                        | 7.125       | 7.407       |
| 19                  | 19-140                        | 7.500       | 7.782       |
| 20                  | 20-140                        | 7.875       | 8.157       |
| 21                  | 21-140                        | 8.250       | 8.532       |
| 22                  | 22-140                        | 8.625       | 8.907       |
| 23                  | 23-140                        | 9.000       | 9.282       |
| 24                  | 24-140                        | 9.375       | 9.657       |
| 25                  | 25-140                        | 9.750       | 10.032      |

Barrier Blocks  
Series 140

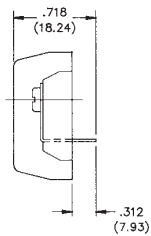
.375 Density, 5-40 x 3/16"  
BH Screw, Open Bottom,  
Double Row



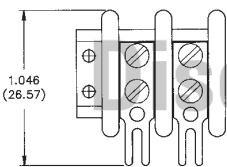
Solder Terminal Options

Dimensions

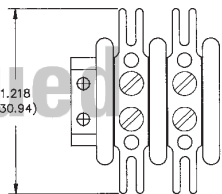
“Y” Terminals



~~“3/4W” Terminals~~



~~“W” Terminals~~



Ordering Information

| No. of Terminals | Catalog No. | Catalog No.            | Catalog No.         |
|------------------|-------------|------------------------|---------------------|
| 1                | 1-140-Y     | <del>1-140-3/4W</del>  | <del>1-140-W</del>  |
| 2                | 2-140-Y     | <del>2-140-3/4W</del>  | <del>2-140-W</del>  |
| 3                | 3-140-Y     | <del>3-140-3/4W</del>  | <del>3-140-W</del>  |
| 4                | 4-140-Y     | <del>4-140-3/4W</del>  | <del>4-140-W</del>  |
| 5                | 5-140-Y     | <del>5-140-3/4W</del>  | <del>5-140-W</del>  |
| 6                | 6-140-Y     | <del>6-140-3/4W</del>  | <del>6-140-W</del>  |
| 7                | 7-140-Y     | <del>7-140-3/4W</del>  | <del>7-140-W</del>  |
| 8                | 8-140-Y     | <del>8-140-3/4W</del>  | <del>8-140-W</del>  |
| 9                | 9-140-Y     | <del>9-140-3/4W</del>  | <del>9-140-W</del>  |
| 10               | 10-140-Y    | <del>10-140-3/4W</del> | <del>10-140-W</del> |
| 11               | 11-140-Y    | <del>11-140-3/4W</del> | <del>11-140-W</del> |
| 12               | 12-140-Y    | <del>12-140-3/4W</del> | <del>12-140-W</del> |
| 13               | 13-140-Y    | <del>13-140-3/4W</del> | <del>13-140-W</del> |
| 14               | 14-140-Y    | <del>14-140-3/4W</del> | <del>14-140-W</del> |
| 15               | 15-140-Y    | <del>15-140-3/4W</del> | <del>15-140-W</del> |
| 16               | 16-140-Y    | <del>16-140-3/4W</del> | <del>16-140-W</del> |
| 17               | 17-140-Y    | <del>17-140-3/4W</del> | <del>17-140-W</del> |
| 18               | 18-140-Y    | <del>18-140-3/4W</del> | <del>18-140-W</del> |
| 19               | 19-140-Y    | <del>19-140-3/4W</del> | <del>19-140-W</del> |
| 20               | 20-140-Y    | <del>20-140-3/4W</del> | <del>20-140-W</del> |
| 21               | 21-140-Y    | <del>21-140-3/4W</del> | <del>21-140-W</del> |
| 22               | 22-140-Y    | <del>22-140-3/4W</del> | <del>22-140-W</del> |
| 23               | 23-140-Y    | <del>23-140-3/4W</del> | <del>23-140-W</del> |
| 24               | 24-140-Y    | <del>24-140-3/4W</del> | <del>24-140-W</del> |
| 25               | 25-140-Y    | <del>25-140-3/4W</del> | <del>25-140-W</del> |

Solder Terminals can be ordered separately.

Terminal Type

“Y”

~~“3/4W”~~

~~“W”~~

Catalog No.

Y-140

~~3/4W-140~~

~~W-140~~

Marketed exclusively through distribution.

Barrier Blocks  
Series 140

.375 Density, 5-40 x 3/16"  
BH Screw, Open Bottom,  
Double Row

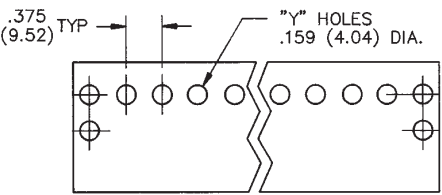
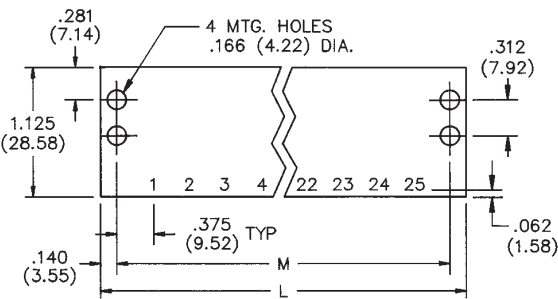


Marker Strips

Dimensions

Standard

"Y" Terminal



Ordering Information

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 1                   | MS-1-140    | MS-1-140-Y  |
| 2                   | MS-2-140    | MS-2-140-Y  |
| 3                   | MS-3-140    | MS-3-140-Y  |
| 4                   | MS-4-140    | MS-4-140-Y  |
| 5                   | MS-5-140    | MS-5-140-Y  |
| 6                   | MS-6-140    | MS-6-140-Y  |
| 7                   | MS-7-140    | MS-7-140-Y  |
| 8                   | MS-8-140    | MS-8-140-Y  |
| 9                   | MS-9-140    | MS-9-140-Y  |
| 10                  | MS-10-140   | MS-10-140-Y |
| 11                  | MS-11-140   | MS-11-140-Y |
| 12                  | MS-12-140   | MS-12-140-Y |
| 13                  | MS-13-140   | MS-13-140-Y |
| 14                  | MS-14-140   | MS-14-140-Y |
| 15                  | MS-15-140   | MS-15-140-Y |
| 16                  | MS-16-140   | MS-16-140-Y |
| 17                  | MS-17-140   | MS-17-140-Y |
| 18                  | MS-18-140   | MS-18-140-Y |
| 19                  | MS-19-140   | MS-19-140-Y |
| 20                  | MS-20-140   | MS-20-140-Y |
| 21                  | MS-21-140   | MS-21-140-Y |
| 22                  | MS-22-140   | MS-22-140-Y |
| 23                  | MS-23-140   | MS-23-140-Y |
| 24                  | MS-24-140   | MS-24-140-Y |
| 25                  | MS-25-140   | MS-25-140-Y |

~~Use Standard Marker Strips for "3/4W" and "W" Solder Terminals.~~

Accessories

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

## Barrier Blocks Series 141

.438 Density, 6-32 x 1/4"  
BH Screw, Open Bottom,  
Double Row

# Cinch

### Electrical Characteristics

**Voltage Rating:** 250 VAC RMS maximum

**Current Rating:** 20 Amps maximum

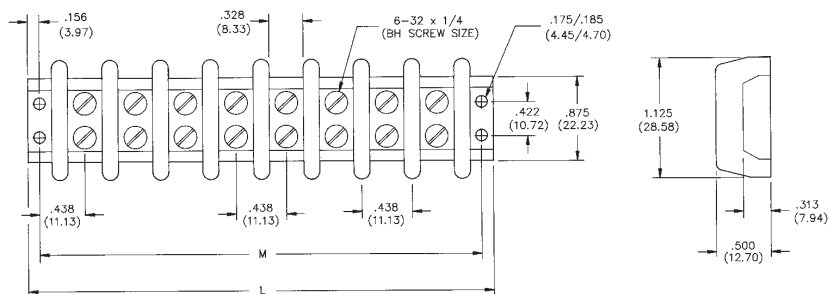
**Maximum Watts Per Terminal:** 5000

### Mechanical Characteristics

**Maximum Wire Size:** #14 AWG

**Recommended Tightening Torque:** 12 lb.-in.

### Dimensions



### Ordering Information

| No. of<br>Terminals | Standard Screw<br>Catalog No. | "M"<br>Dim. | "L"<br>Dim. |
|---------------------|-------------------------------|-------------|-------------|
| 1                   | 1-141                         | .875        | 1.187       |
| 2                   | 2-141                         | 1.312       | 1.625       |
| 3                   | 3-141                         | 1.750       | 2.062       |
| 4                   | 4-141                         | 2.187       | 2.500       |
| 5                   | 5-141                         | 2.625       | 2.938       |
| 6                   | 6-141                         | 3.062       | 3.375       |
| 7                   | 7-141                         | 3.500       | 3.812       |
| 8                   | 8-141                         | 3.938       | 4.250       |
| 9                   | 9-141                         | 4.375       | 4.687       |
| 10                  | 10-141                        | 4.813       | 5.125       |
| 11                  | 11-141                        | 5.250       | 5.562       |
| 12                  | 12-141                        | 5.687       | 6.000       |
| 13                  | 13-141                        | 6.125       | 6.437       |
| 14                  | 14-141                        | 6.562       | 6.875       |
| 15                  | 15-141                        | 7.000       | 7.312       |
| 16                  | 16-141                        | 7.437       | 7.750       |
| 17                  | 17-141                        | 7.875       | 8.187       |
| 18                  | 18-141                        | 8.312       | 8.625       |
| 19                  | 19-141                        | 8.750       | 9.062       |
| 20                  | 20-141                        | 9.187       | 9.500       |

Marketed exclusively through distribution.

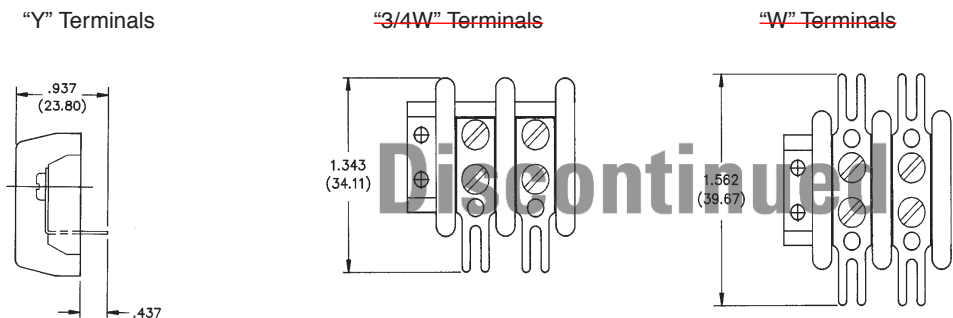
**Barrier Blocks**  
**Series 141**

.438 Density, 6-32 x 1/4"  
BH Screw, Open Bottom,  
Double Row



**Solder Terminal Options**

**Dimensions**



**Ordering Information**

| No. of Terminals | Catalog No. | Catalog No.            | Catalog No.         |
|------------------|-------------|------------------------|---------------------|
| 1                | 1-141-Y     | <del>1-141-3/4W</del>  | <del>1-141-W</del>  |
| 2                | 2-141-Y     | <del>2-141-3/4W</del>  | <del>2-141-W</del>  |
| 3                | 3-141-Y     | <del>3-141-3/4W</del>  | <del>3-141-W</del>  |
| 4                | 4-141-Y     | <del>4-141-3/4W</del>  | <del>4-141-W</del>  |
| 5                | 5-141-Y     | <del>5-141-3/4W</del>  | <del>5-141-W</del>  |
| 6                | 6-141-Y     | <del>6-141-3/4W</del>  | <del>6-141-W</del>  |
| 7                | 7-141-Y     | <del>7-141-3/4W</del>  | <del>7-141-W</del>  |
| 8                | 8-141-Y     | <del>8-141-3/4W</del>  | <del>8-141-W</del>  |
| 9                | 9-141-Y     | <del>9-141-3/4W</del>  | <del>9-141-W</del>  |
| 10               | 10-141-Y    | <del>10-141-3/4W</del> | <del>10-141-W</del> |
| 11               | 11-141-Y    | <del>11-141-3/4W</del> | <del>11-141-W</del> |
| 12               | 12-141-Y    | <del>12-141-3/4W</del> | <del>12-141-W</del> |
| 13               | 13-141-Y    | <del>13-141-3/4W</del> | <del>13-141-W</del> |
| 14               | 14-141-Y    | <del>14-141-3/4W</del> | <del>14-141-W</del> |
| 15               | 15-141-Y    | <del>15-141-3/4W</del> | <del>15-141-W</del> |
| 16               | 16-141-Y    | <del>16-141-3/4W</del> | <del>16-141-W</del> |
| 17               | 17-141-Y    | <del>17-141-3/4W</del> | <del>17-141-W</del> |
| 18               | 18-141-Y    | <del>18-141-3/4W</del> | <del>18-141-W</del> |
| 19               | 19-141-Y    | <del>19-141-3/4W</del> | <del>19-141-W</del> |
| 20               | 20-141-Y    | <del>20-141-3/4W</del> | <del>20-141-W</del> |

Solder Terminals can be ordered separately.

**Terminal Type**

"Y"  
~~"3/4W"~~  
~~W~~

**Catalog No.**

Y-141  
~~3/4W-141~~  
~~W-141~~

Marketed exclusively through distribution.

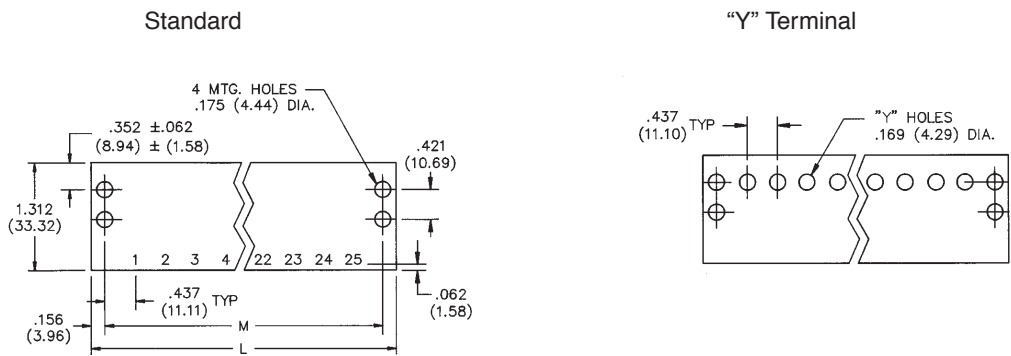
Barrier Blocks  
Series 141

.438 Density, 6-32 x 1/4"  
BH Screw, Open Bottom,  
Double Row



Marker Strips

Dimensions



Ordering Information

| No. of Terminals | Catalog No. | Catalog No. |
|------------------|-------------|-------------|
| 1                | MS-1-141    | MS-1-141-Y  |
| 2                | MS-2-141    | MS-2-141-Y  |
| 3                | MS-3-141    | MS-3-141-Y  |
| 4                | MS-4-141    | MS-4-141-Y  |
| 5                | MS-5-141    | MS-5-141-Y  |
| 6                | MS-6-141    | MS-6-141-Y  |
| 7                | MS-7-141    | MS-7-141-Y  |
| 8                | MS-8-141    | MS-8-141-Y  |
| 9                | MS-9-141    | MS-9-141-Y  |
| 10               | MS-10-141   | MS-10-141-Y |
| 11               | MS-11-141   | MS-11-141-Y |
| 12               | MS-12-141   | MS-12-141-Y |
| 13               | MS-13-141   | MS-13-141-Y |
| 14               | MS-14-141   | MS-14-141-Y |
| 15               | MS-15-141   | MS-15-141-Y |
| 16               | MS-16-141   | MS-16-141-Y |
| 17               | MS-17-141   | MS-17-141-Y |
| 18               | MS-18-141   | MS-18-141-Y |
| 19               | MS-19-141   | MS-19-141-Y |
| 20               | MS-20-141   | MS-20-141-Y |

~~Use Standard Marker Strip for "3/4W" and "W" Solder Terminals.~~

Accessories

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

## Barrier Blocks Series 142

.563 Density, 8-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row

# Cinch

### Electrical Characteristics

**Voltage Rating:** 250 VAC RMS maximum

**Current Rating:** 30 Amps maximum

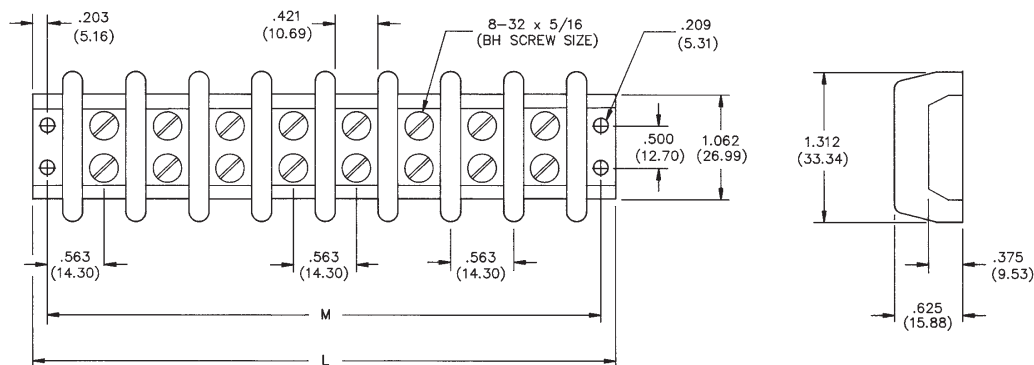
**Maximum Watts Per Terminal:** 7500

### Mechanical Characteristics

**Maximum Wire Size:** #10 AWG

**Recommended Tightening Torque:** 16 lb.-in.

### Dimensions



### Ordering Information

| No. of<br>Terminals | Standard Screw<br>Catalog No. | "M"<br>Dim. | "L"<br>Dim. |
|---------------------|-------------------------------|-------------|-------------|
| 1                   | 1-142                         | 1.125       | 1.531       |
| 2                   | 2-142                         | 1.687       | 2.094       |
| 3                   | 3-142                         | 2.250       | 2.656       |
| 4                   | 4-142                         | 2.812       | 3.219       |
| 5                   | 5-142                         | 3.375       | 3.781       |
| 6                   | 6-142                         | 3.937       | 4.344       |
| 7                   | 7-142                         | 4.500       | 4.906       |
| 8                   | 8-142                         | 5.062       | 5.468       |
| 9                   | 9-142                         | 5.625       | 6.031       |
| 10                  | 10-142                        | 6.187       | 6.594       |
| 11                  | 11-142                        | 6.750       | 7.156       |
| 12                  | 12-142                        | 7.312       | 7.719       |
| 13                  | 13-142                        | 7.875       | 8.281       |
| 14                  | 14-142                        | 8.437       | 8.844       |
| 15                  | 15-142                        | 9.000       | 9.406       |
| 16                  | 16-142                        | 9.562       | 9.969       |
| 17                  | 17-142                        | 10.125      | 10.531      |

Marketed exclusively through distribution.

**Barrier Blocks  
Series 142**

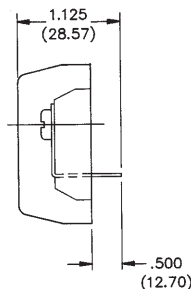
.563 Density, 8-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row



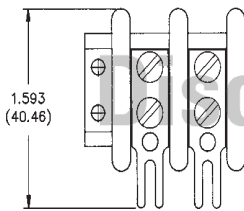
**Solder Terminal Options**

**Dimensions**

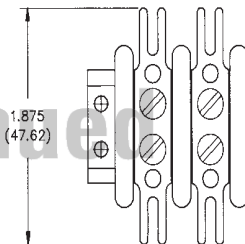
**“Y” Terminals**



~~“3/4W” Terminals~~



~~“W” Terminals~~



**Ordering Information**

| No. of Terminals | Catalog No. | Catalog No.            | Catalog No.         |
|------------------|-------------|------------------------|---------------------|
| 1                | 1-142-Y     | <del>1-142-3/4W</del>  | <del>1-142-W</del>  |
| 2                | 2-142-Y     | <del>2-142-3/4W</del>  | <del>2-142-W</del>  |
| 3                | 3-142-Y     | <del>3-142-3/4W</del>  | <del>3-142-W</del>  |
| 4                | 4-142-Y     | <del>4-142-3/4W</del>  | <del>4-142-W</del>  |
| 5                | 5-142-Y     | <del>5-142-3/4W</del>  | <del>5-142-W</del>  |
| 6                | 6-142-Y     | <del>6-142-3/4W</del>  | <del>6-142-W</del>  |
| 7                | 7-142-Y     | <del>7-142-3/4W</del>  | <del>7-142-W</del>  |
| 8                | 8-142-Y     | <del>8-142-3/4W</del>  | <del>8-142-W</del>  |
| 9                | 9-142-Y     | <del>9-142-3/4W</del>  | <del>9-142-W</del>  |
| 10               | 10-142-Y    | <del>10-142-3/4W</del> | <del>10-142-W</del> |
| 11               | 11-142-Y    | <del>11-142-3/4W</del> | <del>11-142-W</del> |
| 12               | 12-142-Y    | <del>12-142-3/4W</del> | <del>12-142-W</del> |
| 13               | 13-142-Y    | <del>13-142-3/4W</del> | <del>13-142-W</del> |
| 14               | 14-142-Y    | <del>14-142-3/4W</del> | <del>14-142-W</del> |
| 15               | 15-142-Y    | <del>15-142-3/4W</del> | <del>15-142-W</del> |
| 16               | 16-142-Y    | <del>16-142-3/4W</del> | <del>16-142-W</del> |
| 17               | 17-142-Y    | <del>17-142-3/4W</del> | <del>17-142-W</del> |

Solder Terminals can be ordered separately.

**Terminal Type**

“Y”  
~~“3/4W”~~  
~~“W”~~

**Catalog No.**

Y-142  
~~3/4W-142~~  
~~W-142~~

Marketed exclusively through distribution.

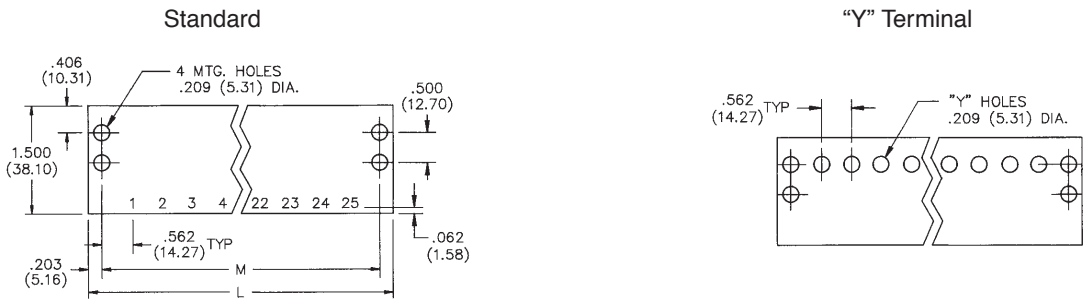
**Barrier Blocks**  
**Series 142**

.563 Density, 8-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row



**Marker Strips**

**Dimensions**



**Ordering Information**

| No. of Terminals | Catalog No. | Catalog No. |
|------------------|-------------|-------------|
| 1                | MS-1-142    | MS-1-142-Y  |
| 2                | MS-2-142    | MS-2-142-Y  |
| 3                | MS-3-142    | MS-3-142-Y  |
| 4                | MS-4-142    | MS-4-142-Y  |
| 5                | MS-5-142    | MS-5-142-Y  |
| 6                | MS-6-142    | MS-6-142-Y  |
| 7                | MS-7-142    | MS-7-142-Y  |
| 8                | MS-8-142    | MS-8-142-Y  |
| 9                | MS-9-142    | MS-9-142-Y  |
| 10               | MS-10-142   | MS-10-142-Y |
| 11               | MS-11-142   | MS-11-142-Y |
| 12               | MS-12-142   | MS-12-142-Y |
| 13               | MS-13-142   | MS-13-142-Y |
| 14               | MS-14-142   | MS-14-142-Y |
| 15               | MS-15-142   | MS-15-142-Y |
| 16               | MS-16-142   | MS-16-142-Y |
| 17               | MS-17-142   | MS-17-142-Y |

~~Use Standard Marker Strips for "3/4W" and "W" Solder Terminals.~~

**Accessories**

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

## Barrier Blocks Series 150

.688 Density, 10-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row

# Cinch

### Electrical Characteristics

**Voltage Rating:** 250 VAC RMS maximum

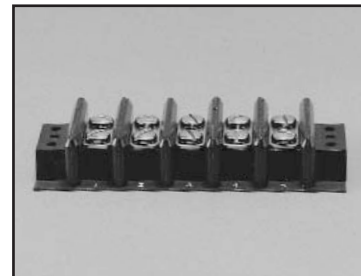
**Current Rating:** 40 Amps maximum

**Maximum Watts Per Terminal:** 10,000

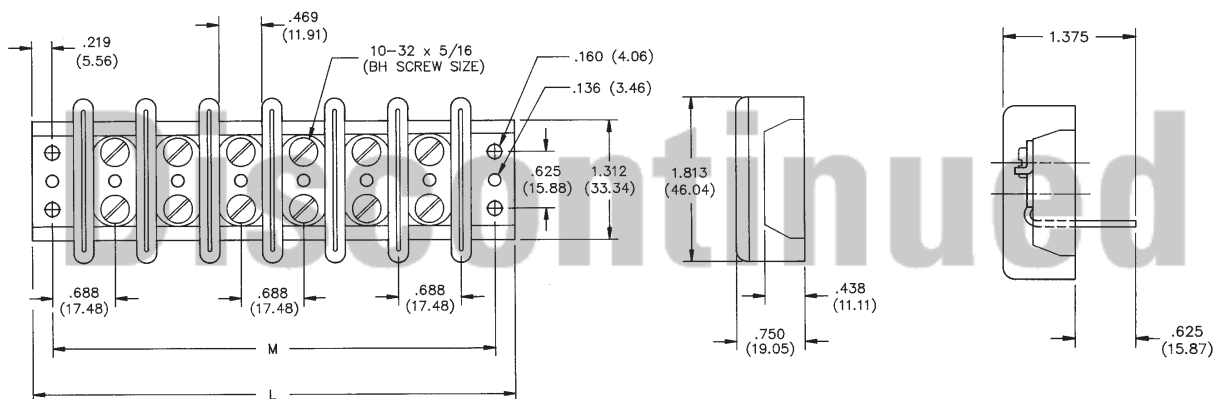
### Mechanical Characteristics

**Maximum Wire Size:** #10 AWG

**Recommended Tightening Torque:** 20 lb.-in.



### Dimensions



### Ordering Information

| No. of<br>Terminals | Standard Screw<br>Catalog No. | Y-Terminals<br>Catalog No. | "M"<br>Dim. | "L"<br>Dim. |
|---------------------|-------------------------------|----------------------------|-------------|-------------|
| 1                   | 1-150                         | 1-150-Y                    | 1.375       | 1.812       |
| 2                   | 2-150                         | 2-150-Y                    | 2.062       | 2.500       |
| 3                   | 3-150                         | 3-150-Y                    | 2.750       | 3.187       |
| 4                   | 4-150                         | 4-150-Y                    | 3.437       | 3.875       |
| 5                   | 5-150                         | 5-150-Y                    | 4.125       | 4.562       |
| 6                   | 6-150                         | 6-150-Y                    | 4.812       | 5.250       |
| 7                   | 7-150                         | 7-150-Y                    | 5.500       | 5.938       |
| 8                   | 8-150                         | 8-150-Y                    | 6.187       | 6.625       |
| 9                   | 9-150                         | 9-150-Y                    | 6.875       | 7.312       |
| 10                  | 10-150                        | 10-150-Y                   | 7.562       | 8.000       |

Marketed exclusively through distribution.

**Barrier Blocks  
Series 150**

.688 Density, 10-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row



**Marker Strips**

**Dimensions**



**Ordering Information**

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 1                   | MS-1-150    | MS-1-150-Y  |
| 2                   | MS-2-150    | MS-2-150-Y  |
| 3                   | MS-3-150    | MS-3-150-Y  |
| 4                   | MS-4-150    | MS-4-150-Y  |
| 5                   | MS-5-150    | MS-5-150-Y  |
| 6                   | MS-6-150    | MS-6-150-Y  |
| 7                   | MS-7-150    | MS-7-150-Y  |
| 8                   | MS-8-150    | MS-8-150-Y  |
| 9                   | MS-9-150    | MS-9-150-Y  |
| 10                  | MS-10-150   | MS-10-150-Y |

**Accessories**

None Available for 150 Series.

Marketed exclusively through distribution.

.875 Density, 12-32 x 3/8"  
BH Screw, Open Bottom,  
Double Row



## ~~Electrical Characteristics~~

~~**Voltage Rating:** 250 Volts maximum~~

~~Current Rating: 50 Amps maximum~~

~~Maximum Watts Per Terminal: 12,500~~

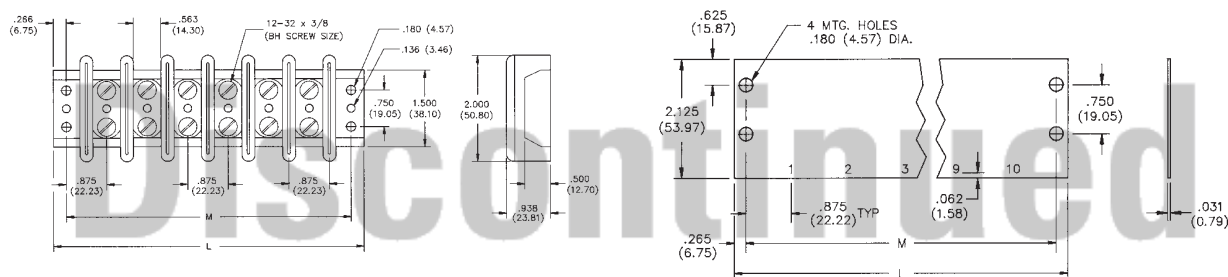
## ~~Mechanical Characteristics~~

~~Maximum Wire Size: #8~~

~~Recommended Tightening Torque: 40 lb.-in.~~



## ~~Dimensions~~



## ~~Ordering Information~~

| No. of Terminals | Catalog No. | "M"<br>Dim. (in) | "L"<br>Dim. (in) | Marker Strip<br>Catalog No. |
|------------------|-------------|------------------|------------------|-----------------------------|
| 1                | 1-151       | 1.750            | 2.282            | N/A                         |
| 2                | 2-151       | 2.625            | 3.157            | MS-2-151                    |
| 3                | 3-151       | 3.500            | 4.032            | MS-3-151                    |
| 4                | 4-151       | 4.375            | 4.907            | MS-4-151                    |
| 5                | 5-151       | 5.250            | 5.782            | MS-5-151                    |
| 6                | 6-151       | 6.125            | 6.657            | MS-6-151                    |
| 7                | 7-151       | 7.000            | 7.532            | MS-7-151                    |
| 8                | 8-151       | 7.875            | 8.407            | MS-8-151                    |

~~Solder Terminals can be ordered separately.~~

~~Terminal Type~~  
~~“W”~~

~~Catalog No.~~  
~~W-151~~

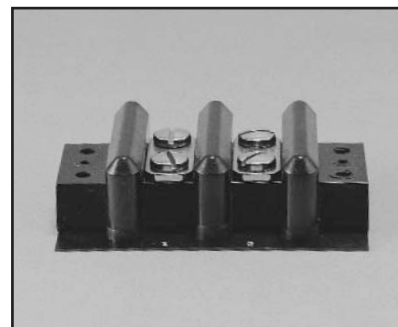
Marketed exclusively through distribution.

1.25 Density, 1/4-28 x 1/2"  
BH Screw, Open Bottom,  
Double Row

# Cinch

~~**Voltage Rating:** 250 Volts maximum~~  
~~**Current Rating:** 70 Amps maximum~~  
~~**Maximum Watts Per Terminal:** 54.000~~

~~Maximum Wire Size: #6~~  
~~Recommended Tightening Torque: 75 lb.-in.~~



| No. of Terminals | Catalog No.      | "M"<br>Dim. (in) | "L"<br>Dim. (in) | Marker Strip<br>Catalog No. |
|------------------|------------------|------------------|------------------|-----------------------------|
| 1                | <del>1-152</del> | 2.250            | 2.876            | N/A                         |
| 2                | <del>2-152</del> | 3.375            | 4.001            | MS-2-152                    |
| 3                | <del>3-152</del> | 4.500            | 5.126            | MS-3-152                    |
| 4                | <del>4-152</del> | 5.625            | 6.251            | MS-4-152                    |
| 5                | <del>5-152</del> | 6.750            | 7.376            | MS-5-152                    |
| 6                | <del>6-152</del> | 7.875            | 8.501            | MS-6-152                    |

~~None Available for 152 Series.~~

Marketed exclusively through distribution.

## Barrier Blocks Series 164

.375 Density, 6-32 x 5/16"  
BH Screw, Open Bottom,  
Double Row

# Cinch

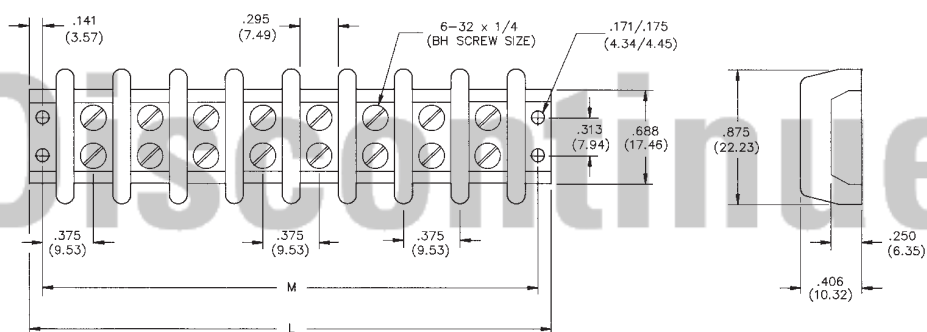
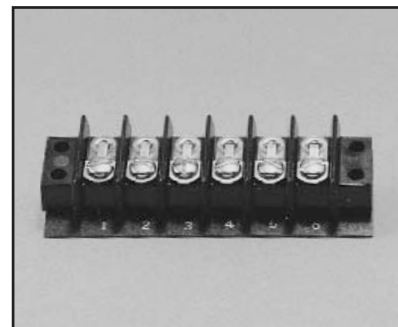
### Electrical Characteristics

~~Voltage Rating: 250 Volts maximum~~  
~~Current Rating: 15 Amps maximum~~  
~~Maximum Watts Per Terminal: 3750~~

### Mechanical Characteristics

~~Maximum Wire Size: #14~~  
~~Recommended Tightening Torque: 12 lb.-in.~~

### Dimensions



### Ordering Information

| No. of<br>Terminals | Catalog No. | "M"<br>Dim. (in) | "L"<br>Dim. (in) |
|---------------------|-------------|------------------|------------------|
| 1                   | 1-164       | 0.750            | 1.032            |
| 2                   | 2-164       | 1.125            | 1.407            |
| 3                   | 3-164       | 1.500            | 1.782            |
| 4                   | 4-164       | 1.875            | 2.157            |
| 5                   | 5-164       | 2.250            | 2.532            |
| 6                   | 6-164       | 2.625            | 2.907            |
| 7                   | 7-164       | 3.000            | 3.282            |
| 8                   | 8-164       | 3.375            | 3.657            |
| 9                   | 9-164       | 3.750            | 4.032            |
| 10                  | 10-164      | 4.125            | 4.407            |
| 11                  | 11-164      | 4.500            | 4.782            |
| 12                  | 12-164      | 4.875            | 5.157            |
| 13                  | 13-164      | 5.250            | 5.532            |
| 14                  | 14-164      | 5.625            | 5.907            |
| 15                  | 15-164      | 6.000            | 6.282            |
| 16                  | 16-164      | 6.375            | 6.657            |
| 17                  | 17-164      | 6.750            | 7.032            |
| 18                  | 18-164      | 7.125            | 7.407            |
| 19                  | 19-164      | 7.500            | 7.782            |
| 20                  | 20-164      | 7.875            | 8.157            |
| 21                  | 21-164      | 8.250            | 8.532            |

Marketed exclusively through distribution.

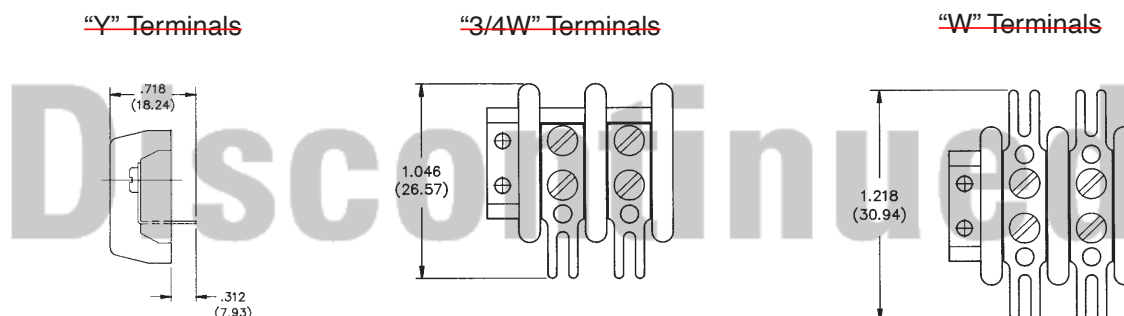
## Barrier Blocks Series 164

.375 Density, 6-32 x 1/4"  
BH Screw, Open Bottom,  
Double Row

# Cinch

### Solder Terminal Options

### Dimensions



### Ordering Information

| No. of<br>Terminals | Catalog No. | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|-------------|
| 1                   | 1-164-Y     | 1-164-3/4W  | 1-164-W     |
| 2                   | 2-164-Y     | 2-164-3/4W  | 2-164-W     |
| 3                   | 3-164-Y     | 3-164-3/4W  | 3-164-W     |
| 4                   | 4-164-Y     | 4-164-3/4W  | 4-164-W     |
| 5                   | 5-164-Y     | 5-164-3/4W  | 5-164-W     |
| 6                   | 6-164-Y     | 6-164-3/4W  | 6-164-W     |
| 7                   | 7-164-Y     | 7-164-3/4W  | 7-164-W     |
| 8                   | 8-164-Y     | 8-164-3/4W  | 8-164-W     |
| 9                   | 9-164-Y     | 9-164-3/4W  | 9-164-W     |
| 10                  | 10-164-Y    | 10-164-3/4W | 10-164-W    |
| 11                  | 11-164-Y    | 11-164-3/4W | 11-164-W    |
| 12                  | 12-164-Y    | 12-164-3/4W | 12-164-W    |
| 13                  | 13-164-Y    | 13-164-3/4W | 13-164-W    |
| 14                  | 14-164-Y    | 14-164-3/4W | 14-164-W    |
| 15                  | 15-164-Y    | 15-164-3/4W | 15-164-W    |
| 16                  | 16-164-Y    | 16-164-3/4W | 16-164-W    |
| 17                  | 17-164-Y    | 17-164-3/4W | 17-164-W    |
| 18                  | 18-164-Y    | 18-164-3/4W | 18-164-W    |
| 19                  | 19-164-Y    | 19-164-3/4W | 19-164-W    |
| 20                  | 20-164-Y    | 20-164-3/4W | 20-164-W    |
| 21                  | 21-164-Y    | 21-164-3/4W | 21-164-W    |

Marketed exclusively through distribution.

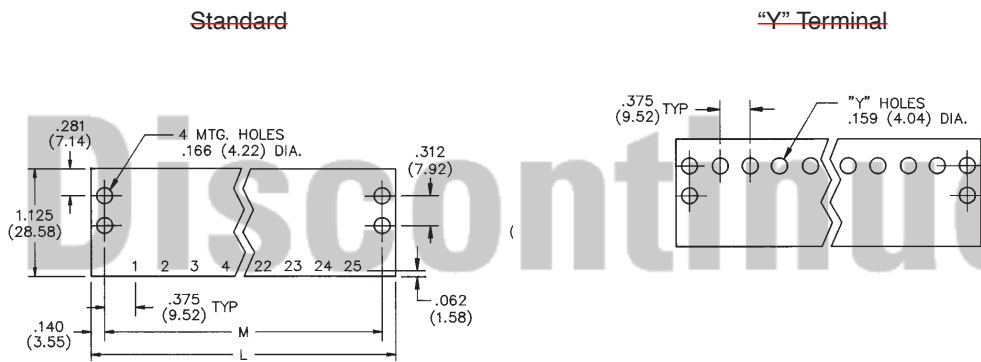
Barrier Blocks  
Series 164

.375 Density, 6-32 x 1/4"  
BH Screw, Open Bottom,  
Double Row



Marker Strips

Dimensions



Ordering Information

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 1                   | N/A         | N/A         |
| 2                   | MS-2-140    | MS-2-140-Y  |
| 3                   | MS-3-140    | MS-3-140-Y  |
| 4                   | MS-4-140    | MS-4-140-Y  |
| 5                   | MS-5-140    | MS-5-140-Y  |
| 6                   | MS-6-140    | MS-6-140-Y  |
| 7                   | MS-7-140    | MS-7-140-Y  |
| 8                   | MS-8-140    | MS-8-140-Y  |
| 9                   | MS-9-140    | MS-9-140-Y  |
| 10                  | MS-10-140   | MS-10-140-Y |
| 11                  | MS-11-140   | MS-11-140-Y |
| 12                  | MS-12-140   | MS-12-140-Y |
| 13                  | MS-13-140   | MS-13-140-Y |
| 14                  | MS-14-140   | MS-14-140-Y |
| 15                  | MS-15-140   | MS-15-140-Y |
| 16                  | MS-16-140   | MS-16-140-Y |
| 17                  | MS-17-140   | MS-17-140-Y |
| 18                  | MS-18-140   | MS-18-140-Y |
| 19                  | MS-19-140   | MS-19-140-Y |
| 20                  | MS-20-140   | MS-20-140-Y |
| 21                  | MS-21-140   | MS-21-140-Y |

Use Standard Marker Strips for "3/4W" and "W" Solder Terminals.

Marketed exclusively through distribution.

## Barrier Blocks Series 540

.375 Density, 5-40 x 1/4"  
BH Screw, Closed Bottom,  
Double Row

# Cinch

### Electrical Characteristics

~~Voltage Rating: 600 Volts maximum~~

~~Current Rating: 15 Amps~~

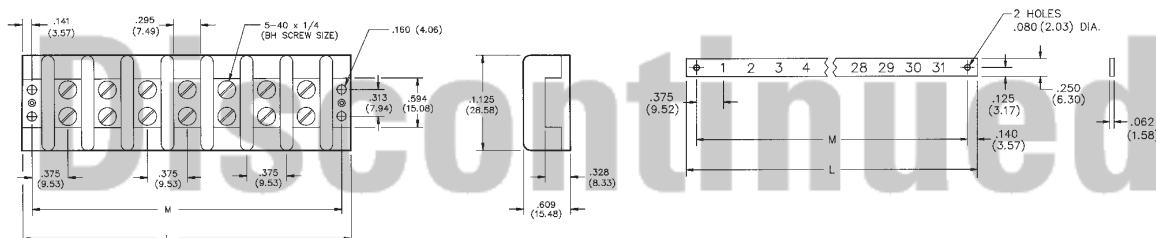
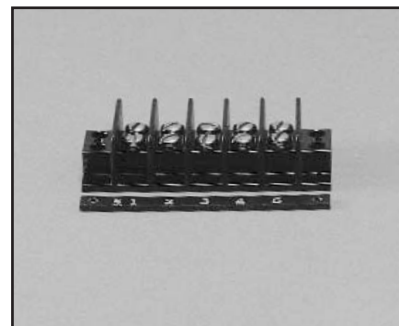
~~Maximum Watts Per Terminal: 3750~~

### Mechanical Characteristics

~~Maximum Wire Size: #16~~

~~Recommended Tightening Torque: 9 lb.-in.~~

### Dimensions



### Ordering Information

| No. of<br>Terminals | Catalog No. | "M"<br>Dim. (in) | "L"<br>Dim. (in) | Marker Strip<br>Catalog No. |
|---------------------|-------------|------------------|------------------|-----------------------------|
| 2                   | 2-540       | 1.125            | 1.407            | MSX-2-540                   |
| 3                   | 3-540       | 1.500            | 1.782            | MSX-3-540                   |
| 4                   | 4-540       | 1.875            | 2.157            | MSX-4-540                   |
| 5                   | 5-540       | 2.250            | 2.532            | MSX-5-540                   |
| 6                   | 6-540       | 2.625            | 2.907            | MSX-6-540                   |
| 7                   | 7-540       | 3.000            | 3.282            | MSX-7-540                   |
| 8                   | 8-540       | 3.375            | 3.657            | MSX-8-540                   |
| 9                   | 9-540       | 3.750            | 4.032            | MSX-9-540                   |
| 10                  | 10-540      | 4.125            | 4.407            | MSX-10-540                  |
| 11                  | 11-540      | 4.500            | 4.782            | MSX-11-540                  |
| 12                  | 12-540      | 4.875            | 5.157            | MSX-12-540                  |
| 13                  | 13-540      | 5.250            | 5.532            | MSX-13-540                  |
| 14                  | 14-540      | 5.625            | 5.907            | MSX-14-540                  |
| 15                  | 15-540      | 6.000            | 6.282            | MSX-15-540                  |
| 16                  | 16-540      | 6.375            | 6.657            | MSX-16-540                  |
| 17                  | 17-540      | 6.750            | 7.032            | MSX-17-540                  |
| 18                  | 18-540      | 7.125            | 7.407            | MSX-18-540                  |
| 19                  | 19-540      | 7.500            | 7.782            | MSX-19-540                  |
| 20                  | 20-540      | 7.875            | 8.157            | MSX-20-540                  |
| 21                  | 21-540      | 8.250            | 8.532            | MSX-21-540                  |
| 22                  | 22-540      | 8.625            | 8.907            | MSX-22-540                  |
| 23                  | 23-540      | 9.000            | 9.282            | MSX-23-540                  |
| 24                  | 24-540      | 9.375            | 9.657            | MSX-24-540                  |
| 25                  | 25-540      | 9.750            | 10.032           | MSX-25-540                  |
| 26                  | 26-540      | 10.125           | 10.407           | MSX-26-540                  |
| 27                  | 27-540      | 10.500           | 10.782           | MSX-27-540                  |
| 28                  | 28-540      | 10.875           | 11.157           | MSX-28-540                  |
| 29                  | 29-540      | 11.250           | 11.532           | MSX-29-540                  |
| 30                  | 30-540      | 11.625           | 11.907           | MSX-30-540                  |
| 31                  | 31-540      | 12.000           | 12.282           | MSX-31-540                  |

Marketed exclusively through distribution.

## Barrier Blocks Series 541

.438 Density, 6-32 x 1/4"  
BH Screw, Closed Bottom,  
Double Row

# Cinch

### Electrical Characteristics

~~Voltage Rating: 600 Volts maximum~~

~~Current Rating: 20 Amps~~

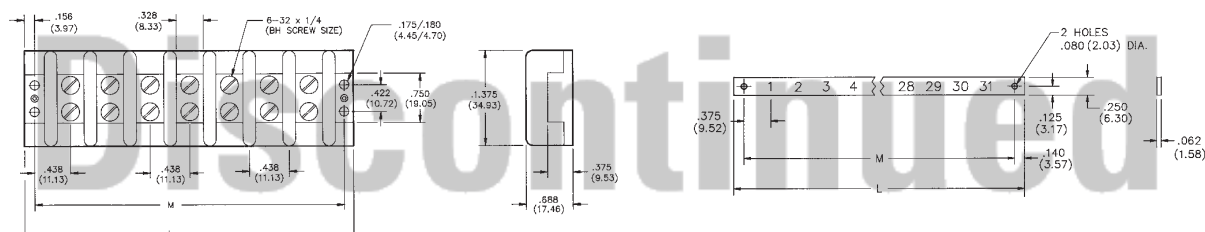
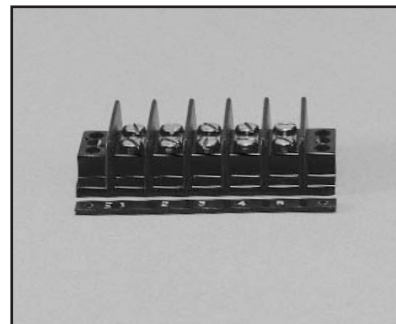
~~Maximum Watts Per Terminal: 5000~~

### Mechanical Characteristics

~~Maximum Wire Size: #14~~

~~Recommended Tightening Torque: 12 lb.-in.~~

### Dimensions



### Ordering Information

| No. of<br>Terminals | Catalog No. | "M"<br>Dim. (in) | "L"<br>Dim. (in) | Marker Strip<br>Catalog No. |
|---------------------|-------------|------------------|------------------|-----------------------------|
| 2                   | 2-541       | 1.314            | 1.626            | MSX-2-541                   |
| 3                   | 3-541       | 1.752            | 2.064            | MSX-3-541                   |
| 4                   | 4-541       | 2.190            | 2.502            | MSX-4-541                   |
| 5                   | 5-541       | 2.628            | 2.940            | MSX-5-541                   |
| 6                   | 6-541       | 3.066            | 3.378            | MSX-6-541                   |
| 7                   | 7-541       | 3.504            | 3.816            | MSX-7-541                   |
| 8                   | 8-541       | 3.942            | 4.254            | MSX-8-541                   |
| 9                   | 9-541       | 4.380            | 4.692            | MSX-9-541                   |
| 10                  | 10-541      | 4.818            | 5.130            | MSX-10-541                  |
| 11                  | 11-541      | 5.256            | 5.568            | MSX-11-541                  |
| 12                  | 12-541      | 5.694            | 6.006            | MSX-12-541                  |
| 13                  | 13-541      | 6.132            | 6.444            | MSX-13-541                  |
| 14                  | 14-541      | 6.570            | 6.882            | MSX-14-541                  |
| 15                  | 15-541      | 7.008            | 7.320            | MSX-15-541                  |
| 16                  | 16-541      | 7.446            | 7.758            | MSX-16-541                  |
| 17                  | 17-541      | 7.884            | 8.196            | MSX-17-541                  |
| 18                  | 18-541      | 8.322            | 8.634            | MSX-18-541                  |
| 19                  | 19-541      | 8.760            | 9.072            | MSX-19-541                  |
| 20                  | 20-541      | 9.198            | 9.510            | MSX-20-541                  |
| 21                  | 21-541      | 9.636            | 9.948            | MSX-21-541                  |
| 22                  | 22-541      | 10.074           | 10.386           | MSX-22-541                  |
| 23                  | 23-541      | 10.512           | 10.824           | MSX-23-541                  |
| 24                  | 24-541      | 10.950           | 11.262           | MSX-24-541                  |
| 25                  | 25-541      | 11.388           | 11.700           | MSX-25-541                  |
| 26                  | 26-541      | 11.826           | 12.138           | MSX-26-541                  |
| 27                  | 27-541      | 12.264           | 12.576           | MSX-27-541                  |
| 28                  | 28-541      | 12.702           | 13.014           | MSX-28-541                  |
| 29                  | 29-541      | 13.140           | 13.452           | MSX-29-541                  |
| 30                  | 30-541      | 13.578           | 13.890           | MSX-30-541                  |

Marketed exclusively through distribution.

## Barrier Blocks Series 542

.563 Density, 8-32 x 5/16"  
BH Screw, Closed Bottom,  
Double Row

# Cinch

### Electrical Characteristics

**Voltage Rating:** 600 Volts maximum

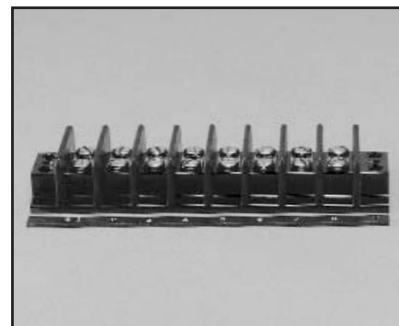
**Current Rating:** 30 Amps

**Maximum Watts Per Terminal:** 7500

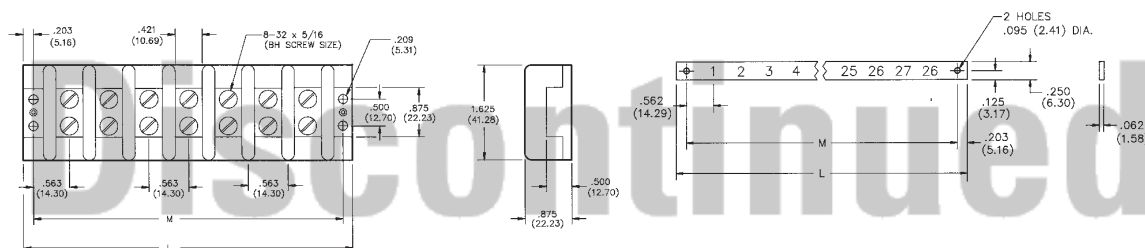
### Mechanical Characteristics

**Maximum Wire Size:** #10

**Recommended Tightening Torque:** 16 lb.-in.



### Dimensions



### Ordering Information

| No. of<br>Terminals | Catalog No. | "M"<br>Dim. (in) | "L"<br>Dim. (in) | Marker Strip<br>Catalog No. |
|---------------------|-------------|------------------|------------------|-----------------------------|
| 2                   | 2-542       | 1.689            | 2.095            | MSX-2-542                   |
| 3                   | 3-542       | 2.252            | 2.658            | MSX-3-542                   |
| 4                   | 4-542       | 2.815            | 3.221            | MSX-4-542                   |
| 5                   | 5-542       | 3.378            | 3.784            | MSX-5-542                   |
| 6                   | 6-542       | 3.941            | 4.347            | MSX-6-542                   |
| 7                   | 7-542       | 4.504            | 4.910            | MSX-7-542                   |
| 8                   | 8-542       | 5.067            | 5.473            | MSX-8-542                   |
| 9                   | 9-542       | 5.630            | 6.036            | MSX-9-542                   |
| 10                  | 10-542      | 6.193            | 6.599            | MSX-10-542                  |
| 11                  | 11-542      | 6.756            | 7.162            | MSX-11-542                  |
| 12                  | 12-542      | 7.319            | 7.725            | MSX-12-542                  |
| 13                  | 13-542      | 7.882            | 8.288            | MSX-13-542                  |
| 14                  | 14-542      | 8.445            | 8.851            | MSX-14-542                  |
| 15                  | 15-542      | 9.008            | 9.414            | MSX-15-542                  |
| 16                  | 16-542      | 9.571            | 9.977            | MSX-16-542                  |
| 17                  | 17-542      | 10.134           | 10.540           | MSX-17-542                  |
| 18                  | 18-542      | 10.697           | 11.103           | MSX-18-542                  |
| 19                  | 19-542      | 11.260           | 11.666           | MSX-19-542                  |
| 20                  | 20-542      | 11.823           | 12.229           | MSX-20-542                  |
| 21                  | 21-542      | 12.386           | 12.792           | MSX-21-542                  |
| 22                  | 22-542      | 12.949           | 13.355           | MSX-22-542                  |
| 23                  | 23-542      | 13.512           | 13.918           | MSX-23-542                  |
| 24                  | 24-542      | 14.075           | 14.481           | MSX-24-542                  |
| 25                  | 25-542      | 14.638           | 15.044           | MSX-25-542                  |
| 26                  | 26-542      | 15.201           | 15.607           | MSX-26-542                  |

Marketed exclusively through distribution.

## Barrier Blocks Series 176

.375 Density, 5-40 x 3/16"  
BH Screw, Dip Solder,  
Single Row

# Cinch

### Electrical Characteristics

~~Voltage Rating: 250 Volts maximum~~

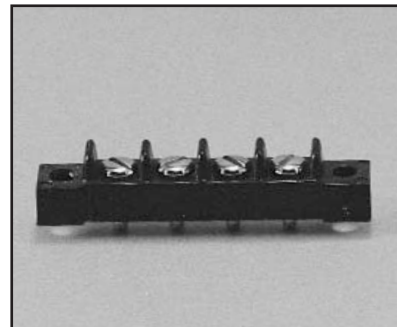
~~Current Rating: 15 Amps maximum~~

~~Maximum Watts Per Terminal: 3750~~

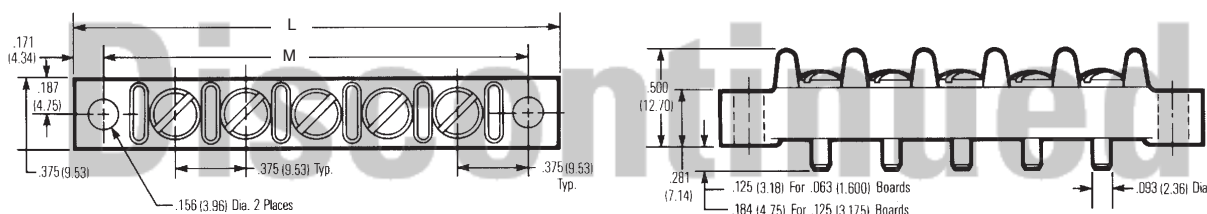
### Mechanical Characteristics

~~Maximum Wire Size: 16 AWG~~

~~Recommended Tightening Torque: 16 lb.-in.~~



### Dimensions



### Ordering Information

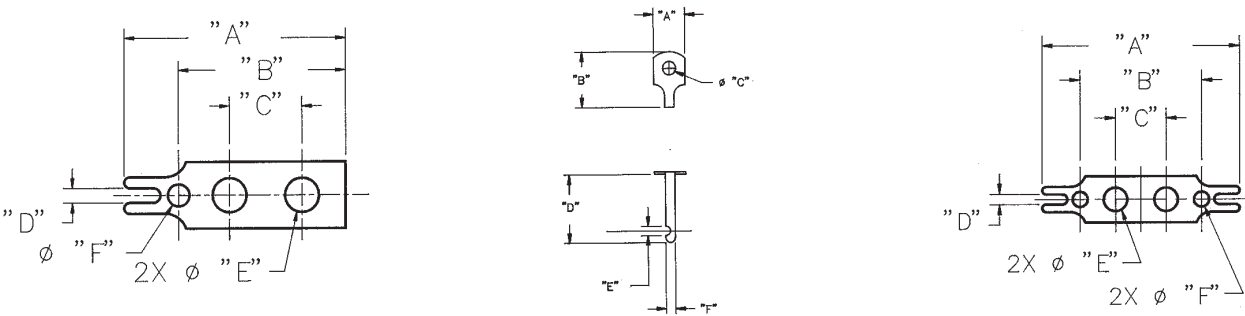
| No. of<br>Terminals | With Mounting Ears            |                               | "M"<br>Dimension | "L"<br>Dimension |
|---------------------|-------------------------------|-------------------------------|------------------|------------------|
|                     | Catalog No.<br>.125 Tail Lgth | Catalog No.<br>.184 Tail Lgth |                  |                  |
| 2                   | 2-176-2                       | 2-176-3                       | 1.125            | 1.469            |
| 3                   | 3-176-2                       | 3-176-3                       | 1.500            | 1.844            |
| 4                   | 4-176-2                       | 4-176-3                       | 1.875            | 2.219            |
| 5                   | 5-176-2                       | 5-176-3                       | 2.250            | 2.594            |
| 6                   | 6-176-2                       | 6-176-3                       | 2.625            | 2.969            |
| 7                   | 7-176-2                       | 7-176-3                       | 3.000            | 3.344            |
| 8                   | 8-176-2                       | 8-176-3                       | 3.375            | 3.719            |
| 9                   | 9-176-2                       | 9-176-3                       | 3.750            | 4.094            |
| 10                  | 10-176-2                      | 10-176-3                      | 4.125            | 4.469            |

| No. of<br>Terminals | Without Mounting Ears         |                               | "L"<br>Dimension |
|---------------------|-------------------------------|-------------------------------|------------------|
|                     | Catalog No.<br>.125 Tail Lgth | Catalog No.<br>.184 Tail Lgth |                  |
| 2                   | 2-176-2A                      | 2-176-3A                      | .719             |
| 3                   | 3-176-2A                      | 3-176-3A                      | 1.094            |
| 4                   | 4-176-2A                      | 4-176-3A                      | 1.469            |
| 5                   | 5-176-2A                      | 5-176-3A                      | 1.844            |
| 6                   | 6-176-2A                      | 6-176-3A                      | 2.219            |
| 7                   | 7-176-2A                      | 7-176-3A                      | 2.594            |
| 8                   | 8-176-2A                      | 8-176-3A                      | 2.969            |
| 9                   | 9-176-2A                      | 9-176-3A                      | 3.344            |
| 10                  | 10-176-2A                     | 10-176-3A                     | 3.719            |
| 11                  | 11-176-2A                     | 11-176-3A                     | 4.094            |
| 12                  | 12-176-2A                     | 12-176-3A                     | 4.469            |

Marketed exclusively through distribution.

Solder Terminals  
3/4W, Y, and W

Optional Terminals for use with Cinch terminal blocks.  
See chart for type and dimensions. (Below)



Ordering Information

~~"3/4 W" Terminals - Dimensions~~

| Catalog<br>Number | A     |       | B    |       | C    |       | D    |      | E    |      | F    |      |
|-------------------|-------|-------|------|-------|------|-------|------|------|------|------|------|------|
|                   | in    | mm    | in   | mm    | in   | mm    | in   | mm   | in   | mm   | in   | mm   |
| 3/4W-140          | .953  | 24.21 | .719 | 18.20 | .312 | 7.92  | .062 | 1.57 | .146 | 3.71 | .094 | 2.39 |
| 3/4W-141          | 1.156 | 29.36 | .680 | 17.27 | .422 | 10.72 | .078 | 1.98 | .152 | 3.86 | .125 | 3.18 |
| 3/4W-142          | 1.422 | 36.11 | .797 | 20.24 | .500 | 12.70 | .094 | 2.39 | .177 | 4.50 | .125 | 3.18 |

"Y" Terminals - Dimensions

| Catalog<br>Number | A    |       | B    |       | C    |      | D    |       | E    |      | F    |      |
|-------------------|------|-------|------|-------|------|------|------|-------|------|------|------|------|
|                   | in   | mm    | in   | mm    | in   | mm   | in   | mm    | in   | mm   | in   | mm   |
| Y-140             | .281 | 7.14  | .500 | 12.70 | .136 | 3.45 | .593 | 15.06 | .093 | 2.36 | .091 | 2.31 |
| Y-141             | .312 | 7.92  | .625 | 15.88 | .152 | 3.86 | .781 | 19.83 | .125 | 3.18 | .103 | 2.62 |
| Y-142             | .421 | 10.69 | .734 | 18.64 | .177 | 4.50 | .906 | 23.01 | .125 | 3.18 | .126 | 3.20 |

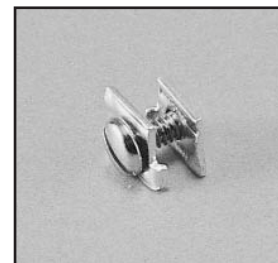
~~"W" Terminals - Dimensions~~

| Catalog<br>Number | A     |       | B     |       | C    |       | D    |      | E    |      | F    |      |
|-------------------|-------|-------|-------|-------|------|-------|------|------|------|------|------|------|
|                   | in    | mm    | in    | mm    | in   | mm    | in   | mm   | in   | mm   | in   | mm   |
| W-140             | 1.219 | 30.96 | .750  | 19.05 | .312 | 7.92  | .063 | 1.60 | .146 | 3.71 | .094 | 2.39 |
| W-141             | 1.563 | 39.70 | .938  | 23.83 | .422 | 10.72 | .078 | 1.98 | .152 | 3.86 | .125 | 3.18 |
| W-142             | 1.875 | 47.63 | 1.094 | 27.79 | .500 | 12.70 | .094 | 2.39 | .177 | 4.50 | .125 | 3.18 |

Marketed exclusively through distribution.

## Quick Clamp Terminals

Simplifies engaging of wires to barrier blocks. Wire is inserted into flared opening and screw is tightened. Screws are brass binder head type with nickel plating. Terminals are brass with tin plating. Includes two mating clamps and one screw.



QC-1  
Shown

## Ordering Information

| Barrier Block Series | Catalog No. | Screw Size | Wire Gauge Range AWG |
|----------------------|-------------|------------|----------------------|
| 141, <del>541</del>  | QC-1        | 6-32x5/16" | 12 thru 22           |
| 142, <del>542</del>  | QC-2        | 8-32x3/8"  | 10 thru 16           |

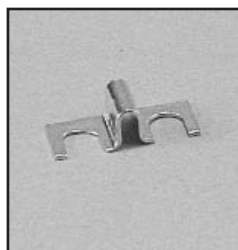
## Jumpers

For connecting between adjacent terminals or alternate terminals. All jumpers are brass with nickel plating.

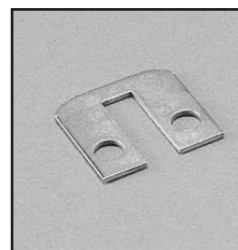
## Ordering Information

| Barrier Block Series | Type | Catalog No.       |
|----------------------|------|-------------------|
| 140                  | A    | 140J-1            |
| <del>141</del>       | B    | <del>141J-1</del> |
| 141                  | F    | 141J              |
| 142                  | F    | 95B               |
| 142, <del>542</del>  | D    | 142J-1*           |
| 142, <del>542</del>  | E    | 142J-2            |
| <del>540</del>       | C    | <del>540J</del>   |
| <del>541</del>       | C    | <del>541J</del>   |
| <del>542</del>       | C    | <del>542J</del>   |

\* Connects two alternate terminals



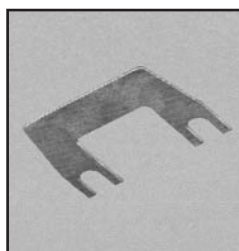
Type A



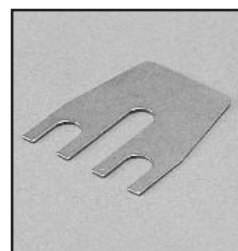
Type B



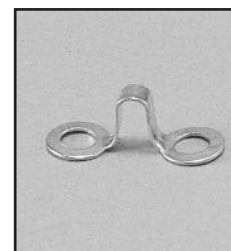
Type C



Type D



Type E



Type F

### FEATURES

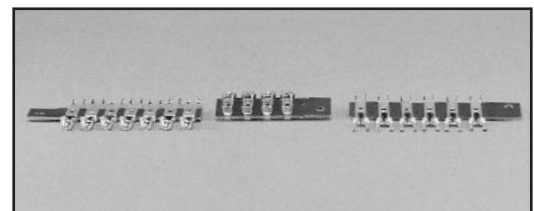
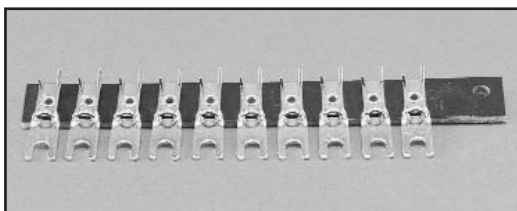
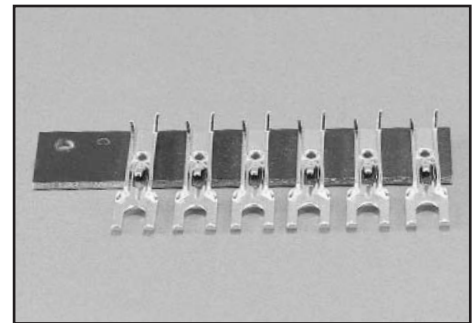
- *Minimize wiring errors.*
- *Available in straight and right-angle styles.*
- *Available with cable clamp hole on right or left side, designated by "L" or "R" at end of catalog number.*
- *Cable clamp hole for securing cable/wires with lacing twine or ty-wrap.*

### MATERIALS

**Insulation Material:** UL 94HB rated XPC, chocolate

**Contact Material:** Brass

**Contact Plating:** Cadmium

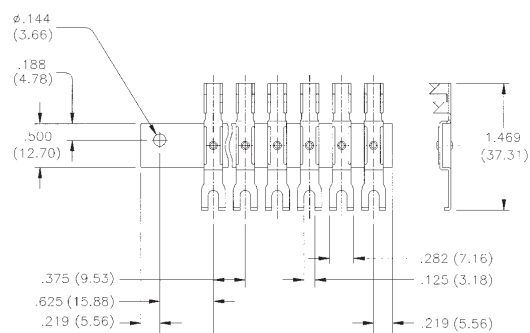


Marketed exclusively through distribution.

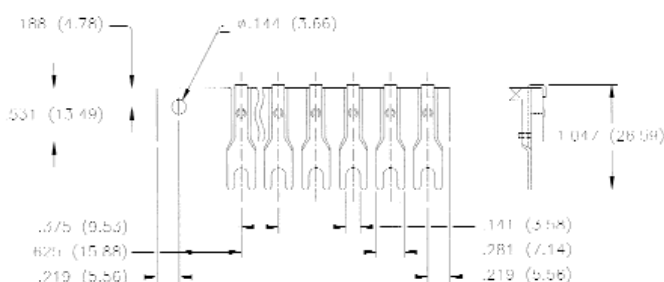
### Catalog Numbers and Dimensions for Fanning Strips for 140 Series Terminal Blocks

#### Straight Type

#### Dimensions



Catalog No. 6-160-R



Catalog No. 6-160B-R

#### Ordering Information

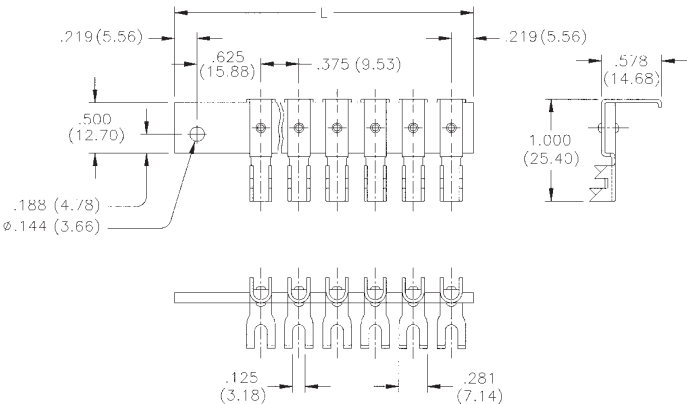
| No. of Terminals | Catalog No.         | Catalog No.         | Catalog No.          | Catalog No.          |
|------------------|---------------------|---------------------|----------------------|----------------------|
| 2                | <del>2-160-R</del>  | <del>2-160-L</del>  | <del>2-160B-R</del>  | <del>2-160B-L</del>  |
| 3                | <del>3-160-R</del>  | <del>3-160-L</del>  | <del>3-160B-R</del>  | <del>3-160B-L</del>  |
| 4                | <del>4-160-R</del>  | <del>4-160-L</del>  | <del>4-160B-R</del>  | <del>4-160B-L</del>  |
| 5                | <del>5-160-R</del>  | <del>5-160-L</del>  | <del>5-160B-R</del>  | <del>5-160B-L</del>  |
| 6                | <del>6-160-R</del>  | <del>6-160-L</del>  | <del>6-160B-R</del>  | <del>6-160B-L</del>  |
| 7                | <del>7-160-R</del>  | <del>7-160-L</del>  | <del>7-160B-R</del>  | <del>7-160B-L</del>  |
| 8                | <del>8-160-R</del>  | <del>8-160-L</del>  | <del>8-160B-R</del>  | <del>8-160B-L</del>  |
| 9                | <del>9-160-R</del>  | <del>9-160-L</del>  | <del>9-160B-R</del>  | <del>9-160B-L</del>  |
| 10               | <del>10-160-R</del> | <del>10-160-L</del> | <del>10-160B-R</del> | <del>10-160B-L</del> |
| 11               | <del>11-160-R</del> | <del>11-160-L</del> | <del>11-160B-R</del> | <del>11-160B-L</del> |
| 12               | <del>12-160-R</del> | <del>12-160-L</del> | <del>12-160B-R</del> | <del>12-160B-L</del> |
| 13               | <del>13-160-R</del> | <del>13-160-L</del> | <del>13-160B-R</del> | <del>13-160B-L</del> |
| 14               | <del>14-160-R</del> | <del>14-160-L</del> | <del>14-160B-R</del> | <del>14-160B-L</del> |
| 15               | <del>15-160-R</del> | <del>15-160-L</del> | <del>15-160B-R</del> | <del>15-160B-L</del> |
| 16               | <del>16-160-R</del> | <del>16-160-L</del> | <del>16-160B-R</del> | <del>16-160B-L</del> |
| 17               | <del>17-160-R</del> | <del>17-160-L</del> | <del>17-160B-R</del> | <del>17-160B-L</del> |
| 18               | <del>18-160-R</del> | <del>18-160-L</del> | <del>18-160B-R</del> | <del>18-160B-L</del> |
| 19               | <del>19-160-R</del> | <del>19-160-L</del> | <del>19-160B-R</del> | <del>19-160B-L</del> |
| 20               | <del>20-160-R</del> | <del>20-160-L</del> | <del>20-160B-R</del> | <del>20-160B-L</del> |
| 21               | <del>21-160-R</del> | <del>21-160-L</del> | <del>21-160B-R</del> | <del>21-160B-L</del> |

Marketed exclusively through distribution.

Catalog Numbers and Dimensions for Fanning Strips for 140 Series Terminal Blocks, Continued

Right-Angle Type

Dimensions



Catalog No. 6-160A-R

Ordering Information

| No. of Terminals | Catalog No. | Catalog No. |
|------------------|-------------|-------------|
| 2                | 2-160A-R    | 2-160A-L    |
| 3                | 3-160A-R    | 3-160A-L    |
| 4                | 4-160A-R    | 4-160A-L    |
| 5                | 5-160A-R    | 5-160A-L    |
| 6                | 6-160A-R    | 6-160A-L    |
| 7                | 7-160A-R    | 7-160A-L    |
| 8                | 8-160A-R    | 8-160A-L    |
| 9                | 9-160A-R    | 9-160A-L    |
| 10               | 10-160A-R   | 10-160A-L   |
| 11               | 11-160A-R   | 11-160A-L   |
| 12               | 12-160A-R   | 12-160A-L   |
| 13               | 13-160A-R   | 13-160A-L   |
| 14               | 14-160A-R   | 14-160A-L   |
| 15               | 15-160A-R   | 15-160A-L   |
| 16               | 16-160A-R   | 16-160A-L   |
| 17               | 17-160A-R   | 17-160A-L   |
| 18               | 18-160A-R   | 18-160A-L   |
| 19               | 19-160A-R   | 19-160A-L   |
| 20               | 20-160A-R   | 20-160A-L   |
| 21               | 21-160A-R   | 21-160A-L   |

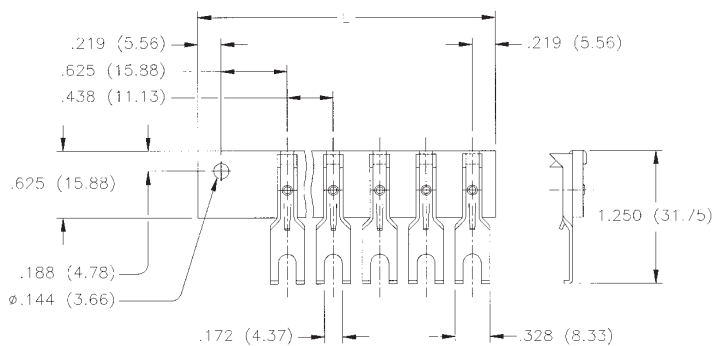
Marketed exclusively through distribution.

## Catalog Numbers and Dimensions for Fanning Strips for 141 Series Terminal Blocks

### Straight Type

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 2                   | 2-161-R     | 2-161-L     |
| 3                   | 3-161-R     | 3-161-L     |
| 4                   | 4-161-R     | 4-161-L     |
| 5                   | 5-161-R     | 5-161-L     |
| 6                   | 6-161-R     | 6-161-L     |
| 7                   | 7-161-R     | 7-161-L     |
| 8                   | 8-161-R     | 8-161-L     |
| 9                   | 9-161-R     | 9-161-L     |
| 10                  | 10-161-R    | 10-161-L    |
| 11                  | 11-161-R    | 11-161-L    |
| 12                  | 12-161-R    | 12-161-L    |
| 13                  | 13-161-R    | 13-161-L    |
| 14                  | 14-161-R    | 14-161-L    |
| 15                  | 15-161-R    | 15-161-L    |
| 16                  | 16-161-R    | 16-161-L    |
| 17                  | 17-161-R    | 17-161-L    |
| 18                  | 18-161-R    | 18-161-L    |
| 19                  | 19-161-R    | 19-161-L    |
| 20                  | 20-161-R    | 20-161-L    |

### Dimensions

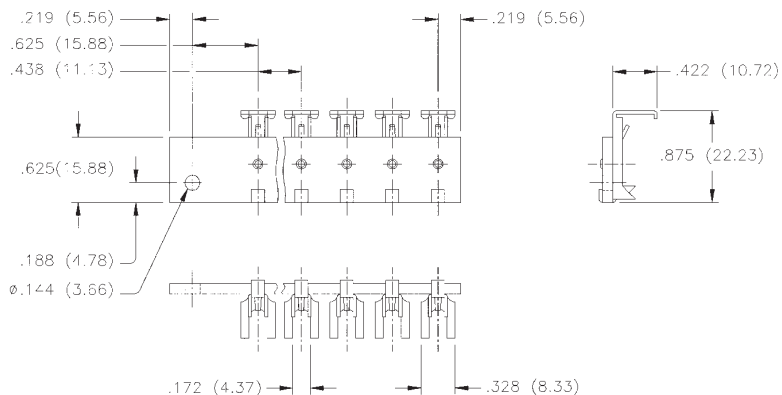


Catalog No. 5-161-R

### Right-Angle Type

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 2                   | 2-161A-R    | 2-161A-L    |
| 3                   | 3-161A-R    | 3-161A-L    |
| 4                   | 4-161A-R    | 4-161A-L    |
| 5                   | 5-161A-R    | 5-161A-L    |
| 6                   | 6-161A-R    | 6-161A-L    |
| 7                   | 7-161A-R    | 7-161A-L    |
| 8                   | 8-161A-R    | 8-161A-L    |
| 9                   | 9-161A-R    | 9-161A-L    |
| 10                  | 10-161A-R   | 10-161A-L   |
| 11                  | 11-161A-R   | 11-161A-L   |
| 12                  | 12-161A-R   | 12-161A-L   |
| 13                  | 13-161A-R   | 13-161A-L   |
| 14                  | 14-161A-R   | 14-161A-L   |
| 15                  | 15-161A-R   | 15-161A-L   |
| 16                  | 16-161A-R   | 16-161A-L   |
| 17                  | 17-161A-R   | 17-161A-L   |
| 18                  | 18-161A-R   | 18-161A-L   |
| 19                  | 19-161A-R   | 19-161A-L   |
| 20                  | 20-161A-R   | 20-161A-L   |

### Dimensions



Catalog No. 5-161A-R

Marketed exclusively through distribution.

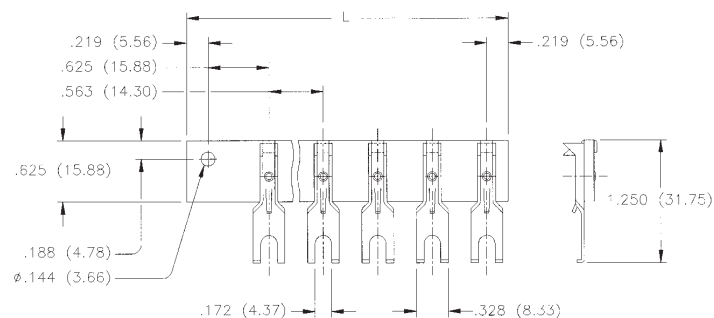
### Catalog Numbers and Dimensions for Fanning Strips for 142 Series Barrier Blocks

#### Straight Type

#### Ordering Information

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 2                   | 2-162-R     | 2-162-L     |
| 3                   | 3-162-R     | 3-162-L     |
| 4                   | 4-162-R     | 4-162-L     |
| 5                   | 5-162-R     | 5-162-L     |
| 6                   | 6-162-R     | 6-162-L     |
| 7                   | 7-162-R     | 7-162-L     |
| 8                   | 8-162-R     | 8-162-L     |
| 9                   | 9-162-R     | 9-162-L     |
| 10                  | 10-162-R    | 10-162-L    |
| 11                  | 11-162-R    | 11-162-L    |
| 12                  | 12-162-R    | 12-162-L    |
| 13                  | 13-162-R    | 13-162-L    |
| 14                  | 14-162-R    | 14-162-L    |
| 15                  | 15-162-R    | 15-162-L    |
| 16                  | 16-162-R    | 16-162-L    |
| 17                  | 17-162-R    | 17-162-L    |

#### Dimensions



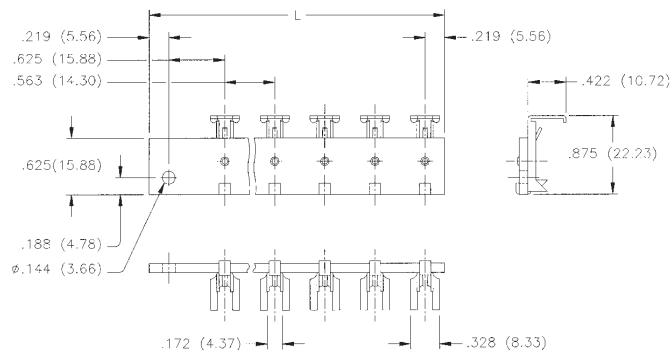
Catalog No. 5-162-R

#### Right-Angle Type

#### Ordering Information

| No. of<br>Terminals | Catalog No. | Catalog No. |
|---------------------|-------------|-------------|
| 2                   | 2-162A-R    | 2-162A-L    |
| 3                   | 3-162A-R    | 3-162A-L    |
| 4                   | 4-162A-R    | 4-162A-L    |
| 5                   | 5-162A-R    | 5-162A-L    |
| 6                   | 6-162A-R    | 6-162A-L    |
| 7                   | 7-162A-R    | 7-162A-L    |
| 8                   | 8-162A-R    | 8-162A-L    |
| 9                   | 9-162A-R    | 9-162A-L    |
| 10                  | 10-162A-R   | 10-162A-L   |
| 11                  | 11-162A-R   | 11-162A-L   |
| 12                  | 12-162A-R   | 12-162A-L   |
| 13                  | 13-162A-R   | 13-162A-L   |
| 14                  | 14-162A-R   | 14-162A-L   |
| 15                  | 15-162A-R   | 15-162A-L   |
| 16                  | 16-162A-R   | 16-162A-L   |
| 17                  | 17-162A-R   | 17-162A-L   |

#### Dimensions



Catalog No. 5-162A-R

Marketed exclusively through distribution.

### Materials

**Insulation Material:** UL 94 HB rated XPC, chocolate

**Contact Material:** Steel

**Contact Plating:** Cadmium

### Mechanical Characteristics

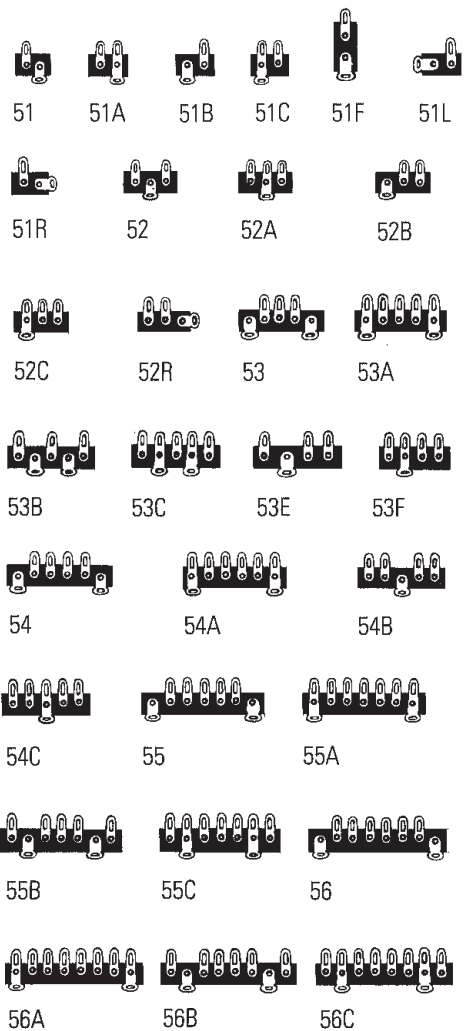
**Mounting Hole:** .140" (3.56mm) diameter

**Strip Dimension:** .0625" (1.59mm) thick x .375" (9.53mm) wide

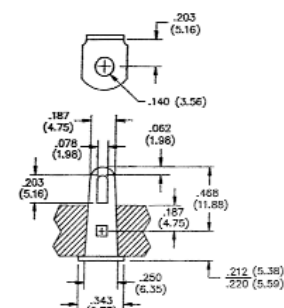
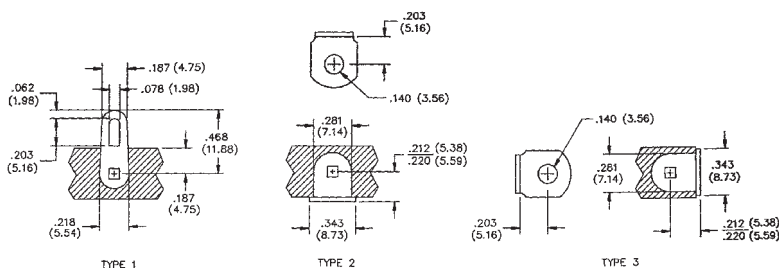
**Lug Density:** .375" (9.53mm)

### Ordering Information

| Catalog No. | Mounting Centers | Lug Type Used In Position |   |   |   |   |   |   |   |
|-------------|------------------|---------------------------|---|---|---|---|---|---|---|
|             |                  | 1                         | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 51          | -                | 1                         | 2 |   |   |   |   |   |   |
| 51A         | -                | 1                         | 4 |   |   |   |   |   |   |
| 51B         | -                | 2                         | 1 |   |   |   |   |   |   |
| 51C         | -                | 4                         | 1 |   |   |   |   |   |   |
| 51F         | -                | 1/2                       |   |   |   |   |   |   |   |
| 51L         | -                | 3                         | 1 |   |   |   |   |   |   |
| 51R         | -                | 1                         | 3 |   |   |   |   |   |   |
| 52          | -                | 1                         | 2 | 1 |   |   |   |   |   |
| 52A         | -                | 1                         | 4 | 1 |   |   |   |   |   |
| 52B         | -                | 2                         | 1 | 1 |   |   |   |   |   |
| 52C         | -                | 4                         | 1 | 1 |   |   |   |   |   |
| 52R         | -                | 1                         | 1 | 3 |   |   |   |   |   |
| 53          | 1.500 (38.10)    | 2                         | 1 | 1 | 1 | 2 |   |   |   |
| 53A         | 1.500 (38.10)    | 4                         | 1 | 1 | 1 | 4 |   |   |   |
| 53B         | .750 (19.05)     | 1                         | 2 | 1 | 2 | 1 |   |   |   |
| 53C         | .750 (19.05)     | 1                         | 4 | 1 | 4 | 1 |   |   |   |
| 53E         | -                | 1                         | 2 | 1 | 1 |   |   |   |   |
| 53F         | -                | 1                         | 4 | 1 | 1 |   |   |   |   |
| 54          | 1.875 (47.63)    | 2                         | 1 | 1 | 1 | 1 | 2 |   |   |
| 54A         | 1.875 (47.63)    | 4                         | 1 | 1 | 1 | 1 | 4 |   |   |
| 54B         | -                | 1                         | 1 | 2 | 1 | 1 |   |   |   |
| 54C         | -                | 1                         | 1 | 4 | 1 | 1 |   |   |   |
| 55          | 2.250 (57.15)    | 2                         | 1 | 1 | 1 | 1 | 1 | 2 |   |
| 55A         | 2.250 (57.15)    | 4                         | 1 | 1 | 1 | 1 | 1 | 4 |   |
| 55B         | 1.500 (38.10)    | 1                         | 2 | 1 | 1 | 1 | 2 | 1 |   |
| 55C         | 1.500 (38.10)    | 1                         | 4 | 1 | 1 | 1 | 4 | 1 |   |
| 56          | 2.625 (66.68)    | 2                         | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 56A         | 2.625 (66.68)    | 4                         | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| 56B         | 1.875 (47.63)    | 1                         | 2 | 1 | 1 | 1 | 1 | 2 | 1 |
| 56C         | 1.875 (47.63)    | 1                         | 4 | 1 | 1 | 1 | 1 | 4 | 1 |



### Dimensions



Marketed exclusively through distribution.

FEATURES

- Solder lug terminals with .093" x .062" (2.36mm x 1.57mm) wiring holes.
- Two-contact "Jones" connector is round, all others are rectangular.
- For use in cable-to-panel and cable-to-cable applications.
- Designed for light and medium duty.
- Plug prongs are .156" (3.96mm) wide and .047" (1.19mm) thick.
- Polarized to prevent wrong-way insertion.
- Plugs have projecting flat blades, sockets have recessed twin bellows.
- Cable clamps of zinc and clear irridite-plated steel used for strain relief.
- UL Recognized-file E170218 (UL 1977), E130965 (UL1863).
- CSA-LR31996.
- See Panel Cutout dimension on page (2-38).

MATERIALS

**Insulation Material:** Molded monoblock, general purpose phenolic, black UL94V-1

**Contact Material:** Plug: Brass  
Socket: Phosphor bronze

**Contact Plating:** Cadmium

**Operating Temperature:** Up to +105°C

**Hood Material:** UL 94V-0 rated thermoplastic



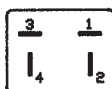
ELECTRICAL

**Operating Voltage:** 250 VAC RMS maximum  
**Current Rating:** 10 Amps  
**Contact Resistance:** 16 Milliohms maximum

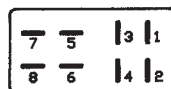
Polarizing Patterns - 300 Series



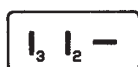
302



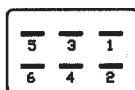
304



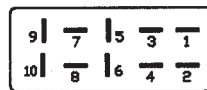
308



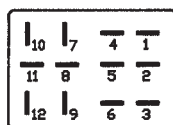
303



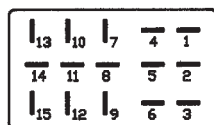
306



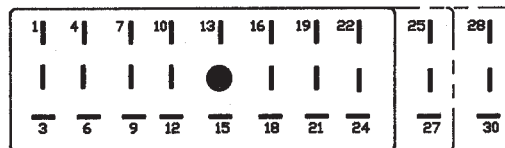
310



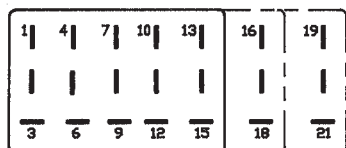
312



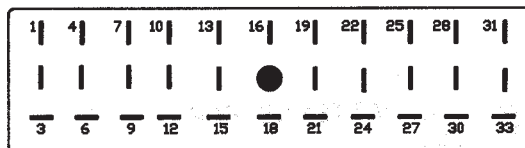
315-12



324,327,330



315,318,321

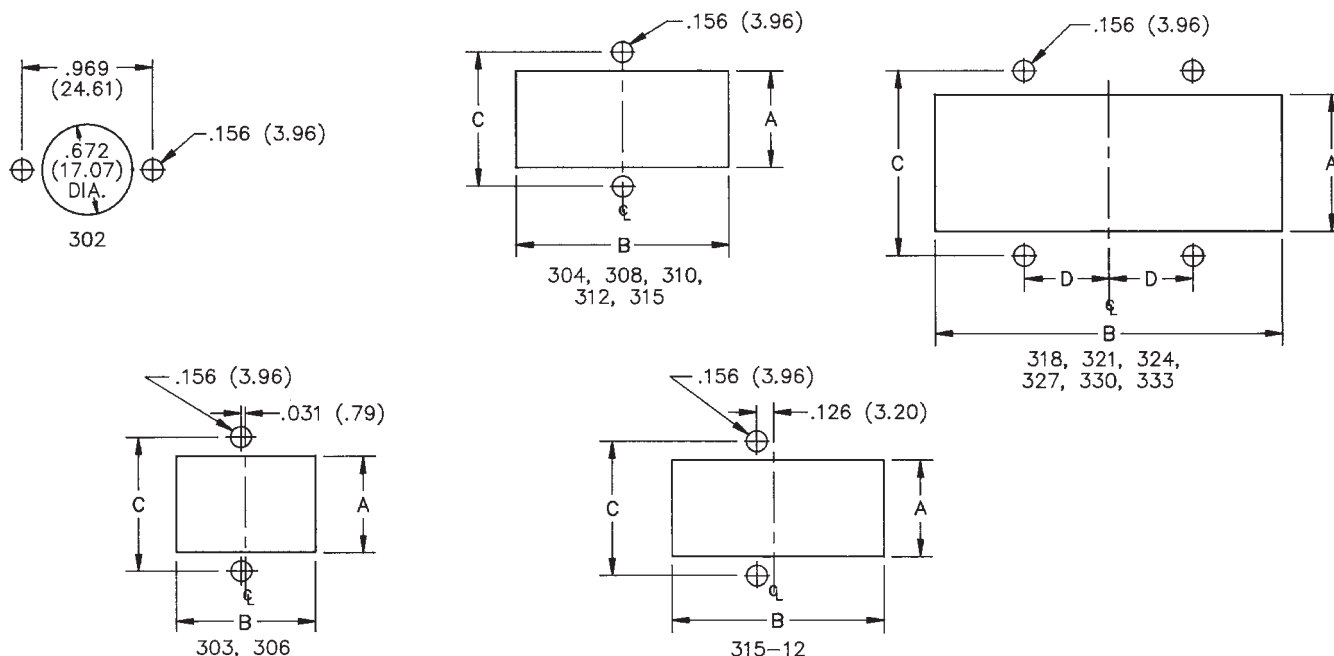


333

**Mounting Dimensions**

| Reference | A     |       | B     |       | C     |       | D     |       |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
|           | in    | mm    | in    | mm    | in    | mm    | in    | mm    |
| 303       | .453  | 11.51 | 1.016 | 25.81 | .750  | 19.05 | -     | -     |
| 304       | .719  | 18.26 | .781  | 19.84 | 1.000 | 25.40 | -     | -     |
| 306       | .719  | 18.26 | 1.031 | 26.19 | 1.000 | 25.40 | -     | -     |
| 308       | .719  | 18.26 | 1.281 | 32.54 | 1.000 | 25.40 | -     | -     |
| 310       | .719  | 18.26 | 1.578 | 40.08 | 1.000 | 25.40 | -     | -     |
| 312       | .953  | 24.21 | 1.266 | 32.16 | 1.250 | 31.75 | -     | -     |
| 315-12    | .953  | 24.21 | 1.516 | 38.51 | 1.250 | 31.75 | -     | -     |
| 315       | 1.016 | 25.81 | 1.641 | 41.68 | 1.375 | 34.93 | -     | -     |
| 318       | 1.016 | 25.81 | 1.953 | 49.61 | 1.375 | 34.93 | .625  | 15.88 |
| 321       | 1.016 | 25.81 | 2.266 | 57.56 | 1.375 | 34.93 | .469  | 11.91 |
| 324       | 1.016 | 25.81 | 2.578 | 65.48 | 1.375 | 34.93 | .625  | 15.88 |
| 327       | 1.016 | 25.81 | 2.891 | 73.43 | 1.375 | 34.93 | .781  | 19.84 |
| 330       | 1.016 | 25.81 | 3.203 | 81.36 | 1.375 | 34.93 | .938  | 23.83 |
| 333       | 1.016 | 25.81 | 3.516 | 89.31 | 1.375 | 34.93 | 1.094 | 27.79 |

NOTE: For 300 Series 2 through 33 contact angle bracket connectors. All mounting holes are .156" (3.96mm) dia. Maximum chassis thickness is .063" (1.59mm) for bottom mounting. Mounting holes are located on center line unless otherwise shown.



Marketed exclusively through distribution.

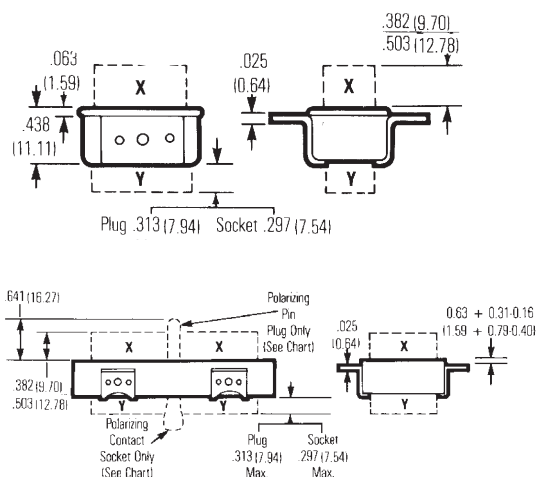
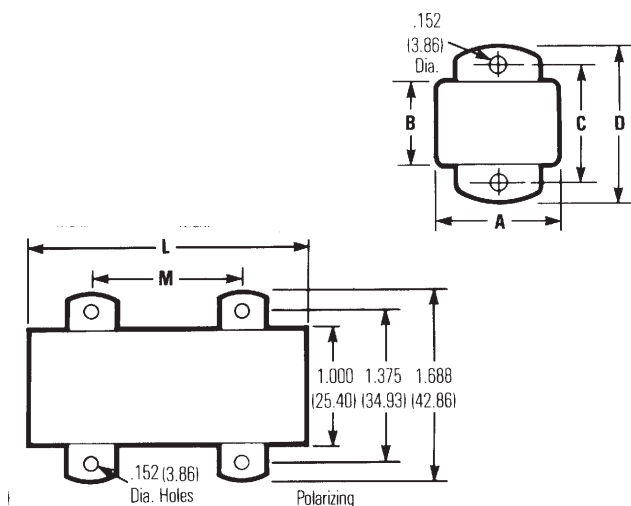
**Jones  
Plugs/Sockets  
Series 300**

Multiple Density  
Solder Eyelet With Angle  
Bracket/Less Angle Bracket



| With Angle Bracket |                     |                     | Less Angle Bracket |                      |                      |
|--------------------|---------------------|---------------------|--------------------|----------------------|----------------------|
| No. of Contacts    | Catalog No. Plug    | Catalog No. Socket  | No. of Contacts    | Catalog No. Plug     | Catalog No. Socket   |
| 2                  | P-302-AB            | S-302-AB            | 2                  | P-302-LAB            | S-302-LAB            |
| 3                  | P-303-AB            | S-303-AB            | 3                  | P-303-LAB            | S-303-LAB            |
| 4                  | P-304-AB            | S-304-AB            | 4                  | P-304-LAB            | S-304-LAB            |
| 6                  | P-306-AB            | S-306-AB            | 6                  | P-306-LAB            | S-306-LAB            |
| 8                  | N/A                 | N/A                 | 8                  | N/A                  | N/A                  |
| 10                 | <del>P-310-AB</del> | N/A                 | 10                 | P-310-LAB            | N/A                  |
| 12                 | <del>P-312-AB</del> | N/A                 | 12                 | P-312-LAB            | N/A                  |
| 15*                | N/A                 | S-315-12-AB         | 15                 | N/A                  | S-315-12-LAB         |
| 15                 | P-315-AB            | S-315-AB            | 15                 | P-315-LAB            | S-315-LAB            |
| 18                 | P-318-AB            | S-318-AB            | 18                 | <del>P-318-LAB</del> | <del>S-318-LAB</del> |
| 21                 | <del>P-321-AB</del> | <del>S-321-AB</del> | 21                 | <del>P-321-LAB</del> | <del>S-321-LAB</del> |
| 24                 | <del>P-324-AB</del> | <del>S-324-AB</del> | 24                 | <del>P-324-LAB</del> | <del>S-324-LAB</del> |
| 27                 | <del>P-327-AB</del> | <del>S-327-AB</del> | 27                 | <del>P-327-LAB</del> | <del>S-327-LAB</del> |
| 30                 | P-330-AB            | <del>S-330-AB</del> | 30                 | <del>P-330-LAB</del> | <del>S-330-LAB</del> |
| 33                 | <del>P-333-AB</del> | <del>S-333-AB</del> | 33                 | <del>P-333-LAB</del> | <del>S-333-LAB</del> |

X = length of plug contacts. This dimension does not apply to sockets.  
Y = length of plug or socket tails.



| No. of Contacts | A     |       | B    |       | C     |       | D     |       |
|-----------------|-------|-------|------|-------|-------|-------|-------|-------|
|                 | in    | mm    | in   | mm    | in    | mm    | in    | mm    |
| 2               | .656  | 16.67 | -    | -     | .969  | 24.61 | 1.219 | 30.96 |
| 3               | 1.000 | 25.40 | .438 | 11.11 | .750  | 19.05 | 1.062 | 26.99 |
| 4               | .750  | 19.05 | .688 | 17.46 | 1.000 | 25.40 | 1.312 | 33.34 |
| 6               | 1.000 | 25.40 | .688 | 17.46 | 1.000 | 25.40 | 1.312 | 33.34 |
| 8               | --    | --    | --   | --    | --    | --    | --    | --    |
| 10              | 1.562 | 39.69 | .688 | 17.46 | 1.000 | 25.40 | 1.312 | 33.34 |
| 12              | 1.250 | 31.75 | .938 | 23.81 | 1.250 | 31.75 | 1.562 | 39.69 |
| 15*             | 1.500 | 38.10 | .938 | 23.81 | 1.250 | 31.75 | 1.562 | 39.69 |

\*Special 15 contact arrangement to allow 12-position mating.

| Reference | L     |       | M        |       | Polarizing Pin |
|-----------|-------|-------|----------|-------|----------------|
|           | in    | mm    | in       | mm    |                |
| 15        | 1.625 | 41.28 | See note | -     | NO             |
| 18        | 1.938 | 49.23 | 1.250    | 31.75 | NO             |
| 21        | 2.250 | 57.15 | .938     | 23.81 | NO             |
| 24        | 2.563 | 65.10 | 1.250    | 31.75 | 14             |
| 27        | 2.875 | 73.03 | 1.562    | 39.69 | 14             |
| 30        | 3.188 | 80.98 | 1.875    | 47.63 | 14             |
| 33        | 3.500 | 88.90 | 2.188    | 55.58 | 17             |

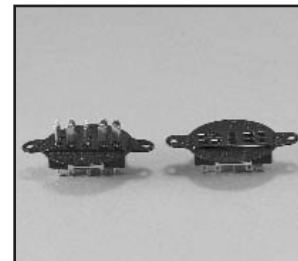
NOTE: 15-position plug and socket require only two mounting brackets, mounted on center of connector.

Marketed exclusively through distribution.

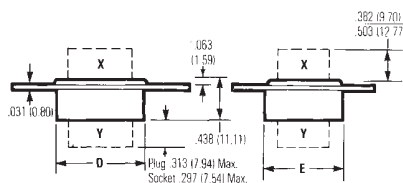
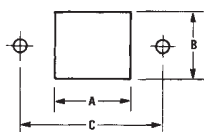
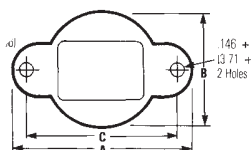
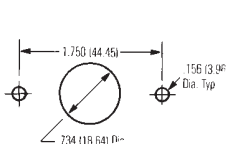
**300 Series with Flush Plate (FP)**

| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | P-302-FP            | S-302-FP              |
| 3                  | P-303-FP            | S-303-FP              |
| 4                  | P-304-FP            | S-304-FP              |
| 6                  | P-306-FP            | S-306-FP              |
| 8                  | N/A                 | N/A                   |
| 10                 | P-310-FP            | N/A                   |
| 12                 | P-312-FP            | N/A                   |

NOTE: Not available in contact sizes 15-33.



X = length of plug contacts. This dimension does not apply to sockets.  
Y = length of plug or socket tails.



**Dimensions - Plug or Socket**

| No. of<br>Contacts | A     |       | B     |       | C     |       | D     |       | E Max. |       |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
|                    | in    | mm    | in    | mm    | in    | mm    | in    | mm    | in     | mm    |
| 2                  | 2.063 | 52.40 | 1.250 | 31.75 | 1.750 | 44.45 | -     | -     | .719   | 18.26 |
| 3                  | 2.063 | 52.40 | 1.250 | 31.75 | 1.750 | 44.45 | .938  | 23.81 | .500   | 12.70 |
| 4                  | 2.063 | 52.40 | 1.250 | 31.75 | 1.750 | 44.45 | .688  | 17.46 | .750   | 19.05 |
| 6                  | 2.063 | 52.40 | 1.250 | 31.75 | 1.750 | 44.45 | .938  | 23.81 | .750   | 19.05 |
| 8                  | --    | --    | --    | --    | --    | --    | --    | --    | --     | --    |
| 10                 | 2.563 | 65.10 | 1.750 | 44.45 | 2.250 | 57.15 | 1.500 | 38.10 | .750   | 19.05 |
| 12                 | 2.563 | 65.10 | 1.750 | 44.45 | 2.250 | 57.15 | 1.188 | 30.16 | 1.000  | 25.40 |

**Panel Cutout Dimensions**

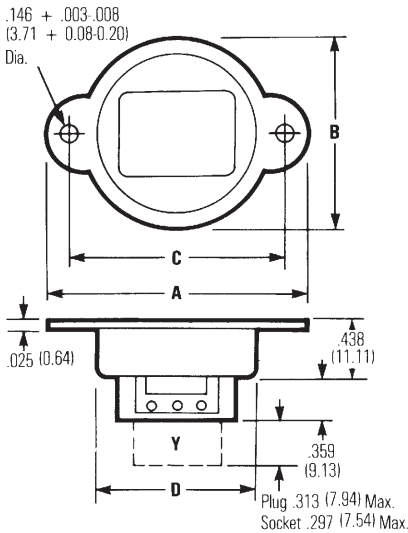
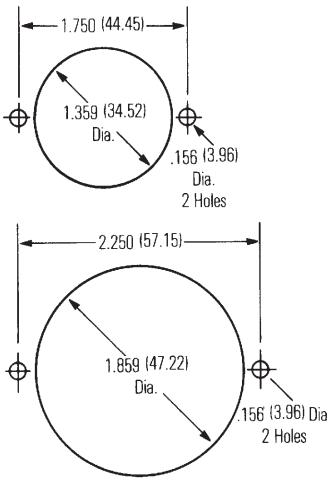
| Reference | A     |       | B     |       | C     |       |
|-----------|-------|-------|-------|-------|-------|-------|
|           | in    | mm    | in    | mm    | in    | mm    |
| 303-FP    | .953  | 24.21 | .516  | 13.11 | 1.750 | 44.45 |
| 304-FP    | .703  | 17.86 | .766  | 19.46 | 1.750 | 44.45 |
| 306-FP    | .953  | 24.21 | .766  | 19.46 | 1.750 | 44.45 |
| 308-FP    | --    | --    | --    | --    | --    | --    |
| 310-FP    | 1.516 | 38.51 | .766  | 19.46 | 2.250 | 57.15 |
| 312-FP    | 1.203 | 30.56 | 1.016 | 25.81 | 2.250 | 57.15 |



300 Series with Recessed Plate (RP)

| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | P-302-RP            | S-302-RP              |
| 3                  | P-303-RP            | S-303-RP              |
| 4                  | P-304-RP            | S-304-RP              |
| 6                  | P-306-RP            | S-306-RP              |
| 8                  | N/A                 | N/A                   |
| 10                 | <del>P-310-RP</del> | N/A                   |
| 12                 | <del>P-312-RP</del> | N/A                   |

NOTE: Not available in contact sizes 15-33.



Y = length of plug or socket tails.

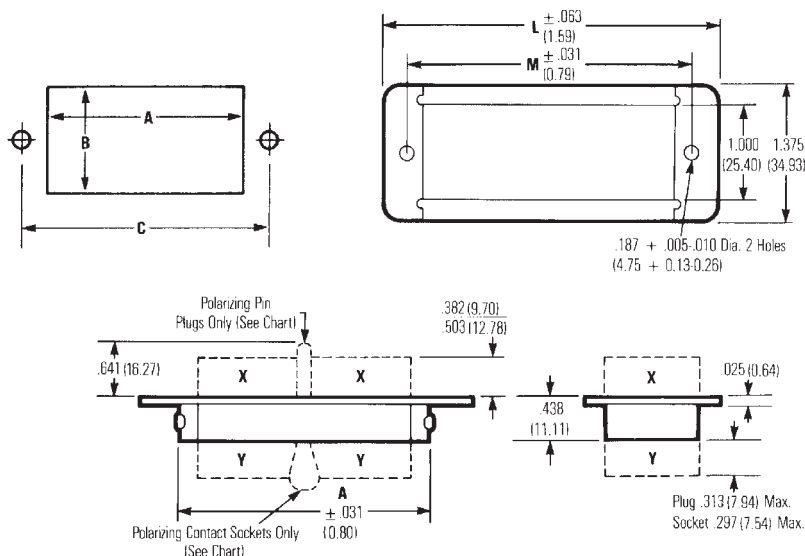
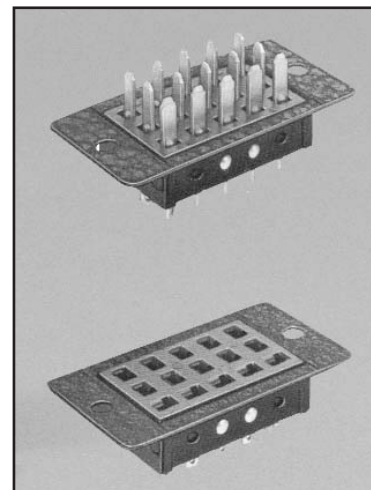
Dimensions

| No. of<br>Contacts | A     |       | B     |       | C     |       | D Max. |       |
|--------------------|-------|-------|-------|-------|-------|-------|--------|-------|
|                    | in    | mm    | in    | mm    | in    | mm    | in     | mm    |
| 2                  | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 1.350  | 34.29 |
| 3                  | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 1.350  | 34.29 |
| 4                  | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 1.350  | 34.29 |
| 6                  | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 1.350  | 34.29 |
| 8                  | --    | --    | --    | --    | --    | --    | --     | --    |
| 10                 | 2.563 | 65.10 | 2.000 | 50.80 | 2.250 | 57.15 | 1.850  | 46.99 |
| 12                 | 2.563 | 65.10 | 2.000 | 50.80 | 2.250 | 57.15 | 1.850  | 46.99 |

**300 Series with Shallow Bracket (SB)**

| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 15                 | P-315-SB            | S-315-SB              |
| 18                 | P-318-SB            | S-318-SB              |
| 21                 | P-321-SB            | S-321-SB              |
| 24                 | P-324-SB            | S-324-SB              |
| 27                 | P-327-SB            | S-327-SB              |
| 30                 | P-330-SB            | S-330-SB              |
| 33                 | P-333-SB            | S-333-SB              |

NOTE: Not available in contact sizes 2-12.



X = length of plug contacts. This dimension does not apply to sockets.  
Y = length of plug or socket tails.

**Dimensions**

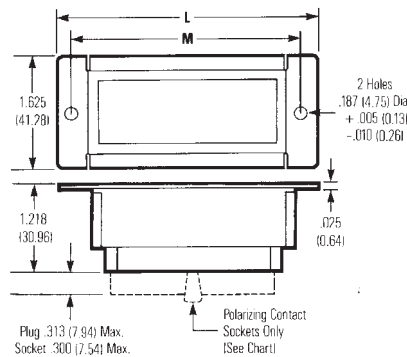
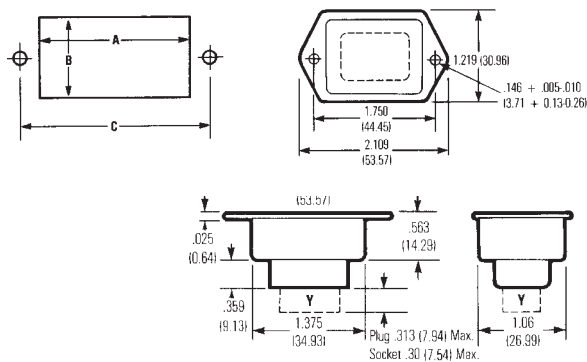
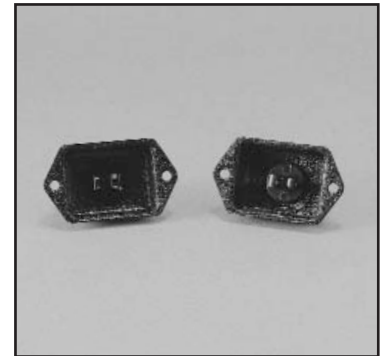
| No. of<br>Polarizing<br>Contacts | A           |               | M           |               | L           |                | Polarizing<br>Pin |
|----------------------------------|-------------|---------------|-------------|---------------|-------------|----------------|-------------------|
|                                  | ±.031<br>in | (.79mm)<br>mm | ±.031<br>in | (.79mm)<br>mm | ±.063<br>in | (1.59mm)<br>mm |                   |
| 15                               | 1.688       | 42.86         | 2.125       | 53.98         | 2.547       | 64.69          | NO                |
| 18                               | 2.000       | 50.80         | 2.438       | 61.93         | 2.859       | 72.62          | NO                |
| 21                               | 2.313       | 58.75         | 2.750       | 69.85         | 3.172       | 80.57          | NO                |
| 24                               | 2.625       | 66.68         | 2.063       | 52.40         | 3.484       | 88.49          | 14                |
| 27                               | 2.938       | 74.63         | 3.375       | 85.73         | 3.797       | 96.44          | 14                |
| 30                               | 3.250       | 82.55         | 3.688       | 93.68         | 4.109       | 104.38         | 14                |
| 33                               | 3.563       | 90.50         | 4.000       | 101.60        | 4.422       | 112.32         | 17                |

**Panel Cutout Dimensions**

| Reference | A     |       | B     |       | C     |        |
|-----------|-------|-------|-------|-------|-------|--------|
|           | in    | mm    | in    | mm    | in    | mm     |
| 315-SB    | 1.750 | 44.45 | 1.156 | 29.36 | 2.125 | 53.98  |
| 318-SB    | 2.063 | 52.40 | 1.156 | 29.36 | 2.438 | 61.93  |
| 321-SB    | 2.375 | 60.33 | 1.156 | 29.36 | 2.750 | 69.85  |
| 324-SB    | 2.688 | 68.28 | 1.156 | 29.36 | 3.062 | 77.77  |
| 327-SB    | 3.000 | 76.20 | 1.156 | 29.36 | 3.376 | 85.75  |
| 330-SB    | 3.313 | 84.15 | 1.156 | 29.36 | 3.688 | 93.68  |
| 333-SB    | 3.625 | 92.08 | 1.156 | 29.36 | 4.000 | 101.60 |

**300 Series Deep Bracket (DB)**

| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2               | P-302-DB         | S-302-DB           |
| 3               | P-303-DB         | S-303-DB           |
| 4               | P-304-DB         | S-304-DB           |
| 6               | P-306-DB         | S-306-DB           |
| 8               | N/A              | N/A                |
| 10              | N/A              | N/A                |
| 12              | P-312-DB         | N/A                |
| 15              | P-315-DB         | S-315-DB           |
| 18              | P-318-DB         | S-318-DB           |
| 21              | P-321-DB         | S-321-DB           |
| 24              | P-324-DB         | S-324-DB           |
| 27              | P-327-DB         | S-327-DB           |
| 30              | P-330-DB         | S-330-DB           |
| 33              | P-333-DB         | S-333-DB           |



**Dimensions**

Y = length of plug or socket tails.

| No. of Contacts | L<br>±.063 (1.60mm) |        | M<br>±.031 (.79mm) |        | Polarizing Pin |
|-----------------|---------------------|--------|--------------------|--------|----------------|
|                 | in                  | mm     | in                 | mm     |                |
| 15              | 2.813               | 71.44  | 2.375              | 60.33  | NO             |
| 18              | 3.125               | 79.38  | 2.688              | 68.28  | NO             |
| 21              | 3.437               | 87.31  | 3.000              | 76.20  | NO             |
| 24              | 3.750               | 95.25  | 3.313              | 84.15  | 14             |
| 27              | 4.063               | 103.19 | 3.625              | 92.08  | 14             |
| 30              | 4.375               | 111.13 | 3.938              | 100.03 | 14             |
| 33              | 4.688               | 119.06 | 4.250              | 107.95 | 17             |

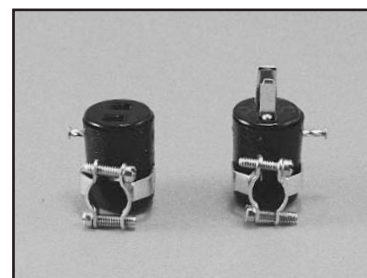
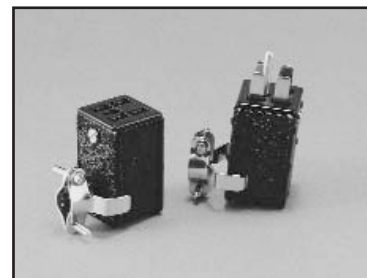
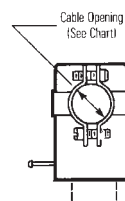
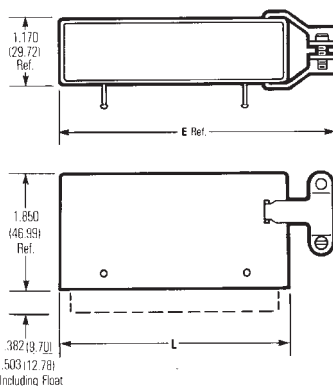
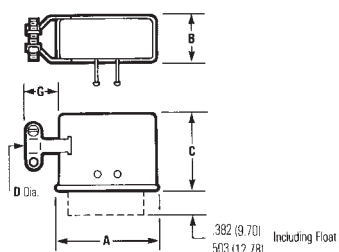
**Panel Cutout Dimensions**

| Reference   | A     |       | B     |       | C     |        |
|-------------|-------|-------|-------|-------|-------|--------|
|             | in    | mm    | in    | mm    | in    | mm     |
| 302-DB thru |       |       |       |       |       |        |
| 312-DB      | 1.453 | 36.91 | 1.125 | 28.58 | 1.750 | 38.10  |
| 315-DB      | 2.000 | 50.80 | 1.438 | 36.53 | 2.376 | 60.35  |
| 318-DB      | 2.313 | 58.75 | 1.438 | 36.53 | 2.688 | 68.28  |
| 321-DB      | 2.625 | 66.68 | 1.438 | 36.53 | 3.000 | 76.20  |
| 324-DB      | 2.938 | 74.63 | 1.438 | 36.53 | 3.312 | 84.12  |
| 327-DB      | 3.250 | 82.55 | 1.438 | 36.53 | 3.626 | 92.10  |
| 330-DB      | 3.562 | 90.47 | 1.438 | 36.53 | 3.938 | 100.03 |
| 333-DB      | 3.875 | 98.43 | 1.438 | 36.53 | 4.250 | 107.95 |

Marketed exclusively through distribution.

**300 Series with Hood and 90° Cable Clamp (CCE)**

| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | P-302-CCE           | S-302-CCE             |
| 3                  | P-303-CCE           | S-303-CCE             |
| 4                  | P-304-CCE           | S-304-CCE             |
| 6                  | P-306-CCE           | S-306-CCE             |
| 8                  | N/A                 | N/A                   |
| 10                 | P-310-CCE           | N/A                   |
| 12                 | P-312-CCE           | N/A                   |
| 15                 | P-315-CCE           | S-315-CCE             |
| 18                 | P-318-CCE           | S-318-CCE             |
| 21                 | P-321-CCE           | S-321-CCE             |
| 24                 | P-324-CCE           | S-324-CCE             |
| 27                 | P-327-CCE           | S-327-CCE             |
| 30                 | P-330-CCE           | S-330-CCE             |
| 33                 | P-333-CCE           | S-333-CCE             |



**Dimensions**

| No. of<br>Contacts | A $\pm .016$<br>(.41mm) |       | B $\pm .016$<br>(.41mm) |       | C $\pm .031$<br>(.79mm) |       | G    |       | Cable "D"<br>Opening |       |
|--------------------|-------------------------|-------|-------------------------|-------|-------------------------|-------|------|-------|----------------------|-------|
|                    | in                      | mm    | in                      | mm    | in                      | mm    | in   | mm    | in                   | mm    |
| 2                  | .691                    | 17.55 | -                       | -     | .953                    | 24.21 | .313 | 7.95  | .313                 | 7.95  |
| 3                  | 1.034                   | 26.26 | .472                    | 11.99 | .953                    | 24.21 | .344 | 8.74  | .250                 | 6.35  |
| 4                  | .786                    | 19.96 | .724                    | 18.39 | .953                    | 24.21 | .453 | 11.51 | .375                 | 9.53  |
| 6                  | 1.036                   | 26.31 | .724                    | 18.39 | .078                    | 27.38 | .469 | 11.91 | .438                 | 11.13 |
| 8                  | --                      | --    | --                      | --    | --                      | --    | --   | --    | --                   | --    |
| 10                 | 1.592                   | 40.44 | .720                    | 18.29 | 1.203                   | 30.56 | .359 | 9.12  | .500                 | 12.70 |
| 12                 | 1.286                   | 32.66 | .974                    | 24.74 | 1.203                   | 30.56 | .422 | 10.72 | .563                 | 14.30 |

| No. of<br>Contacts | E     |        | L     |       | Cable Opening |       | Polarizing<br>Pin |
|--------------------|-------|--------|-------|-------|---------------|-------|-------------------|
|                    | in    | mm     | in    | mm    | in            | mm    |                   |
| 15                 | 2.514 | 63.85  | 1.795 | 45.59 | .563          | 14.30 | NO                |
| 18                 | 2.826 | 71.78  | 2.107 | 53.52 | .563          | 14.30 | NO                |
| 21                 | 3.139 | 79.73  | 2.420 | 61.47 | .625          | 15.88 | NO                |
| 24                 | 3.451 | 87.66  | 2.732 | 69.39 | .625          | 15.88 | 14                |
| 27                 | 3.764 | 95.61  | 3.045 | 77.34 | .625          | 15.88 | 14                |
| 30                 | 4.076 | 103.53 | 3.357 | 85.27 | .750          | 19.05 | 14                |
| 33                 | 4.389 | 111.48 | 3.670 | 93.22 | .750          | 19.05 | 17                |

Marketed exclusively through distribution.

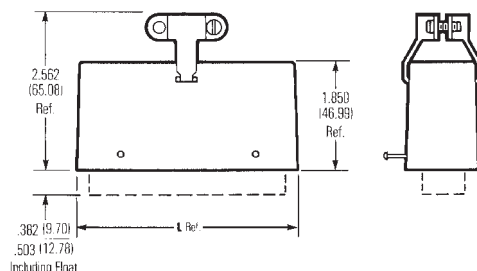
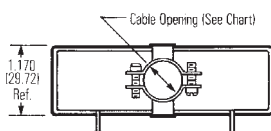
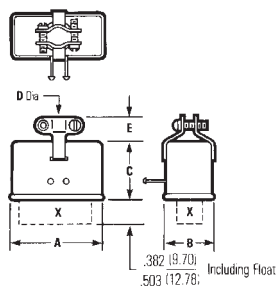
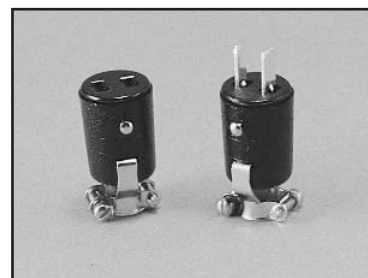
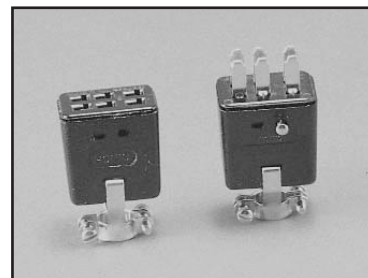
# Jones Plugs/Socket Series 300

Multiple Density  
Solder Eyelet  
With Hood & 180° Clamp

# Cinch

## 300 Series with Hood and 180° Cable Clamp (CCT)

| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | P-302-CCT           | S-302-CCT             |
| 3                  | P-303-CCT           | S-303-CCT             |
| 4                  | P-304-CCT           | S-304-CCT             |
| 6                  | P-306-CCT           | S-306-CCT             |
| 8                  | N/A                 | N/A                   |
| 10                 | P-310-CCT           | N/A                   |
| 12                 | P-312-CCT           | N/A                   |
| 15                 | P-315-CCT           | S-315-CCT             |
| 18                 | P-318-CCT           | S-318-CCT             |
| 21                 | P-321-CCT           | S-321-CCT             |
| 24                 | P-324-CCT           | S-324-CCT             |
| 27                 | P-327-CCT           | S-327-CCT             |
| 30                 | P-330-CCT           | S-330-CCT             |
| 33                 | P-333-CCT           | S-333-CCT             |



## Dimensions

| No. of<br>Contacts | A ±.016<br>(.41mm) |       | B ±.016<br>(.41mm) |       | C ±.031<br>(.79mm) |       | "D" Cable<br>Opening |       | E ±.031<br>(.79mm) |       |
|--------------------|--------------------|-------|--------------------|-------|--------------------|-------|----------------------|-------|--------------------|-------|
|                    | in                 | mm    | in                 | mm    | in                 | mm    | in                   | mm    | in                 | mm    |
| 2                  | .691               | 17.55 | -                  | -     | .953               | 24.21 | .375                 | 9.53  | .359               | 9.12  |
| 3                  | 1.034              | 26.26 | .472               | 11.99 | .953               | 24.21 | .313                 | 7.95  | .359               | 9.12  |
| 4                  | .786               | 19.96 | .724               | 18.39 | .953               | 24.21 | .375                 | 9.53  | .469               | 11.91 |
| 6                  | 1.036              | 26.31 | .724               | 18.39 | 1.078              | 27.38 | .438                 | 11.13 | .484               | 12.29 |
| 8                  | --                 | --    | --                 | --    | --                 | --    | --                   | --    | --                 | --    |
| 10                 | 1.592              | 40.44 | .720               | 18.29 | 1.203              | 30.56 | .500                 | 12.70 | .500               | 12.70 |
| 12                 | 1.286              | 32.66 | .974               | 24.74 | 1.203              | 30.56 | .563                 | 14.30 | .469               | 11.91 |

| No. of<br>Contacts | L     |       | Cable Opening |       | Polarizing<br>Pin |
|--------------------|-------|-------|---------------|-------|-------------------|
|                    | in    | mm    | in            | mm    |                   |
| 15                 | 1.795 | 45.59 | .563          | 14.30 | NO                |
| 18                 | 2.107 | 53.52 | .563          | 14.30 | NO                |
| 21                 | 2.420 | 61.47 | .625          | 15.88 | NO                |
| 24                 | 2.732 | 69.39 | .625          | 15.88 | 14                |
| 27                 | 3.045 | 77.34 | .625          | 15.88 | 14                |
| 30                 | 3.357 | 85.27 | .750          | 19.05 | 14                |
| 33                 | 3.670 | 93.22 | .750          | 19.05 | 17                |

Marketed exclusively through distribution.

**Jones  
Plugs/Sockets  
Series 300**

Multiple Density  
Solder Eyelet  
180° Clamp w/Locks

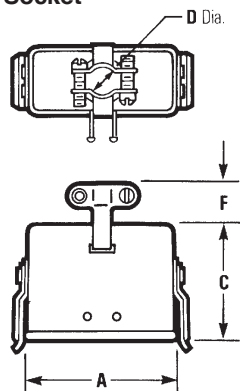
**Cinch**

**300 Series Plug with Hood and Lock (CCT-L) and Socket with Hood and Keeper (CCT-K)**

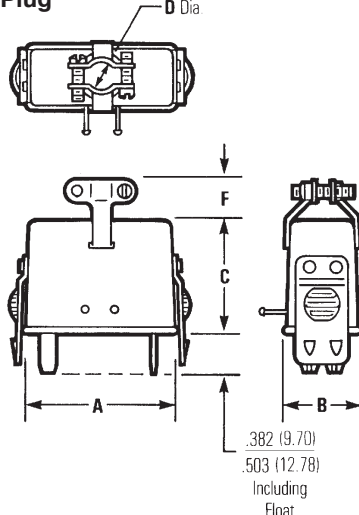
| No. of<br>Contacts | Catalog No.<br>Plug w/ Lock | Catalog No.<br>Socket w/ Keeper |
|--------------------|-----------------------------|---------------------------------|
| 2                  | P-302-CCT-L                 | S-302-CCT-K                     |
| 3                  | P-303-CCT-L                 | S-303-CCT-K                     |
| 4                  | P-304-CCT-L                 | S-304-CCT-K                     |
| 6                  | P-306-CCT-L                 | S-306-CCT-K                     |
| 8                  | N/A                         | N/A                             |
| 10                 | P-310-CCT-L                 | N/A                             |
| 12                 | P-312-CCT-L                 | N/A                             |
| 15                 | P-315-CCT-L                 | S-315-CCT-K                     |
| 18                 | P-318-CCT-L                 | S-318-CCT-K                     |
| 21                 | P-321-CCT-L                 | S-321-CCT-K                     |
| 24                 | P-324-CCT-L                 | S-324-CCT-K                     |
| 27                 | P-327-CCT-L                 | S-327-CCT-K                     |
| 30                 | P-330-CCT-L                 | S-330-CCT-K                     |
| 33                 | P-333-CCT-L                 | S-333-CCT-K                     |



**Socket**



**Plug**



**Dimensions**

| No. of<br>Contacts | A ±.016<br>(.41mm) |       | B ±.016<br>(.41mm) |       | C ±.031<br>(.79mm) |       | F    |       | "D" Cable<br>Opening |       | Polarizing<br>Pin |
|--------------------|--------------------|-------|--------------------|-------|--------------------|-------|------|-------|----------------------|-------|-------------------|
|                    | in                 | mm    | in                 | mm    | in                 | mm    | in   | mm    | in                   | mm    |                   |
| 2                  | .691               | 17.5  | -                  | -     | .953               | 24.21 | .359 | 9.12  | .375                 | 9.53  | --                |
| 3                  | 1.034              | 26.26 | .472               | 11.99 | .953               | 24.21 | .359 | 9.12  | .313                 | 7.94  | --                |
| 4                  | .786               | 19.96 | .724               | 18.39 | .953               | 24.21 | .469 | 11.91 | .375                 | 9.53  | --                |
| 6                  | 1.036              | 26.31 | .724               | 18.39 | 1.078              | 27.38 | .484 | 12.29 | .438                 | 11.13 | --                |
| 8                  | --                 | --    | --                 | --    | --                 | --    | --   | --    | --                   | --    | --                |
| 10                 | 1.592              | 40.44 | .720               | 18.29 | 1.203              | 30.56 | .500 | 12.70 | .500                 | 12.70 | --                |
| 12                 | 1.286              | 32.66 | .974               | 24.74 | 1.203              | 30.56 | .469 | 11.91 | .563                 | 14.30 | --                |
| 15                 | 1.795              | 45.59 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .563                 | 14.30 | NO                |
| 18                 | 2.107              | 53.52 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .563                 | 14.30 | NO                |
| 21                 | 2.420              | 61.47 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .625                 | 15.88 | NO                |
| 24                 | 2.732              | 69.39 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .625                 | 15.88 | 14                |
| 27                 | 3.045              | 77.34 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .625                 | 15.88 | 14                |
| 30                 | 3.357              | 85.27 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .750                 | 19.05 | 14                |
| 33                 | 3.670              | 93.22 | 1.100              | 27.94 | 1.850              | 46.99 | .712 | 18.08 | .750                 | 19.05 | 17                |

Marketed exclusively through distribution.

JONES PLUGS AND SOCKETS 300 SERIES MATING CHART

PLUGS

| MOUNTING CONFIG. | AB | DB | FP | RP | EB | SB | CCE | CCT | CCT-L | CCT-K | LAB |
|------------------|----|----|----|----|----|----|-----|-----|-------|-------|-----|
| AB               | •• |    | •• |    | •• | •• | •   | •   |       |       | •   |
| DB               |    |    |    |    |    |    |     | •   |       |       | •   |
| FP               | •• |    | •• |    | •• |    | •   | •   |       |       | •   |
| RP               |    |    |    |    |    |    | •   | •   |       |       | •   |
| EB               | •• |    | •• |    | •• |    | •   | •   |       |       | •   |
| SB               | •• |    |    |    | •• | •• | •   | •   |       |       | •   |
| CCE              | •  |    | •  | •  | •  | •  | •   | •   |       |       | •   |
| CCT              | •  | •  | •  | •  | •  | •  | •   | •   |       |       | •   |
| CCT-L            |    |    |    |    |    |    |     |     |       | •     |     |
| CCT-K            |    |    |    |    |    |    |     |     | •     |       |     |
| LAB              | •  | •  | •  | •  | •  | •  | •   | •   | •     | •     | •   |

- These are recommended configurations.
- These are possible configurations, but not normally recommended.

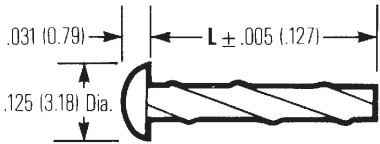
NOTE: Cinch layout S315-12 is available only in “AB” or “LAB”.

Replacement Drive Pins for Series 300 Plugs and Sockets with Cable Caps and Clamps

Dimensions

| No. of Contacts | Dim. L<br>+.005 (.13mm) |       | No. of Contacts | Catalog No. |
|-----------------|-------------------------|-------|-----------------|-------------|
|                 | in                      | mm    |                 |             |
| 2               | .687                    | 17.45 | 2               | 302R        |
| 3               | .468                    | 11.89 | 3               | 303R        |
| 4,6,8,10*       | .718                    | 18.24 | 4,6,8,10*       | 304R        |
| 12              | .953                    | 28.58 | 12              | 312R        |
| 15-33*          | 1.125                   | 28.58 | 15-33*          | 333R        |

\*10 contact size and 15 through 33 contact sizes require two pins per unit; all other sizes require only one.



Marketed exclusively through distribution.

FEATURES

- *For use in cable-to-cable and cable-to-panel applications.*
- *Designed for medium duty.*
- *Plug prongs are .250" (6.35mm) wide and .055" (1.40mm) thick.*
- *Socket contacts have solder eyelet contacts of .093" diameters.*
- *Polarized to prevent wrong-way insertion.*
- *Plugs have projecting flat blades, sockets have recessed twin bellows.*
- *Cable clamps of zinc and clear irridite-plated steel are used for strain relief.*
- *Bifurcated bellows socket contact provides four individual flexing surfaces for maximum contact with the blade.*
- *Plugs and sockets have recessed pockets with barriers around the contacts.*
- *A shoulder extends around the face (mating) side of both plug and socket presenting a finished appearance when mounted in bracket or cap.*
- *Intermates with existing 400 Series Products on the market.*
- *UL Recognized - file - E17021B (UL1977) E130965 (1863).*
- *CSA - LR31996-2.*
- *Panel cutout dimensions (See page 2-57).*

MATERIALS

**Insulation Material:** Molded monoblock, general purpose phenolic, black

**Contact Material:** Plug: Brass

Socket: Phosphor bronze

**Contact Plating:** Cadmium

**Operating Temperature:** Up to +105°C

**Hood Material:** Formed metal with dielectric liner in hood to prevent shorting

ELECTRICAL

**Operating Voltage:** 250 VAC RMS  
**Current Rating:** 15 Amps  
**Current Resistance:** 1.0 Milliohms maximum

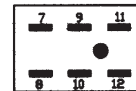
POLARIZING PATTERNS FOR  
SERIES 2400



2402



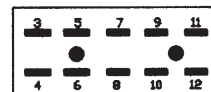
2404



2406



2408



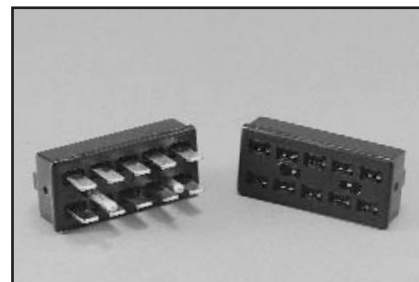
2410



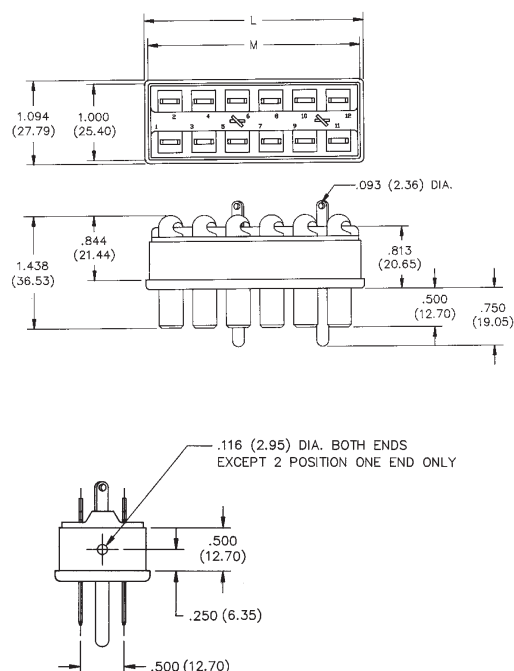
2412

**2400 Series Less Angle Bracket**

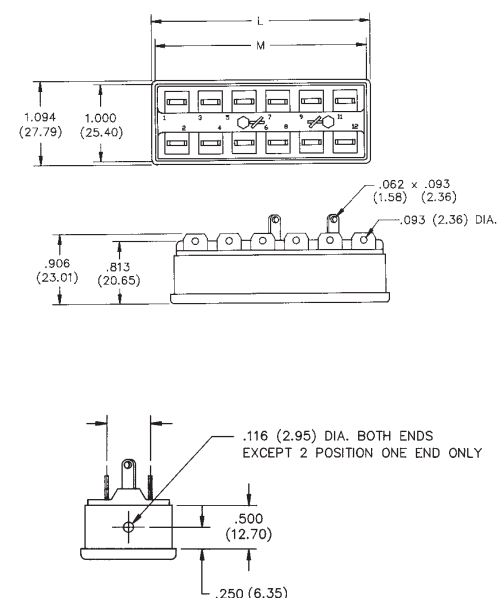
| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | N/A                 | S-2402-LAB            |
| 4                  | P-2404-LAB          | S-2404-LAB            |
| 6                  | P-2406-LAB          | S-2406-LAB            |
| 8                  | P-2408-LAB          | S-2408-LAB            |
| 10                 | P-2410-LAB          | S-2410-LAB            |
| 12                 | P-2412-LAB          | S-2412-LAB            |



**Plug**



**Socket**



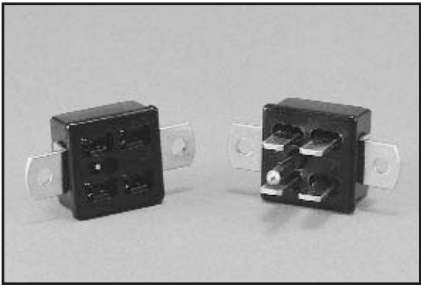
**Dimensions - Plug or Socket**

| No. of<br>Contacts | M     |       | L     |       |
|--------------------|-------|-------|-------|-------|
|                    | in    | mm    | in    | mm    |
| 2                  | .563  | 14.29 | .656  | 16.67 |
| 4                  | 1.000 | 25.40 | 1.094 | 27.78 |
| 6                  | 1.438 | 36.51 | 1.531 | 38.89 |
| 8                  | 1.875 | 47.63 | 1.969 | 50.01 |
| 10                 | 2.313 | 58.74 | 2.406 | 61.12 |
| 12                 | 2.750 | 69.85 | 1.844 | 46.83 |

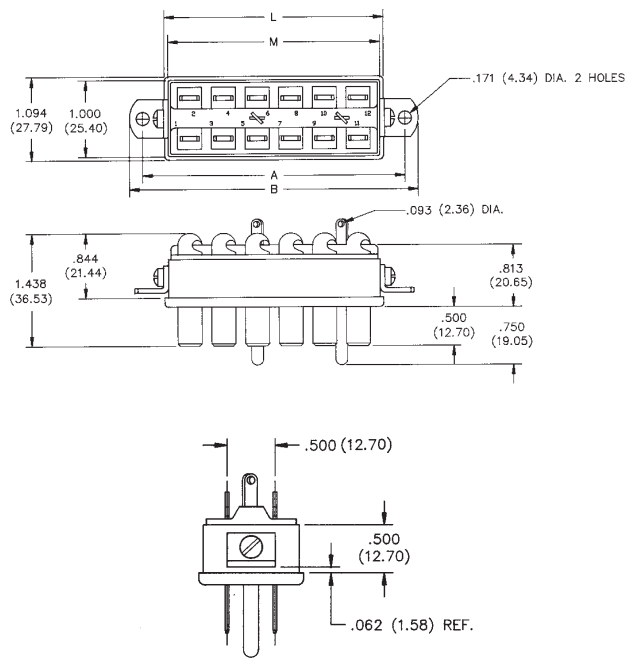
Marketed exclusively through distribution.

2400 Series with Angle Bracket

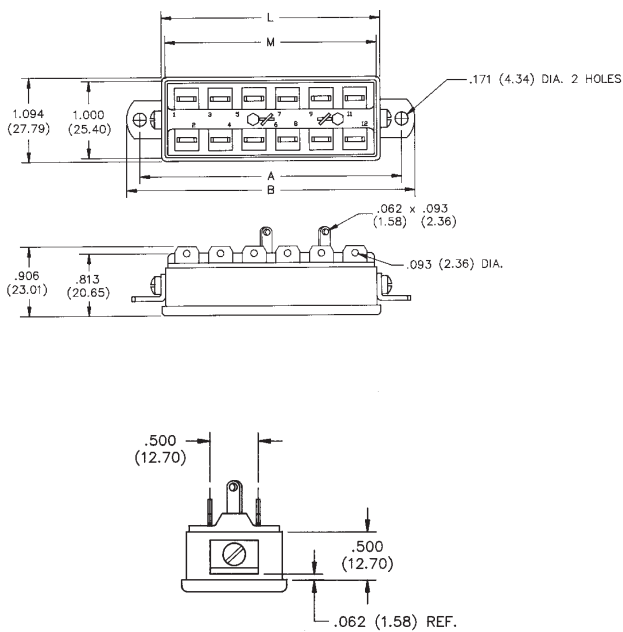
| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | N/A                 | S-2402-AB             |
| 4                  | P-2404-AB           | S-2404-AB             |
| 6                  | P-2406-AB           | S-2406-AB             |
| 8                  | P-2408-AB           | S-2408-AB             |
| 10                 | P-2410-AB           | S-2410-AB             |
| 12                 | P-2412-AB           | S-2412-AB             |



Plug



Socket



Dimensions - Plug or Socket

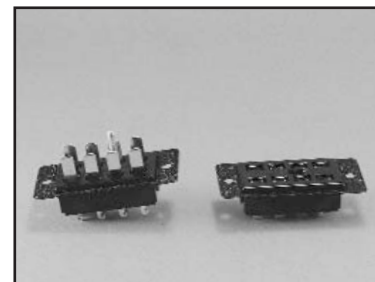
| No. of<br>Contacts | M     |       | L     |       |
|--------------------|-------|-------|-------|-------|
|                    | in    | mm    | in    | mm    |
| 2                  | .563  | 14.29 | .656  | 16.67 |
| 4                  | 1.000 | 25.40 | 1.094 | 27.78 |
| 6                  | 1.438 | 36.51 | 1.531 | 38.89 |
| 8                  | 1.875 | 47.63 | 1.969 | 50.01 |
| 10                 | 2.313 | 58.74 | 2.406 | 61.12 |
| 12                 | 2.750 | 69.85 | 2.844 | 72.24 |

Panel Cutout dimensions are on page 2-61.

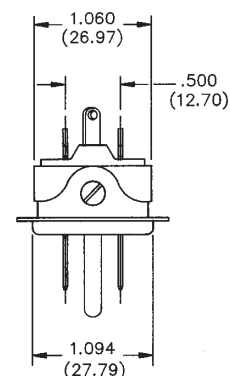
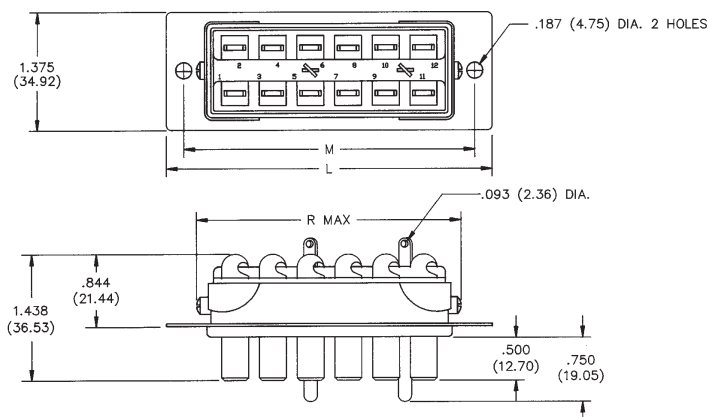
Marketed exclusively through distribution.

**2400 Series with Shallow Bracket**

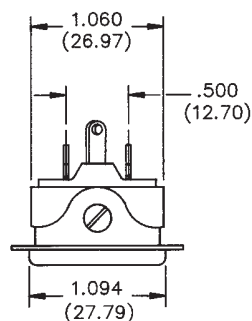
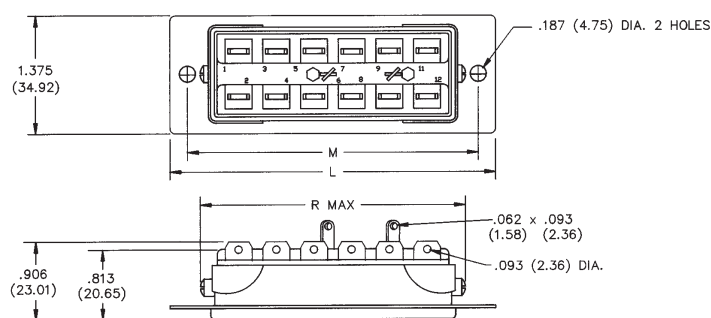
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2               | N/A              | S-2402-SB          |
| 4               | P-2404-SB        | S-2404-SB          |
| 6               | P-2406-SB        | S-2406-SB          |
| 8               | P-2408-SB        | S-2408-SB          |
| 10              | P-2410-SB        | S-2410-SB          |
| 12              | P-2412-SB        | S-2412-SB          |



**Plug**



**Socket**



**Dimensions - Plug or Socket**

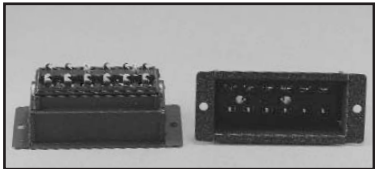
| No. of Contacts | L     |       | M     |       | R. Max. |       |
|-----------------|-------|-------|-------|-------|---------|-------|
|                 | in    | mm    | in    | mm    | in      | mm    |
| 2               | 1.500 | 38.10 | 1.062 | 26.99 | 1.766   | 19.45 |
| 4               | 1.937 | 49.21 | 1.500 | 38.10 | 1.234   | 31.34 |
| 6               | 2.375 | 60.33 | 1.938 | 49.23 | 1.672   | 42.47 |
| 8               | 2.813 | 71.45 | 2.375 | 60.33 | 2.109   | 53.57 |
| 10              | 3.250 | 82.55 | 2.813 | 71.45 | 2.547   | 64.69 |
| 12              | 3.688 | 93.68 | 3.250 | 82.55 | 2.984   | 75.80 |

Panel Cutout dimensions are on page 2-61.

Marketed exclusively through distribution.

2400 Series with Deep Bracket

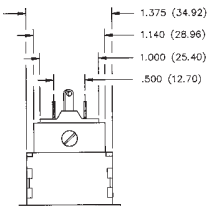
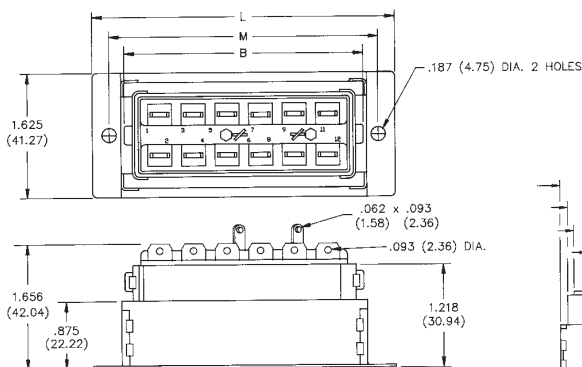
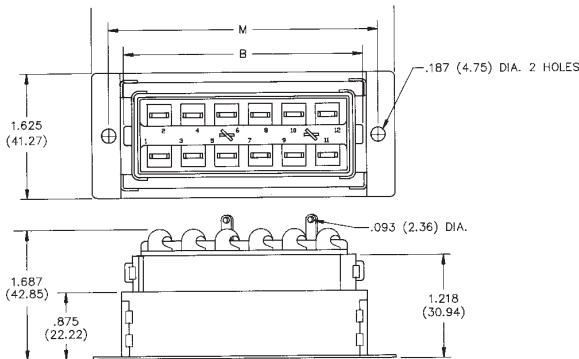
| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | N/A                 | S-2402-DB             |
| 4                  | P-2404-DB           | S-2404-DB             |
| 6                  | P-2406-DB           | S-2406-DB             |
| 8                  | P-2408-DB           | S-2408-DB             |
| 10                 | P-2410-DB           | S-2410-DB             |
| 12                 | P-2412-DB           | S-2412-DB             |



Plug

Socket

Plug or Socket



Dimensions - Plug or Socket

| No. of<br>Contacts | B     |       | L     |        | M     |       |
|--------------------|-------|-------|-------|--------|-------|-------|
|                    | in    | mm    | in    | mm     | in    | mm    |
| 2                  | .922  | 23.42 | 1.750 | 44.45  | 1.313 | 33.35 |
| 4                  | 1.359 | 34.53 | 2.188 | 55.58  | 1.750 | 44.45 |
| 6                  | 1.797 | 45.64 | 2.625 | 57.53  | 2.188 | 55.58 |
| 8                  | 2.234 | 56.74 | 3.063 | 77.79  | 2.625 | 66.68 |
| 10                 | 2.672 | 67.87 | 3.500 | 88.90  | 3.063 | 77.80 |
| 12                 | 3.109 | 78.97 | 3.938 | 100.03 | 3.500 | 88.90 |

Panel Cutout dimensions are on page 2-61.

Marketed exclusively through distribution.

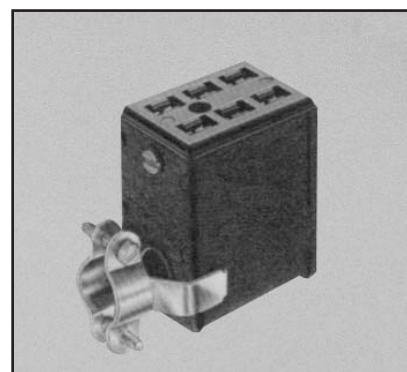
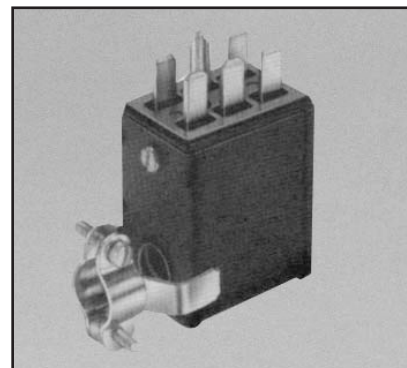
# Jones Plugs/Sockets Series 2400

Multiple Density  
Solder Eyelet  
With Hood & 90° Clamp

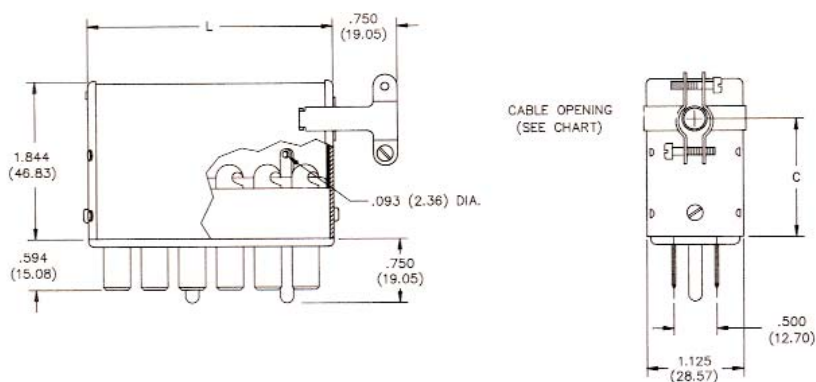
# Cinch

## 2400 Series with Hood and 90° Clamp

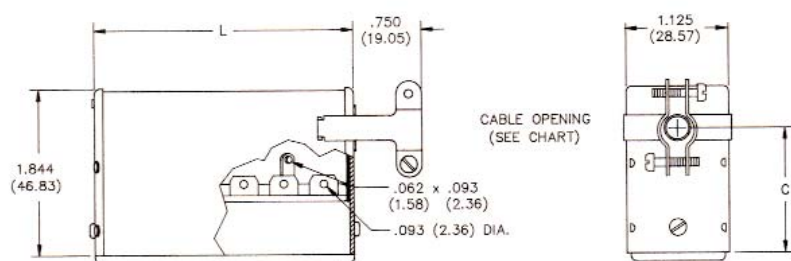
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2               | N/A              | S-2402-CCE         |
| 4               | P-2404-CCE       | S-2404-CCE         |
| 6               | P-2406-CCE       | S-2406-CCE         |
| 8               | P-2408-CCE       | S-2408-CCE         |
| 10              | P-2410-CCE       | S-2410-CCE         |
| 12              | P-2412-CCE       | S-2412-CCE         |



### Plug



### Socket



## Dimensions - Plug or Socket

| No. of Contacts | L     |       | C     |       | Cable Opening |       |
|-----------------|-------|-------|-------|-------|---------------|-------|
|                 | in    | mm    | in    | mm    | in            | mm    |
| 2               | .625  | 15.88 | 1.375 | 34.93 | .375          | 9.53  |
| 4               | 1.062 | 26.99 | 1.375 | 34.93 | .438          | 11.11 |
| 6               | 1.500 | 38.10 | 1.375 | 34.93 | .438          | 11.11 |
| 8               | 1.937 | 49.21 | 1.344 | 34.13 | .563          | 14.29 |
| 10              | 2.375 | 60.33 | 1.344 | 34.13 | .563          | 14.29 |
| 12              | 2.813 | 71.45 | 1.312 | 33.34 | .625          | 15.88 |

Marketed exclusively through distribution.

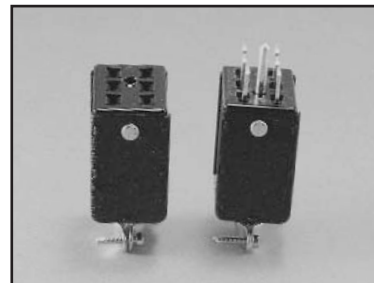
# Jones Plugs/Socket Series 2400

Multiple Density  
Solder Eyelet  
With Hood & 180° Clamp

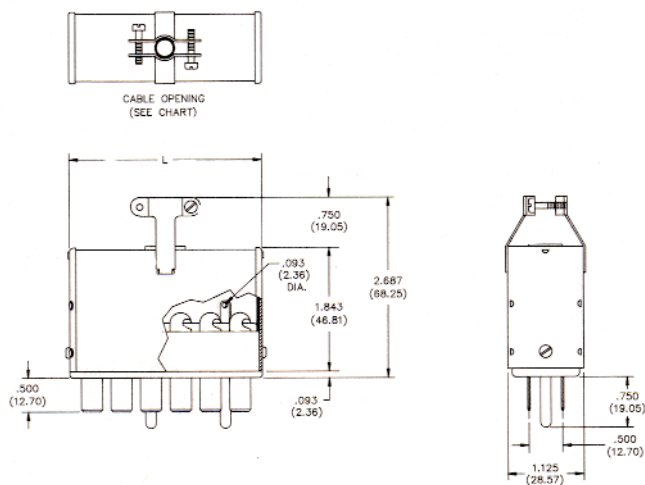
# Cinch

## 2400 Series with Hood and 180° Clamp

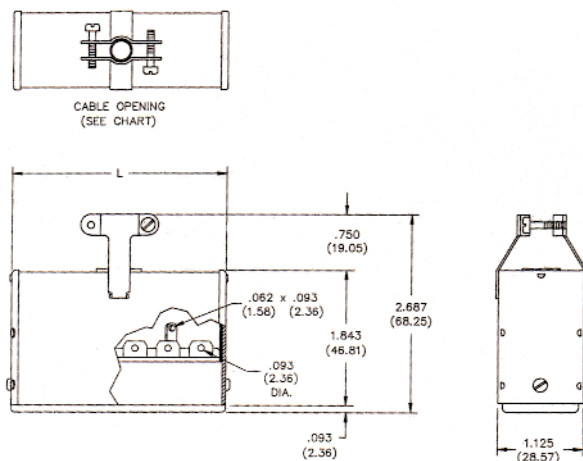
| No. of<br>Contacts | Catalog No.<br>Plug | Catalog No.<br>Socket |
|--------------------|---------------------|-----------------------|
| 2                  | N/A                 | S-2402-CCT            |
| 4                  | P-2404-CCT          | S-2404-CCT            |
| 6                  | P-2406-CCT          | S-2406-CCT            |
| 8                  | P-2408-CCT          | S-2408-CCT            |
| 10                 | P-2410-CCT          | S-2410-CCT            |
| 12                 | P-2412-CCT          | S-2412-CCT            |



### Plug



### Socket



### Dimensions - Plug or Socket

| No. of<br>Contacts | L     |       | Cable Opening |       |
|--------------------|-------|-------|---------------|-------|
|                    | in    | mm    | in            | mm    |
| 2                  | .625  | 15.88 | .313          | 7.94  |
| 4                  | 1.062 | 26.99 | .438          | 11.11 |
| 6                  | 1.500 | 38.10 | .438          | 11.11 |
| 8                  | 1.937 | 49.21 | .563          | 14.29 |
| 10                 | 2.375 | 60.33 | .563          | 14.29 |
| 12                 | 2.813 | 71.45 | .625          | 15.88 |

Marketed exclusively through distribution.

**Panel Cutout Dimensions  
Angle Bracket**

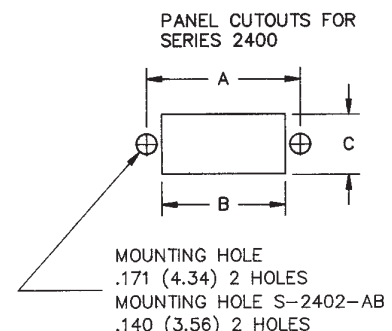
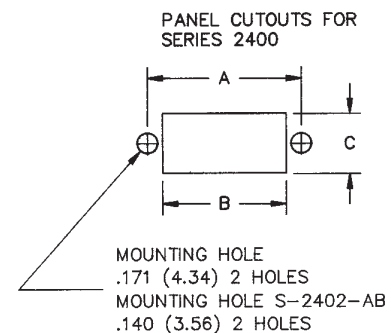
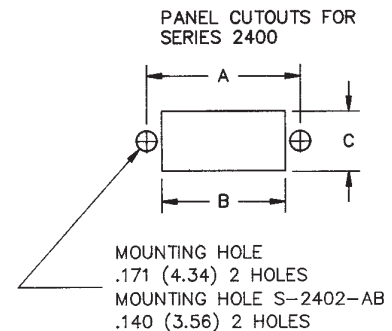
| Reference | A     |       | B     |       | C     |       |
|-----------|-------|-------|-------|-------|-------|-------|
|           | in    | mm    | in    | mm    | in    | mm    |
| P-2402-AB | --    | --    | --    | --    | --    | --    |
| S-2402-AB | 1.188 | 30.16 | 1.008 | 25.60 | 1.015 | 25.78 |
| P-2404-AB |       |       |       |       |       |       |
| S-2404-AB | 1.625 | 41.28 | 1.445 | 36.70 | 1.015 | 25.78 |
| P-2406-AB |       |       |       |       |       |       |
| S-2406-AB | 2.063 | 52.40 | 1.886 | 47.83 | 1.015 | 25.78 |
| P-2408-AB |       |       |       |       |       |       |
| S-2408-AB | 2.500 | 63.50 | 2.320 | 58.93 | 1.015 | 25.78 |
| P-2410-AB |       |       |       |       |       |       |
| S-2410-AB | 2.938 | 74.63 | 2.758 | 70.05 | 1.015 | 25.78 |
| P-2412-AB |       |       |       |       |       |       |
| S-2412-AB | 3.375 | 85.73 | 3.195 | 81.15 | 1.015 | 25.78 |

**Panel Cutout Dimensions  
Shallow Bracket**

| Reference | A     |       | B     |       | C     |       |
|-----------|-------|-------|-------|-------|-------|-------|
|           | in    | mm    | in    | mm    | in    | mm    |
| P-2402-SB |       |       |       |       |       |       |
| S-2402-SB | 1.062 | 27.00 | .813  | 20.64 | 1.156 | 29.37 |
| P-2404-SB |       |       |       |       |       |       |
| S-2404-SB | 1.500 | 38.10 | 1.250 | 31.75 | 1.156 | 29.37 |
| P-2406-SB |       |       |       |       |       |       |
| S-2406-SB | 1.938 | 49.22 | 1.688 | 42.86 | 1.156 | 29.37 |
| P-2408-SB |       |       |       |       |       |       |
| S-2408-SB | 2.376 | 60.34 | 2.125 | 53.98 | 1.156 | 29.37 |
| P-2410-SB |       |       |       |       |       |       |
| S-2410-SB | 2.812 | 71.44 | 2.563 | 65.10 | 1.156 | 29.37 |
| P-2412-SB |       |       |       |       |       |       |
| S-2412-SB | 3.250 | 82.56 | 3.000 | 76.20 | 1.156 | 29.37 |

**Panel Cutout Dimensions  
Deep Bracket**

| Reference | A     |       | B     |       | C     |       |
|-----------|-------|-------|-------|-------|-------|-------|
|           | in    | mm    | in    | mm    | in    | mm    |
| P-2402-DB |       |       |       |       |       |       |
| S-2402-DB | 1.312 | 33.34 | .938  | 23.81 | 1.438 | 36.51 |
| P-2404-DB |       |       |       |       |       |       |
| S-2404-DB | 1.750 | 44.46 | 1.375 | 34.93 | 1.438 | 36.51 |
| P-2406-DB |       |       |       |       |       |       |
| S-2406-DB | 2.188 | 55.56 | 1.813 | 46.04 | 1.438 | 36.51 |
| P-2408-DB |       |       |       |       |       |       |
| S-2408-DB | 2.624 | 66.68 | 2.250 | 57.15 | 1.438 | 36.51 |
| P-2410-DB |       |       |       |       |       |       |
| S-2410-DB | 3.062 | 77.80 | 2.688 | 68.28 | 1.438 | 36.51 |
| P-2412-DB |       |       |       |       |       |       |
| S-2412-DB | 3.500 | 88.90 | 3.125 | 79.38 | 1.438 | 36.51 |



Marketed exclusively through distribution.

### FEATURES

- **Contact positions 3, 4, 5, 6, 7, and 8.**
- **Pre-assembled with standard shielded cable lengths; consult factory for other lengths.**
- **Molded-in strain relief.**
- **Cable and overmold available in standard colors: black or beige.**
- **Contacts available with gold over nickel.**
- **Shielding system designed to meet FCC requirements for EMI/RFI suppression.**
- **UL Recognized - file E170218 (UL1977).**
- **CSA Certified - file LR31996-6.**

### MATERIALS

**Insulation Material:** Plug Insulator: UL 94V-0 rated nylon  
Plug Overmold: PVC (black or beige)  
Cable Jacket: PVC (black or beige)

**Contact Material:** Plug: Phosphor bronze

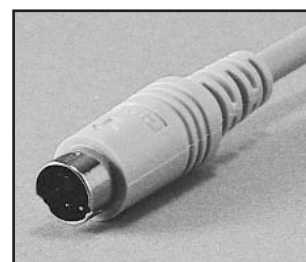
**Contact Plating:**  
**Option 1:** Gold Flash over nickel underplate overall  
**Option 2:** Option 1 plus additional gold in mating area for total thickness of 30µin.

**Shield Material:** Steel

**Shield Plating:** Nickel

**Standard Cable** Shielded cable with 0.197 inch OD

**Composition:** jacket over 28 AWG stranded wire conductors. Contact factory for custom cable requirements.



### ENVIRONMENTAL

**Shock:** MIL-STD-202, Method 213, Condition C

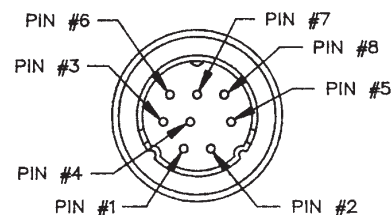
**Operating Temperature:** -40°C to +70°C

**Heat Resistance:** 196 hrs. at 100°C

**Salt Spray:** MIL-STD-202, Method 101D, Condition D

**Vibration:** MIL-STD-202, Method 204, Condition B

**Humidity:** MIL-STD-202, Method 103, 48 hrs. at 90-95% RH at 40°C



### ELECTRICAL

**Voltage Rating:** 500 VAC RMS, 707 VDC

**Current Rating:** 1 Amp at 100 VAC  
2 Amps at 12 VDC

**Contact Resistance:** Contact to contact: 30 milliohms maximum  
Shield to shield: 50 milliohms maximum

**Insulation Resistance:** 500 megohms minimum at 500 VDC  
100 megohms minimum after humidity

| PIN NO | COLOR  |
|--------|--------|
| 1      | BLACK  |
| 2      | GREEN  |
| 3      | RED    |
| 4      | BROWN  |
| 5      | BLUE   |
| 6      | WHITE  |
| 7      | YELLOW |
| 8      | GRAY   |

### MECHANICAL

**Durability:** Withstands 500 mating/unmating cycles

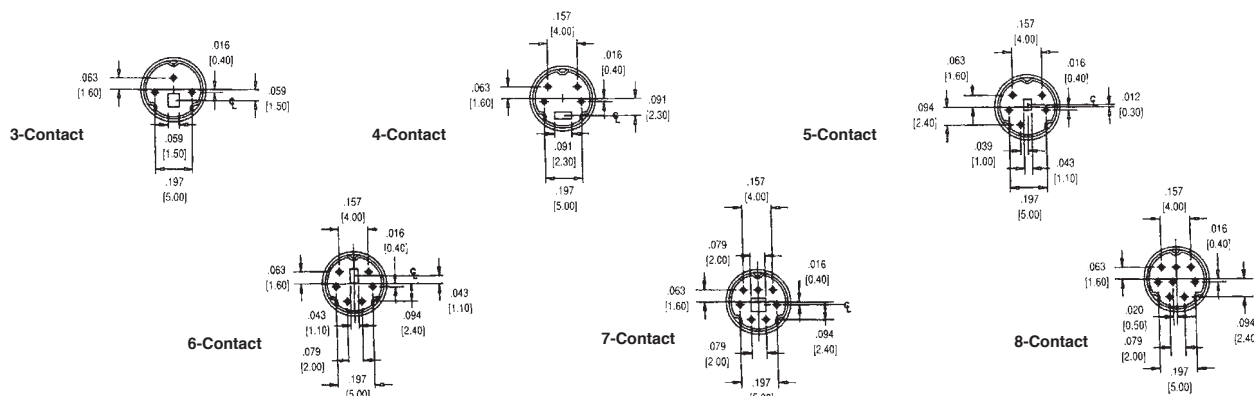
**Mating Force:** 10 lb. (4.5 kg) maximum

**Unmating Force:** 1 lb. (0.9 kg) minimum

**Contact Retention:** 3 lb. minimum

Marketed exclusively through distribution.

### Dimensions



### Ordering Information: (NOTE: One meter = 39.62 inches.)

For cable assemblies with plug on one end. Plug features contacts with Option 1 plating (gold flash over nickel).

| No. of Contacts | Cable Length Meter | Black Color Cable & Overmold Catalog No. | Beige Color Cable & Overmold Catalog No. |
|-----------------|--------------------|------------------------------------------|------------------------------------------|
| 3               | 1                  | MDC-3P05                                 | MDC-3P08                                 |
| 4               | 1                  | MDC-4P05                                 | MDC-4P08                                 |
| 4               | 2                  | MDC-4P13                                 | MDC-4P53                                 |
| 4               | 3                  | MDC-4P15                                 | MDC-4P55                                 |
| 5               | 1                  | MDC-5P05                                 | MDC-5P08                                 |
| 6               | 1                  | MDC-6P05                                 | MDC-6P08                                 |
| 6               | 2                  | MDC-6P13                                 | MDC-6P53                                 |
| 6               | 3                  | MDC-6P15                                 | MDC-6P55                                 |
| 7               | 1                  | MDC-7P05                                 | MDC-7P08                                 |
| 7               | 2                  | MDC-7P13                                 | MDC-7P53                                 |
| 7               | 3                  | MDC-7P15                                 | MDC-7P55                                 |
| 8               | 1                  | MDC-8P05                                 | MDC-8P08                                 |
| 8               | 2                  | MDC-8P13                                 | MDC-8P53                                 |
| 8               | 3                  | MDC-8P15                                 | MDC-8P55                                 |

The above cable assemblies are highly recommended for general commercial applications. Contact factory for other lengths or colors.

For cable assemblies with plug on one end. Plug features contacts with Option 2 plating (Option 1 with additional gold in mating area). NOTE: Total gold thickness in mating area is 30 microinches.

| No. of Contacts | Cable Length Meter | Black Color Cable & Overmold Catalog No. | Beige Color Cable & Overmold Catalog No. |
|-----------------|--------------------|------------------------------------------|------------------------------------------|
| 3               | 1                  | MDC-3P06                                 | MDC-3P09                                 |
| 4               | 1                  | MDC-4P06                                 | MDC-4P09                                 |
| 5               | 1                  | MDC-5P06                                 | MDC-5P09                                 |
| 6               | 1                  | MDC-6P06                                 | MDC-6P09                                 |
| 7               | 1                  | MDC-7P06                                 | MDC-7P09                                 |
| 8               | 1                  | MDC-8P06                                 | MDC-8P09                                 |

The above cable assemblies are recommended where greater contact durability is required.

### Additional Capabilities

- Additional lengths or colors of the above cable assemblies can be produced. Consult factory for custom orders.
- Custom-plated contacts can be provided. Consult factory for information.

Marketed exclusively through distribution.

# Circular Mini DIN Plugs

## Plug Components for Cable Termination



### FEATURES

- Individual components available for cable assembly with overmolding.
- Plug insulator available with contact positions 3, 4, 5, 6, 7, and 8.
- Seamless shield case is crimped to cable shield; designed to meet FCC requirements for EMI/RFI suppression.
- One-piece shield case - no extra ferrules or shields required with Cinch Shield Crimp Tools.
- Contacts are crimp style and supplied on reels.
- Contacts available with gold over nickel in several options.
- Tools available to facilitate reliable, efficient termination.
- Terminates 24 to 30 AWG wire.
- UL Recognized - file E170218 (UL1977).



### MATERIALS

**Insulation Material:** Plug Insulator: 94 V-0 rated nylon

**Contact Material:** Plug: Phosphor bronze

**Contact Plating:**

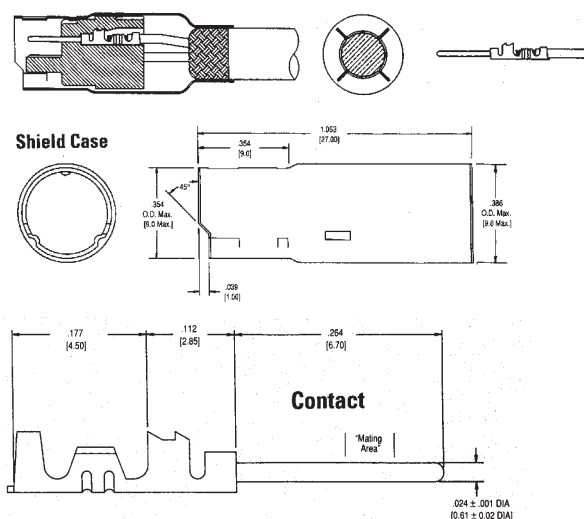
- Option 1:** Gold flash over nickel underplate overall
- Option 2:** Option 1 plus additional gold in mating area for total thickness of 30µin.
- Option 3:** Option 1 plus additional gold in mating area for total thickness of 50µin.

**Shield Case Material:** Steel

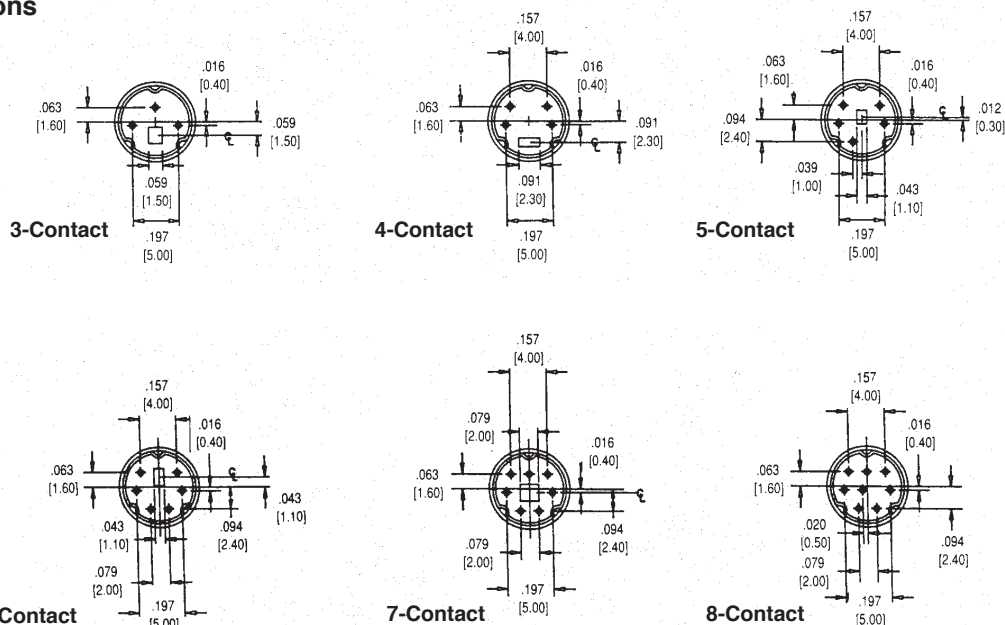
**Shield Case Plating:** Nickel

Cross-Section of Assembly

Crimped Contact



### Dimensions



Marketed exclusively through distribution.

**Ordering Information**

For each Plug Assembly, the following components are needed: one plug insulator, one shield, and adequate contacts.

| Component Type | Description          | Quantity       | Catalog No. |
|----------------|----------------------|----------------|-------------|
| Insulator      | 3 Position Insulator | 1              | MDX-3PI     |
|                | 4 Position Insulator | 1              | MDX-4PI     |
|                | 5 Position Insulator | 1              | MDX-5PI     |
|                | 6 Position Insulator | 1              | MDX-6PI     |
|                | 7 Position Insulator | 1              | MDX-7PI     |
|                | 8 Position Insulator | 1              | MDX-8PI     |
| Shield Case    | Metal Shield Case    | 1              | MDX-PZ      |
| Contact        | Option 1 Plating     | 300 on Reel    | MDX-P-3A    |
|                | Option 1 Plating     | 15,000 on Reel | MDX-P-15A   |
|                | Option 2 Plating     | 300 on Reel    | MDX-P-3B    |
|                | Option 2 Plating     | 15,000 on Reel | MDX-P-15B   |
|                | Option 3 Plating     | 15,000 on Reel | MDX-P-15D   |

**Tool Ordering Information**

The following tools are recommended for Mini Din Cable Plug Assembly.  
One tool of each type is required.

| Tool Type         | Description                                                | Catalog No. |
|-------------------|------------------------------------------------------------|-------------|
| Contact Crimp     | Stripper-Crimper Machine                                   | MDT-P25     |
|                   | Complete, Includes Dies                                    |             |
|                   | Contact Crimp Hand Tool                                    | MDT-P35     |
| Contact Insertion | Crimps using 300 Contact Reels                             |             |
|                   | Combination Contact Insertion and Insulator Insertion Tool | MDT-P41     |
|                   | Contact Insertion Hand Tool                                | MDT-P28     |
|                   | Fixture used with MDT-P28                                  | MDT-P29     |
|                   | Insulator Insertion Bench Mounted Tool                     | MDT-P34     |
|                   | Insulator Insertion Hand Tool                              | MDT-P30     |
|                   | Pneumatic Crimp Tool                                       | MDT-P81     |

**Overview of Assembly Steps**

- Prepare multi-conductor cable.
- Crimp contacts onto individual conductors using tool MDT-P25 or tool MDT-P35.
- Insert contact with conductor into insulator using tool MDT-P41 or have insertion tool MDT-P28 with insulator locating vice MDT-P29.
- Insert insulator into the shield case using tool MDT-P34 or MDT-P30.
- Crimp the shield case onto the cable shield using tool MDT-P81.
- Overmold plastic to complete the assembly.

Marketed exclusively through distribution.

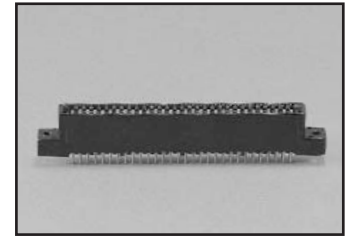
**CARDCON™**  
**Edge Connector**  
**Commercial**

.100" (2.54mm) Density  
Dip Solder

**Cinch**

FEATURES

- **AT and XT versions available.**
- **Dip solder tails on .200" (5.08mm) row centers double readout.**
- **Bifurcated semi-bellows contacts for added contact reliability.**
- **Ideal for applications involving vibration or board irregularities.**
- **Contact positions: 12, 15, 18, 20, 22, 25, 28, 30, 31, 36, 37, 40, 43, 44, 49, 50, 52, 60, 70, AT, and XT.**
- **Accepts .062" (1.59mm) thick PC boards.**
- **Available less mounting ears, or with .128" (3.25mm) mounting holes or 4-40 threaded holes.**
- **Meets applicable performance criteria of MIL-C-21097.**
- **Tube packaging available.**
- **UL Recognized - file E170218 (UL1977) E130965 (UL1863).**



MATERIALS

**Insulation Material:** UL 94V-0 rated glass-filled polyester, black  
**Contact Material:** Spring brass  
**Standard Contact Plating:** 10 in. selective gold over nickel, 50 in. nickel in contact area, tin on tails  
**XT, AT Plating:** 30 in. selective gold over 50 in. nickel in contact area, tin on tails

ENVIRONMENTAL

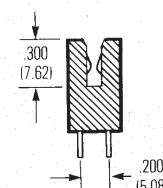
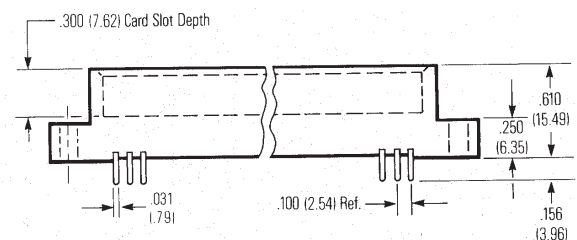
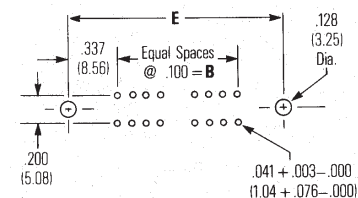
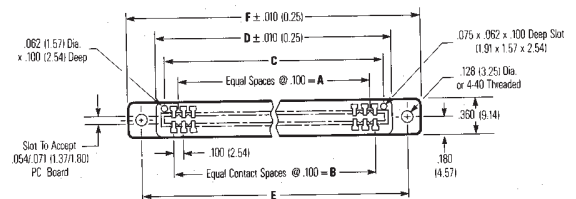
**Shock:** Per MIL-STD-202E, Method 213, Condition C  
**Operating Temperature:** -65°C to +105°C  
**Vibration:** Per MIL-STD-202E, Method 204, Condition B  
**Humidity:** Per MIL-STD-202, Method 103, Condition B  
**Accessories:**  
**Polarizing Key:** Two types (order separately):  
a) for between-contact polarization and  
b) for in-contact polarization.  
See page 2-74 for more information.  
**Card Guide Posts:** (order separately)  
Attach to mounting ears and guide PC board into connector. See page 2-74 for more information.

ELECTRICAL

**Withstanding Voltage:** 650 VAC RMS (@ sea level)  
**Current Rating:** 3 Amps  
**Contact Resistance:** 10 Milliohms maximum  
**Insulation Resistance:** 5000 Megohms minimum

MECHANICAL

**Individual Contact Insertion and Separation Force:**  
12oz. maximum with .070" (1.78mm) blade;  
1 oz. minimum with .054" (1.37mm) blade



Marketed exclusively through distribution.

## Dimensions

| No. of<br>Pos./Cont. | A     |        | B     |        | C     |        | D     |        | E     |        | F     |        |
|----------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
|                      | in    | mm     | in    | mm     | in    | mm     | in    | mm     | in    | mm     | in    | mm     |
| 12/24                | 1.000 | 25.40  | 1.100 | 27.94  | 1.300 | 33.02  | 1.460 | 37.08  | 1.775 | 45.09  | 2.035 | 51.69  |
| 15/30                | 1.300 | 33.02  | 1.400 | 35.56  | 1.600 | 40.64  | 1.760 | 44.70  | 2.075 | 52.71  | 2.335 | 59.31  |
| 18/36                | 1.600 | 40.64  | 1.700 | 43.18  | 1.900 | 48.26  | 2.060 | 52.32  | 2.375 | 60.33  | 2.635 | 66.93  |
| 18/36+               |       |        |       |        |       |        |       |        |       |        |       |        |
| 31/62 IBM            | 5.000 | 127.00 | 5.100 | 129.54 | 5.300 | 134.62 | 5.460 | 138.68 | 5.775 | 146.69 | 6.035 | 153.29 |
| 20/40                | 1.800 | 45.72  | 1.900 | 48.26  | 2.100 | 53.34  | 2.260 | 57.40  | 2.575 | 65.41  | 2.835 | 72.01  |
| 22/24                | 2.000 | 50.80  | 2.100 | 53.34  | 2.300 | 58.42  | 2.460 | 62.48  | 2.775 | 70.49  | 3.035 | 77.09  |
| 25/50                | 2.300 | 58.42  | 2.400 | 60.96  | 2.600 | 66.04  | 2.760 | 70.10  | 3.075 | 78.11  | 3.335 | 84.71  |
| 28/56                | 2.600 | 66.04  | 2.700 | 68.58  | 2.900 | 73.66  | 3.060 | 77.72  | 3.375 | 85.73  | 3.635 | 92.33  |
| 30/60                | 2.800 | 71.12  | 2.900 | 73.66  | 3.100 | 78.74  | 3.260 | 82.80  | 3.575 | 90.81  | 3.835 | 97.41  |
| 31/62                | 2.900 | 73.66  | 3.000 | 76.20  | 3.200 | 81.28  | 3.360 | 85.34  | 3.675 | 93.35  | 3.935 | 99.95  |
| 31/62 IBM            | 2.900 | 73.66  | 3.000 | 76.20  | 3.200 | 81.28  | 3.360 | 85.34  | 3.675 | 93.35  | 3.935 | 99.95  |
| 36/72                | 3.400 | 86.36  | 3.500 | 88.90  | 3.700 | 93.98  | 3.860 | 98.04  | 4.175 | 106.05 | 4.435 | 112.63 |
| 37/74                | 3.500 | 88.90  | 3.600 | 91.44  | 3.800 | 96.52  | 3.960 | 100.58 | 4.275 | 108.59 | 4.535 | 115.19 |
| 40/80                | 3.800 | 96.52  | 3.900 | 99.06  | 4.100 | 104.14 | 4.260 | 108.20 | 4.575 | 116.21 | 4.835 | 122.81 |
| 43/86                | 4.100 | 104.14 | 4.200 | 106.68 | 4.400 | 111.76 | 4.560 | 115.82 | 4.875 | 123.83 | 5.135 | 130.43 |
| 44/88                | 4.200 | 106.68 | 4.300 | 109.22 | 4.500 | 114.30 | 4.660 | 118.36 | 4.975 | 126.37 | 5.235 | 132.97 |
| 49/98                | 4.700 | 119.38 | 4.800 | 121.92 | 5.000 | 127.00 | 5.160 | 131.06 | 5.475 | 139.07 | 5.735 | 145.67 |
| 50/100               | 4.800 | 121.92 | 4.900 | 124.46 | 5.100 | 129.54 | 5.260 | 133.60 | 5.575 | 141.61 | 5.835 | 148.21 |
| 52/104               | 5.000 | 127.00 | 5.100 | 129.54 | 5.300 | 134.62 | 5.460 | 138.68 | 5.775 | 146.69 | 6.035 | 153.29 |
| 60/120               | 5.800 | 147.32 | 5.900 | 149.86 | 6.100 | 154.94 | 6.260 | 159.00 | 6.575 | 167.01 | 6.835 | 173.61 |
| 70/140               | 6.800 | 172.72 | 6.900 | 175.26 | 7.100 | 180.34 | 7.260 | 184.40 | 7.575 | 192.41 | 7.835 | 199.01 |

## Ordering Information

| No. of<br>Pos./Cont. | Less Mounting Ears |  | .128" (3.25mm)<br>Mounting Holes | 4-40<br>Threaded Holes |
|----------------------|--------------------|--|----------------------------------|------------------------|
|                      | Catalog No.        |  | Catalog No.                      | Catalog No.            |
| 12/24                | 50-12SN-12         |  | 50-12SN-11                       | 50-12SN-13             |
| 15/30                | 50-15SN-12         |  | 50-15SN-11                       | 50-15SN-13             |
| 18/36                | 50-18SN-12         |  | 50-18SN-11                       | 50-18SN-13             |
| 18/36+               |                    |  |                                  |                        |
| 31/62 IBM            | 50-52SN-AT         |  | -                                | -                      |
| 20/40                | 50-20SN-12         |  | 50-20SN-11                       | 50-20SN-13             |
| 22/44                | 50-22SN-12         |  | 50-22SN-11                       | 50-22SN-13             |
| 25/50                | 50-25SN-12         |  | 50-25SN-11                       | 50-25SN-13             |
| 28/56                | 50-28SN-12         |  | 50-28SN-11                       | 50-28SN-13             |
| 30/60                | 50-30SN-12         |  | 50-30SN-11                       | 50-30SN-13             |
| 31/62                | 50-31SN-12         |  | 50-31SN-11                       | 50-31SN-13             |
| 31/62 IBM            | 50-31SN-XT         |  | -                                | -                      |
| 36/72                | 50-36SN-12         |  | 50-36SN-11                       | 50-36SN-13             |
| 37/74                | 50-37SN-12         |  | 50-37SN-11                       | 50-37SN-13             |
| 40/80                | 50-40SN-12         |  | 50-40SN-11                       | 50-40SN-13             |
| 43/86                | 50-43SN-12         |  | 50-43SN-11                       | 50-43SN-13             |
| 44/88                | 50-44SN-12         |  | 50-44SN-11                       | 50-44SN-13             |
| 49/98                | 50-49SN-12         |  | 50-49SN-11                       | 50-49SN-13             |
| 50/100               | 50-50SN-12         |  | 50-50SN-11                       | 50-50SN-13             |
| 52/104               | 50-52SN-12         |  | 50-52SN-11                       | 50-52SN-13             |
| 60/120               | 50-60SN-12         |  | 50-60SN-11                       | 50-60SN-13             |
| 70/140               | 50-70SN-12         |  | 50-70SN-11                       | 50-70SN-13             |

Marketed exclusively through distribution.

FEATURES

- *Dip solder tails single readout and double readout on .140" (3.56mm) row centers or .200" (5.08mm) row centers.*
- *Solder eyelet, single readout and double readout on .200" (5.08mm) row centers.*
- *Available with unique tails for PC board retention; holds the connector firmly on the board during wave soldering operations.*
- *Bifurcated semi-bellows contacts for added contact reliability.*
- *Ideal for applications involving vibration or board irregularities.*
- *Contact positions: 6, 10, 12, 15, 18, 22, 24, and 25.*
- *Accepts single- or double-sided .062" (1.59mm) thick PC boards.*
- *Available less mounting ears or with .128" (3.25mm) mounting hole.*
- *Meets applicable performance criteria of MIL-C-21097.*
- *UL Recognized - file E170218 (UL1977) E130965 (UL1863).*

MATERIALS

**Insulation Material:** UL 94V-0 rated glass-filled polyester, black  
**Contact Material:** Spring brass  
**Contact Plating:** 10 " selective gold over 30 " nickel in contact area, tin on tails

ENVIRONMENTAL

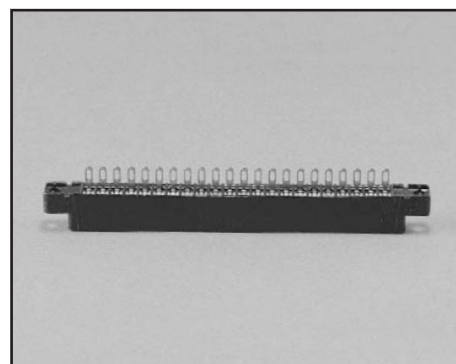
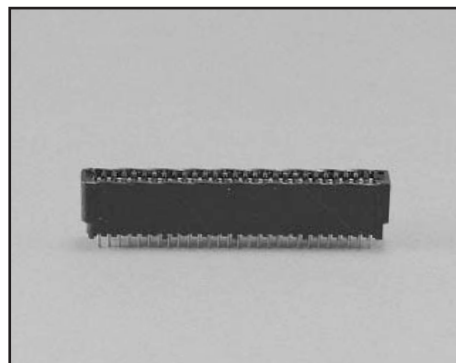
**Shock:** Per MIL-STD-202E, Method 213, Condition C  
**Operating Temperature:** -65°C to +105°C  
**Vibration:** Per MIL-STD-202E, Method 204, Condition B  
**Humidity:** Per MIL-STD-202, Method 103, Condition B  
**Accessories:**  
**Polarizing Key:** Two types (order separately):  
a) for between-contact polarization and  
b) for in-contact polarization  
See page 2-72 for more information.  
**Card Guide Posts:** (order separately):  
Attach to mounting ears and guide PC board into connector  
See page 2-72 for more information.

ELECTRICAL

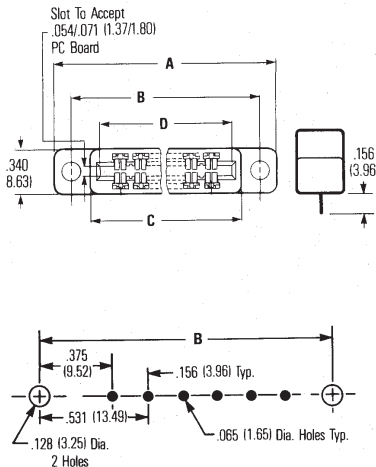
**Withstanding Voltage:** 1800 VAC RMS (@ sea level)  
**Current Rating:** 5 Amps  
**Contact Resistance:** 6 Milliohms maximum  
**Insulation Resistance:** 5000 Megohms minimum

MECHANICAL

**Individual Contact Insertion and Separation Force:**  
16 oz. maximum with .070" (1.78mm) blade;  
1 oz. minimum with .054" (1.37mm) blade



Marketed exclusively through distribution.



### Dimensions

| No. of<br>Pos./Cont. | A     |        | B     |        | C     |        | D     |        |
|----------------------|-------|--------|-------|--------|-------|--------|-------|--------|
|                      | In    | mm     | in    | mm     | in    | mm     | in    | mm     |
| 6/12                 | 1.785 | 45.34  | 1.531 | 38.89  | 1.239 | 31.47  | 1.100 | 27.94  |
| 10/20                | 2.410 | 61.21  | 2.156 | 54.76  | 1.874 | 47.34  | 1.724 | 43.79  |
| 12/24                | 2.723 | 69.16  | 2.469 | 62.71  | 2.177 | 55.30  | 2.036 | 51.71  |
| 15/30                | 3.191 | 81.05  | 2.937 | 74.60  | 2.645 | 67.18  | 2.504 | 63.60  |
| 18/36                | 3.660 | 92.96  | 3.406 | 86.51  | 3.114 | 79.10  | 2.972 | 75.49  |
| 22/44                | 4.285 | 108.84 | 4.031 | 102.39 | 3.739 | 94.94  | 3.596 | 91.34  |
| 24/48                | 4.598 | 116.79 | 4.344 | 110.34 | 4.052 | 102.92 | 3.911 | 99.34  |
| 25/50                | 4.754 | 120.75 | 4.500 | 114.30 | 4.208 | 106.88 | 4.067 | 103.30 |

### Ordering Information

No. of Less Mounting Ears .128 Mounting Hole  
Pos./Cont. Catalog No. Catalog No.

#### Solder eyelet, single readout

|       |           |           |
|-------|-----------|-----------|
| 6/6   | 50-6SN-8  | 50-6SN-7  |
| 10/10 | 50-10SN-8 | 50-10SN-7 |
| 12/12 | 50-12SN-8 | 50-12SN-7 |
| 15/15 | 50-15SN-8 | 50-15SN-7 |
| 18/18 | 50-18SN-8 | 50-18SN-7 |
| 22/22 | 50-22SN-8 | 50-22SN-7 |
| 24/24 | 50-24SN-8 | 50-24SN-7 |
| 25/25 | 50-25SN-8 | 50-25SN-7 |

#### Solder eyelet, double readout, .200" (5.08mm) row spacing

|       |            |           |
|-------|------------|-----------|
| 6/12  | 50-12SN-10 | 50-12SN-9 |
| 10/20 | 50-20SN-10 | 50-20SN-9 |
| 12/24 | 50-24SN-10 | 50-24SN-9 |
| 15/30 | 50-30SN-10 | 50-30SN-9 |
| 18/36 | 50-36SN-10 | 50-36SN-9 |
| 22/24 | 50-44SN-10 | 50-44SN-9 |
| 24/28 | 50-48SN-10 | 50-48SN-9 |
| 25/50 | 50-50SN-10 | 50-50SN-9 |

No. of Less Mounting Ears .128 Mounting Hole  
Pos./Cont. Catalog No. Catalog No.

#### Dip solder tails, single readout, .156" (3.96mm) long

|       |           |           |
|-------|-----------|-----------|
| 6/6   | 50-6SN-6  | 50-6SN-5  |
| 10/10 | 50-10SN-6 | 50-10SN-5 |
| 12/12 | 50-12SN-6 | 50-12SN-5 |
| 15/15 | 50-15SN-6 | 50-15SN-5 |
| 18/18 | 50-18SN-6 | 50-18SN-5 |
| 22/22 | 50-22SN-6 | 50-22SN-5 |
| 24/24 | 50-24SN-6 | 50-24SN-5 |
| 25/25 | 50-25SN-6 | 50-25SN-5 |

#### Dip solder tails, double readout, .200" (5.08mm) row spacing, .156" (3.96mm) long

|       |           |           |
|-------|-----------|-----------|
| 6/12  | 50-12SN-3 | 50-12SN-1 |
| 10/20 | 50-20SN-3 | 50-20SN-1 |
| 12/24 | 50-24SN-3 | 50-24SN-1 |
| 15/30 | 50-30SN-3 | 50-30SN-1 |
| 18/36 | 50-36SN-3 | 50-36SN-1 |
| 22/44 | 50-44SN-3 | 50-44SN-1 |
| 24/48 | 50-48SN-3 | 50-48SN-1 |
| 25/50 | 50-50SN-3 | 50-50SN-1 |

No. of Less Mounting Ears .128 Mounting Hole  
Pos./Cont. Catalog No. Catalog No.

#### Dip solder tails, double readout, .140" (3.55mm) row spacing, .125" (3.18mm) long

|       |           |           |
|-------|-----------|-----------|
| 6/12  | 50-12SN-4 | 50-12SN-2 |
| 10/20 | 50-20SN-4 | 50-20SN-2 |
| 12/24 | 50-24SN-4 | 50-24SN-2 |
| 15/30 | 50-30SN-4 | 50-30SN-2 |
| 18/36 | 50-36SN-4 | 50-36SN-2 |
| 22/24 | 50-44SN-4 | 50-44SN-2 |
| 24/48 | 50-48SN-4 | 50-48SN-2 |
| 25/50 | 50-50SN-4 | 50-50SN-2 |

#### Dip solder tails with unique board retention feature .200" (5.08mm) row spacing, .156" (3.96mm) long

|       |            |            |
|-------|------------|------------|
| 6/12  | 50-12SN-3R | 50-12SN-1R |
| 10/20 | 50-20SN-3R | 50-20SN-1R |
| 12/24 | 50-24SN-3R | 50-24SN-1R |
| 15/30 | 50-30SN-3R | 50-30SN-1R |
| 18/36 | 50-36SN-3R | 50-36SN-1R |
| 22/44 | 50-44SN-3R | 50-44SN-1R |
| 24/48 | 50-48SN-3R | 50-48SN-1R |
| 25/50 | 50-50SN-3R | 50-50SN-1R |

Marketed exclusively through distribution.

## Edge Connector High Reliability

.156" (3.96mm) Density Dip  
Solder/Solder Eyelet

# Cinch

### FEATURES

- *Dip solder tails, single readout, .156" (3.96mm) long or .234" (5.94mm) long.*
- *Dip solder tails, double readout, .156" (3.96mm) or .234" (5.94mm) long on .200" (5.08mm) row spacing, or .125" (3.18mm) long on .140" (3.56mm) row spacing.*
- *Solder eyelet, single readout and double readout on .200" (5.08mm) row spacing.*
- *Patented bifurcated bellows contacts for added contact reliability.*
- *Ideal for applications involving vibration or board irregularities.*
- *Contact positions: 6, 10, 12, 15, 18, 22, and 25.*
- *Available with or without mounting ears.*
- *Accepts single- or double-sided .062" (1.59mm) thick PC boards.*
- *UL Recognized - file E170218 (UL1977) E130965 (UL1863).*

### MATERIALS

**Insulation Material:** Diallyl phthalate, green  
**Contact Material:** Phosphor bronze  
**Contact Plating:** 30 " selective gold over 50 " copper in the contact areas, 5 " gold on tails

### ENVIRONMENTAL

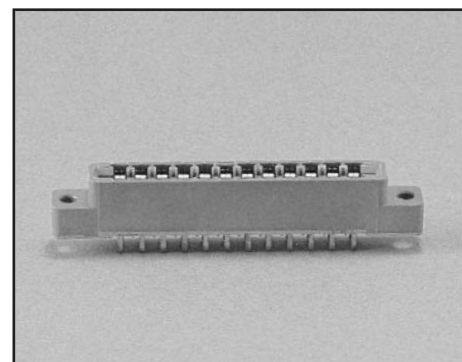
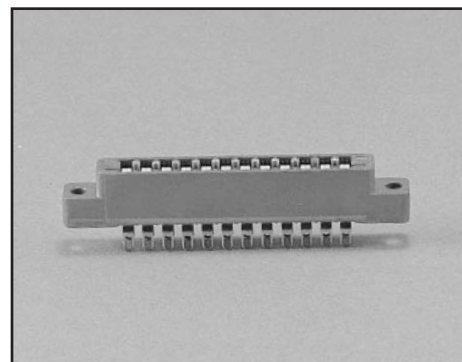
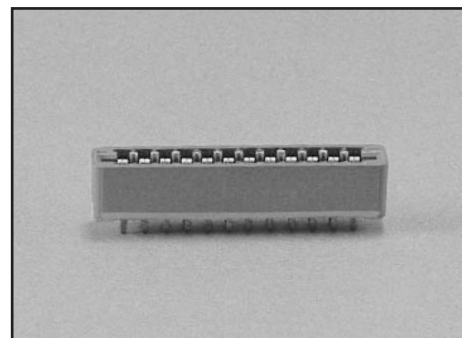
**Shock:** Per MIL-STD-202E, Method 202  
**Operating Temperature:** Dip solder: -65°C to +105°C  
Solder eyelet: -65°C to +125°C  
**Vibration:** Per MIL-STD-202E, Method 204, Condition B  
**Humidity:** Per MIL-STD-202E, Method 103, Condition B  
**Accessories:**  
**Polarizing Key:** Two types (order separately):  
a) for between-contact polarization and  
b) for in-contact polarization  
See page 2-74 for more information.  
**Card Guide Posts:** (order separately):  
Attach to mounting ears and guide PC board into connector  
See page 2-74 for more information.

### ELECTRICAL

**Withstanding Voltage:** 1800 VAC RMS (@ sea level)  
**Current Rating:** 5 Amps  
**Contact Resistance:** Dip solder: 6 Milliohms  
Solder eyelet: 10 Milliohms  
**Insulation Resistance:** 5000 Megohms minimum

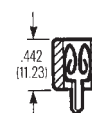
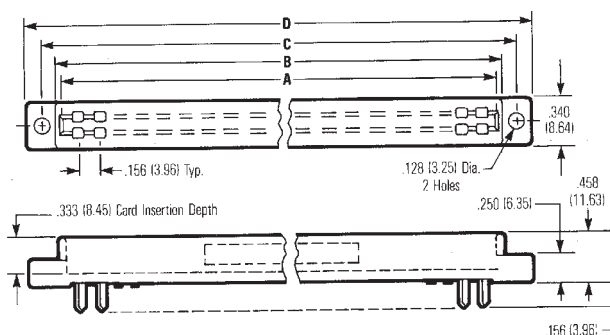
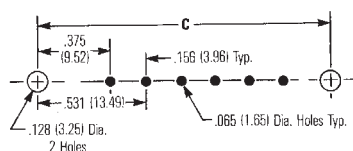
### MECHANICAL

**Individual Contact Insertion and Separation Force:**  
16 oz. maximum with .070" (1.78mm) blade;  
1 oz. minimum with .054" (1.37mm) blade

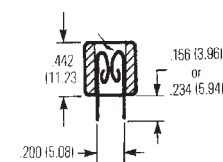
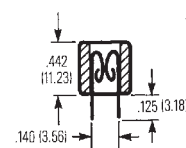
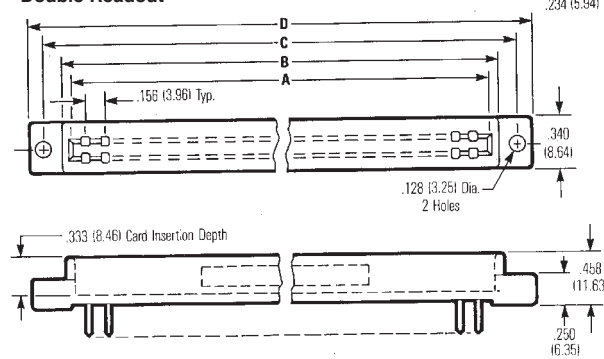
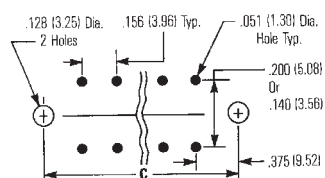


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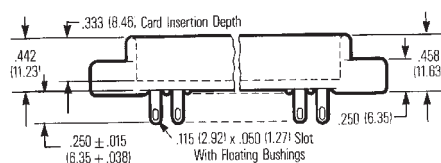
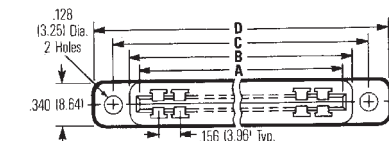
**Single Readout**



**Double Readout**



**With Plain Mounting Holes**



Single Readout



Double Readout

**Dimensions**

| No. of<br>Pos./Cont. | A     |        | B     |        | C     |        | D     |        |
|----------------------|-------|--------|-------|--------|-------|--------|-------|--------|
|                      | in    | mm     | in    | mm     | in    | mm     | in    | mm     |
| 6                    | 1.100 | 27.94  | 1.239 | 31.47  | 1.531 | 38.80  | 1.785 | 45.34  |
| 10                   | 1.724 | 43.79  | 1.864 | 47.35  | 2.156 | 54.76  | 2.410 | 61.21  |
| 12                   | 2.036 | 51.71  | 2.177 | 55.30  | 2.469 | 62.71  | 2.723 | 69.16  |
| 15                   | 2.504 | 63.60  | 2.645 | 67.18  | 2.937 | 74.60  | 3.191 | 81.05  |
| 18                   | 2.972 | 75.49  | 3.114 | 79.10  | 3.406 | 86.51  | 3.660 | 92.96  |
| 20                   | 3.286 | 83.46  | 3.427 | 87.05  | 3.719 | 94.46  | 3.973 | 100.91 |
| 22                   | 3.596 | 91.34  | 3.739 | 94.97  | 4.031 | 102.39 | 4.285 | 108.84 |
| 25                   | 4.067 | 103.30 | 4.208 | 106.88 | 4.500 | 114.30 | 4.754 | 120.75 |

Marketed exclusively through distribution.

Ordering Information

Single Readout

| No. of<br>Pos./Cont. | .128" (3.25mm) Mounting Hole |                     |                  |
|----------------------|------------------------------|---------------------|------------------|
|                      | Dip Solder Tails             |                     | Solder<br>Eyelet |
|                      | .156" (3.96mm) Long          | .234" (5.94mm) Long |                  |
|                      | Catalog No.                  | Catalog No.         | Catalog No.      |
| 6/6                  | 50-6H-10                     | 50-6S-10            | 50-6H-20         |
| 10/10                | 50-10H-10                    | 50-10S-10           | 50-10H-20        |
| 12/12                | 50-12R-10                    | 50-12S-10           | 50-12H-20        |
| 15/15                | 50-15H-10                    | 50-15S-10           | 50-15H-20        |
| 18/18                | 50-18H-10                    | 50-18S-10           | 50-18H-20        |
| 20/20                | 50-20C-10                    | 50-20S-10           | 50-20A-20        |
| 22/22                | 50-22H-10                    | 50-22S-10           | 50-22H-20        |
| 25/25                | 50-25H-10                    | 50-25S-10           | 50-25H-20        |

Double Readout

| No. of<br>Pos./Cont. | .128" (3.25mm) Mounting Hole |                                       | Less Mounting Ears                    |                                       |                                       |
|----------------------|------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                      | Solder Eyelet                | Dip Solder Tails                      | Dip Solder Tails                      | Dip Solder Tails                      | Dip Solder Tails                      |
|                      |                              | .234" (5.94mm) Long                   | .156" (3.96mm) Long                   | .125" (3.18mm) Long                   | .125" (3.18mm) Long                   |
|                      |                              | .200" (5.08mm) Between<br>Row Spacing | .200" (5.08mm) Between<br>Row Spacing | .140" (3.56mm) Between<br>Row Spacing | .140" (3.56mm) Between<br>Row Spacing |
|                      | Catalog No.                  | Catalog No.                           | Catalog No.                           | Catalog No.                           | Catalog No.                           |
| 6/12                 | 50-12H-30                    | 50-12S-20                             | 50-12H-10                             | 50-12H-30-2                           | 50-12H-30-1                           |
| 10/20                | 50-20H-30                    | 50-20S-20                             | 50-20H-10                             | 50-20H-30-2                           | 50-20H-30-1                           |
| 12/24                | 50-24H-30                    | 50-24S-20                             | 50-24H-10                             | 50-24H-30-2                           | 50-24H-30-1                           |
| 15/30                | 50-30H-30                    | 50-30S-20                             | 50-30H-10                             | 50-30H-30-2                           | 50-30H-30-1                           |
| 18/36                | 50-36H-30                    | 50-36S-20                             | 50-36H-10                             | 50-36H-30-2                           | 50-36H-30-1                           |
| 20/40                | 50-40A-30                    | 50-40S-20                             | 50-40B-10                             |                                       |                                       |
| 22/44                | 50-44H-30                    | 50-44S-20                             | 50-44H-10                             | 50-44H-30-2                           | 50-44H-30-1                           |
| 25/50                | 50-50H-30                    | 50-50S-20                             | 50-50H-10                             | 50-50H-30-2                           | 50-50H-30-1                           |

## Edge Connector High Reliability

.156" (3.96mm) Density  
Card Extender

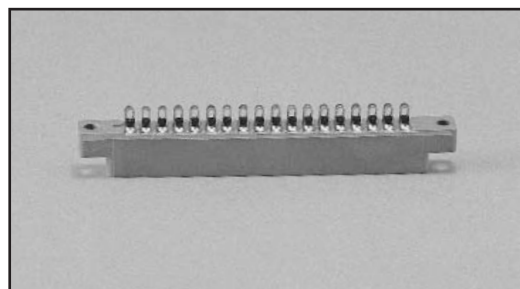
# Cinch

### FEATURES

- **Solder terminations, double readout.**
- **Bifurcated bellows type contacts.**
- **Contact positions: 6, 10, 12, 15, 18, 22, and 25.**
- **Accepts .062" (1.59mm) thick double-sided PC boards.**

### MATERIALS

**Insulation Material:** Diallyl phthalate, green  
**Contact Material:** Beryllium copper  
**Contact Plating:** 30 in. select gold over 50 in. nickel in the contact areas, 10 in. gold tails



### ENVIRONMENTAL

**Shock:** Per MIL-STD-202E, Method 213, Condition C  
**Operating Temperature:** -65°C to +125°C  
**Vibration:** Per MIL-STD-202E, Method 204, Condition B  
**Humidity:** Per MIL-STD-202E, Method 103, Condition B

### ELECTRICAL

**Withstanding Voltage:** 830 VAC RMS (@ sea level)  
**Current Rating:** 5 Amps  
**Contact Resistance:** 5 Milliohms maximum  
**Insulation Resistance:** 5000 Megohms minimum

### MECHANICAL

**Individual Contact Insertion and Separation Force:**  
16 oz. maximum with .070" (1.78mm) blade;  
1 oz. minimum with .054" (1.37mm) blade

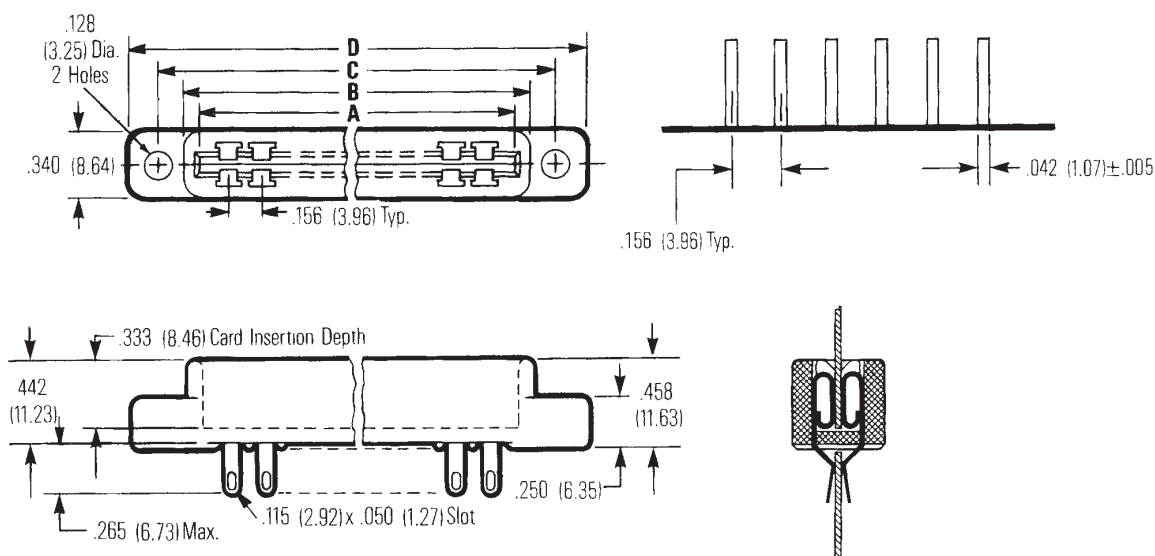
Marketed exclusively through distribution.

# Edge Connector High Reliability

.156" (3.96mm) Density  
Card Extender

# Cinch

## Dimensions



## Dimensions

| No. of<br>Pos./Cont. | A     |        | B     |        | C     |        | D     |        |
|----------------------|-------|--------|-------|--------|-------|--------|-------|--------|
|                      | in    | mm     | in    | mm     | in    | mm     | in    | mm     |
| 6/12                 | 1.100 | 27.94  | 1.239 | 31.47  | 1.531 | 38.88  | 1.785 | 45.33  |
| 10/20                | 1.724 | 43.79  | 1.864 | 47.34  | 2.156 | 54.76  | 2.410 | 61.21  |
| 12/24                | 2.036 | 51.71  | 2.177 | 55.29  | 2.469 | 62.71  | 2.723 | 69.16  |
| 15/30                | 2.504 | 63.60  | 2.645 | 67.18  | 2.937 | 74.59  | 3.191 | 81.05  |
| 18/36                | 2.972 | 75.48  | 3.114 | 79.09  | 3.406 | 86.51  | 3.660 | 92.96  |
| 22/44                | 3.596 | 91.33  | 3.739 | 94.97  | 4.031 | 102.38 | 4.285 | 108.83 |
| 25/50                | 4.067 | 103.30 | 4.208 | 106.88 | 4.500 | 114.30 | 4.754 | 120.75 |

## Ordering Information

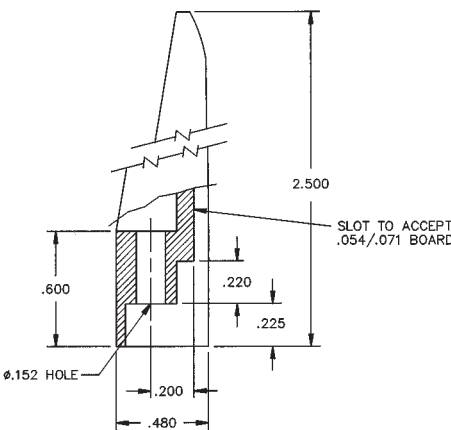
| No. of<br>Pos./Cont. | Catalog No. |
|----------------------|-------------|
| 6/12                 | 50-12S-30   |
| 10/20                | 50-20S-30   |
| 12/24                | 50-24S-30   |
| 15/30                | 50-30S-30   |
| 18/36                | 50-36S-30   |
| 22/44                | 50-44S-30   |
| 25/50                | 50-50S-30   |

Marketed exclusively through distribution.

**Card Guides**

Card guide for .100" (2.54mm) and .156" (3.96mm) density edge connectors. Accepts .062" (1.59mm) thick PC boards. Card guides attach to mounting ears and guide printed circuit board into connector. Order separately.

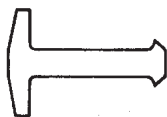
**Material:** Polypropylene  
Part No. 50-GP-1 (Green)  
Part No. 50-GP-1B (Black)



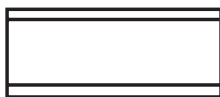
**Polarizing Keys**



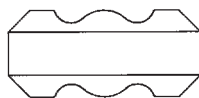
Style A



Style B



Style C



Style D

| Description          | Connector Family | Material           | Style | Catalog No. |
|----------------------|------------------|--------------------|-------|-------------|
| Between-contact type | .156"            | Cellulose acetate  | B     | 50-PK       |
| In-contact type      | .156"            | Thermoset plastic  | B     | 50-PK1      |
| Between-contact type | .156"            | Glass epoxy        | A     | 50-PK2      |
| Between-contact type | .156"            | Glass epoxy        | D     | 50-PK2M     |
| Between-contact type | .100"            | Glass-filled nylon | C     | 50-PK3      |
| In-contact type      | .156"            | Thermoplastic      | B     | 50-PK4      |

**Plug Buttons**

Nickel-plated steel. Spring tension prongs.  
41V provides ventilation wherever required.



**Dimensions**

| For Hole<br>Diameter |       | Cup<br>Diameter |       | Catalog No. |
|----------------------|-------|-----------------|-------|-------------|
| in                   | mm    | in              | mm    |             |
| .250                 | 6.35  | .406            | 10.32 | 41A         |
| .375                 | 9.53  | .500            | 12.70 | 41B         |
| .500                 | 12.70 | .656            | 16.67 | 41C         |
| .625                 | 15.88 | .797            | 20.24 | 41D         |
| .750                 | 19.05 | .938            | 23.81 | 41E         |
| .875                 | 22.23 | 1.062           | 26.99 | 41F         |
| 1.000                | 25.40 | 1.156           | 29.37 | 41G         |
| 1.250                | 31.75 | 1.438           | 36.51 | 41H         |
| 1.000                | 25.40 | 1.156           | 29.37 | 41V         |

# Press-Fit BNC Coaxial Connector Board Mount Receptacle for 75 $\Omega$ Applications

# Cinch

## FEATURES

- **Solderless, Press-Fit Installation.**
- **Strong, One-Piece Cast Body.**
- **Standard BNC Interface.**
- **75 $\Omega$  Impedance.**
- **Meets Lucent Technologies (AT&T) Requirements.**

## MATERIALS

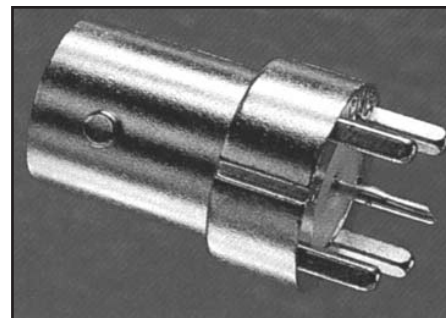
**Body:** One-piece diecast zinc per QQ-Z-363  
**Plating:** Nickel, 150 $\mu$ in. min. per QQ-N-290 over copper, 200 $\mu$ in. min. per MIL-C-14550  
**Center Contact:** Beryllium copper  
**Plating:** Gold, 30 $\mu$ in. minimum over nickel, 50 $\mu$ in. minimum  
**Insulator:** Teflon TFE per ASTM D1710

## ELECTRICAL

**Impedance:** 75 $\Omega$   
**Frequency Range:** 0 to 4 GHz  
**RF Leakage:** > -55 dB  
**Insertion Loss:** .2dB maximum @ 2 GHz  
**VSWR:** 1.024  
**Working Voltage:**  $\leq$  500 VAC RMS @ sea level  
**Insulation Resistance:**  $\geq$  5000 MOhms @ 500 VDC

## MECHANICAL

**Connector Insertion Force:**  $\leq$  500 lb.\*  
**Connector Removal Force:**  $\geq$  100 lb.\*  
**Center Contact Insertion Force:**  $\leq$  2.0 lb.\*  
**Center Contact Removal Force:**  $\geq$  2.0 oz.\*  
 \*Requirements are for two connector insertions into the same PC board mounting holes. PC board thickness can range from .093" to .300" thick. PC board hole requirements are as follows:  
 Ground Legs: .059" Nom.  
 Center Contact: .040" Nom.



**Compliant version,  
Pt. No. 299 99 00 134  
is also available.  
For more information please  
contact us at 1-800-323-9612**

Unique patented press-fit connector design allows for multiple insertions into a backplane without loss of mechanical retention or electrical performance.

The design requirements for nominal PC board mounting holes and thickness are as follows:

### Insertion Forces:

.093 Board Thickness: 200 lb. max.  
 .250 Board Thickness: 500 lb. max.

### Withdraw Forces:

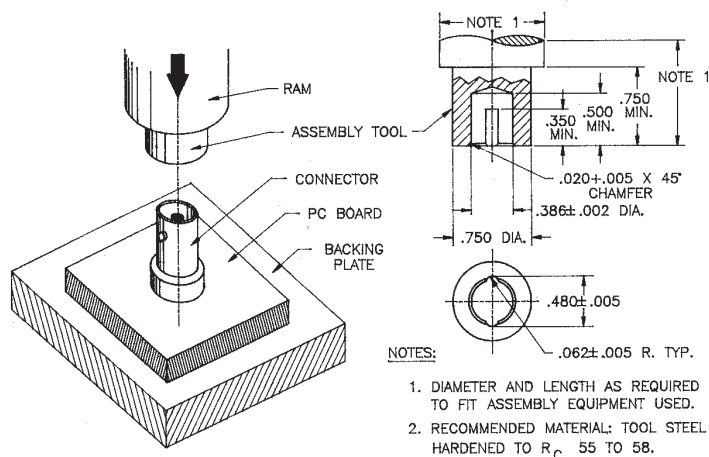
.093 Board Thickness: 100 lb. max.  
 .250 Board Thickness: 200 lb. max.

The Cinch Press-Fit BNC surpasses these requirements with a unique, non-symmetrical ground leg design. This design allows the connector to be inserted, removed, rotated 180°, and reinserted into the same location on the board without loss of mechanical or electrical performance.

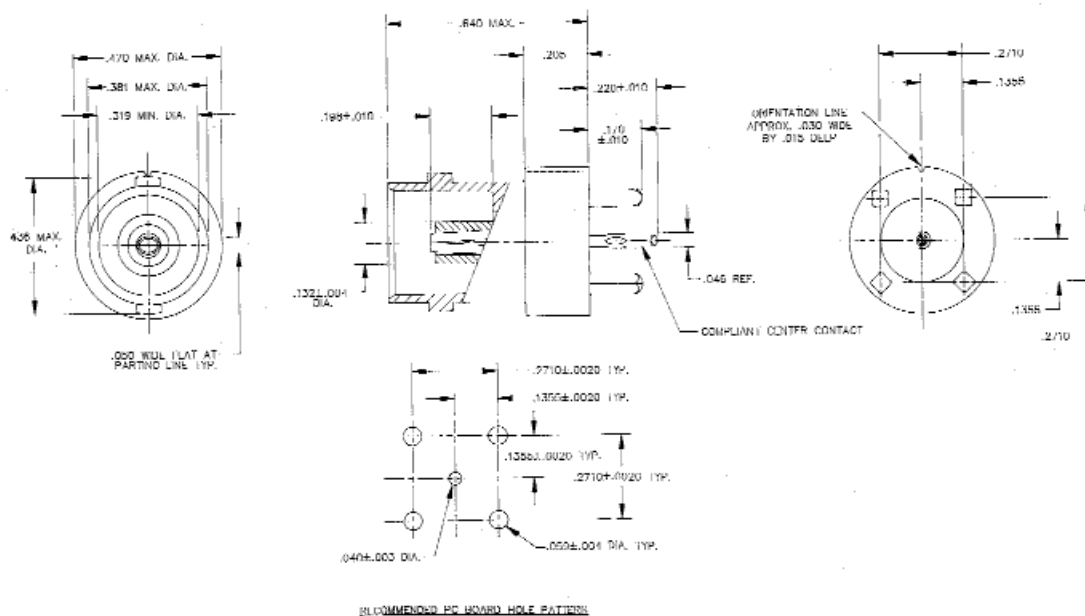
# Press-Fit BNC Coaxial Connector Board Mount Receptacle for 75 $\Omega$ Applications

# Cinch

## Production Insertion Tool Design



## Press-Fit BNC Connector Dimensions



## Ordering Information

Catalog Number: BNC-1-PF  
Standard Package: Anti-Static Tube, 48 Connectors Per Tube