

COMMERCIAL

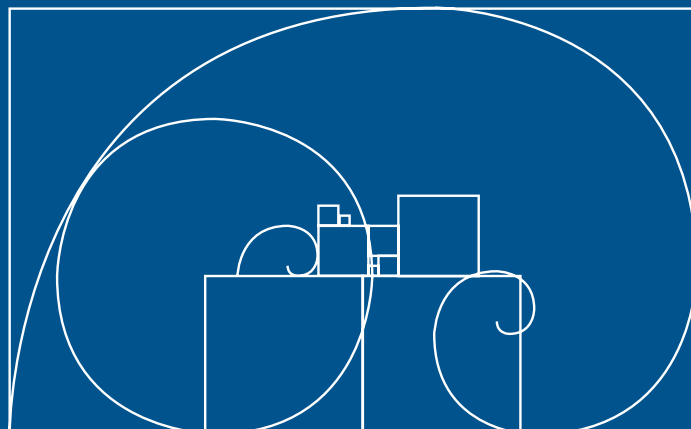
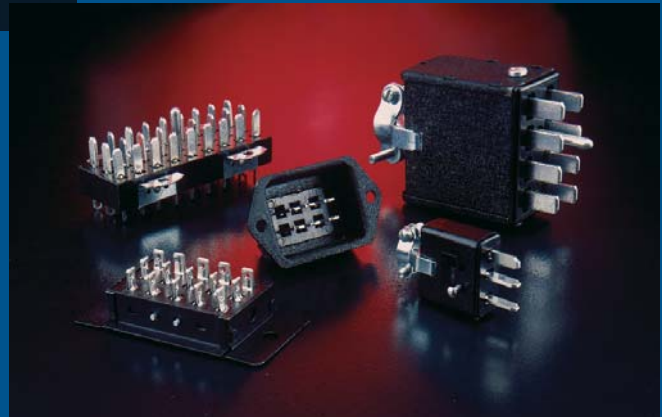
Barrier Blocks

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.

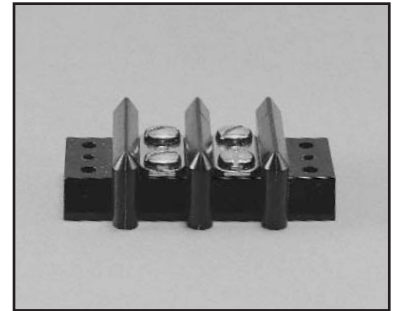
When looking for time reliability to solve your commercial interconnect needs, look no further than Cinch Connectors. Whether it's a Jones Plug and Socket, Barrier Block, Edge Card, Mini Din plug, or our newest addition, the 75Ω BNC Press-Fit connector, you will always know years of customer satisfaction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

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.*

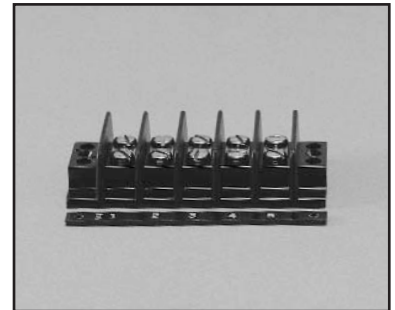
MATERIALS

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-0



ENVIRONMENTAL

Operating Temperature: -55° to +300°F
Certifications: UL Recognized - File E61245
CSA - LR 31996



Marketed exclusively through distribution.

TERMINAL BLOCK QUICK REFERENCE

| Series | Center-to-Center Spacing | Number of Terminals | Single or Double Row | Screw Size | Operating Voltage | Current Rating | Max. Wire Size | Max. Watts/Terminal | Voltage Rating w/Marker | Voltage Rating w/o Marker | Marker Strip 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 |

Discontinued

Barrier Blocks Series 140

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

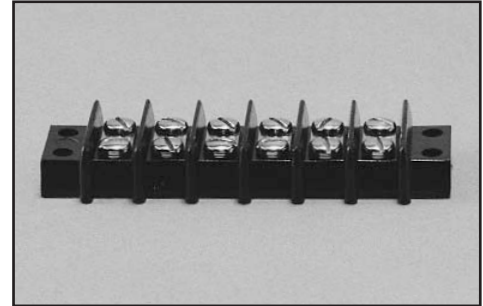


Electrical Characteristics

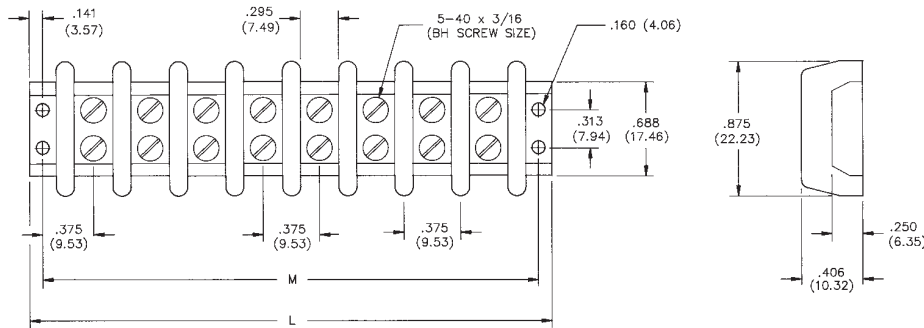
Voltage Rating: 250 VAC RMS maximum
Current Rating: 15 Amps maximum
Maximum Watts Per Terminal: 3750

Mechanical Characteristics

Maximum Wire Size: #16 AWG
Recommended Tightening Torque: 9 lb.-in.



Dimensions



Ordering Information

| No. of Terminals | Standard Screw Catalog No. | "M" Dim. | "L" 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

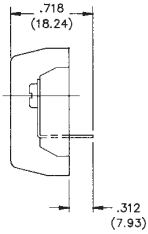
.375 Density, 5-40 x 3/16"
BH Screw, Open Bottom,
Double Row



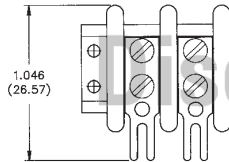
Solder Terminal Options

Dimensions

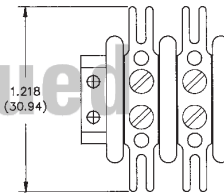
"Y" Terminals



~~"3/4W" Terminals~~



~~"W" Terminals~~



Ordering Information

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

Solder Terminals can be ordered separately.

| | |
|----------------------|---------------------|
| Terminal Type | Catalog No. |
| "Y" | Y-140 |
| "3/4W" | 3/4W-140 |
| "W" | W-140 |

Marketed exclusively through distribution.

Barrier Blocks Series 140

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

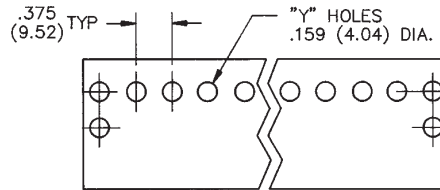
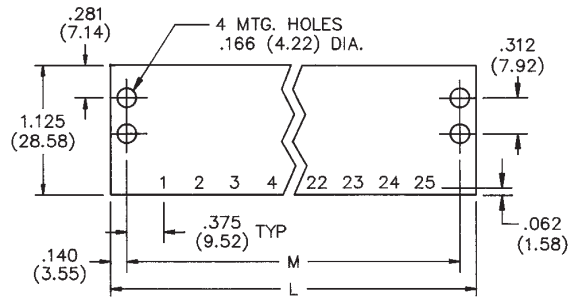


Marker Strips

Dimensions

Standard

"Y" Terminal



Ordering Information

| No. of 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

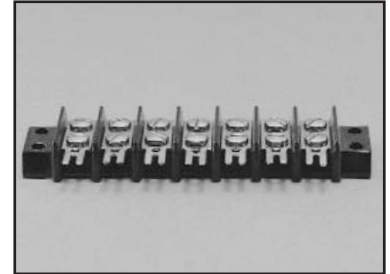
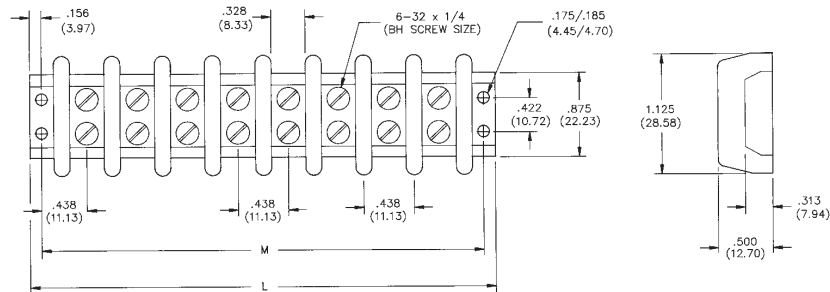
Maximum Watts Per Terminal: 5000

Mechanical Characteristics

Maximum Wire Size: #14 AWG

Recommended Tightening Torque: 12 lb.-in.

Dimensions



Ordering Information

| No. of Terminals | Standard Screw Catalog No. | "M" Dim. | "L" 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

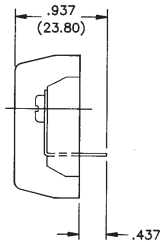
.438 Density, 6-32 x 1/4"
BH Screw, Open Bottom,
Double Row



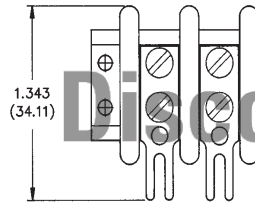
Solder Terminal Options

Dimensions

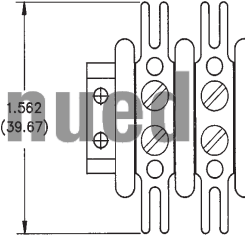
"Y" Terminals



~~"3/4W" Terminals~~



~~"W" Terminals~~



Ordering Information

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

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

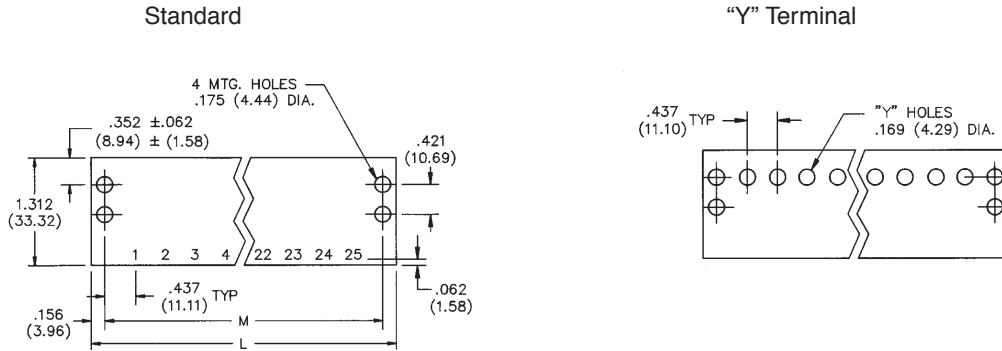
.438 Density, 6-32 x 1/4"
BH Screw, Open Bottom,
Double Row



2

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



Electrical Characteristics

Voltage Rating: 250 VAC RMS maximum

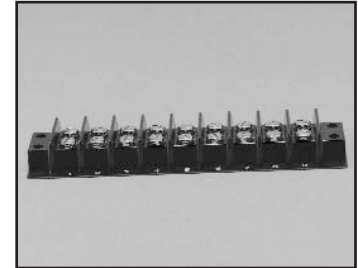
Current Rating: 30 Amps maximum

Maximum Watts Per Terminal: 7500

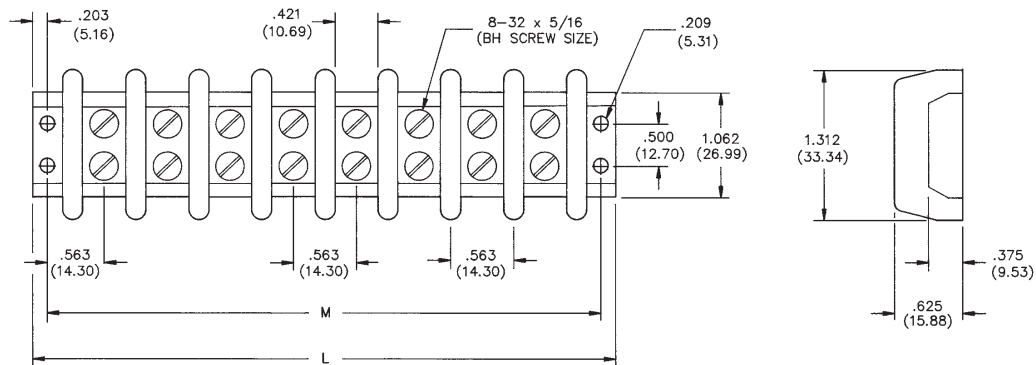
Mechanical Characteristics

Maximum Wire Size: #10 AWG

Recommended Tightening Torque: 16 lb.-in.



Dimensions



Ordering Information

| No. of Terminals | Standard Screw Catalog No. | "M" Dim. | "L" 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.

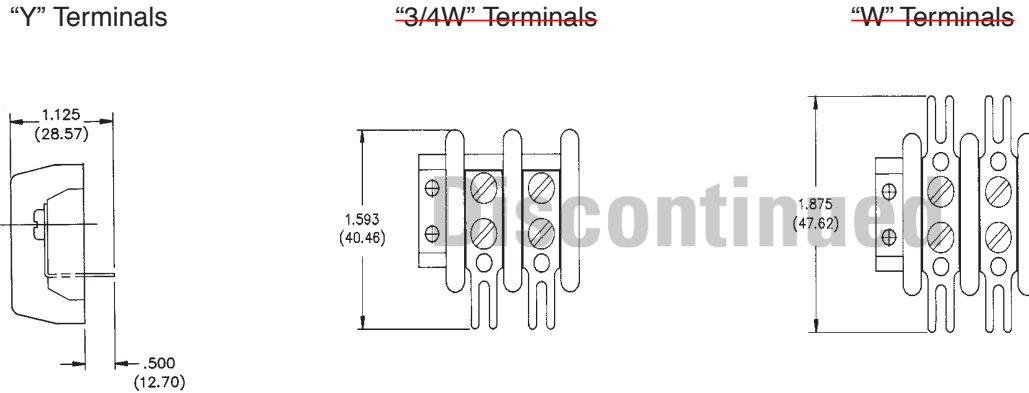
Barrier Blocks Series 142

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



Solder Terminal Options

Dimensions



Ordering Information

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

Solder Terminals can be ordered separately.

| Terminal Type | Catalog No. |
|-------------------|---------------------|
| "Y" | Y-142 |
| "3/4W" | 3/4W-142 |
| "W" | W-142 |

Marketed exclusively through distribution.

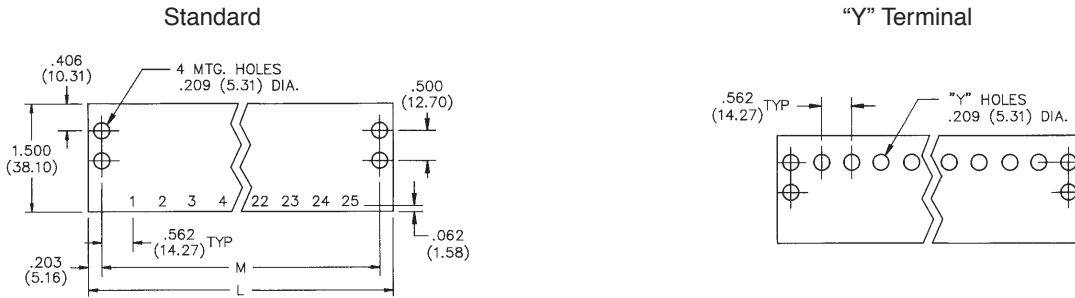
Barrier Blocks Series 142

.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

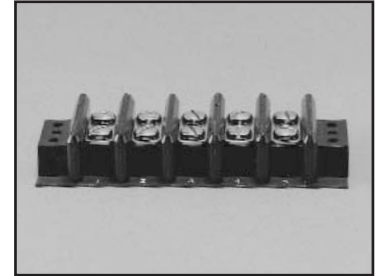


Electrical Characteristics

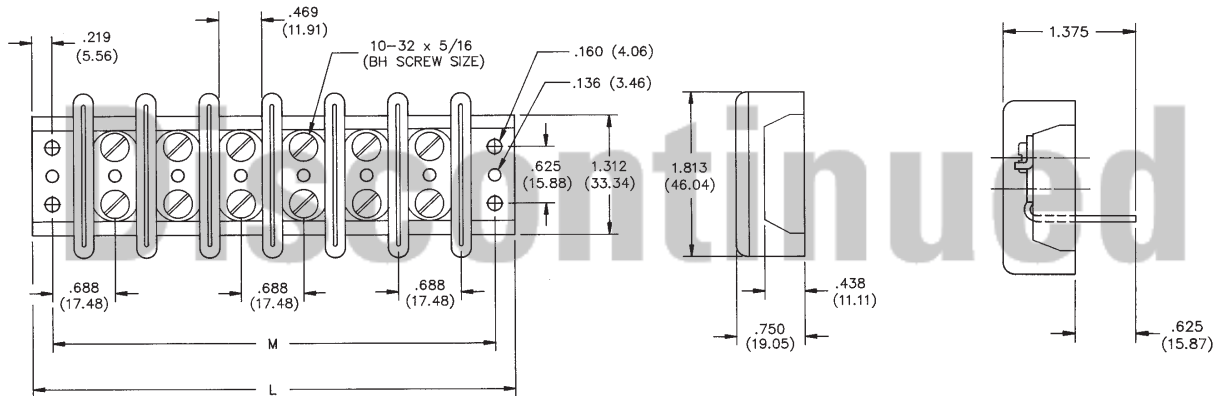
~~Voltage Rating: 250 VAC RMS maximum~~
~~Current Rating: 40 Amps maximum~~
~~Maximum Watts Per Terminal: 10,000~~

Mechanical Characteristics

~~Maximum Wire Size: #10 AWG~~
~~Recommended Tightening Torque: 20 lb.-in.~~



Dimensions



Ordering Information

| No. of Terminals | Standard Screw Catalog No. | Y-Terminals Catalog No. | "M" Dim. | "L" 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.

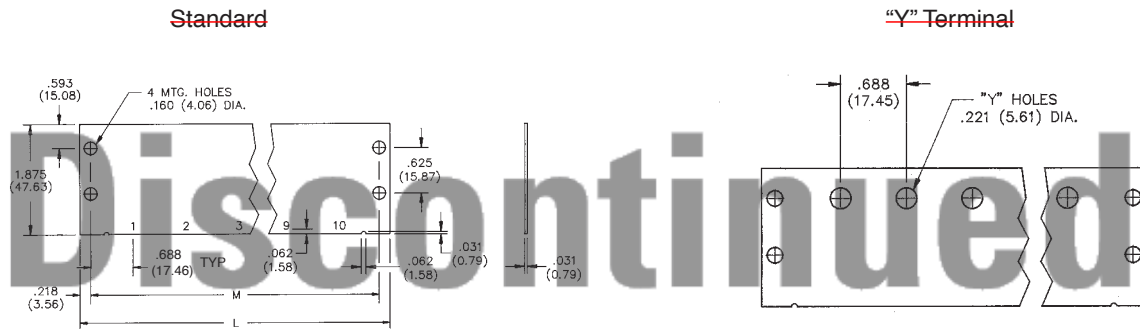
**Barrier Blocks
Series 150**

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



Marker Strips

Dimensions



Ordering Information

| No. of 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.

Barrier Blocks Series 152

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

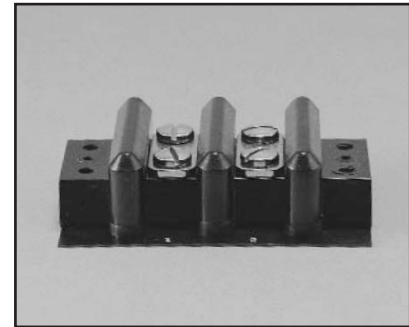


Electrical Characteristics

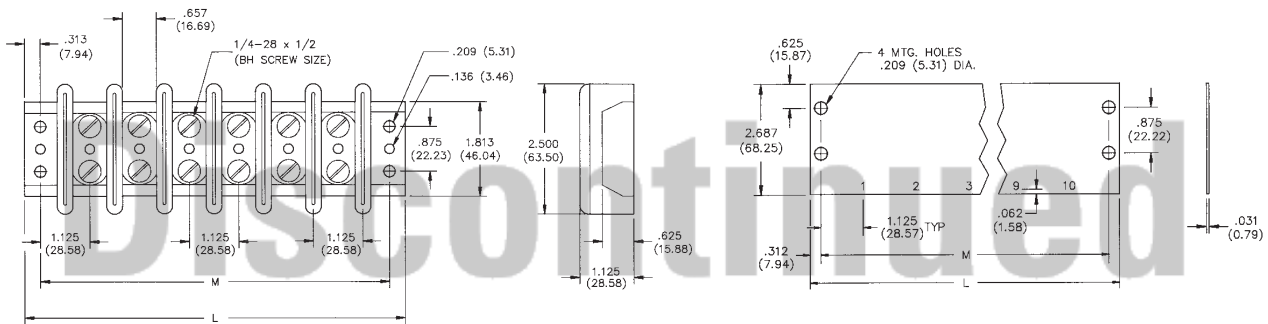
~~Voltage Rating: 250 Volts maximum~~
~~Current Rating: 70 Amps maximum~~
~~Maximum Watts Per Terminal: 54,000~~

Mechanical Characteristics

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



Dimensions



Ordering Information

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

Accessories

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



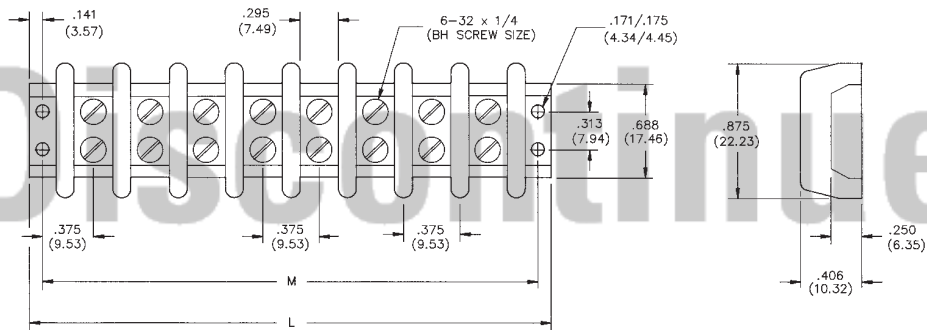
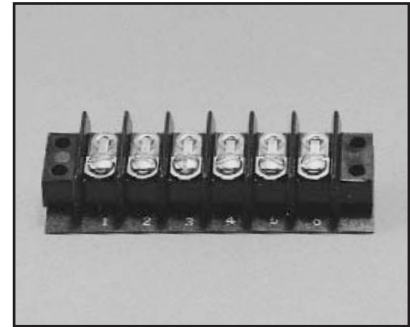
Electrical Characteristics

~~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 Terminals | Catalog No. | "M" Dim. (in) | "L" 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.

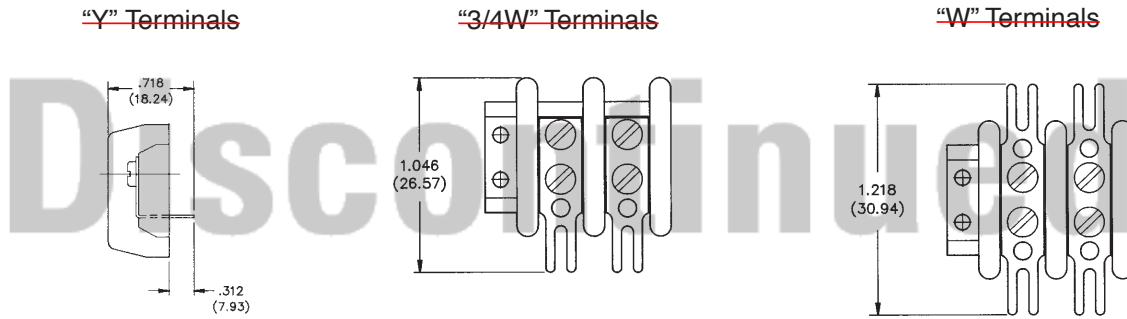
Barrier Blocks Series 164

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



Solder Terminal Options

Dimensions



Ordering Information

| No. of 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

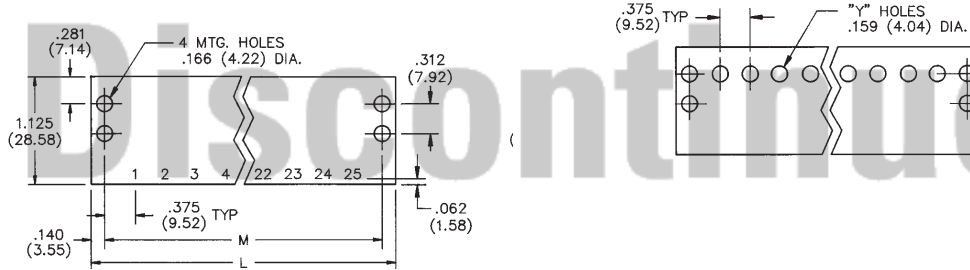


~~Marker Strips~~

~~Dimensions~~

Standard

~~"Y" Terminal~~



~~Ordering Information~~

| No. of 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



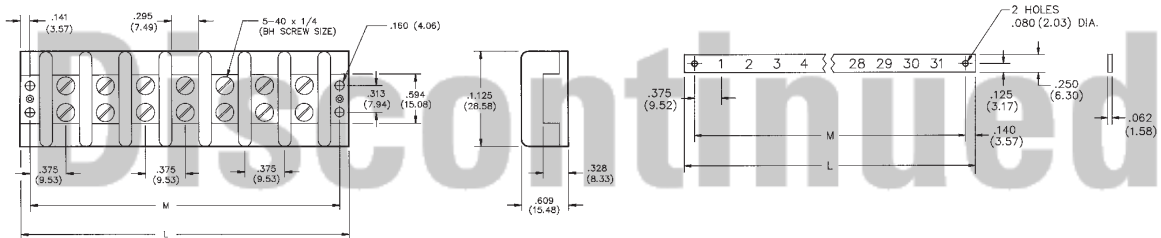
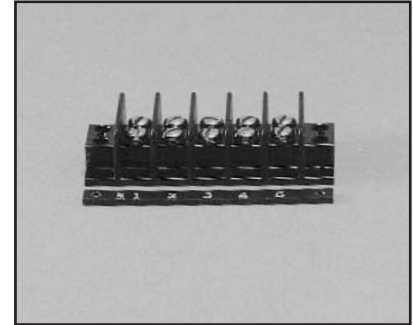
Electrical Characteristics

~~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 Terminals | Catalog No. | "M" Dim. (in) | "L" Dim. (in) | Marker Strip 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



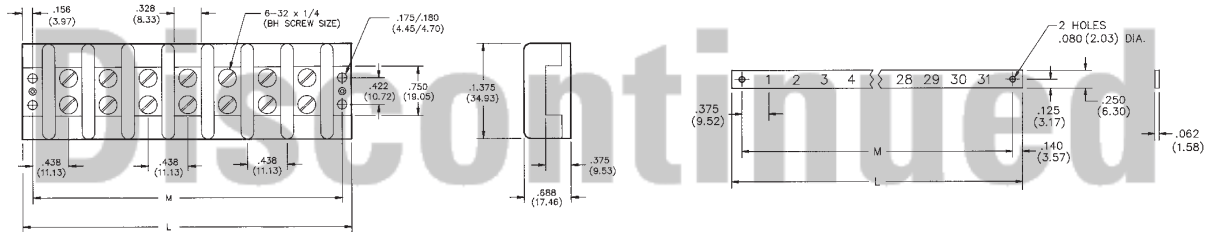
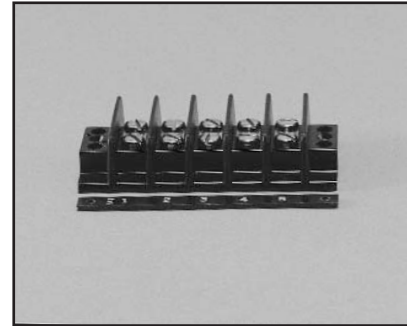
Electrical Characteristics

~~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 Terminals | Catalog No. | "M" Dim. (in) | "L" Dim. (in) | Marker Strip 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

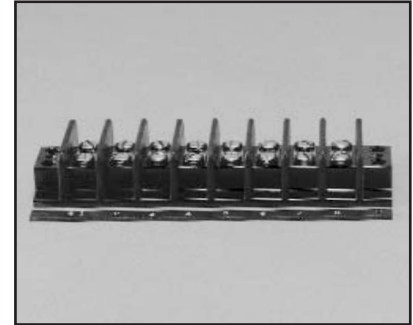


Electrical Characteristics

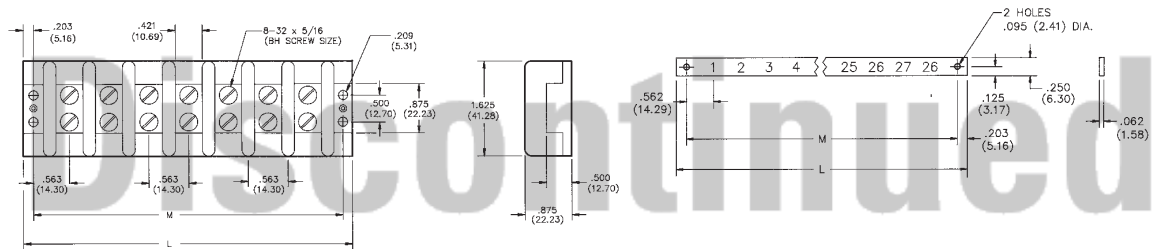
~~Voltage Rating: 600 Volts maximum~~
~~Current Rating: 30 Amps~~
~~Maximum Watts Per Terminal: 7500~~

Mechanical Characteristics

~~Maximum Wire Size: #10~~
~~Recommended Tightening Torque: 16 lb.-in.~~



Dimensions



Ordering Information

| No. of Terminals | Catalog No. | "M" Dim. (in) | "L" Dim. (in) | Marker Strip 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

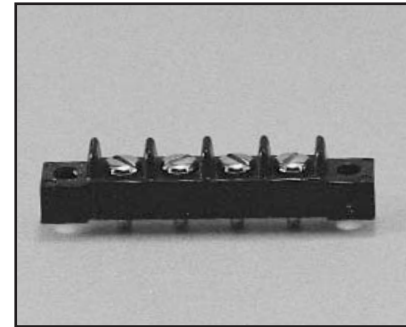


Electrical Characteristics

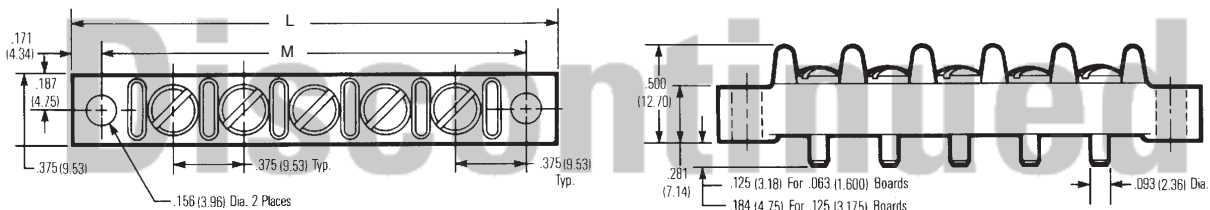
~~Voltage Rating: 250 Volts maximum~~
~~Current Rating: 15 Amps maximum~~
~~Maximum Watts Per Terminal: 3750~~

Mechanical Characteristics

~~Maximum Wire Size: 16 AWG~~
~~Recommended Tightening Torque: 16 lb.-in.~~



Dimensions



Ordering Information

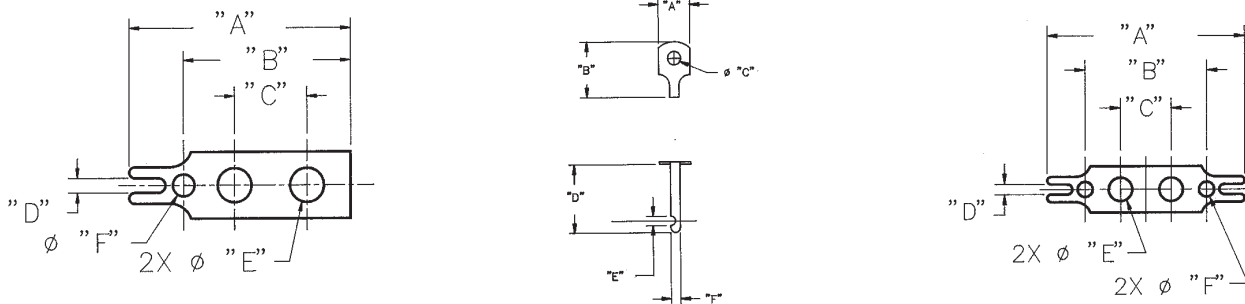
| No. of Terminals | With Mounting Ears | | "M" Dimension | "L" Dimension |
|------------------|----------------------------|----------------------------|---------------|---------------|
| | Catalog No. .125 Tail Lgth | Catalog No. .184 Tail Lgth | | |
| 2 | 2-176-2 | 2-176-3 | 1.125 | 1.469 |
| 3 | 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 Terminals | Without Mounting Ears | | "L" Dimension |
|------------------|----------------------------|----------------------------|---------------|
| | Catalog No. .125 Tail Lgth | Catalog No. .184 Tail Lgth | |
| 2 | 2-176-2A | 2-176-3A | 1.719 |
| 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 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 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 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 |

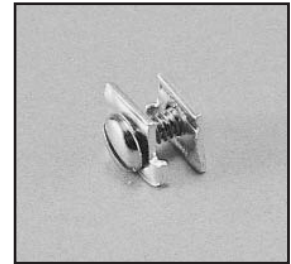
Marketed exclusively through distribution.

Barrier Blocks Accessories



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, 541 | QC-1 | 6-32x5/16" | 12 thru 22 |
| 142, 542 | QC-2 | 8-32x3/8" | 10 thru 16 |

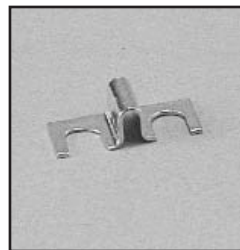
Jumpers

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

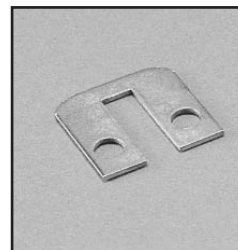
Ordering Information

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

* Connects two alternate terminals



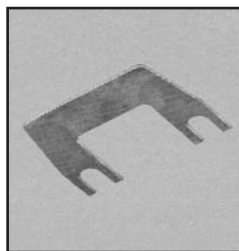
Type A



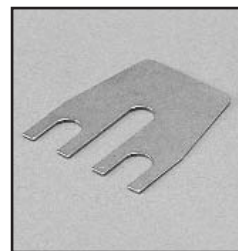
Type B



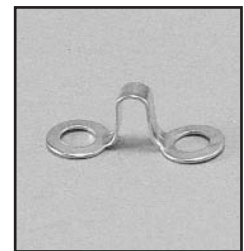
Type C



Type D



Type E



Type F

Marketed exclusively through distribution.

FEATURES

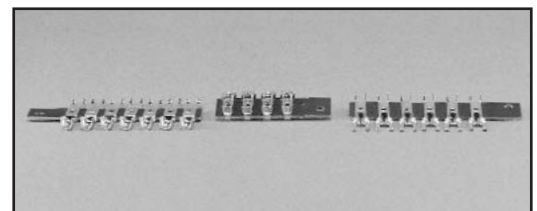
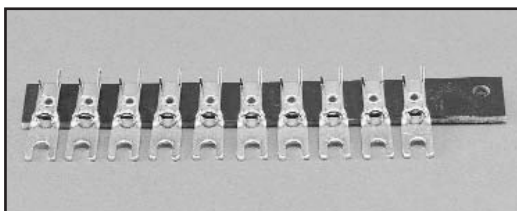
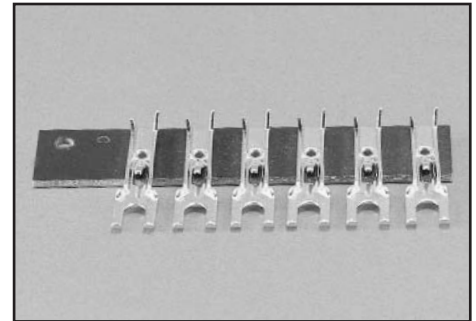
- *Minimize wiring errors.*
- *Available in straight and right-angle styles.*
- *Available with cable clamp hole on right or left side, designated by "L" or "R" at end of catalog number.*
- *Cable clamp hole for securing cable/wires with lacing twine or ty-wrap.*

MATERIALS

Insulation Material: UL 94HB rated XPC, chocolate

Contact Material: Brass

Contact Plating: Cadmium

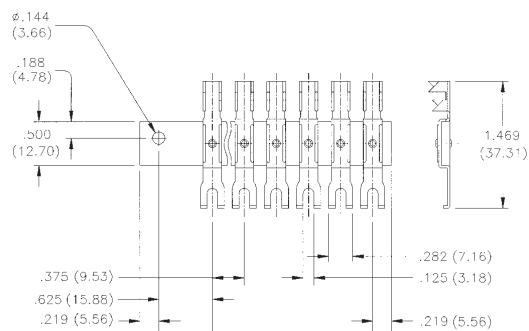


Marketed exclusively through distribution.

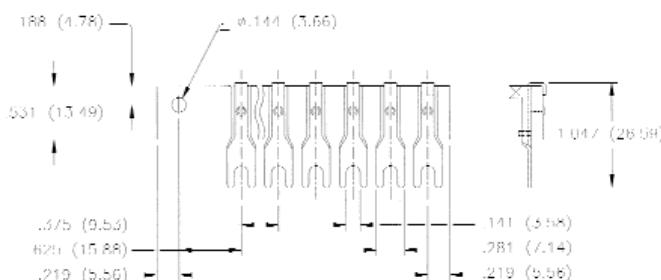
Catalog Numbers and Dimensions for Fanning Strips for 140 Series Terminal Blocks

Straight Type

Dimensions



Catalog No. 6-160-R



Catalog No. 6-160B-R

Ordering Information

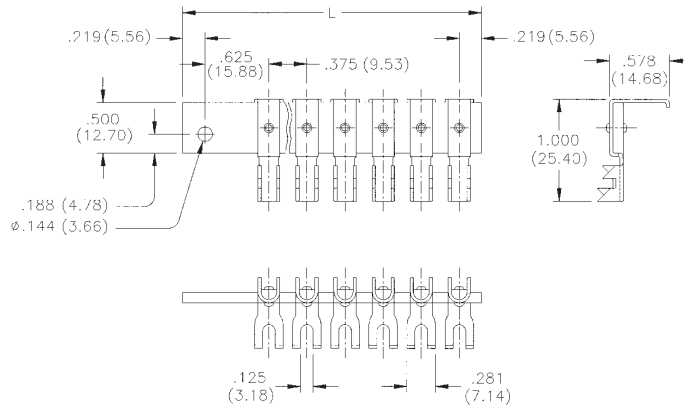
| No. of Terminals | Catalog No. | Catalog No. | Catalog No. | Catalog No. |
|------------------|---------------------|---------------------|----------------------|----------------------|
| 2 | 2-160-R | 2-160-L | 2-160B-R | 2-160B-L |
| 3 | 3-160-R | 3-160-L | 3-160B-R | 3-160B-L |
| 4 | 4-160-R | 4-160-L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

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 |

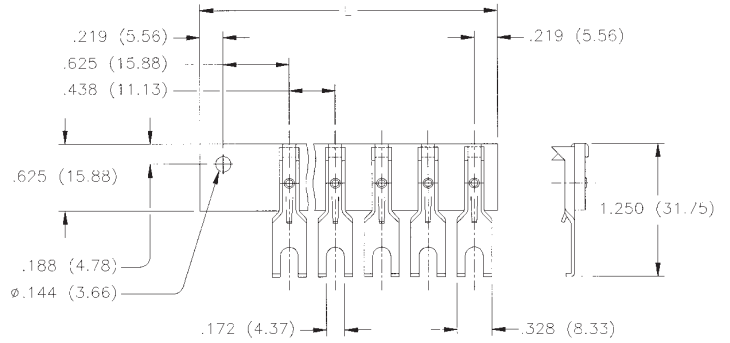
Marketed exclusively through distribution.

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

Straight Type

| No. of 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

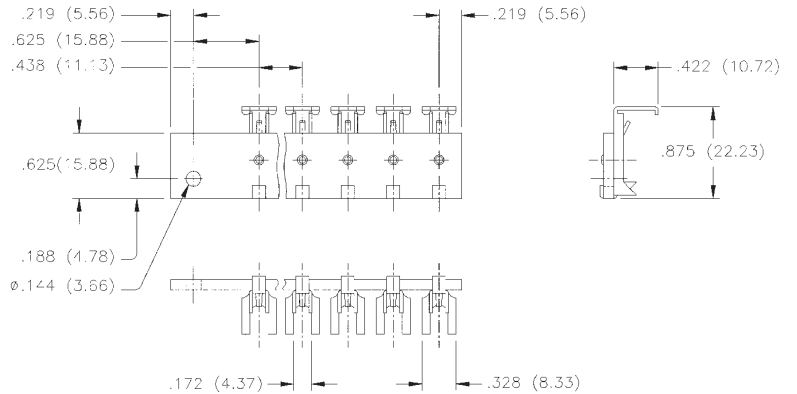


Catalog No. 5-161-R

Right-Angle Type

| No. of 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.

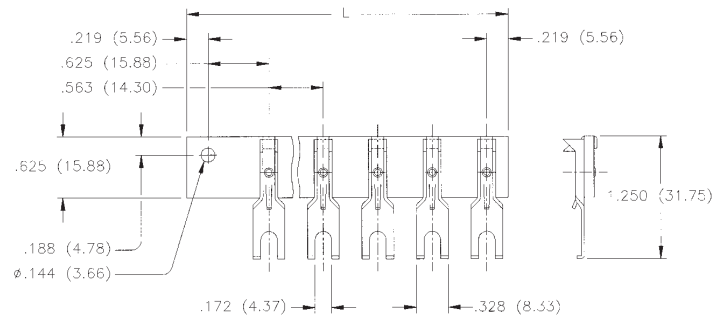
Catalog Numbers and Dimensions for Fanning Strips for 142 Series Barrier Blocks

Straight Type

Ordering Information

| No. of 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



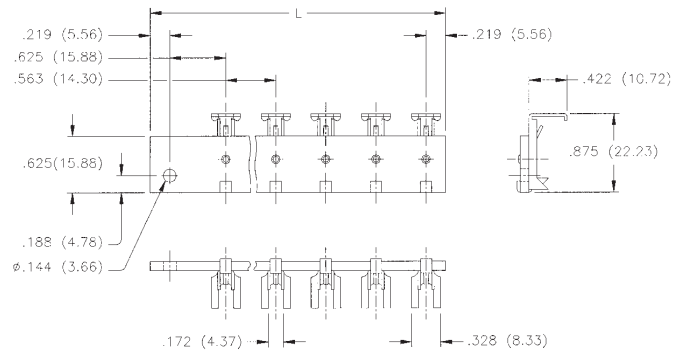
Catalog No. 5-162-R

Right-Angle Type

Ordering Information

| No. of 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

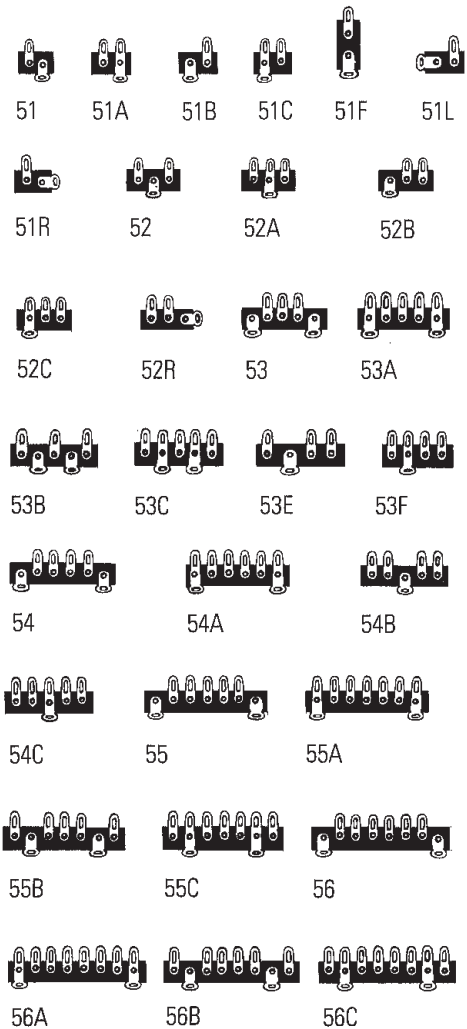
Mounting Hole: .140" (3.56mm) diameter

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

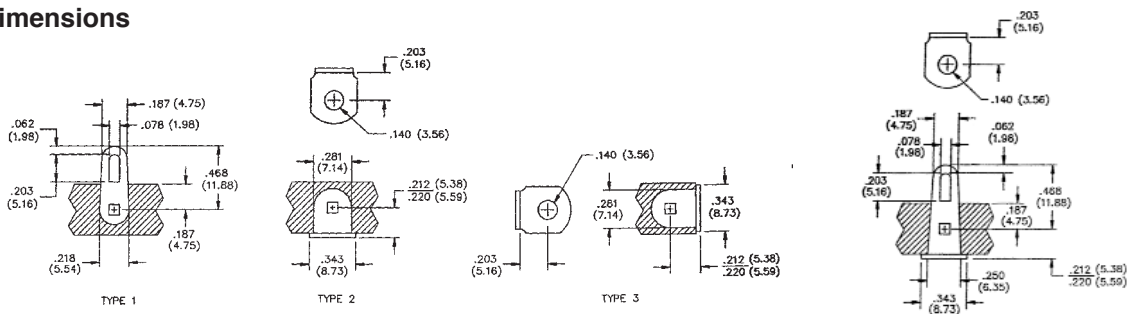
Lug Density: .375" (9.53mm)

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.

**Jones
Plugs/Sockets
Series 300**

Multiple Density
Solder Eyelet

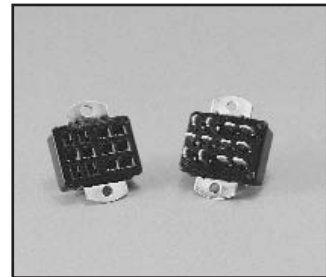


FEATURES

- 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

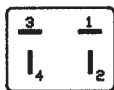


Marketed exclusively through distribution.

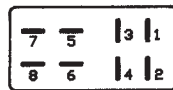
Polarizing Patterns - 300 Series



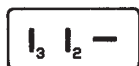
302



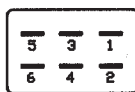
304



308



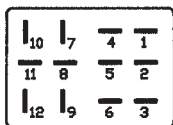
303



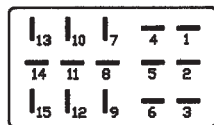
306



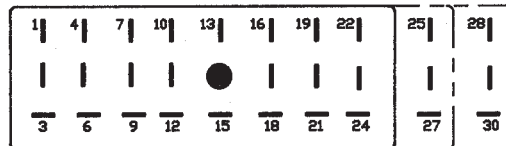
310



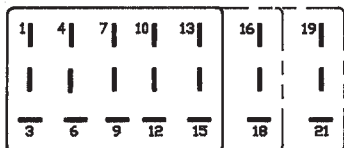
312



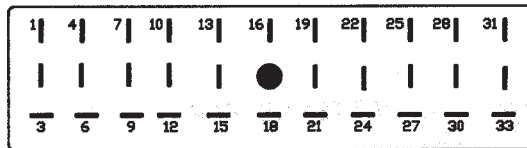
315-12



324,327,330



315,318,321

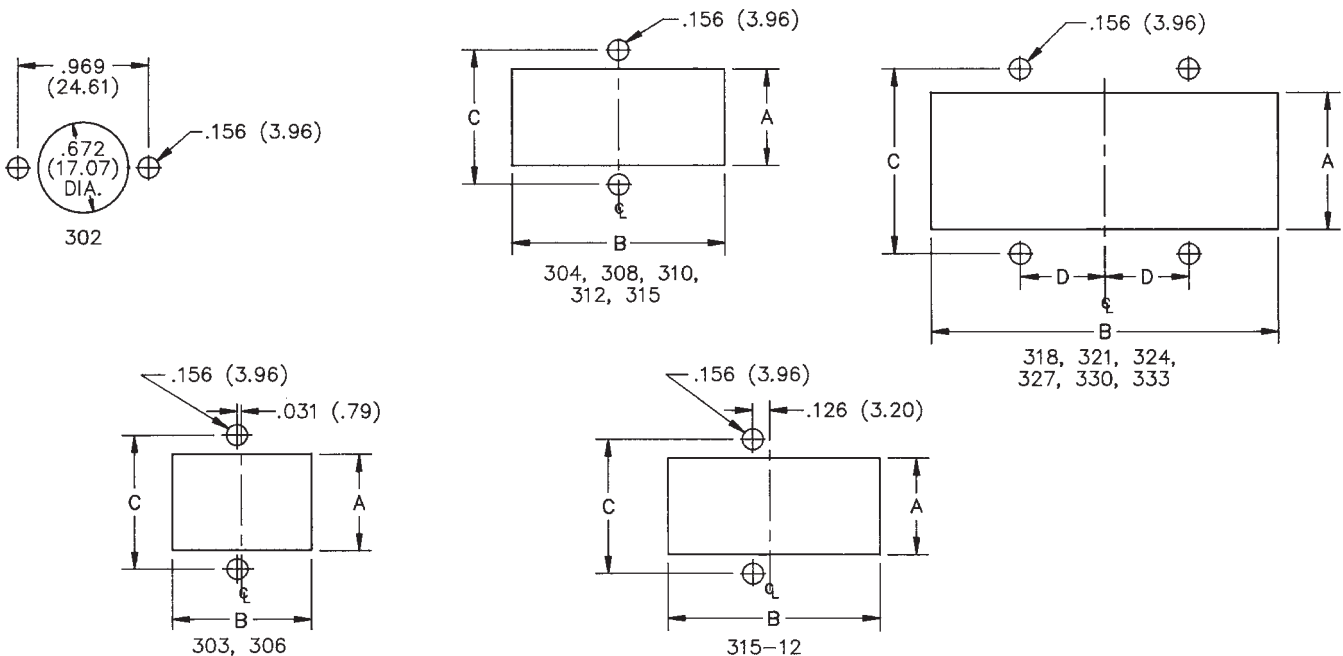


333

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.

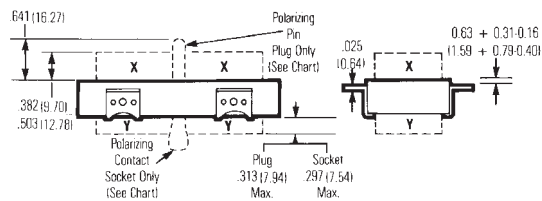
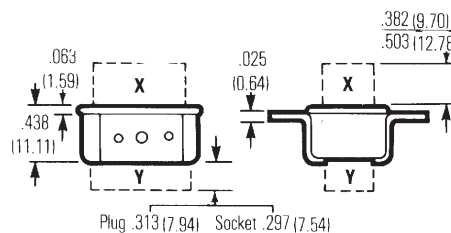
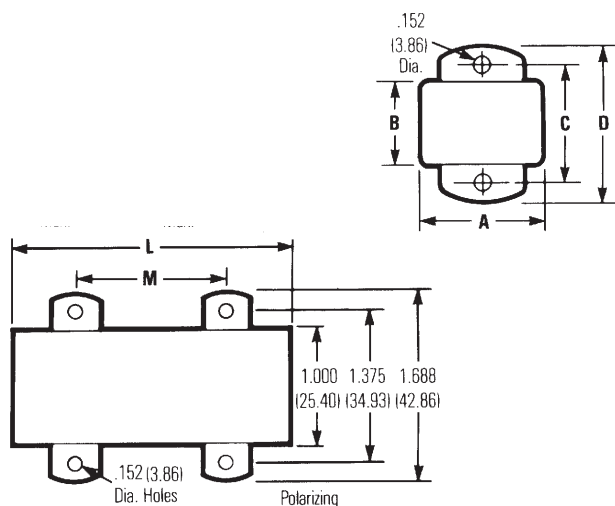
**Jones
Plugs/Sockets
Series 300**

Multiple Density
Solder Eyelet With Angle
Bracket/Less Angle Bracket



| No. of Contacts | With Angle Bracket | | No. of Contacts | Less Angle Bracket | |
|-----------------|---------------------|---------------------|-----------------|----------------------|----------------------|
| | Catalog No. Plug | Catalog No. Socket | | 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 | P-310-AB | N/A | 10 | P-310-LAB | N/A |
| 12 | P-312-AB | 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 | P-318-LAB | S-318-LAB |
| 21 | P-321-AB | S-321-AB | 21 | P-321-LAB | S-321-LAB |
| 24 | P-324-AB | S-324-AB | 24 | P-324-LAB | S-324-LAB |
| 27 | P-327-AB | S-327-AB | 27 | P-327-LAB | S-327-LAB |
| 30 | P-330-AB | S-330-AB | 30 | P-330-LAB | S-330-LAB |
| 33 | P-333-AB | S-333-AB | 33 | P-333-LAB | S-333-LAB |

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 |

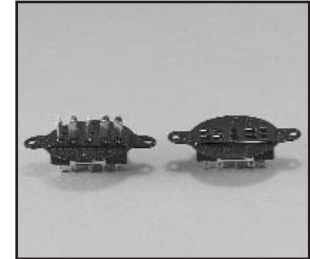
NOTE: 15-position plug and socket require only two mounting brackets, mounted on center of connector.

Marketed exclusively through distribution.

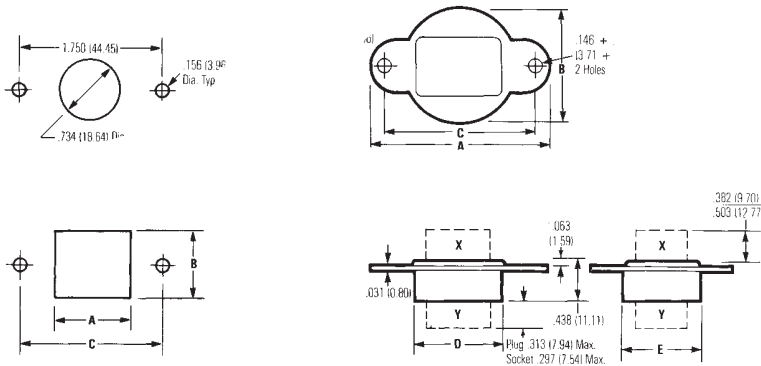
300 Series with Flush Plate (FP)

| No. of Contacts | Catalog No. Plug | Catalog No. 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 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

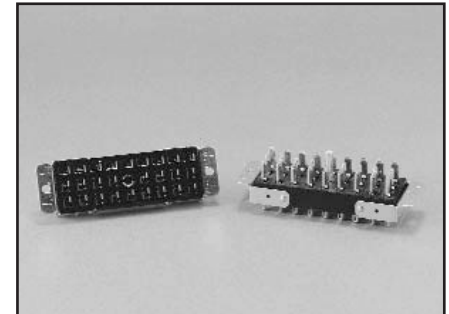
| Reference | A | | B | | C | |
|-----------|-------|-------|-------|-------|-------|-------|
| | in | mm | in | mm | in | mm |
| 303-FP | .953 | 24.21 | .516 | 13.11 | 1.750 | 44.45 |
| 304-FP | .703 | 17.86 | .766 | 19.46 | 1.750 | 44.45 |
| 306-FP | .953 | 24.21 | .766 | 19.46 | 1.750 | 44.45 |
| 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 |

Marketed exclusively through distribution.

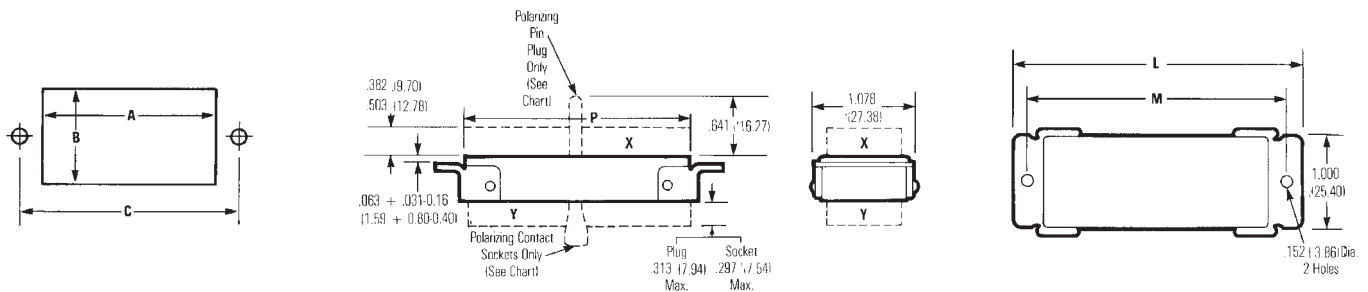
300 Series with End Brackets (EB)

| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 15 | P-315-EB | S-315-EB |
| 18 | P-318-EB | S-318-EB |
| 21 | P-321-EB | S-321-EB |
| 24 | P-324-EB | S-324-EB |
| 28 | P-328-EB | S-328-EB |
| 30 | P-330-EB | S-330-EB |
| 33 | P-333-EB | S-333-EB |

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 Contacts | L | | M | | P | | Polarizing Pin |
|-----------------|---------------|--------|---------------|-------|----------------|-------|----------------|
| | ±.031 (.79mm) | | ±.031 (.79mm) | | ±.063 (1.59mm) | | |
| 15 | 2.313 | 58.75 | 2.000 | 50.80 | 1.625 | 41.28 | NO |
| 18 | 2.625 | 66.68 | 2.313 | 58.75 | 1.938 | 49.23 | NO |
| 21 | 2.938 | 74.63 | 2.625 | 66.68 | 2.250 | 57.15 | NO |
| 24 | 3.250 | 82.55 | 2.938 | 74.63 | 2.563 | 65.10 | 14 |
| 27 | 3.563 | 90.50 | 3.250 | 82.55 | 2.875 | 73.03 | 14 |
| 30 | 3.875 | 98.43 | 3.563 | 90.50 | 3.188 | 80.98 | 14 |
| 33 | 4.188 | 106.38 | 3.875 | 98.43 | 3.500 | 88.90 | 17 |

Panel Cutout Dimensions

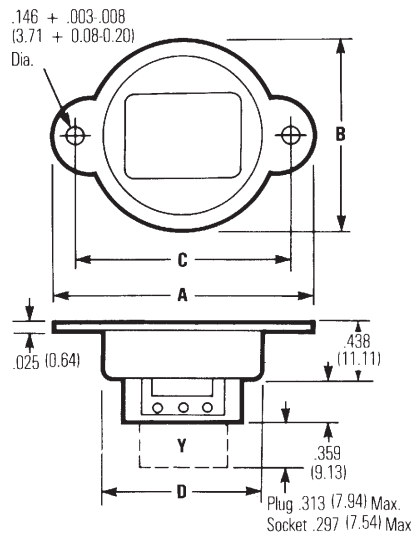
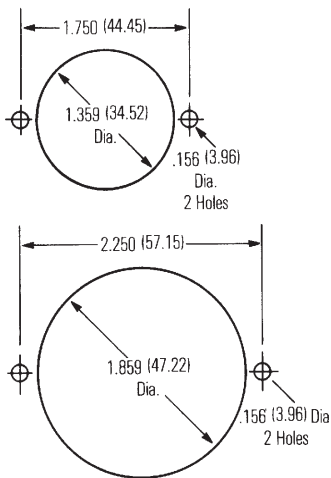
| Reference | A | | B | | C | |
|-----------|-------|-------|-------|-------|-------|-------|
| | in | mm | in | mm | in | mm |
| 315-EB | 1.641 | 41.68 | 1.016 | 25.81 | 2.000 | 50.80 |
| 318-EB | 1.953 | 49.61 | 1.016 | 25.81 | 2.313 | 58.75 |
| 321-EB | 2.266 | 57.56 | 1.016 | 25.81 | 2.625 | 66.68 |
| 324-EB | 2.578 | 65.48 | 1.016 | 25.81 | 2.938 | 74.63 |
| 327-EB | 2.891 | 73.43 | 1.016 | 25.81 | 3.250 | 82.55 |
| 330-EB | 3.203 | 81.36 | 1.016 | 25.81 | 3.563 | 90.50 |
| 333-EB | 3.516 | 89.31 | 1.016 | 25.81 | 3.875 | 98.43 |

Marketed exclusively through distribution.

300 Series with Recessed Plate (RP)

| No. of Contacts | Catalog No. Plug | Catalog No. 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 | P-310-RP | N/A |
| 12 | P-312-RP | N/A |

NOTE: Not available in contact sizes 15-33.



Y = length of plug or socket tails.

Dimensions

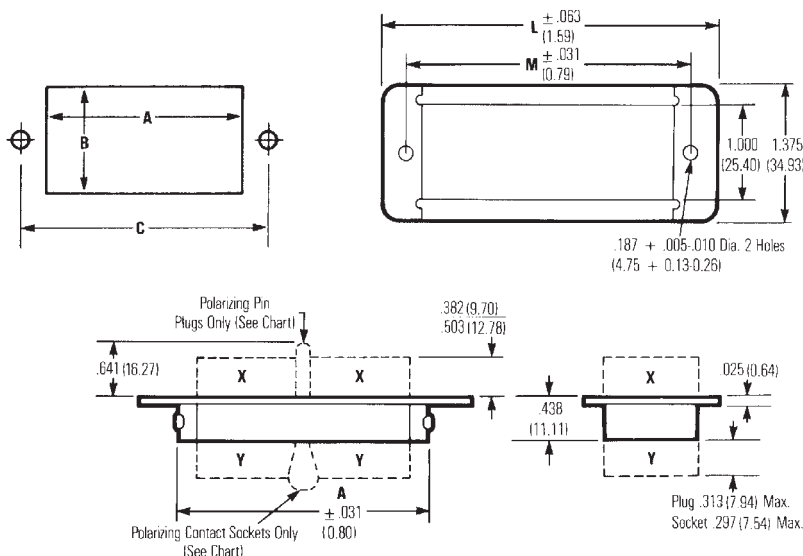
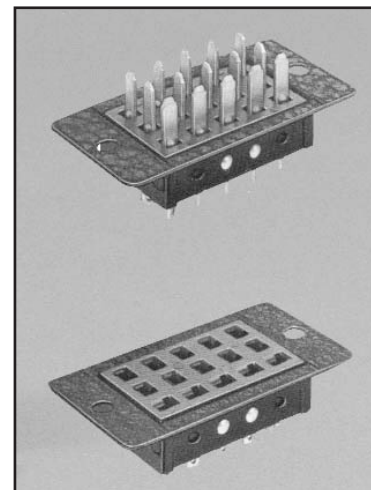
| No. of Contacts | A | | B | | C | | D Max. | |
|-----------------|-------|-------|-------|-------|-------|-------|--------|-------|
| | in | mm | in | mm | in | mm | in | mm |
| 2 | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 1.350 | 34.29 |
| 3 | 2.063 | 52.40 | 1.500 | 38.10 | 1.750 | 44.45 | 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 |

Marketed exclusively through distribution.

300 Series with Shallow Bracket (SB)

| No. of Contacts | Catalog No. Plug | Catalog No. 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 Polarizing Contacts | A | | M | | L | | Polarizing Pin |
|----------------------------|----------|------------|----------|------------|----------|-------------|----------------|
| | ±.031 in | (.79mm) mm | ±.031 in | (.79mm) mm | ±.063 in | (1.59mm) 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 |

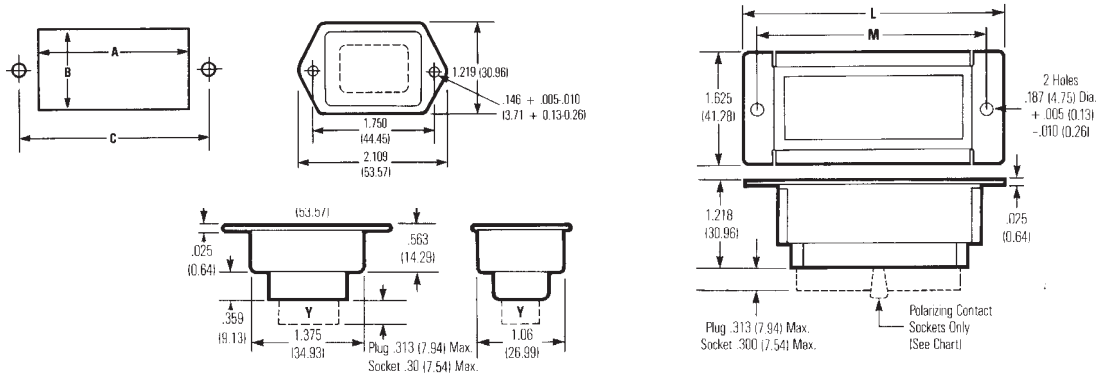
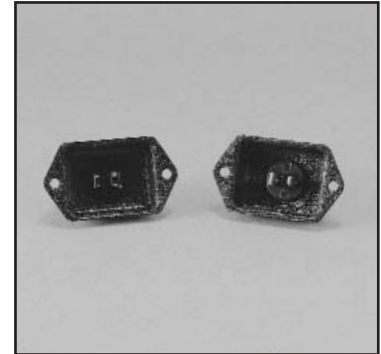
Panel Cutout Dimensions

| 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 |

Marketed exclusively through distribution.

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 ±.063 (1.60mm) | | M ±.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 |

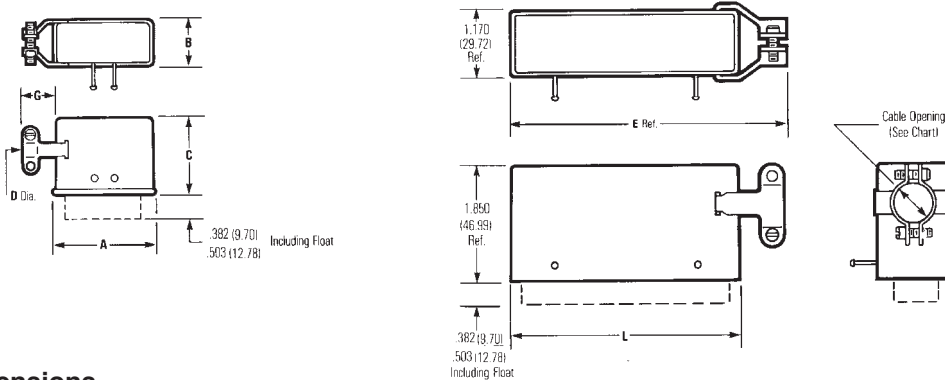
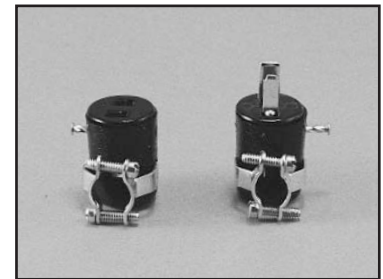
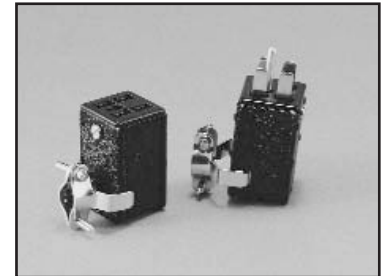
Panel Cutout Dimensions

| 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 Contacts | Catalog No. Plug | Catalog No. 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

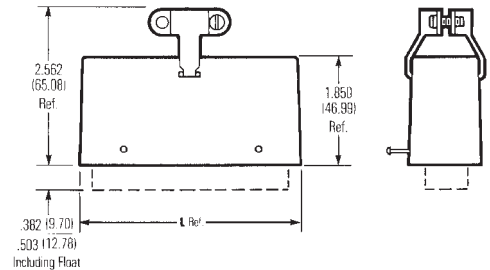
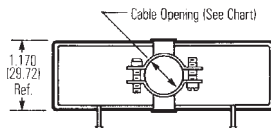
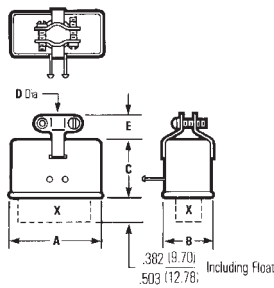
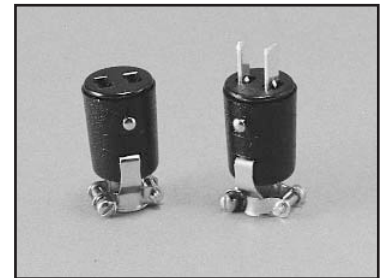
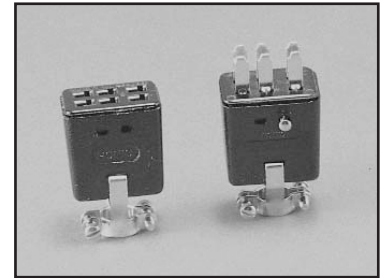
| No. of Contacts | A ±.016 (.41mm) | | B ±.016 (.41mm) | | C ±.031 (.79mm) | | G | | Cable "D" Opening | |
|-----------------|--------------------|-------|--------------------|-------|--------------------|-------|------|-------|-------------------|-------|
| | in | mm | in | mm | in | mm | in | mm | 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 Contacts | E | | L | | Cable Opening | | Polarizing 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.

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

| No. of Contacts | Catalog No. Plug | Catalog No. 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 Contacts | A ±.016 (.41mm) | | B ±.016 (.41mm) | | C ±.031 (.79mm) | | "D" Cable Opening | | E ±.031 (.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 Contacts | L | | Cable Opening | | Polarizing 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

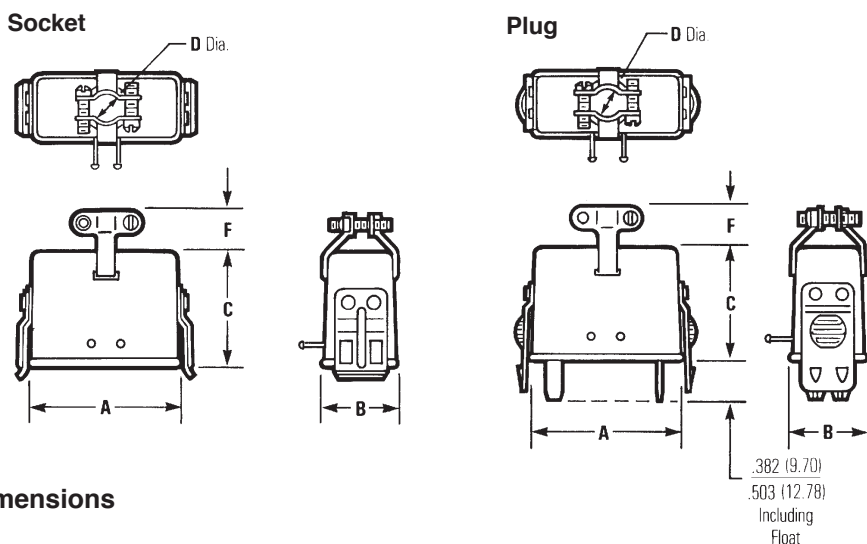


300 Series Plug with Hood and Lock (CCT-L) and Socket with Hood and Keeper (CCT-K)

| No. of Contacts | Catalog No. Plug w/ Lock | Catalog No. 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 |



2



Dimensions

| No. of Contacts | A ±.016 (.41mm) | | B ±.016 (.41mm) | | C ±.031 (.79mm) | | F | | "D" Cable Opening | | Polarizing 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 | • | • | • | • | • | • | • | • | • | • | • |

SOCKETS

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

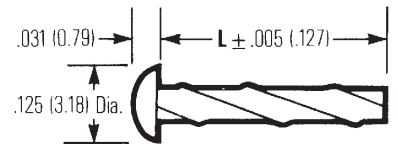
NOTE: Cinch layout S315-12 is available only in "AB" or "LAB".

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

Dimensions

Ordering Information

| No. of Contacts | Dim. L | | No. of Contacts | Catalog No. |
|-----------------|-------------------|-------|-----------------|-------------|
| | + .005 (.13mm) 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

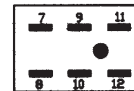
POLARIZING PATTERNS FOR SERIES 2400



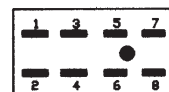
2402



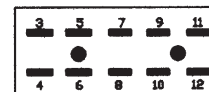
2404



2406



2408



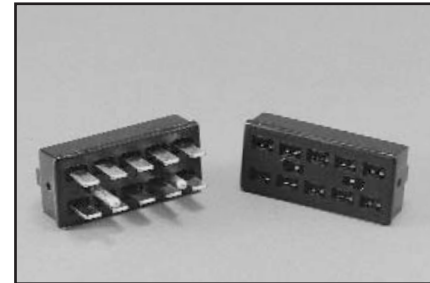
2410



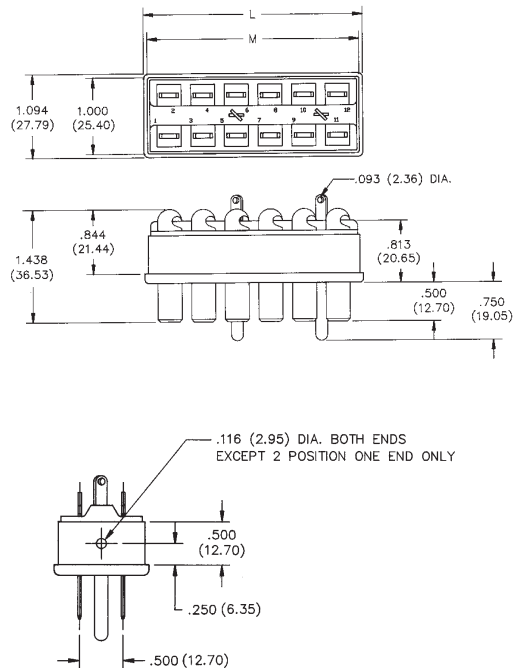
2412

2400 Series Less Angle Bracket

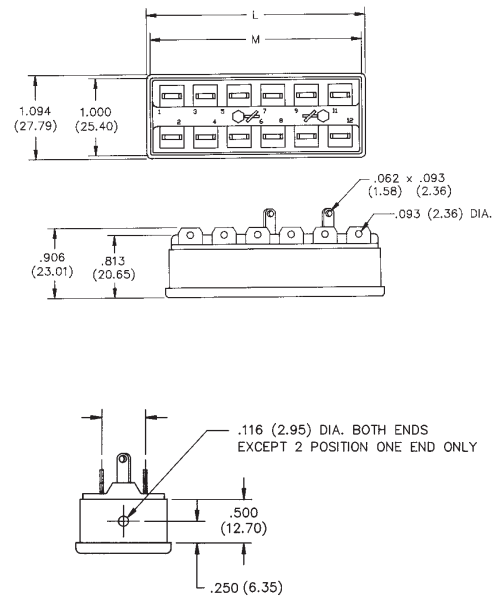
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2 | N/A | S-2402-LAB |
| 4 | P-2404-LAB | S-2404-LAB |
| 6 | P-2406-LAB | S-2406-LAB |
| 8 | P-2408-LAB | S-2408-LAB |
| 10 | P-2410-LAB | S-2410-LAB |
| 12 | P-2412-LAB | S-2412-LAB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



Plug



Socket



Dimensions - Plug or Socket

| No. of 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.

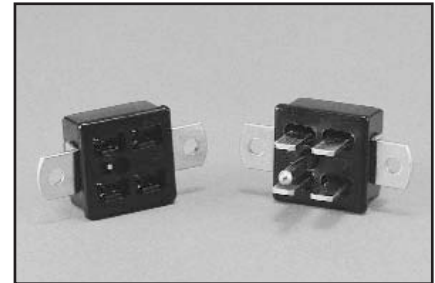
**Jones
Plugs/Sockets
Series 2400**

Multiple Density
Solder Eyelet
With Angle Bracket

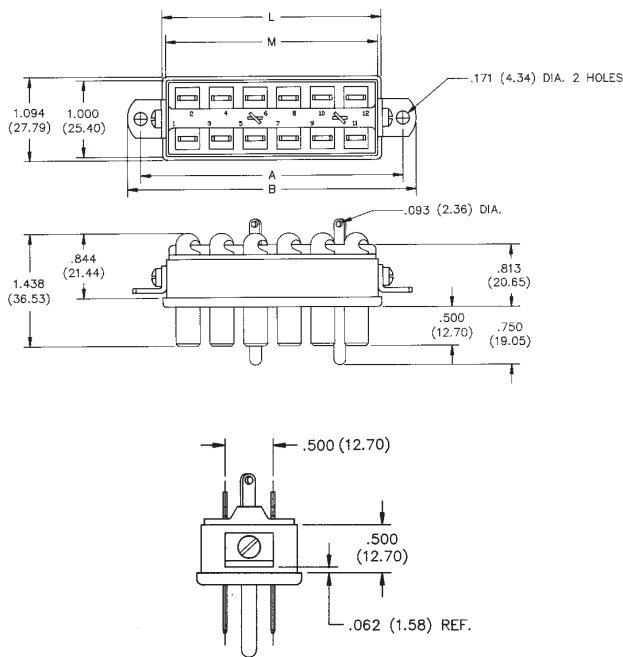


2400 Series with Angle Bracket

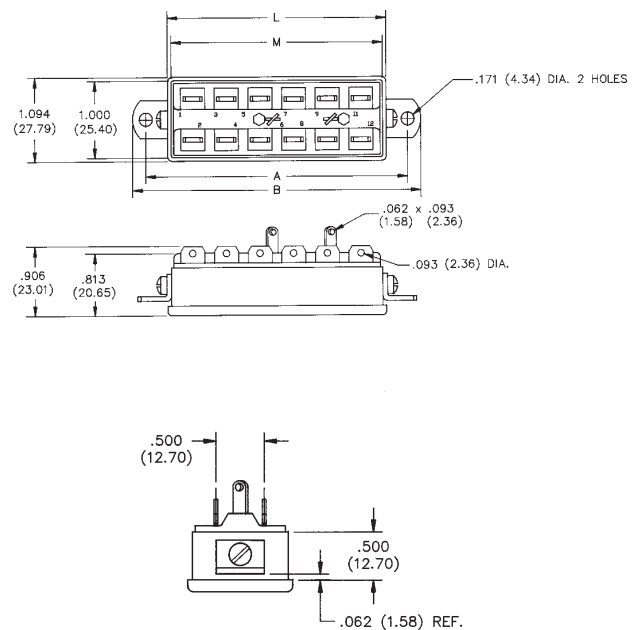
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2 | N/A | S-2402-AB |
| 4 | P-2404-AB | S-2404-AB |
| 6 | P-2406-AB | S-2406-AB |
| 8 | P-2408-AB | S-2408-AB |
| 10 | P-2410-AB | S-2410-AB |
| 12 | P-2412-AB | S-2412-AB |



Plug



Socket



Dimensions - Plug or Socket

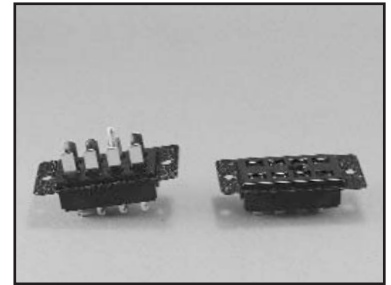
| No. of Contacts | M | | L | |
|-----------------|-------|-------|-------|-------|
| | in | mm | in | mm |
| 2 | .563 | 14.29 | .656 | 16.67 |
| 4 | 1.000 | 25.40 | 1.094 | 27.78 |
| 6 | 1.438 | 36.51 | 1.531 | 38.89 |
| 8 | 1.875 | 47.63 | 1.969 | 50.01 |
| 10 | 2.313 | 58.74 | 2.406 | 61.12 |
| 12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

Panel Cutout dimensions are on page 2-61.

Marketed exclusively through distribution.

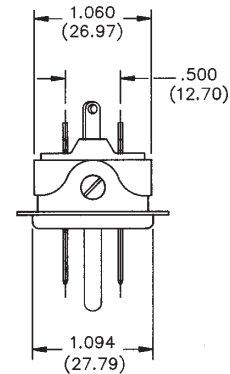
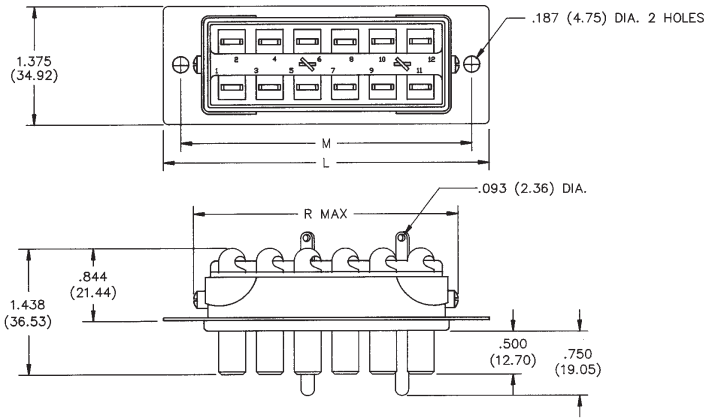
2400 Series with Shallow Bracket

| 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 |

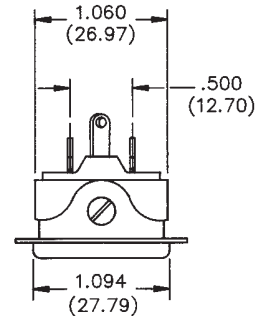
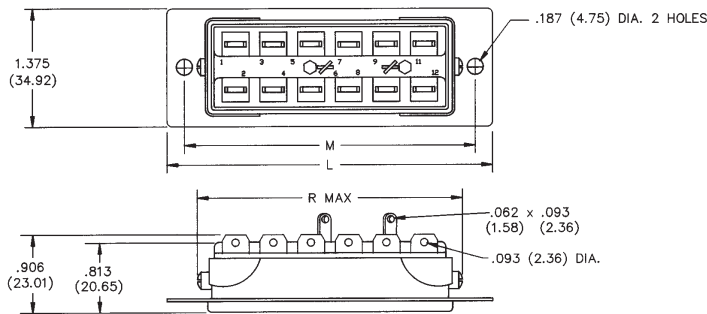


2

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.

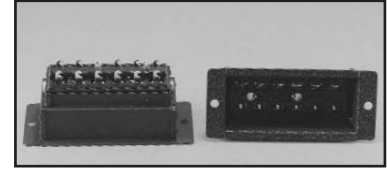
Jones Plugs/Sockets Series 2400

Multiple Density Solder Eyelet Deep Bracket



2400 Series with Deep Bracket

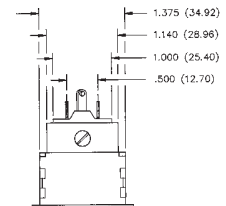
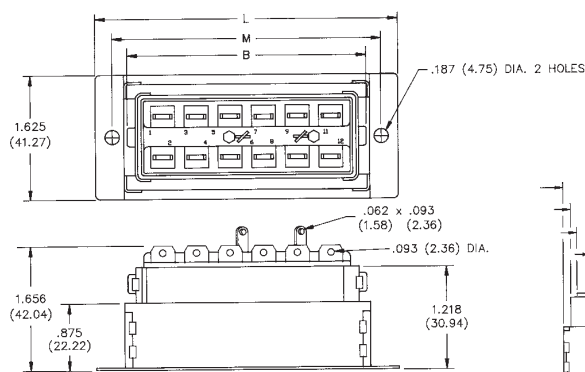
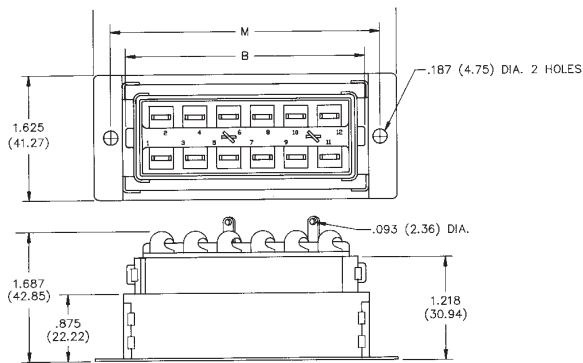
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2 | N/A | S-2402-DB |
| 4 | P-2404-DB | S-2404-DB |
| 6 | P-2406-DB | S-2406-DB |
| 8 | P-2408-DB | S-2408-DB |
| 10 | P-2410-DB | S-2410-DB |
| 12 | P-2412-DB | S-2412-DB |



Plug

Socket

Plug or Socket



Dimensions - Plug or Socket

| No. of 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.

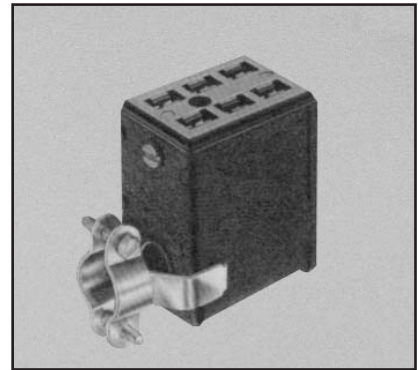
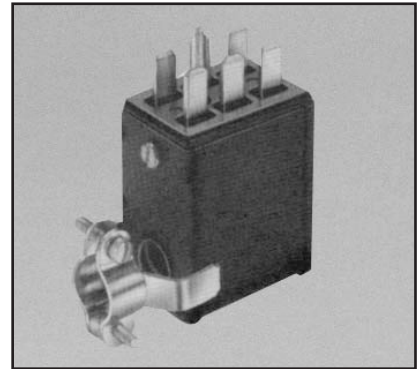
**Jones
Plugs/Sockets
Series 2400**

Multiple Density
Solder Eyelet
With Hood & 90° Clamp

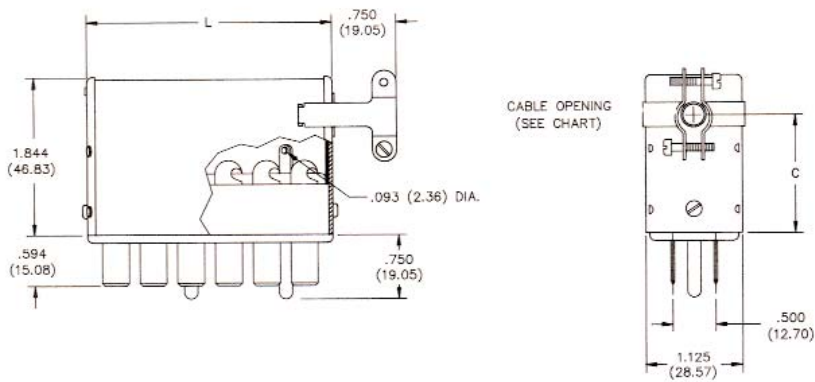


2400 Series with Hood and 90° Clamp

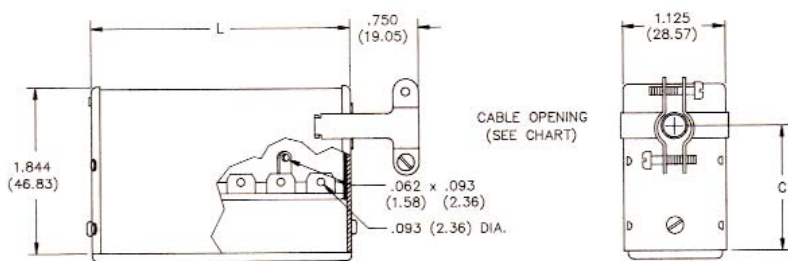
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2 | N/A | S-2402-CCE |
| 4 | P-2404-CCE | S-2404-CCE |
| 6 | P-2406-CCE | S-2406-CCE |
| 8 | P-2408-CCE | S-2408-CCE |
| 10 | P-2410-CCE | S-2410-CCE |
| 12 | P-2412-CCE | S-2412-CCE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



Plug



Socket



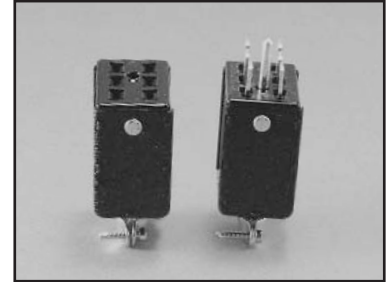
Dimensions - Plug or Socket

| 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 |

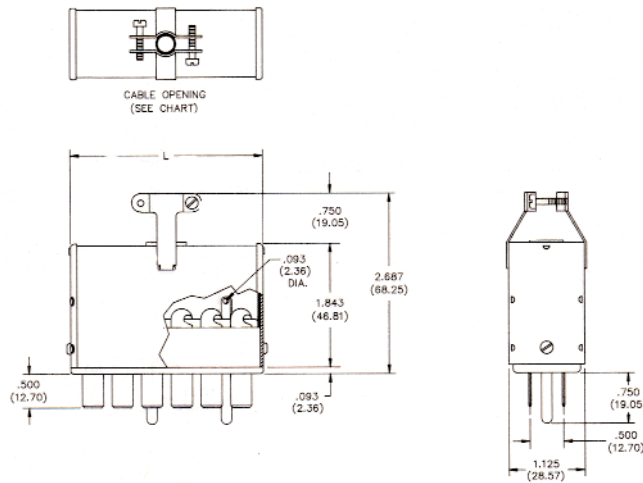
Marketed exclusively through distribution.

2400 Series with Hood and 180° Clamp

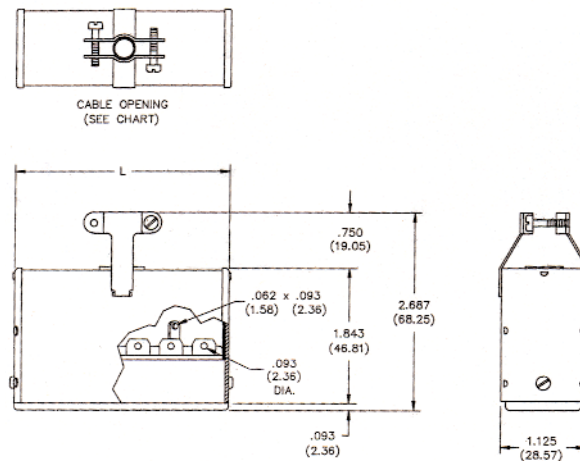
| No. of Contacts | Catalog No. Plug | Catalog No. Socket |
|-----------------|------------------|--------------------|
| 2 | N/A | S-2402-CCT |
| 4 | P-2404-CCT | S-2404-CCT |
| 6 | P-2406-CCT | S-2406-CCT |
| 8 | P-2408-CCT | S-2408-CCT |
| 10 | P-2410-CCT | S-2410-CCT |
| 12 | P-2412-CCT | S-2412-CCT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



Plug



Socket



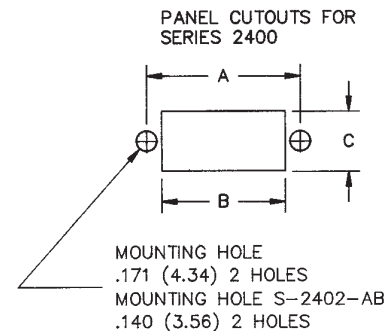
Dimensions - Plug or Socket

| No. of 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.

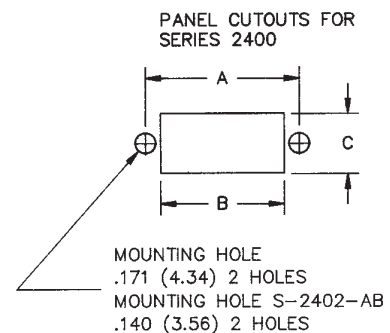
**Panel Cutout Dimensions
Angle Bracket**

| 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 |



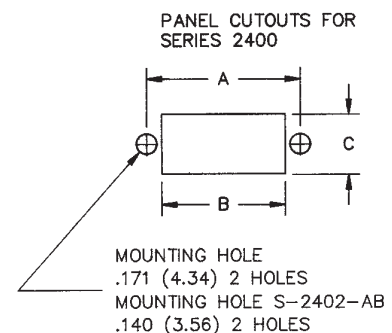
**Panel Cutout Dimensions
Shallow Bracket**

| 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

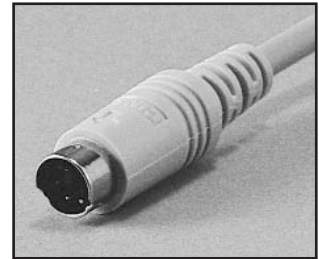
Contact Plating:
Option 1: Gold Flash over nickel underplate overall
Option 2: Option 1 plus additional gold in mating area for total thickness of 30µin.

Shield Material: Steel

Shield Plating: Nickel

Standard Cable Shielded cable with 0.197 inch OD jacket over 28 AWG stranded wire

Composition: Conductors. Contact factory for custom cable requirements.



ENVIRONMENTAL

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

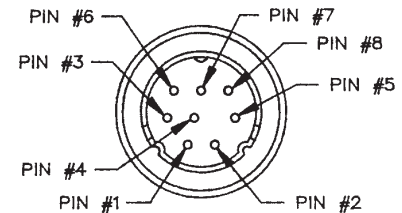
Operating Temperature: -40°C to +70°C

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

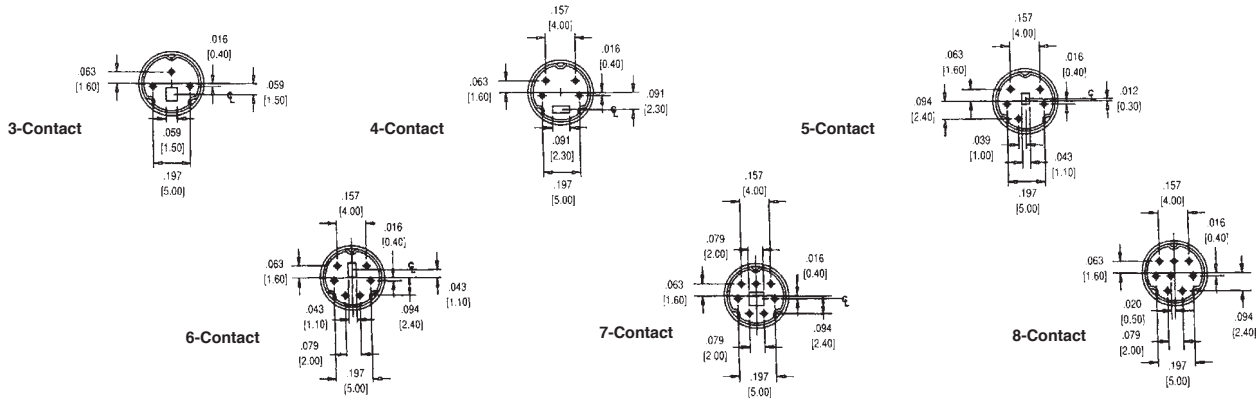
Mating Force: 10 lb. (4.5 kg) maximum

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.

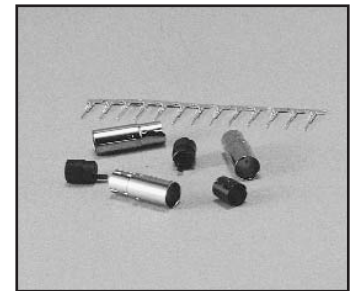
Circular Mini DIN Plugs

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:

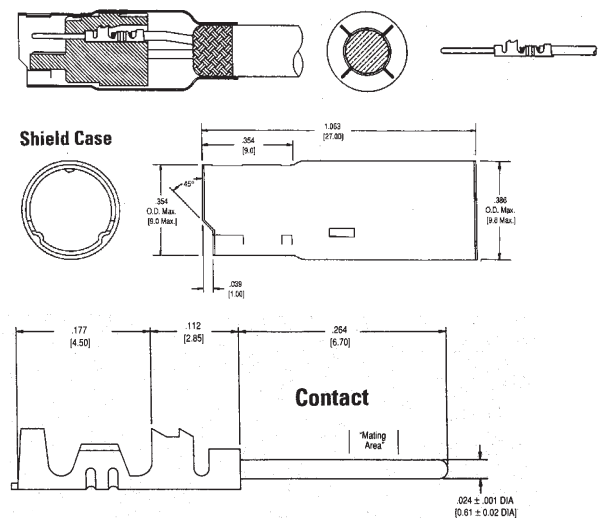
- Option 1:** Gold flash over nickel underplate overall
- Option 2:** Option 1 plus additional gold in mating area for total thickness of 30µin.
- Option 3:** Option 1 plus additional gold in mating area for total thickness of 50µin.

Shield Case Material: Steel

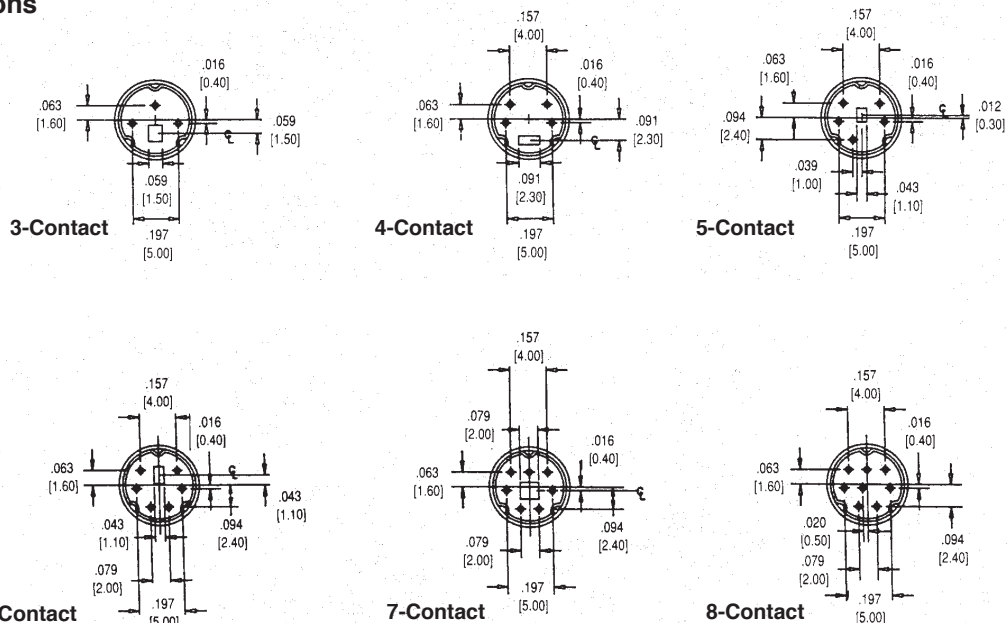
Shield Case Plating: Nickel

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.

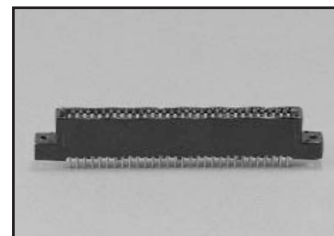
CARDCON™
Edge Connector
Commercial

.100" (2.54mm) Density
 Dip Solder



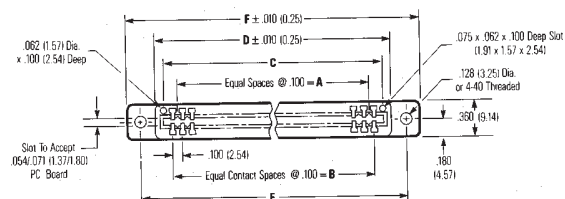
FEATURES

- **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).**



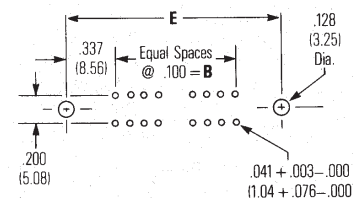
MATERIALS

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



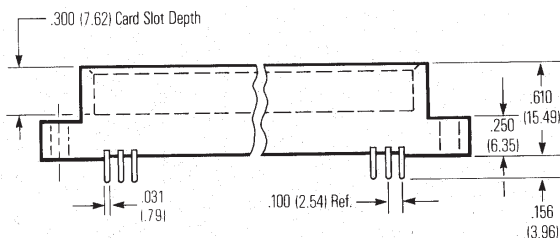
ENVIRONMENTAL

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.



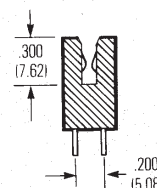
ELECTRICAL

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 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+ | | | | | | | | | | | | |
| 31/62IBM | 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 |
| 31/62IBM | 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 Pos./Cont. | Less Mounting Ears Catalog No. | .128" (3.25mm) | 4-40 |
|----------------------|-----------------------------------|-------------------------------|-------------------------------|
| | | Mounting Holes Catalog No. | Threaded Holes 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.

CARDCON™
Edge Connector
Commercial

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



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

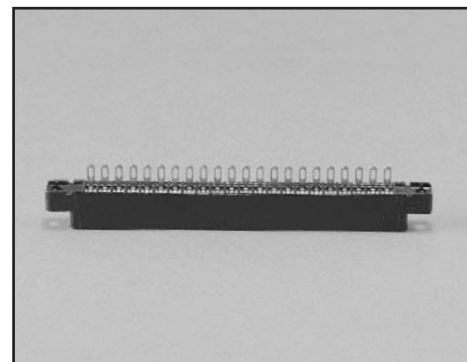
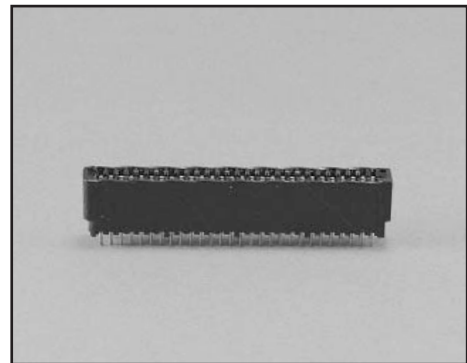
Shock: Per MIL-STD-202E, Method 213, Condition C
Operating Temperature: -65°C to +105°C
Vibration: Per MIL-STD-202E, Method 204, Condition B
Humidity: Per MIL-STD-202, Method 103, Condition B
Accessories:
Polarizing Key: Two types (order separately):
 a) for between-contact polarization and
 b) for in-contact 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

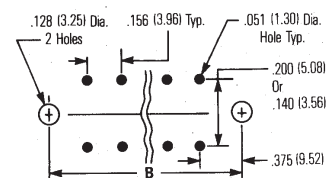
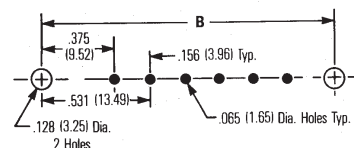
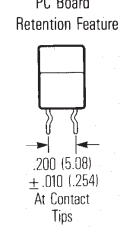
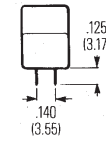
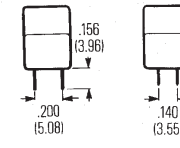
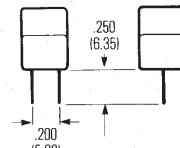
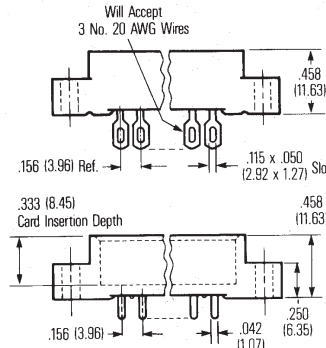
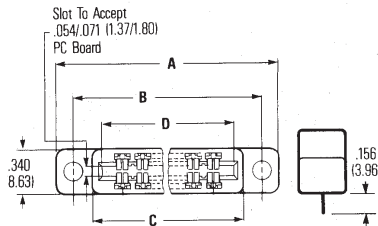
Individual Contact Insertion and Separation Force:
 16 oz. maximum with .070" (1.78mm) blade;
 1 oz. minimum with .054" (1.37mm) blade



Marketed exclusively through distribution.

CARDCON™ Edge Connector Commercial

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



Dimensions

| No. of 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 Pos./Cont. | Less Mounting Ears Catalog No. | .128 Mounting Hole Catalog No. | No. of Pos./Cont. | Less Mounting Ears Catalog No. | .128 Mounting Hole Catalog No. | No. of Pos./Cont. | Less Mounting Ears Catalog No. | .128 Mounting Hole Catalog No. |
|---|--------------------------------|--------------------------------|-------------------|--------------------------------|--------------------------------|-------------------|--------------------------------|--------------------------------|
| Solder eyelet, single readout | | | | | | | | |
| 6/6 | 50-6SN-8 | 50-6SN-7 | 6/6 | 50-6SN-6 | 50-6SN-5 | 6/12 | 50-12SN-4 | 50-12SN-2 |
| 10/10 | 50-10SN-8 | 50-10SN-7 | 10/10 | 50-10SN-6 | 50-10SN-5 | 10/20 | 50-20SN-4 | 50-20SN-2 |
| 12/12 | 50-12SN-8 | 50-12SN-7 | 12/12 | 50-12SN-6 | 50-12SN-5 | 12/24 | 50-24SN-4 | 50-24SN-2 |
| 15/15 | 50-15SN-8 | 50-15SN-7 | 15/15 | 50-15SN-6 | 50-15SN-5 | 15/30 | 50-30SN-4 | 50-30SN-2 |
| 18/18 | 50-18SN-8 | 50-18SN-7 | 18/18 | 50-18SN-6 | 50-18SN-5 | 18/36 | 50-36SN-4 | 50-36SN-2 |
| 22/22 | 50-22SN-8 | 50-22SN-7 | 22/22 | 50-22SN-6 | 50-22SN-5 | 22/24 | 50-44SN-4 | 50-44SN-2 |
| 24/24 | 50-24SN-8 | 50-24SN-7 | 24/24 | 50-24SN-6 | 20-24SN-5 | 24/48 | 50-48SN-4 | 50-48SN-2 |
| 25/25 | 50-25SN-8 | 50-25SN-7 | 25/25 | 50-25SN-6 | 50-25SN-5 | 25/50 | 50-50SN-4 | 50-50SN-2 |
| Dip solder tails, single readout, .156" (3.96mm) long | | | | | | | | |
| Solder eyelet, double readout, .200" (5.08mm) row spacing | | | | | | | | |
| 6/12 | 50-12SN-10 | 50-12SN-9 | 6/12 | 50-12SN-3 | 50-12SN-1 | 6/12 | 50-12SN-3R | 50-12SN-1R |
| 10/20 | 50-20SN-10 | 50-20SN-9 | 10/20 | 50-20SN-3 | 50-20SN-1 | 10/20 | 50-20SN-3R | 50-20SN-1R |
| 12/24 | 50-24SN-10 | 50-24SN-9 | 12/24 | 50-24SN-3 | 50-24SN-1 | 12/24 | 50-24SN-3R | 50-24SN-1R |
| 15/30 | 50-30SN-10 | 50-30SN-9 | 15/30 | 50-30SN-3 | 50-30SN-1 | 15/30 | 50-30SN-3R | 50-30SN-1R |
| 18/36 | 50-36SN-10 | 50-36SN-9 | 18/36 | 50-36SN-3 | 50-36SN-1 | 18/36 | 50-36SN-3R | 50-36SN-1R |
| 22/24 | 50-44SN-10 | 50-44SN-9 | 22/44 | 50-44SN-3 | 50-44SN-1 | 22/44 | 50-44SN-3R | 50-44SN-1R |
| 24/28 | 50-48SN-10 | 50-48SN-9 | 24/48 | 50-48SN-3 | 50-48SN-1 | 24/48 | 50-48SN-3R | 50-48SN-1R |
| 25/50 | 50-50SN-10 | 50-50SN-9 | 25/50 | 50-50SN-3 | 50-50SN-1 | 25/50 | 50-50SN-3R | 50-50SN-1R |
| Dip solder tails, double readout, .200" (5.08mm) row spacing, .156" (3.96mm) long | | | | | | | | |
| Dip solder tails with unique board retention feature .200" (5.08mm) row spacing, .156" (3.96mm) long | | | | | | | | |

Marketed exclusively through distribution.

Edge Connector High Reliability

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



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

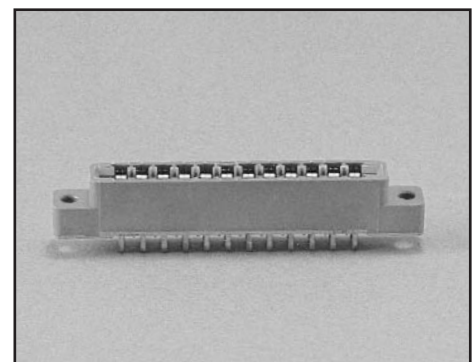
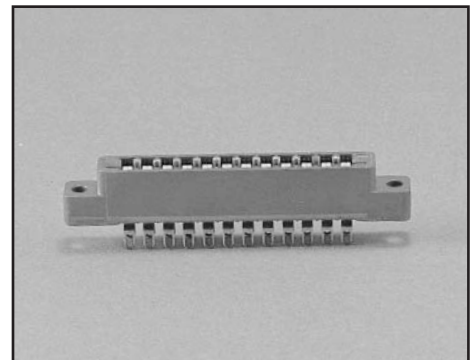
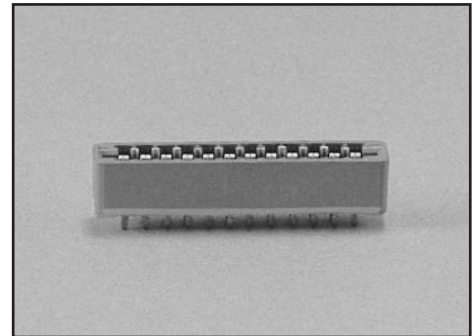
Shock: Per MIL-STD-202E, Method 202
Operating Temperature: Dip solder: -65°C to +105°C
 Solder eyelet: -65°C to +125°C
Vibration: Per MIL-STD-202E, Method 204, Condition B
Humidity: Per MIL-STD-202E, Method 103, Condition B
Accessories:
Polarizing Key: Two types (order separately):
 a) for between-contact 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



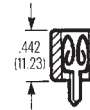
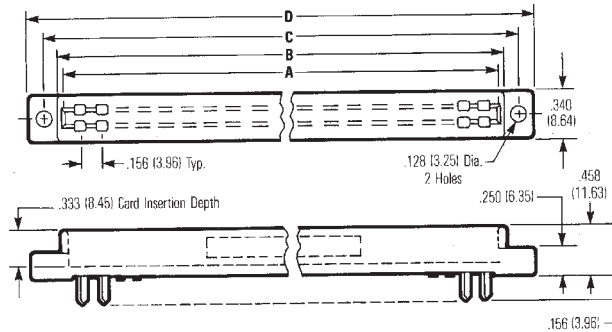
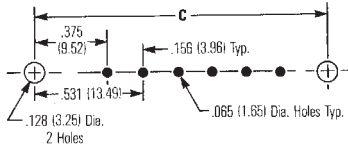
Marketed exclusively through distribution.

Edge Connector High Reliability

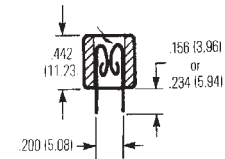
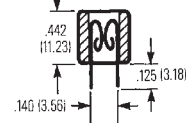
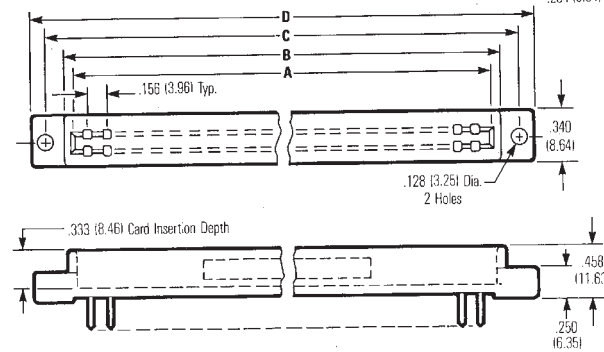
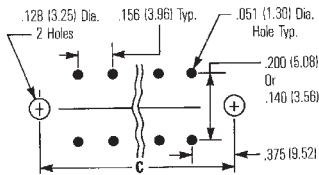
.156" (3.96mm) Density Dip
Solder/Solder Eyelet



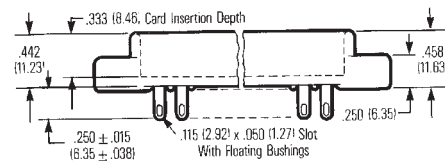
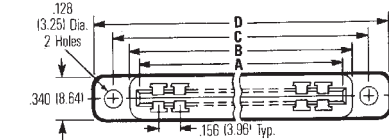
Single Readout



Double Readout



With Plain Mounting Holes



Single Readout



Double Readout

Dimensions

| No. of 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 Pos./Cont. | .128" (3.25mm) Mounting Hole | | |
|----------------------|-------------------------------------|----------------------------|----------------------|
| | Dip Solder Tails | | Solder 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 Pos./Cont. | .128" (3.25mm) Mounting Hole | | | Less Mounting Ears | |
|----------------------|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Solder Eyelet | 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 | .200" (5.08mm) Between | .140" (3.56mm) Between | .140" (3.56mm) Between |
| | Row Spacing | Row Spacing | Row Spacing | 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

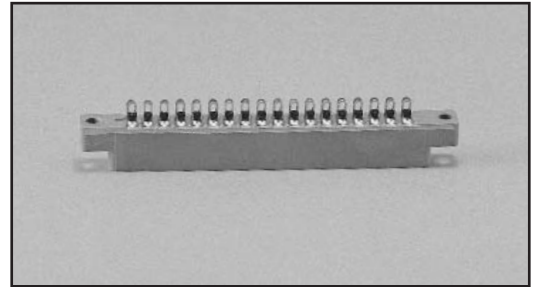


FEATURES

- **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

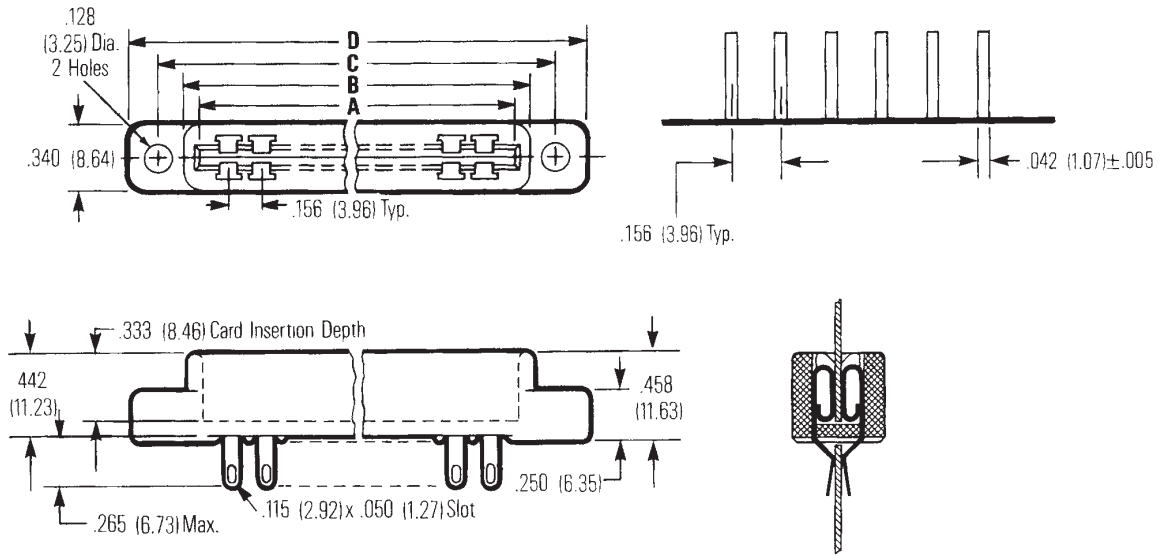
Marketed exclusively through distribution.

Edge Connector High Reliability

.156" (3.96mm) Density
Card Extender



Dimensions



Dimensions

| No. of 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

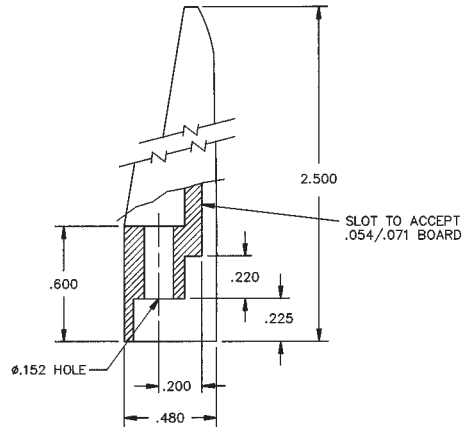
| No. of Pos./Cont. | Catalog No. |
|----------------------|-------------|
| 6/12 | 50-12S-30 |
| 10/20 | 50-20S-30 |
| 12/24 | 50-24S-30 |
| 15/30 | 50-30S-30 |
| 18/36 | 50-36S-30 |
| 22/44 | 50-44S-30 |
| 25/50 | 50-50S-30 |

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.

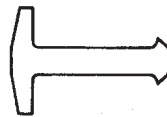
Material: Polypropylene
Part No. 50-GP-1 (Green)
Part No. 50-GP-1B (Black)



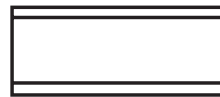
Polarizing Keys



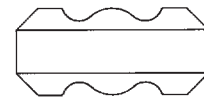
Style A



Style B



Style C



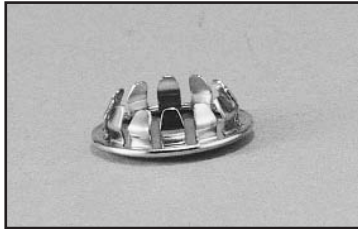
Style D

| 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 |

Marketed exclusively through distribution.

Plug Buttons

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



Dimensions

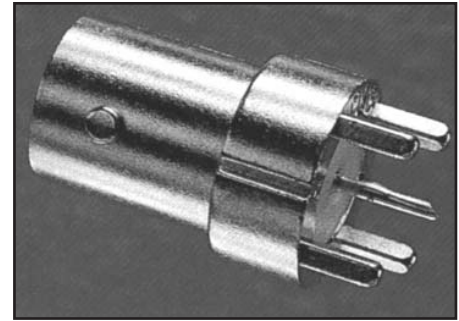
| For Hole Diameter | | Cup Diameter | | Catalog No. |
|-------------------|-------|--------------|-------|-------------|
| in | mm | in | mm | |
| .250 | 6.35 | .406 | 10.32 | 41A |
| .375 | 9.53 | .500 | 12.70 | 41B |
| .500 | 12.70 | .656 | 16.67 | 41C |
| .625 | 15.88 | .797 | 20.24 | 41D |
| .750 | 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 Ω Applications



FEATURES

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



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

MATERIALS

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

ELECTRICAL

| | |
|-------------------------------|---------------------------|
| Impedance: | 75Ω |
| Frequency Range: | 0 to 4 GHz |
| RF Leakage: | > -55 dB |
| Insertion Loss: | .2dB maximum @ 2 GHz |
| VSWR: | 1.024 |
| Working Voltage: | ≤ 500 VAC RMS @ sea level |
| Insulation Resistance: | ≥ 5000 MOhms @ 500 VDC |

MECHANICAL

Connector Insertion Force: ≤500 lb.*
Connector Removal Force: ≥100 lb.*
Center Contact Insertion Force: ≤ 2.0 lb.*
Center Contact Removal Force: ≥ 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.

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:

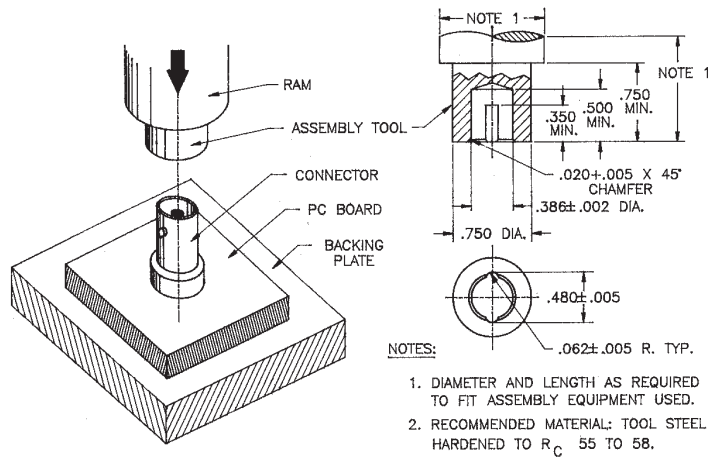
.093 Board Thickness: 100 lb. max.
 .250 Board Thickness: 200 lb. max.

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.

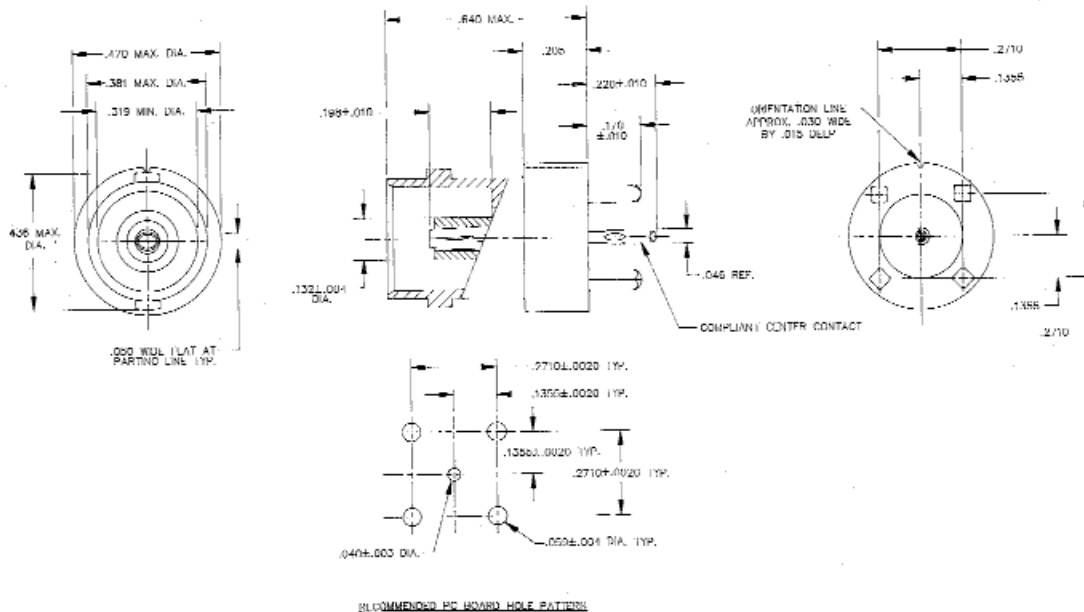
Press-Fit BNC Coaxial Connector Board Mount Receptacle for 75 Ω Applications



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



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.