The Multiway Range has six contact cavity arrangements available and offers an extremely reliable, robust and versatile connector system, in which any of the Trident signal or coaxial contacts can be used. All Multi Rack & Panel connectors are RoHS Compliant.

# 4



- · Inflight entertainment systems.
- Railway applications.
- · Test measurement equipment.

## **Product Features**

- Fully tested to MIL-STD-202 and now IEC 512.
- · Wide range of accessories, jacking and mounting hardware.
- Polarizing between connectors available, by contact position, use of shrouds or additional guide pin and socket sets.
- Recognized under the component program of CSA.
- Complete range of contact options available, see page 64.

# **Performance Specifications**

| Temperature Range       | -55°C to +125°C (-67°F to +257°F) Plastic Hood    |  |  |
|-------------------------|---|--|--|
|                         | assemblies limited to 105°C to (221°F)            |  |  |
| Test Voltage            | 200 V ac rms for 60 seconds                       |  |  |
| Insulation Resistance   | 5000MΩ min. at $500 V dc$                         |  |  |
| Durability <sup>1</sup> | Up to 500 Mating Cycles                           |  |  |
| Flammability            | UL 94 V-0 (Insulators), UL 94 V-1 (Plastic Hoods) |  |  |
| Rated Current           | Dependent on choice of contact and application    |  |  |
|                         | (usually limited by cable bundle factor)          |  |  |
|                         | 1 ,   |  |  |

<sup>&</sup>lt;sup>1</sup> Depends on plating and type of contacts used

## **Materials and Finishes**

| Insulator                           | Glass-Filled Phenolic        |
|-------------------------------------|------------------------------|
| Intermating Hardware                | Brass and Stainless Steel    |
| Jackscrew Knobs                     | Thermoplastic                |
| Cable Clamps                        | Stainless Steel              |
| Pin Protection Shrouds, 14-34-way   | Anodized Aluminum            |
| Pin Protection Shrouds, 50 & 75-way | Stainless Steel              |
| Formed Hoods                        | Anodized Aluminum            |
| Plastic Hoods                       | Unfilled Thermoplastic - PPO |
| Die Cast Hoods                      | Grey Painted Zinc Alloy      |
|                                     |                              |

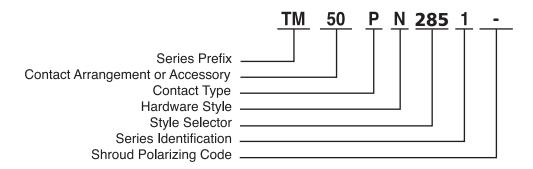
## **Test Data**

| Test Description       | IEC Test       | Military Standard | Test Method       |
|------------------------|----------------|-------------------|-------------------|
| Test Voltage           | 512-2 Test 4a  | MIL-STD-202       | 301               |
| Insulation Resistance  | 512-2 Test 3a  | MIL-STD-202       | 302               |
| Vibration              | 512-4 Test 6d  | MIL-STD-202       | 204, Condition A  |
| Shock                  | 512-4 Test 6c  | MIL-STD-202       | 213               |
| Humidity               | 512-6 Test 11c | MIL-STD-202       | 103, Condition C  |
| Corrosion (Salt Spray) | 512-6 Test 11f | MIL-STD-202       | 101, Condition B  |
| Dry Heat               | 512-6 Test 11i | MIL-STD-202       | 108A, Condition D |



## **How to Order**





**Series Prefix** 

TM - Trident Multiway

**Contact Arrangement** 

See Page 24

**Contact Type** 

P – Plug

R – Receptacle

**Hardware Style** 

N – Normal Hardware R – Reversed Hardware

**Style Selector** 

See Hardware Selection Guide, page 25.

**Series Identification** 

1 – For all items in this publication

**Shroud Polarizing Code** 

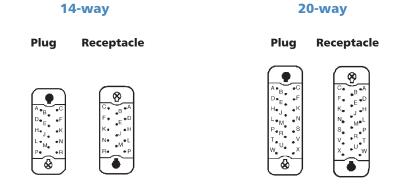
leave blank, if not required. Contact Cannon for other options.

For more information, please contact your local ITT Cannon sales office.



# Contact Cavity Arrangements — Mating Face View



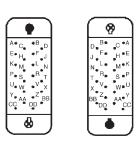


Plug Receptacle

**26-way** 

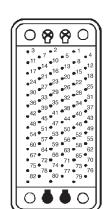
**75-way** 

**34-way** 

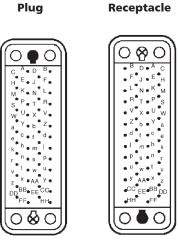


50-way

Receptacle



Receptacle



**KEY** 

Guide socket or female jack screw

O = Fixing holes can be fitted with additional guide pins and sockets for discrimination

# **Style Selector — Hardware Selection Guide**



#### **Plain, No Accessories**



Note: Shown without Pin Protection Shroud.

## Jackscrews available on 34-way only.

|            | Rotating<br>Jackscrews<br>or Fixed<br>Jackposts | Guide Pins<br>& Sockets |
|------------|---|-------------------------|
| No Shrouds | 007   | 001                     |
| Shrouds    | 207   | 201                     |

#### Note:

- 1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
- 2. Normal Hardware: Plugs have rotating jackscrews, receptacles have fixed jackposts.
- 3. Reversed Hardware: Receptacles have rotating jackscrews, plugs have fixed jackposts.

#### **Plastic Hood**



|            | Rotating<br>Jackscrews<br>or Fixed<br>Jackposts | Guide Pins<br>& Sockets |
|------------|---|-------------------------|
| No Shrouds | 155   | 159                     |
|            | (34-way only)                                   | (14, 20, 26 &           |
|            |   | 34-way only)            |
| Shrouds    | 255   | 285                     |
|            | (34-way only)                                   | (14, 20, 26 &           |
|            |   | 34-way only)            |

- 1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
- Normal Hardware: Plugs have rotating jackscrews, receptacles have fixed jackposts.
- 3. Reversed Hardware: Receptacles have rotating jackscrews, plugs have fixed jackposts.

#### **Die-Cast Hood**



Note: Shown with Heavy Duty Jackscrew

|                    | Jackscrews<br>or Fixed<br>Jackposts | Guide Pins<br>& Sockets |  |
|--------------------|-------------------------------------|-------------------------|--|
| No Shrouds         | 157                                 | 185                     |  |
| (50 & 75-way only) |                                     |                         |  |
| Shrouds            | 257                                 | 285                     |  |
| (5                 | 0 & 75-way onl                      | y)                      |  |

**Rotating** 

#### Note:

- Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
- 2. Normal Hardware: Plugs have rotating jackscrews, receptacles have fixed jackposts.
- 3. Reversed Hardware: Receptacles have rotating jackscrews, plugs have fixed jackposts.

Reversed

**Cable Exit to Right** 

**Guide Pins** 

& Sockets

180

280

**Rotating** 

Jackscrews

or Fixed

**Jackposts** 

118

218

### **Straight Cable Clamp**



| Rotating<br>Jackscrews<br>or Fixed<br>Jackposts | Guide Pins<br>& Sockets |
|---|-------------------------|
|---|-------------------------|

| No Shrouds | 118 | 180 |
|------------|-----|-----|
| Shrouds    | 218 | 280 |

- Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
- Normal Hardware: Plugs have rotating jackscrews, receptacles have fixed jackposts.
   Reversed Hardware: Receptacles have rotating
- jackscrews, plugs have fixed jackposts.

### 90° Cable Clamp



**Standard Cable Exit to Left Rotating** Jackscrews **Guide Pins** or Fixed & Sockets **Jackposts** 

| No Shrouds | 138 | 136 |
|------------|-----|-----|
| Shrouds    | 238 | 236 |
|            |     |     |

#### Note:

- Connectors with Jackscrews will not mate with
- connectors with Guide Pins or Sockets.

  2. Normal Hardware: Plugs have rotating jackscrews, receptacles have fixed jackposts.
- 3. Reversed Hardware: Receptacles have rotating jackscrews, plugs have fixed jackposts.



Dimensions shown in mm (inch) Specifications and dimensions subject to change