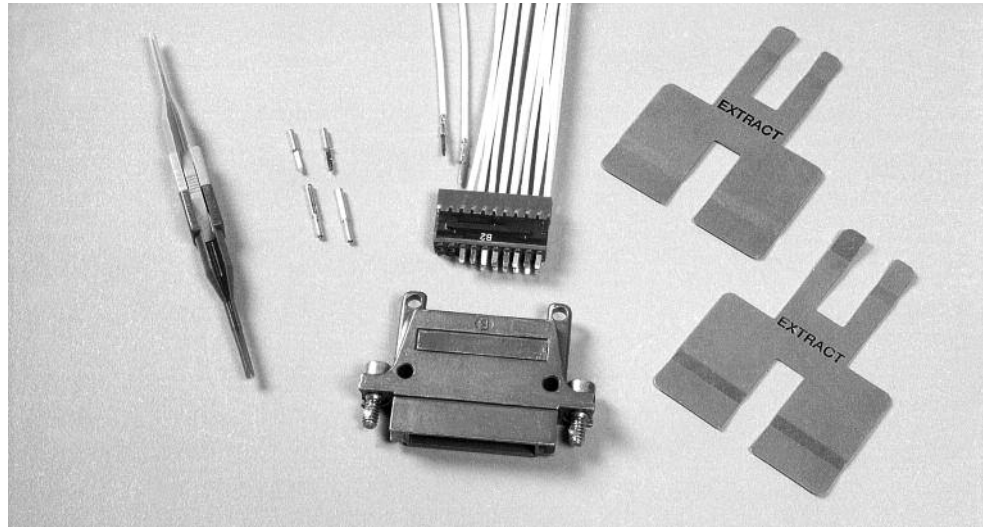
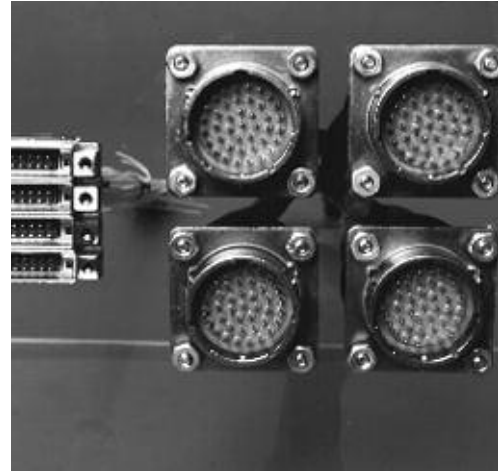
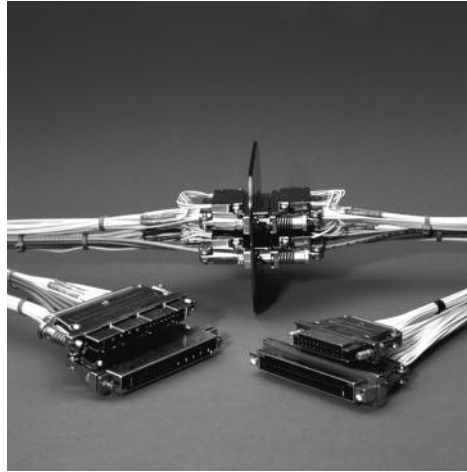


## Introduction

### Product Facts

- Low-profile rectangular design for high packaging density
- Environmental sealing for aerospace applications
- Modular components for design versatility and logistics savings
- Lightweight materials for weight savings
- Quick-disconnect or jackscrew mating hardware



### System

TE Connectivity MTC product line is a complete modular connector system consisting of lightweight, environmentally sealed miniature rectangular connectors (shell housings with removable inserts) and individually removable rear-release contacts.

### Components

MTC connectors are now available with quick-disconnect mating hardware, EME shielding accessories, and modular inserts that can accommodate a mix of signal and power crimp contacts and coaxial contacts. The need for special termination tooling

has been minimized, while the ease of manufacturing and maintenance has been improved.

### Configurations

MTC rectangular connectors using jack screws or quick-disconnect hardware can be stacked or panel-mounted next to each other without any provision for grip space, a feature that can save significant panel area.

MTC connectors are available in 1-inch and 2-inch configurations. Modular removable inserts with size 22 and/or size 16 contact cavities can be combined into the 1-inch and 2-inch MTC housings.

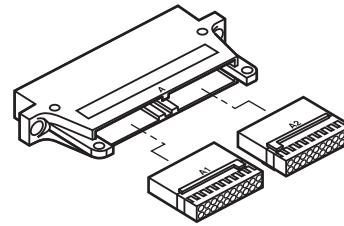
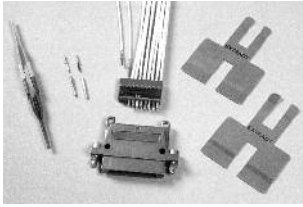
### Inserts

MTC inserts are available in 20-cavity and 5-cavity versions. The 20-cavity insert accepts size 20-22 (24 AWG to 20 AWG wire) crimp contacts. The 5-cavity insert accepts size 16-14 crimp contacts. Insertion/extraction of the contacts is rear release.

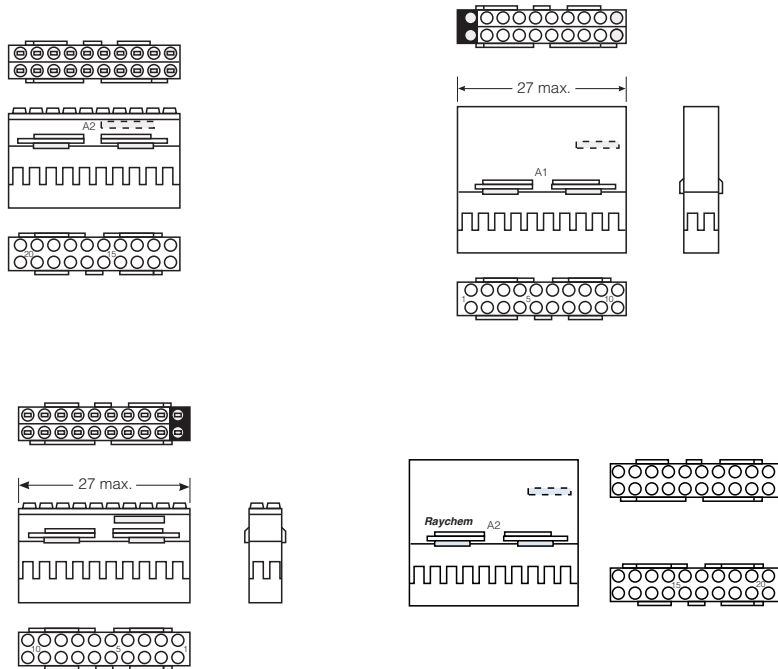
### Note:

Other configurations are available in the MTC family (size 12 contacts; 50 mil spacing for double density; accessories). Please contact TE.

## 20-Cavity Inserts



2-inch shell with inserts



MTCP-122-20 inserts are used with MTC100 1-inch and 2-inch shells. The 1-inch shell takes:

- One MTCP-122-20P (pin contact) **or**
- One MTCP-122-20S (socket contact)

The 2-inch shell takes:

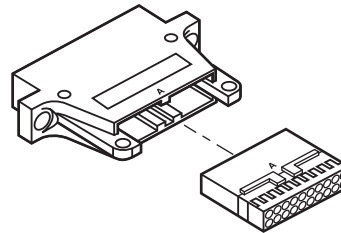
- One MTCP-122-20P1 and one MTCP-122-20P2 (pin contact) **or**
- One MTCP-122-20S1 and one MTCP-122-20S2 (socket contact)

### 2 x 20 Cavity Inserts (Size 20-22)—2-Inch Shell

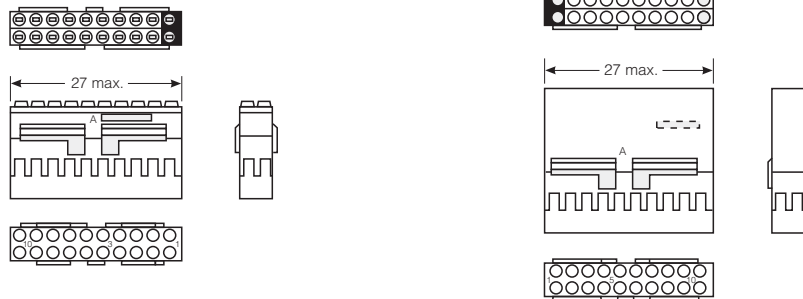
Pin Insert	Socket Insert
MTCP-122-20P1	MTCP-122-20S1
MTCP-122-20P2	MTCP-122-20S2

20-Cavity Inserts (Continued)

1 x 20 Cavity Inserts (Size 20-22)—1-Inch Shell



1-inch shell with insert



Pin Insert	Socket Insert
MTCP-122-20P	MTCP-122-20S

Contacts for 20-Cavity Inserts

The contacts for 20-cavity inserts must be ordered separately. They are:

- CTA-0166—pin contact
- CTA-0165—socket contact

Contacts accept 24 AWG to 20 AWG wires.



Pin Contact  
CTA-0166

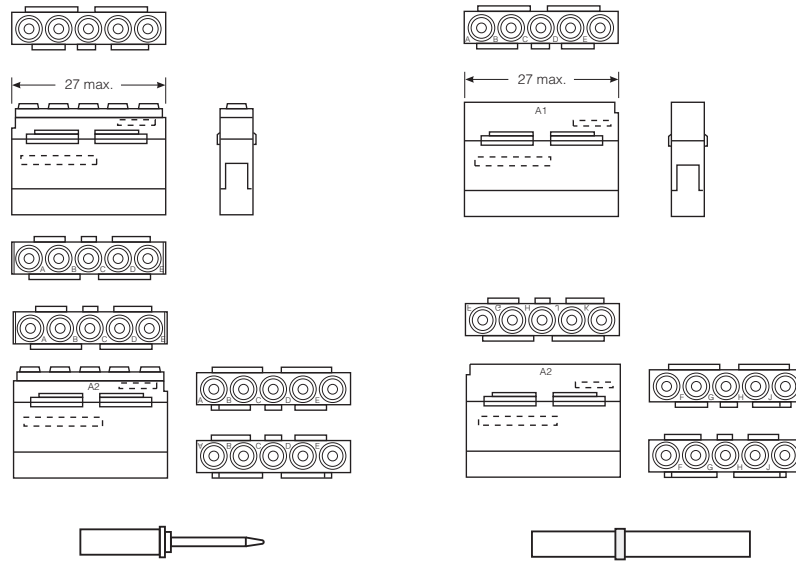


Socket Contact  
CTA-0165

Tools		Tools	
Positioner for pin contact	CE-1605900	Positioner for socket contact	CE-1606000
Installation process	ES-61413	Installation process	ES-61413
Contact removal tool (plastic)	CTA-1160	Contact removal tool (plastic)	CTA-1160
Extraction tool for MTCP inserts	CTA-0161	Extraction tool for MTCP inserts	CTA-0161

### 5-Cavity Inserts

#### 5-Cavity Inserts (Size 16)



MTCP-116-05 inserts are used with MTC100 1-inch and 2-inch shells.  
The 1-inch shell takes:

- One MTCP-116-05-P1 (pin contact) **or**
- One MTCP-116-05-S1 (socket contact)

The 2-inch shell takes:

- One MTCP-116-05P1 and one MTC-116-05P2 (pin contact) **or**
- One MTCP-116-05-S1 and one MTCP-116-05-S2 (socket contact)

#### 5-Cavity Inserts (Size 16)

Pin Insert	Socket Insert
MTCP-116-05P1	MTCP-116-05S1
MTCP-116-05P2	MTCP-116-05S2

#### Contacts for 5-Cavity Inserts

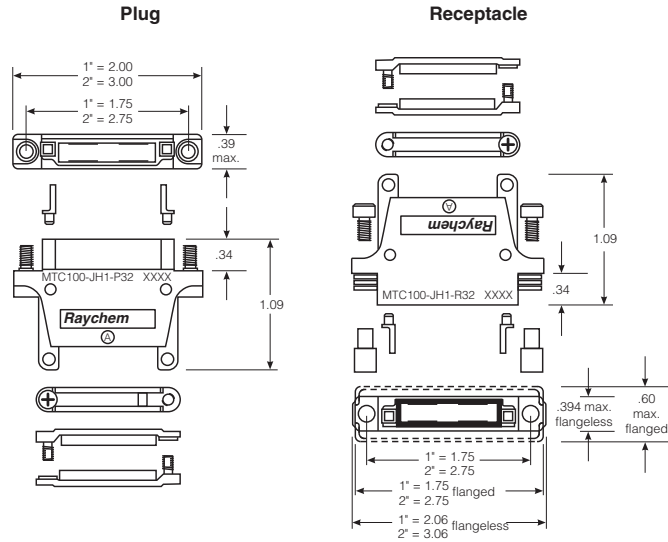
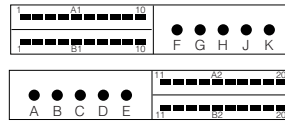
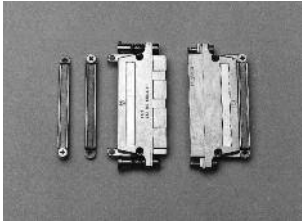
The contacts for 5-cavity inserts must be ordered separately. They include:

- CTA-0079 - pin contact (MS 27493-16) (MIL-C-39029/58 intermateable)
- CTA-0078 - socket contact (MS 27491-16) (MIL-C-39029/57 intermateable)
- D-602-0140 - coaxial pin contact (MIL-C-39029/76 intermateable)
- D-602-0171 - coaxial socket contact (MIL-C-39029/78 intermateable)

Other contacts designed for M38999 Series II connectors can be used.

Pin Contact	Socket Contact
D-602-0140 (coaxial)	D-602-0171 (coaxial)
CTA-0079 (power)	CTA-0078 (power)

### Hybrid Inserts



### Hybrids

Hybrid insert combinations of size 22 and size 16 contact cavities are also possible.

#### 2-Inch Shell—Hybrid Assembly

Power and signal

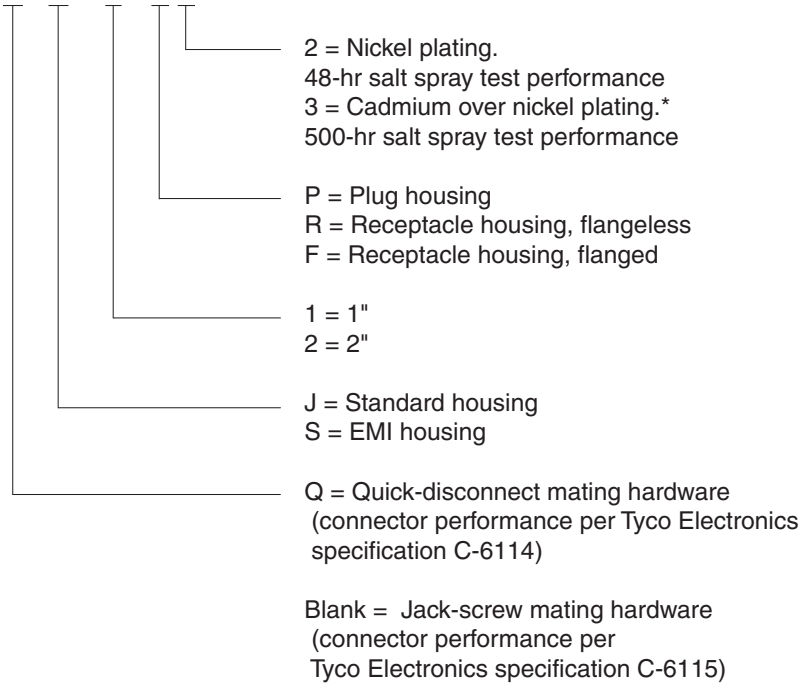
### Shells

MTC connector housing shells are available with nickel plating (48-hr salt spray performance) or cadmium over nickel plating (500-hr salt spray performance).

MTC connector housings are offered with quick-disconnect or jack-screw mating hardware. Each connector shell is polarized and has 64 user-defined keying combinations. Lightweight, low-profile EME backshells are also available for increased shielding effectiveness of the connector.

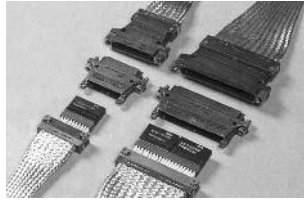
### MTC Shells Ordering Information

**M T C 1 0 0 X - X H X - X X2**



\*Some combinations of shells, mating hardware and EME shielding accessories are not available.  
Contact TE Connectivity for product information.

## Accessories



### Low-Profile EME Backshells

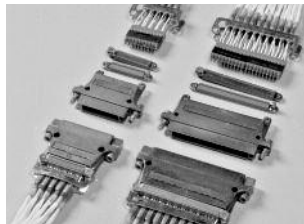
Lightweight rectangular EME backshells connect the overall bundle shield to the MTC connector housing. Individual cable shields can also be terminated to the backshell braid by using SolderSleeve devices.

The backshell is mounted on the MTC housing via the cable clamp screws.

MTC backshell features include a low profile, light weight, and Level II EME performance.

### EME Backshell Adapters

- CHA-0275 2-inch adapter (plug or receptacle)
- CHA-0276 1-inch adapter (plug or receptacle)



### MTC Shield-Grounding BusBars

MTC shield-grounding busbars allow for simple, cost-effective termination of cable shielding to MTC aluminum housings.

Two-inch shield-grounding busbars terminate up to 20 shielded twisted pairs on a 2-inch MTC connector. The individual shields are terminated to "fingers" on the busbar with SolderSleeve devices.

The busbar is mounted on the MTC housing via cable clamp screws.

MTC busbar features include a simple termination, cost effectiveness, light weight, and Level I EME performance.

### Shield-Grounding Busbars

- CTA-0022 1-inch busbar (with 5 SolderSleeve terminators)
- CTA-0023 2-inch busbar (with 10 SolderSleeve terminators)



### EME Shielding Accessories for MTC Connectors

#### Grounding Block (Externally attached)

Allows for cable shield termination grounding on the MTC shell housing via crimp-removable contacts. This grounding scheme allows individual cables to be removed from the connector without cutting a ganged ground connection. Sufficient ground contacts are available to handle shielded twisted-pair cables.

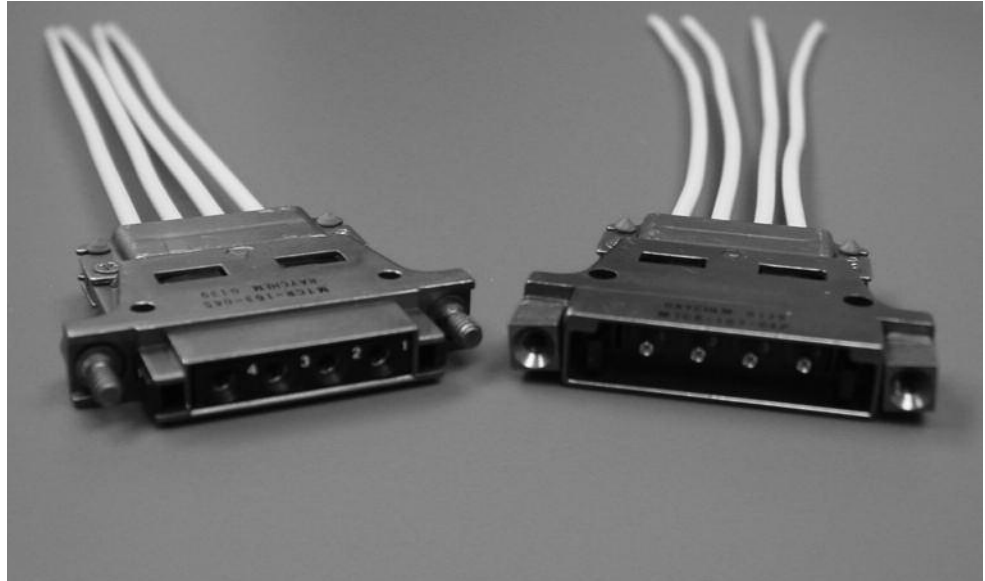
### Grounding Block

- CHA-0305 1-inch grounding block receptacle shell
- CHA-0306 2-inch grounding block receptacle shell
- CHA-0307 1-inch grounding block plug shell
- CHA-0308 2-inch grounding block plug shell

## MTCR Size 12 Connectors

### Product Facts

- Low-profile rectangular design for high packaging density
- Environmental sealing for aerospace applications
- 64 user-defined keying positions for logistics savings
- 4 contact cavities per 1" shell



TE Connectivity MTCR connectors are rectangular, lightweight, and environmentally-sealed, with individually removable rear-release size 12 contacts.

The MTCR connector's size 12 cavities accept four standard MIL-C-83723 Series III contacts for twisted pairs, coax, triax, and 12 to 14 AWG power cables.

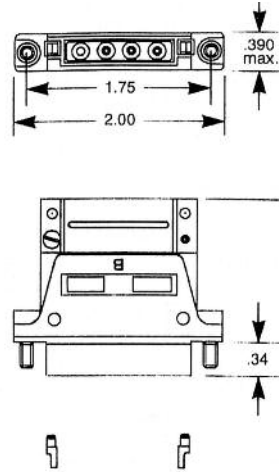
MTCR connectors are available with flanged receptacles and a variety of accessories, including EME backshells.

MTCR connectors are qualified to TE Specification C-6115.

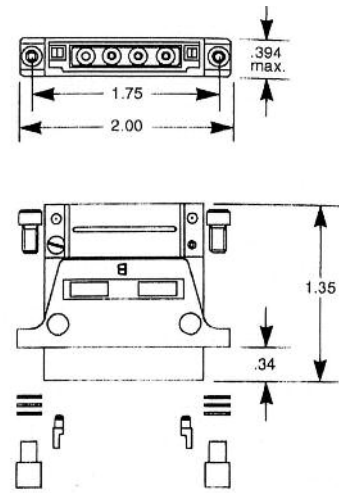
**MTCR Size 12 Connectors** (Continued)

**Connectors**

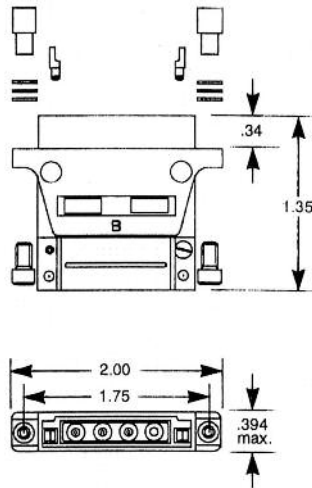
**Pin-Cavity Plug Shell**  
MTCR-163-04P



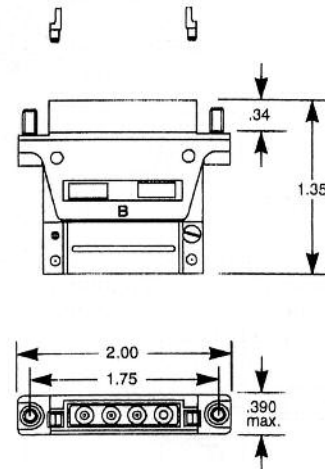
**Pin-Cavity Receptacle Shell**  
MTCR-103-04P



**Socket-Cavity Plug Shell**  
MTCR-163-04S



**Socket-Cavity Receptacle Shell**  
MTCR-103-04S



**Contacts**

Cable Type	12 AWG Power Cable	0.100" Max. Coaxial Cable	0.126" Max Coaxial Cable	Twisted Pair Cable
Pin Contact	CTA-0114 (MIL-C-39029/4)	D-602-0094 (MIL-C-39029/74)	D-602-0106 (MIL-C-39029/74)	D-602-0104 (MIL-C-39029/74)
Socket Contact	CTA-0115 (MIL-C-39029/5)	D-602-0095 (MIL-C-39029/73)	D-602-0107 (MIL-C-39029/73)	D-602-0105 (MIL-C-39029/73)

Note:  
Various options are available. Please see customer drawings or contact TE Connectivity.

**Tooling**

Sealing Plugs (for unused cavities): MS27488-12  
Contact Insertion/Removal Tool: M81969/14-04

## EME Shielding Accessories for MTC Connectors

### Low Profile EME Backshells

#### Product Facts

- Low profile
- Lightweight
- Level II EME performance for hardened applications\*

### MTC Busbar

#### Product Facts

- Simple termination
- Lightweight
- Cost effective
- Level I EME performance\*



TE Connectivity Raychem brand of MTC Shield-Grounding Busbars allow for simple, cost-effective termination of cable shielding to MTC aluminum housings.

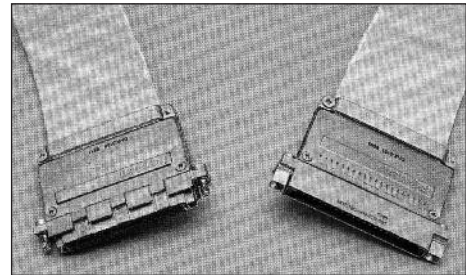
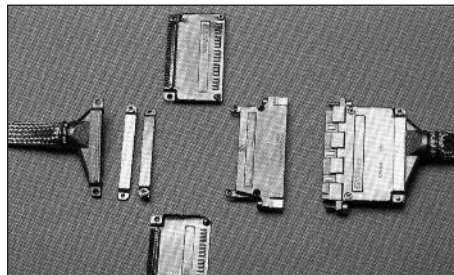
Two-inch shield-grounding busbars terminate up to 20 shielded twisted pairs on a 2" MTC connector. The individual shields are terminated to "fingers" on the busbar with Raychem brand Solder Sleeve devices.

The busbar is mounted on the MTC housing via the cable clamp screws.

TE also offers lightweight, rectangular EME backshells that connect the overall bundle shield to the MTC connector housing. Individual cable shields can also be terminated to the backshell braid by using Raychem brand Solder Sleeve devices.

The backshell is mounted on the MTC housing via the cable clamp screws.

## Screening

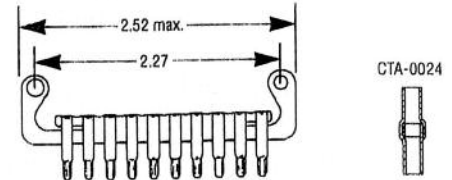
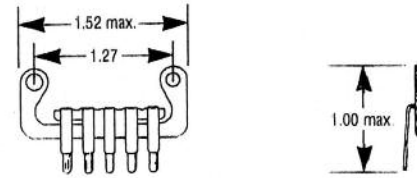


\*Per TE Specifications C-6111 for connectors with fixed contacts and C-6115 for connectors with removable contacts.

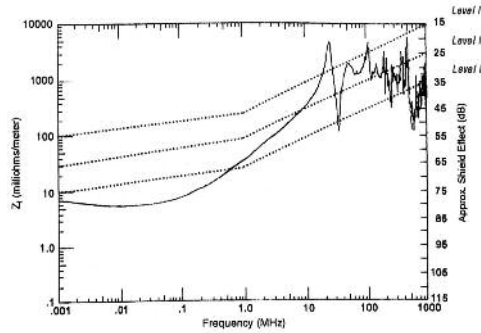
EME Shielding Accessories for MTC Connectors (Continued)

Shielding-Grounding Busbars

- CTA-0022 = 1-inch busbar (with 5 SolderSleeve terminators)
- CTA-0023 = 2-inch busbar (with 10 SolderSleeve terminators)
- CTA-0024 = SolderSleeve terminator

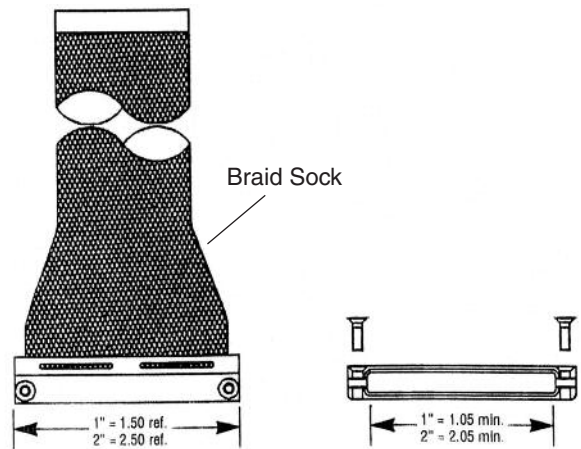


Typical Surface Transfer Impedance ( $Z_t$ )  
2-inch CTA-0023  
(with shielded twisted pairs)

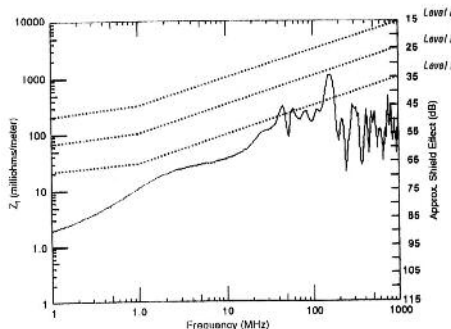


EME Backshell Adapters

- CHA-0275 = 2-inch adapter (plug or receptacle)
- CHA-0276 = 1-inch adapter (plug or receptacle)



Typical Surface Transfer Impedance ( $Z_t$ )  
1-inch CTA-0276 (with overall shielded wire bundle)



**MTC Boxmount Connectors**

**Size 22 Connectors**

**Product Facts**

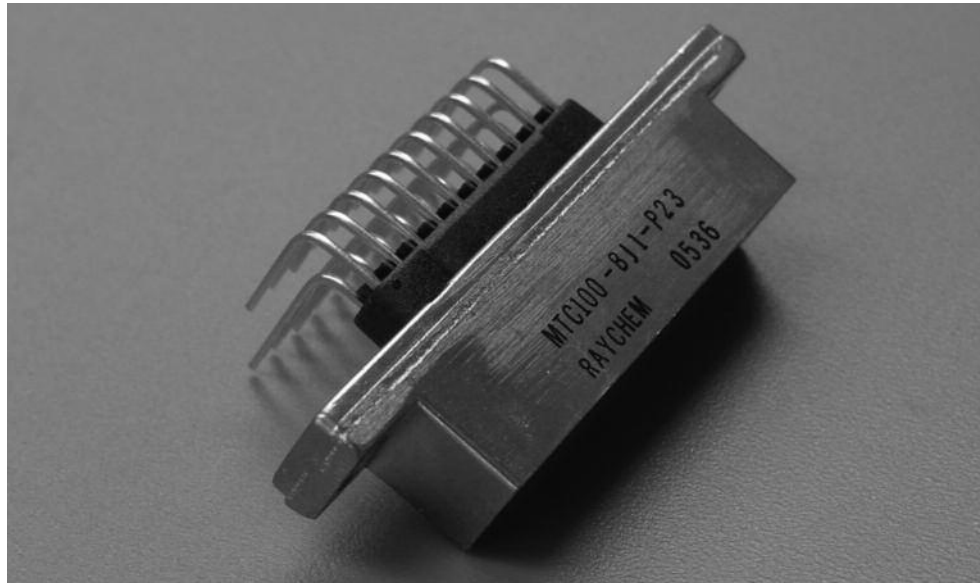
- Fixed size 22 contacts on 100-mil centers
- Compact, lightweight design
- Variety of configurations
- Termination flexibility:

Direct mount onto circuit boards  
 Solderless wire wrap  
 Variety of SolderSleeve terminations

**Size 16 Connectors**

**Product Facts**

- Removable size 16 MIL-C-38999 Series II contacts on 200-mil centers
- Compact, lightweight design



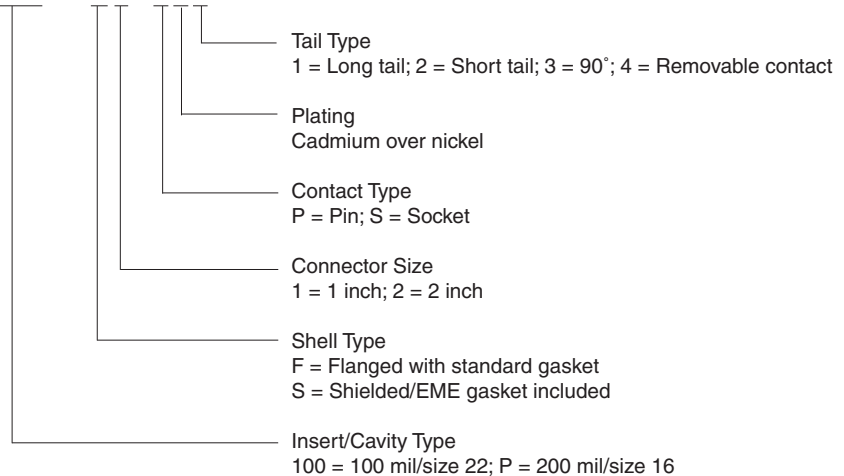
TE Connectivity offers an extensive line of MTC boxmounted connectors to complement the MTC cable connectors. MTC boxmount connectors are lightweight, high-density, one-piece receptacles with fixed pin or socket inserts.

Boxmounted MTC connectors allow for a high density of interconnections while utilizing a minimum of interior box space. MTC boxmounts are available with either size 22 or size 16 contacts.



**Boxmount Connector Part Numbers**

**M T C X X X - B X X - X 3 X**



**MTC Selection Guide**

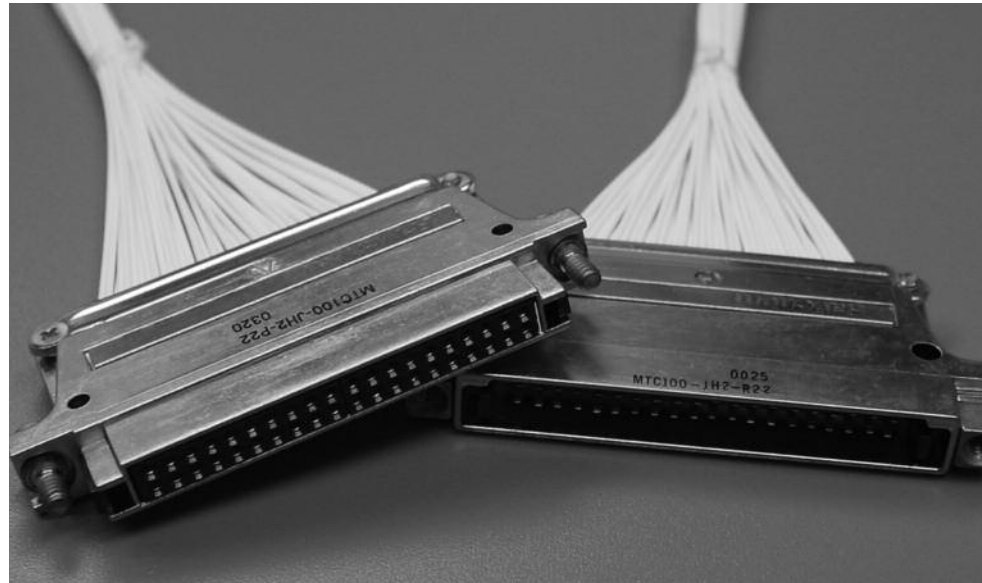
Total Number	Contacts		Arrangement	Possible Round Wire		Possible Flat Cable		Family Shell	Shell Size
	Number	Size		AWG Min.	AWG Max.	AWG Min.	AWG Max.		
4	4	12		16	12			MTCR	1
5	5	16		20	16			MTC100	1
10	2x5	16		20	16			MTC100	2
10	10	22 Dummy wafer		26	20	24	22	MTC100	1
20	2x10	22		26	20	24	22	MTC100	1
20	20	26 Dummy wafer		28	24		28	MTC50	1
20	2x10	22 Dummy wafer		26	20	24*	22*	MTC100	2
20	20	22 Dummy wafer		26	20	24	22	MTC100	2
25	5	16		20	16			MTC100	2
				26	20	24	22		
30	10	22		26	20	24	22	MTC50	1
				28	24	28	28		
40	2x20	26		28	24		28	MTC50	1
40	20	22 2x10		26	20	24*	22*	MTC100	2
40	4x10	22		26	20	24*	22*	MTC100	2
40	40	26 Dummy wafer		28	24		28	MTC50	2
40	2x20	22		26	20	24	22	MTC100	2
60	20	22		26	20	24	22	MTC50	2
				28	24	28	28		
60	2x10	22		26	20	24*	22*	MTC50	2
				28	24	28	28		
80	2x40	26		28	24		28	MTC50	2

\*Two 4-way wafers FCC cannot be mounted together in a same size 2 shell.

## MTC100 Connectors

### Product Facts

- 10 or 20 contacts size 22  
2.54 mm (0.100 in.) spacing
- 20 or 40 contacts size 22  
2.54 mm (0.100 in.) spacing
- Round wire 20-26 AWG or  
flat cable 22-24 AWG
- -65°C to +125°C  
-65°C to +150°C
- TE Connectivity  
Specification C-6111
- Three shell finishes: Black  
anodized (non-conductive),  
Nickel plated (conductive)  
and Cadmium over nickel  
(500 h salt spray)



The basic connector consists of the following modular components: two shells (plug and receptacle), mounting hardware and keying pins. In each shell are included two removable wafers with either 10 or 20 fixed contacts, 2.54mm (0.100 in.) spacing.

These wafers, pin or socket, are available in two versions to receive either round wire or flat conductor cable or flexible printed circuits. It is recommended to use TE flat cable with rectangular section conductors, perfectly adapted to the contacts shape of the connector.

The wafers use a tuning fork type contact design, which corresponds to the requirements of MIL-C-28754. Both pin and socket contacts are fixed in the wafer. The pin contact is molded into the wafer while the socket contact has a degree of free movement.

Environmental sealing is achieved by:

- an integral interfacial seal which is attached to the face of the pin wafer. This seal is compressed when the connector is mated.

- a thermoplastic material which seals the wafer body to the wire during soldering

by additional components. Polarization of shells and wafers prevents mis-mating.

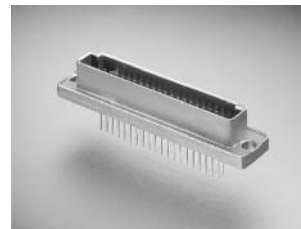
The MTC100 is available in two sizes:

#### Size 1:

20 contacts, 2.54mm (0.100 in.) spacing 2 rows of contacts

#### Size 2:

40 contacts, 2.54mm (0.100 in.) spacing 2 rows of contacts



The connector contact is terminated to the wire by controlled soldering using a heat-shrinkable SolderSleeve. This well-known technology achieves a high degree of electrical performance and allows semi-automated termination.

The EME protection continuity can be achieved

**MTC100 Connectors** (Continued)

**Technical Specification**

**Materials**

Shell	Aluminum alloy per QQ-A-591
Shell Finish	Nickel plated (MIL-C-26074) or Black anodized (MIL-C-8625) or Cadmium plated (QQ-P-416)
Hardware	Passivated stainless steel
Wafer	Polyarylene thermoplastic
Interfacial Seal	Silicone elastomer
Termination Insulation	Transparent blue heat-shrinkable radiation cross-linked PVF2
Contact	Engaging end: copper alloy gold plated over nickel underplate per MIL-G-45204; type 1, Grade C, class 1 Termination end: Sn 63 pre-tinning (125°C) or SN96 (150°C) per QQ-S-571

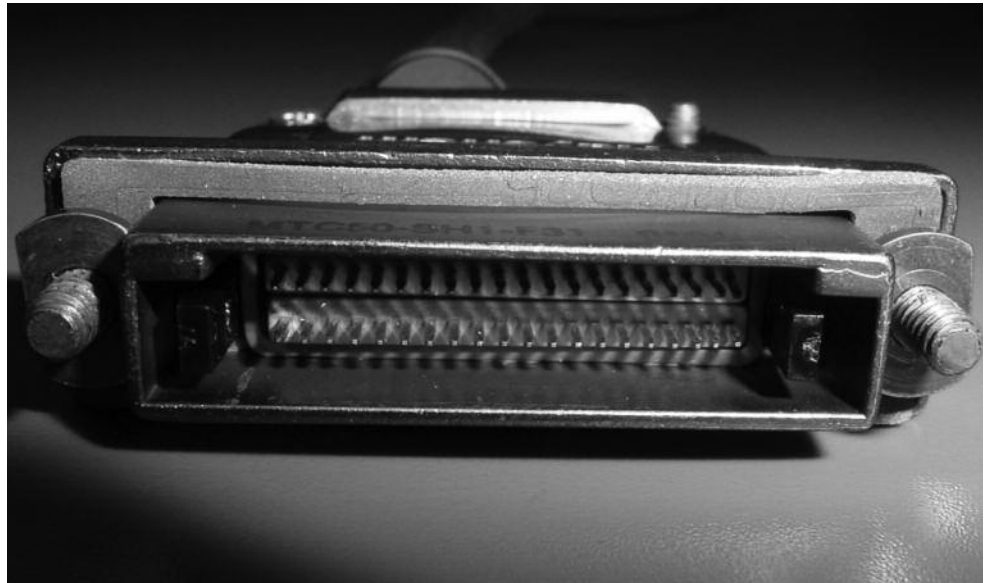
**Technical Data and Performance**

Contact Spacing	2.54 mm
Insulation Resistance	5000 MΩmin. / 23°C
DWV	1500 VAC-RMS 50-60 Hz/Sea level 1500 V eff (round wire) 1000 V eff (flat conductor flat cable)
Current Rating	1.5A per request
Temperature Range	-65°C to 125°C or -65°C to 150°C
Contact Resistance (low current)	MIL-STD-1344 method 3002 before aging 18mΩ/ after aging 21 mΩ wire size 0.4mm <sup>2</sup>
Shell to shell conductivity (except black anodized non-conductive)	2.5mV (1 A dc)
Vibration	MIL-STD-1344, method 2005 condition VI-Letter J
Mechanical Shock	MIL-STD-1344, method 2004 condition D
Temperature Aging	1000 h 125°C 1000 MΩmin. at T max. 5000 MΩmin. 23°C
Humidity	90-98% RH 10 cycles 100 MΩmin.
Altitude Immersion	30 minutes at 21000 M 5000MΩmin. (MIL-STD-1344, method 1004)
Salt Spray	5% salt / 48h or 500 h (cadmium plated) (MIL-STD-1344 method 1001 Condition B)
Fluid Resistance	MIL-STD-1344 method 1016
Contact engagement and separation forces	Engagement: 3.3 N Max. per contact Separation: 0.2 N min. per contact
Durability	500 cycles (including mounting hardware)
Contact Retention	45 N min. (MIL-STD-1344 method 2007)
Wafer Retention	Size 1: 178N Size 2: 356N (MIL-STD-1344, method 2010)
Wire Sizes	FCC MIL-C-49059: 0.25mm <sup>2</sup> -0.4mm <sup>2</sup> (22-24 AWG) Round wire 0.15mm <sup>2</sup> -0.34mm <sup>2</sup> (20-26 AWG) For AWG 18 or 20, contact TE Connectivity.

## MTC50 Connectors

### Product Facts

- 20 or 40 contacts size 26  
1.27 mm (0.050 in.) spacing
- 40 or 80 contacts size 26  
1.27 mm (0.050 in.) spacing
- AWG 24-28 (round wire) or  
28 (flat cable)
- -65°C to +125°C
- TE Connectivity  
Specification C-6111
- Three shell finishes: Black  
anodized (non-conductive),  
Nickel plated (conductive),  
and Cadmium over nickel  
(500 h salt spray)



The basic connector consists of the following modular components: two shells (plug and receptacle), mounting hardware and keying pins. In each shell are included two removable wafers with either 20 or 40 fixed contacts, 1.27mm spacing.

These wafers, pin or socket, are available in two versions to receive either round wire or flat conductor cable or flexible printed circuits. It is recommended to use TE flat cable with rectangular section conductors, perfectly adapted to the contacts shape of the connector.

The wafers use a tuning fork type contact design. Both pin and socket contacts are fixed in the wafer. The pin contact is molded into the wafer while the socket contact has a degree of free movement.

Environmental sealing is achieved by:

- an integral interfacial seal which is attached to the face of the pin wafer. This seal is compressed when the connector is mated.
- a thermoplastic material which seals the wafer body to the wire during soldering

The MTC50 is available in two sizes:

**Size 1:**  
40 contacts, 1.27mm (0.050 in.) spacing 2 rows of contacts

**Size 2:**  
80 contacts, 1.27 mm (0.050 in.) spacing 2 rows of contacts

The connector contact is terminated to the wire by controlled soldering using a heat-shrinkable boot. This well-known technology achieves a high degree of electrical performance and allows semi-automated termination.

The EME protection continuity can be achieved by additional components. Polarization of shells and wafers prevents mis-mating.



**MTC50 Connectors** (Continued)

**Technical Specification**

**Materials**

Shell	Aluminum alloy per QQ-A-591
Shell Finish	Nickel plated (MIL-C-26074) or Black anodized (MIL-C-8625) or Cadmium plated (QQ-P-416)
Hardware	Passivated stainless steel
Wafer	Polyarylene thermoplastic
Interfacial Seal	Silicone elastomer
Termination Insulation	Transparent blue heat-shrinkable radiation cross-linked PVF2
Contact	Engaging end: copper alloy gold plated over nickel underplate per MIL-G-45204; type 1, Grade C, class 1 Termination end: Sn 63 pre-tinning (125°C) or SN96 (150°C) per QQ-S-571

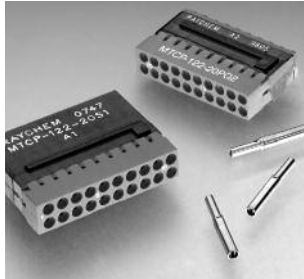
**Technical Data and Performance**

Contact Spacing	1.27 mm
Insulation Resistance	5000 MΩmin. / 23°C
DWV	750 VAC-RMS 50-60 Hz/Sea level
Current Rating	1.5A per request
Temperature Range	-65°C to 125°C
Contact Resistance (low current)	Wire size/before aging/after aging 0.1mm <sup>2</sup> 43mΩ/51mΩ
Shell to shell conductivity (except black anodized non-conductive)	2.5mV (1 A dc)
Vibration	MIL-STD-1344, method 2005 condition VI-Letter J
Mechanical Shock	MIL-STD-1344, method 2004 condition D
Temperature Aging	1000 h 125°C 1000 MΩmin. 125°C 5000 MΩmin. 23°C
Humidity	MIL-STD-1344 Method 1002 Type II, 100 MΩmin.
Altitude Immersion	30 minutes at 21000 M 5000MΩmin. (MIL-STD-1344, method 1004)
Salt Spray	5% salt / 48h or 500 h (cadmium plated) (MIL-STD-1344 method 1001 Condition B)
Fluid Resistance	MIL-STD-1344 method 1016
Contact engagement and separation forces	Engagement: 2.20 N Max. per contact Separation: 0.14 N min. per contact
Durability	500 cycles (including mounting hardware)
Contact Retention	22 N min. (MIL-STD-1344 method 2007)
Wafer Retention	Size 1: 178N Size 2: 356N (MIL-STD-1344, method 2010)
Wire Sizes	FCC MIL-C-49059: 0.1mm <sup>2</sup> (28 AWG) Round wire 0.1mm <sup>2</sup> -0.15mm <sup>2</sup> (24-28 AWG)

**MTCP 20 Cavity Inserts**

**Product Facts**

- 20 cavity inserts
- Size 22-20 contacts



MTCP inserts have been redesigned to include size 22 cavity which can accept 22-20 crimp contacts.

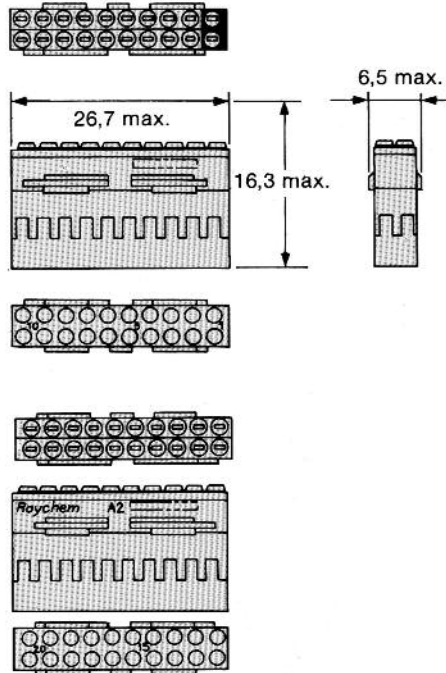
Insertion/extraction of contacts are rear release.

This series completes the MTC100 and MTC50 mass termination families. It extends the crimp version product range from size 12 (MTCR) to size 16 and 20 (MTCP).

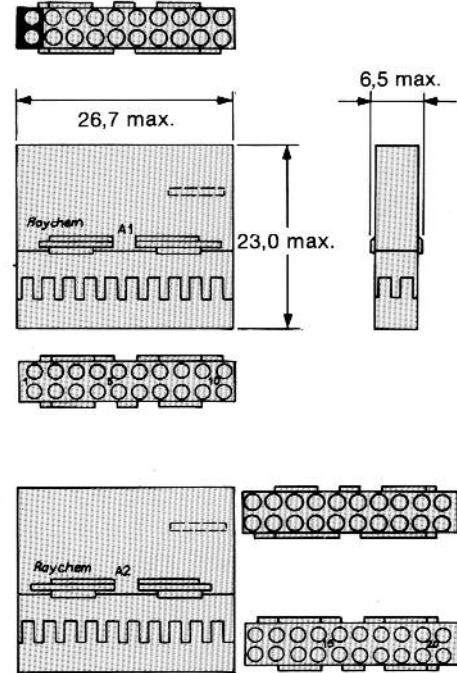
MCTP 22-20 inserts are intermateable and changeable with MTC100 connectors.

They keep the same high performance level.

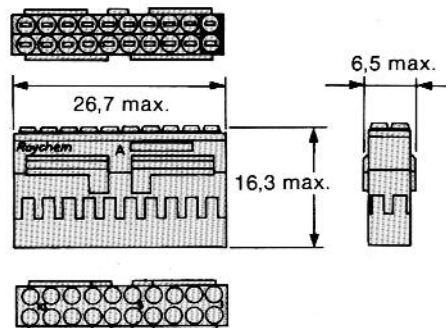
**2" shell Pin Insert**  
 MTCP-122-20P1  
 MTCP-122-20P2



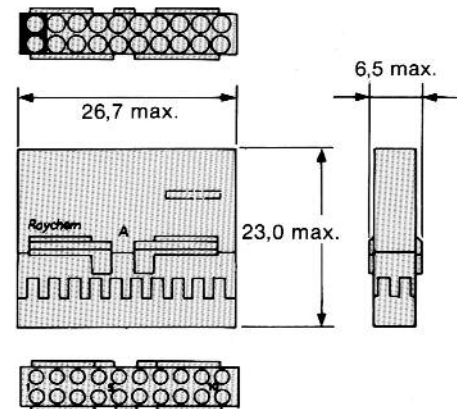
**2" shell Socket Insert**  
 MTCP-122-20S1  
 MTCP-122-20S2



**1" shell Pin Insert**  
 MTCP-122-20P



**1" shell Socket Insert**  
 MTCP-122-20S



**Pin Contact**  
 CTA-0166



**Socket Insert**  
 CTA-0165



- Contact removal tool (plastic):**  
 CTA-1160  
**Extraction tool for MTCP inserts:**  
 CTA-0161  
**Positioner for pin contact:**  
 CE-1605900  
**Positioner for socket socket:**  
 CE-1606000

### MTCT High Performance Modular Rectangular Connectors

for use with ARINC 801 Optical Termini

**Product Facts**

- Available in aluminum or corrosion resisting steel
- Utilizes the industry standard ARINC 801 optical termini - no empty cavities requiring sealing
- Mating hardware options - available in quick disconnect or jack screw styles for optimized space utilization
- Accommodates four ARINC 801 optical termini
- Enhanced MTCT mating interface
- Uses commonly available tooling for installation - no need to carry extra specialized tooling



TE Connectivity MTCT connector is a compact, lightweight design connector for use with ARINC 801 fiber optic termini.

Ideal for applications such as avionics, in-flight entertainment systems, communications, production breaks and other areas.

**Part Number Information**

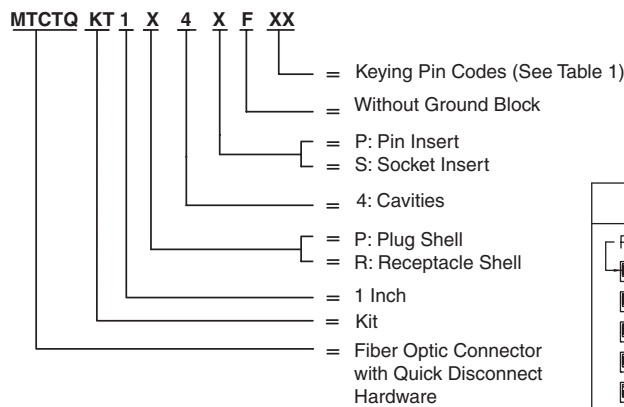
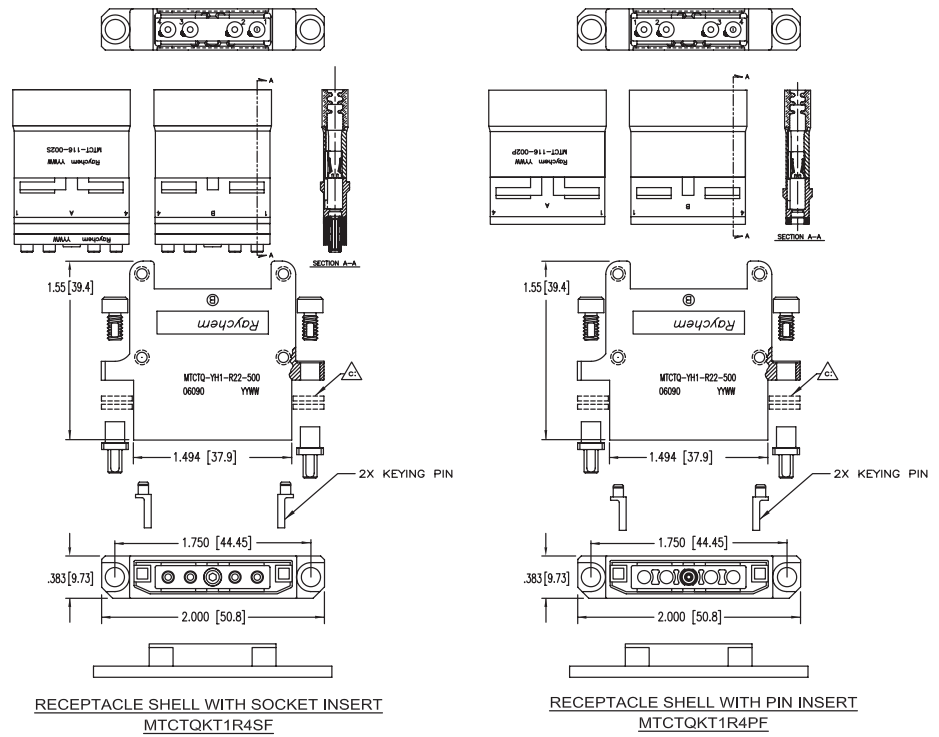
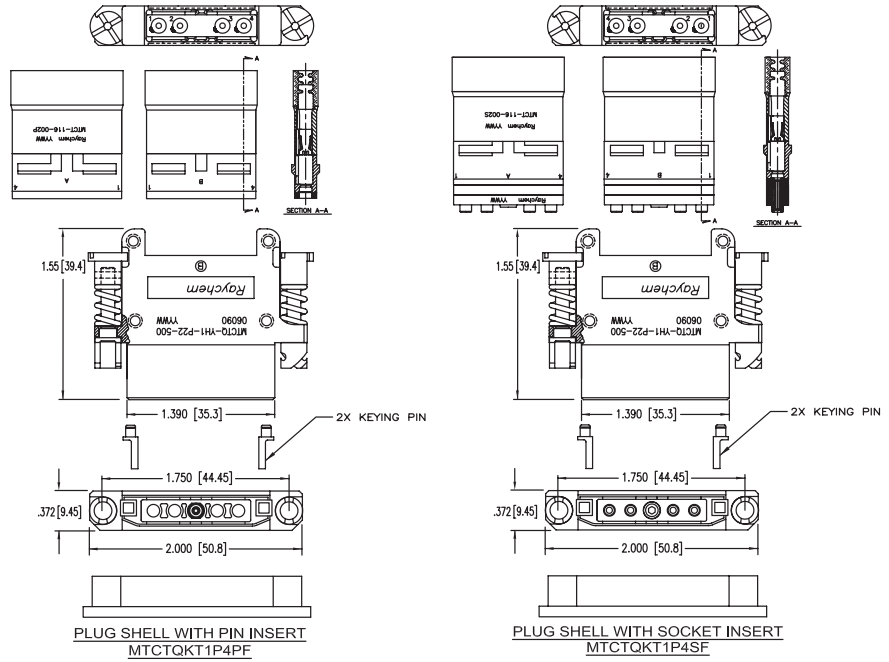


TABLE I KEYING CODES

POSITION OF PROJECTING TAB (TYP)		
RECEPTACLE	CODE	PLUG
	-A A-	
	-A B-	
	-A C-	
	-A D-	
	-B A-	
	-B B-	
	-B C-	
	-B D-	
	-C A-	
	-C B-	
	-C C-	
	-C D-	
	-D A-	
	-D B-	
	-D C-	
	-D D-	
	-X X-	

MTCT High Performance Modular Rectangular Connectors (Continued)

Kit, Plug and Receptacle



## Screening

### Round Wire

The following terminal strips must be used to connect screening to the body of an MTC 100 housing:

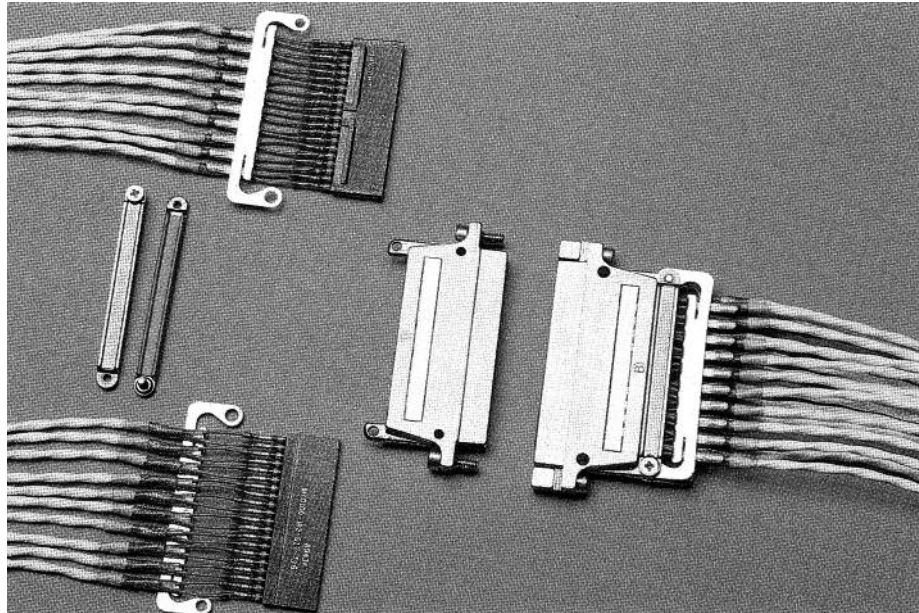
**Size 1 housing:**

Type CTA-0022

**Size 2 housing:**

Type CTA-0023

The strips are connected to the screening using SolderSleeve devices, and secured by the connector cable clamp.



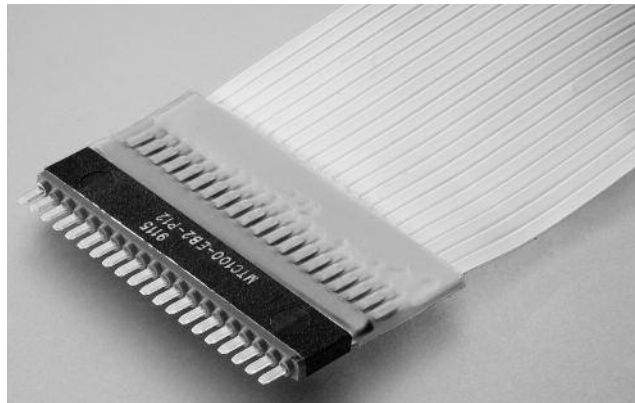
### Ribbon Cable

With ribbon cables, the screening is provided by a copper strip.

The copper strip is connected using different terminal strips in accordance with the electrical diagram (contact TE Connectivity).

In any case, the terminal strips and block must be connected at the same time in the T.C.W.I. heating device (CE-1404300).

The assembly is contained in the connector housing, and does not alter the overall dimensions of the latter.



Unscreened cable shown above.



Application and Installation (Continued)

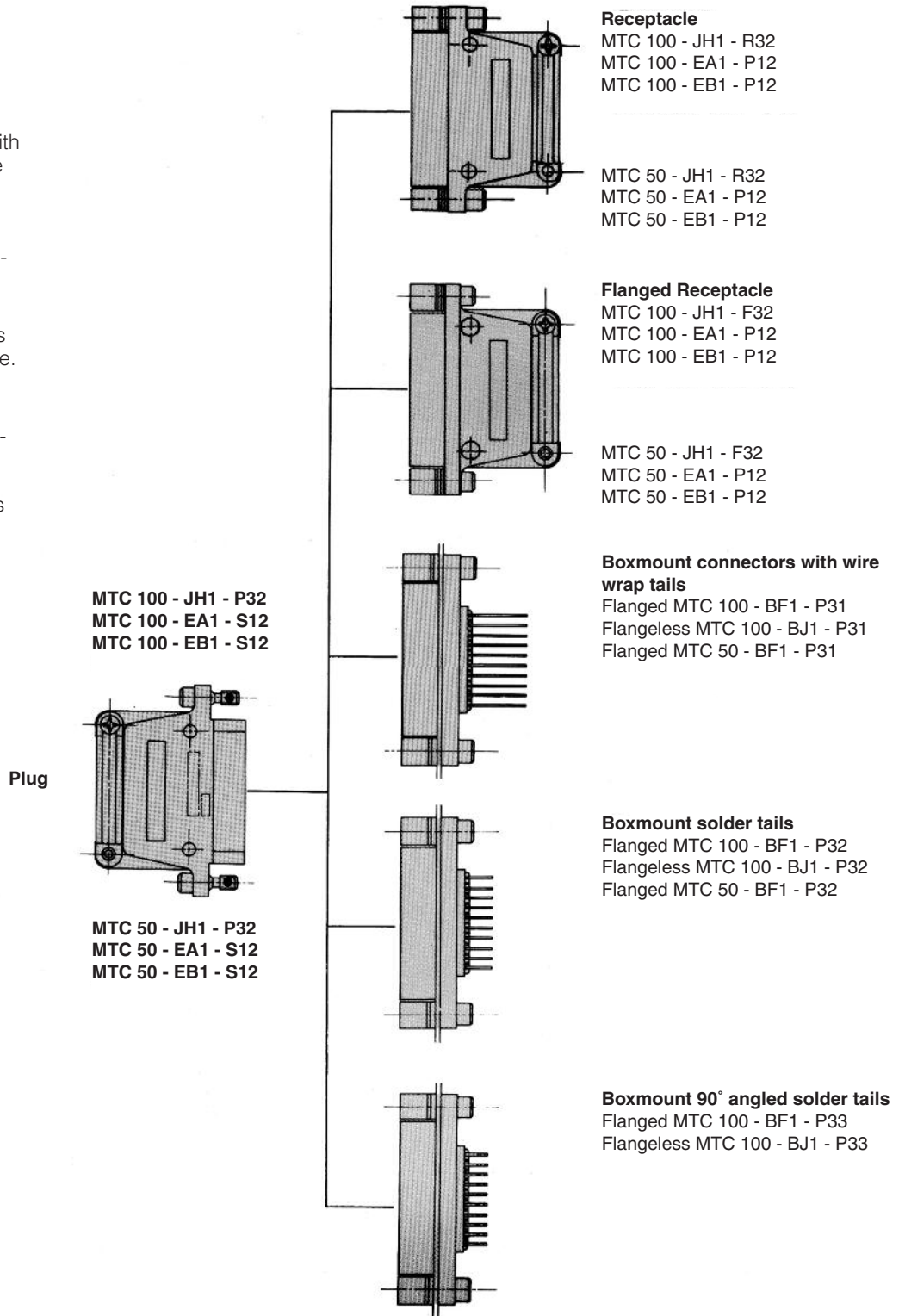
**Mating possibilities**

The mating possibilities of the MTC100 and MTC50 series are depicted below by using a 1" plug shell with cadmium finish. The same mating possibilities are available for 2" shells and other shell finishes. Part numbers should be substituted as necessary.

The wafers shown in the plug and receptacle shells are for flat conductor cable. For round wire wafers, consult text.

Because of the multiple fitting possibilities of pin or socket wafers, the user must ensure that the types of wafer in the plug and receptacle shells match each other.

The MTCR plug shell can only be mated with an MTCR receptacle shell; contact types must match each other.



Application and Installation (Continued)

**Installation dimensions for receptacle shells and box-mount connectors**

The installation dimensions for the MTC100 and MTC50 series are the same.

All receptacle and box-mount shells are suitable for rear panel mounting. Differences in panel thickness between 0.8mm min. and 2.4mm max. are to be adjusted with the 0.8mm thick spacer washers supplied.

Boxmounts with straight wire wrap or solder tails may also be front panel mounted. Front panel and PCB mounting kits are available (consult TE Connectivity).

All receptacle shells are suitable for flat or stack mounting. It is not necessary to dismantle the stack to remove the mating plug shells.

The MTCR connector has a different cable clamp and is therefore longer than a standard receptacle shell.

