Cannon Trident Connector System

Multi Rack & Panel Connectors

The Multiway Range has six plan forms available and offers an extremely reliable, robust and versatile connector system, in which any of the Trident signal or coaxial contacts can be used.

Applications:

- Inflight entertainment systems.
- Rail equipment.
- Test 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 UL Inc. and CSA.
- Complete range of contact options available, see page 47.

Performance Specifications

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

Materials and Finishes

Description	Material	Finish/Treatment
Insulator	Glass-Filled Phenolic	—
Intermating Hardware	Brass and Stainless Steel	—
Jackscrew Knobs	Thermoplastic	—
Cable Clamps	Stainless Steel	—
Pin Protection Shrouds, 14-34 Way	Aluminum	Anodized
Pin Protection Shrouds, 50 & 75 Way	Stainless Steel	—
Formed Hoods	Aluminum	Anodized
Plastic Hoods	Unfilled Thermoplastic - PPO	—
Die Cast Hoods	Zinc Alloy	Grey Paint

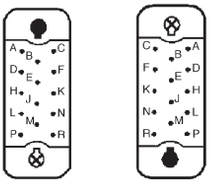
Test Data

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

Contact Cavity Arrangements — Mating Face View

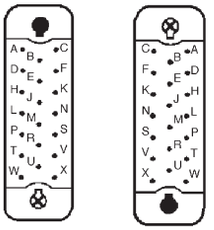
14 Way

Plug **Receptacle**



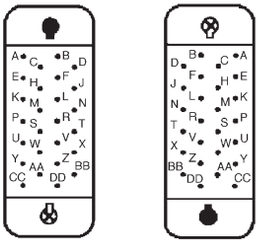
20 Way

Plug **Receptacle**



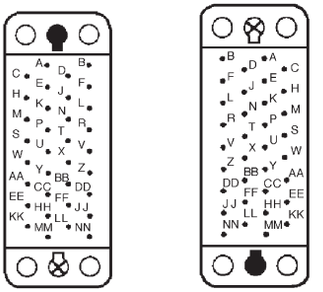
26 Way

Plug **Receptacle**



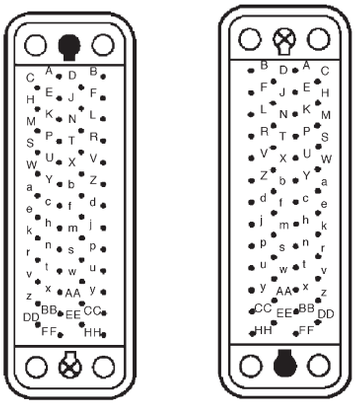
34 Way

Plug **Receptacle**



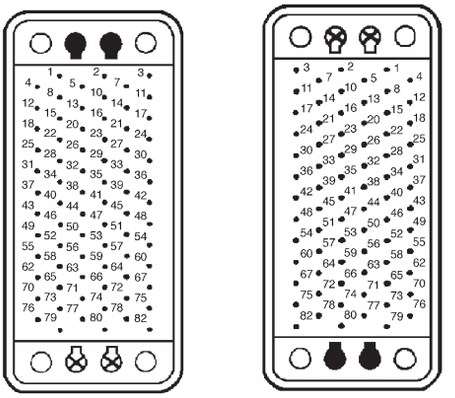
50 Way

Plug **Receptacle**



75 Way

Plug **Receptacle**

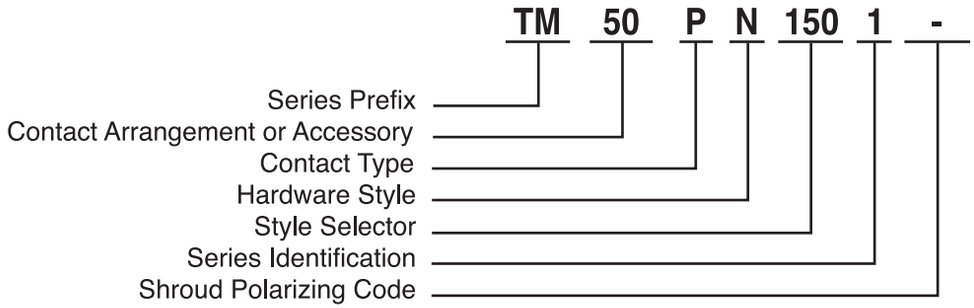


KEY

⊗ = Guide pin or male jack screw
● = Guide socket or female jack screw
O = Fixing holes can be fitted with additional guide pins and sockets for discrimination

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

How to Order



Series Prefix
TM – Trident Multiway

Contact Arrangement or Accessory
16, 22, 28, 36, 52, 77
A – Accessory

Contact Type
P – Plug
R – Receptacle

Hardware Style
N – Normal Hardware
R – Reversed Hardware

Style Selector
See Hardware Selection Guide, page 19.

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 Cannon sales office.

Style Selector — Hardware Selection Guide

Plain, No Accessories

Note: Shown without Pin Protection Shroud.

- Specify receptacle first.

Plug or Receptacles

	Jackscrews	Guide Pins & 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.
3. Reversed Hardware: Receptacles have rotating hardware.

Formed Hood

Note: Shown without Pin Protection Shroud.

Plugs

	Jackscrews	Guide Pins & Sockets
No Shrouds	150	120
Shrouds	250	220

Note:
1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
2. Normal Hardware: Plugs have rotating jackscrews.
3. Reversed Hardware: Receptacles have rotating hardware.

Plastic Hood

- Jackscrews available on 34 Way only.

Plugs

	Jackscrews	Guide Pins & Sockets
No Shrouds	155 (34 Way Only)	159 (14, 20, 26, & 34 Way Only)
Shrouds	255 (34 Way Only)	259 (14, 20, 26, & 34 Way Only)

Note:
1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
2. Normal Hardware: Plugs have rotating jackscrews.
3. Reversed Hardware: Receptacles have rotating hardware.

Die-Cast Hood

Plugs

	Jackscrews	Guide Pins & Sockets
No Shrouds	157 (50 & 75 Way Only)	N/A
Shrouds	257 (50 & 75 Way Only)	N/A

Note:
1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
2. Normal Hardware: Plugs have rotating jackscrews.
3. Reversed Hardware: Receptacles have rotating hardware.

Straight Cable Clamp

Plugs

	Jackscrews	Guide Pins & Sockets
No Shrouds	118	180
Shrouds	218	280

Note:
1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
2. Normal Hardware: Plugs have rotating jackscrews.
3. Reversed Hardware: Receptacles have rotating hardware.

90° Cable Clamp

Plugs

	Standard Cable Exit to Left		Reversed Cable Exit to Right	
	Jackscrews	Guide Pins & Sockets	Jackscrews	Guide Pins & Sockets
No Shrouds	138	136	137	135
Shrouds	238	236	237	235

Note:
1. Connectors with Jackscrews will not mate with connectors with Guide Pins or Sockets.
2. Normal Hardware: Plugs have rotating jackscrews.
3. Reversed Hardware: Receptacles have rotating hardware.

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