

MT38999 Connectors

For High Density Fiber Optic Interconnect Solutions

The features of the Amphenol MT Cylindrical Connector include:

- High fiber density in a relatively small circular connector package with all the advantages of the MIL-DTL-38999 series III connector
- Three levels of alignment provide for precision fiber to fiber interface:
 - Shell to shell with keying to allow for alternate positions
 - Insert plug to insert receptacle
 - MT contact guide pins
- Compatible with 12-fiber or 24-fiber MT ferrules in multi-mode PC, single mode PC, and single mode APC configurations
- 2 arrangements are available, shell size 11 with one ferrule, and shell size 21 with four ferrules

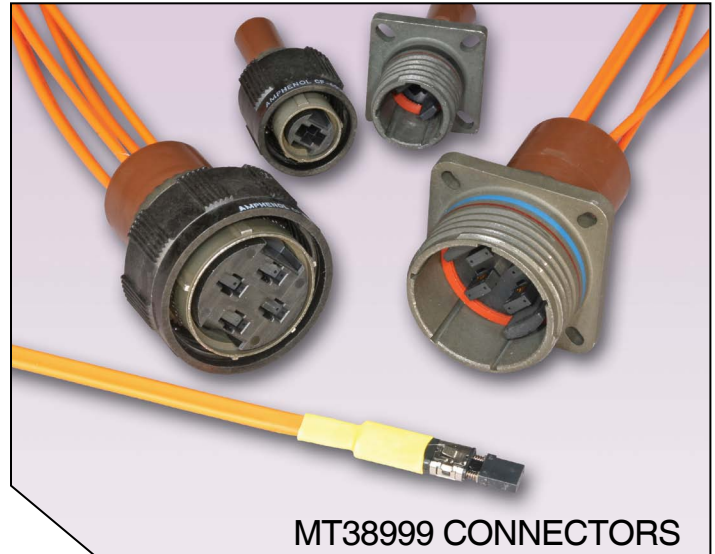
Very high density can be achieved with the use of Amphenol MT38999 connectors:

- Up to 24 fiber channels in a size 11 shell
- Up to 96 fiber channels in a size 21 shell

OPTICAL / MECHANICAL / ENVIRONMENTAL

Parameter	Performance
OPTICAL (Multi-mode)* Insertion Loss (850 nm) Return Loss (850 nm)	0.40 dB (typ) -40.0 dB (typ)
Thermal Cycling	EIA-364-03D, test condition VII -40° to 85°C
Temperature Life	TIA/EIA-455-4; 85° for 336 hours
Vibration	MIL-STD-810F, Method 514.5
Mechanical Shock (Operational)	MIL-STD-810F, Method 516.5 75G half-sine, 10 ms duration
Mechanical Shock (Non-Operational)	MIL-STD-810F, Method 516.5 36-44G sawtooth, 10-12 ms duration
Humidity	TIA/EIA-455-5

* Values shown are typical. Optical loss performance dependant on optical launch conditions, end face geometry, end face quality, and grade of MT ferrule.



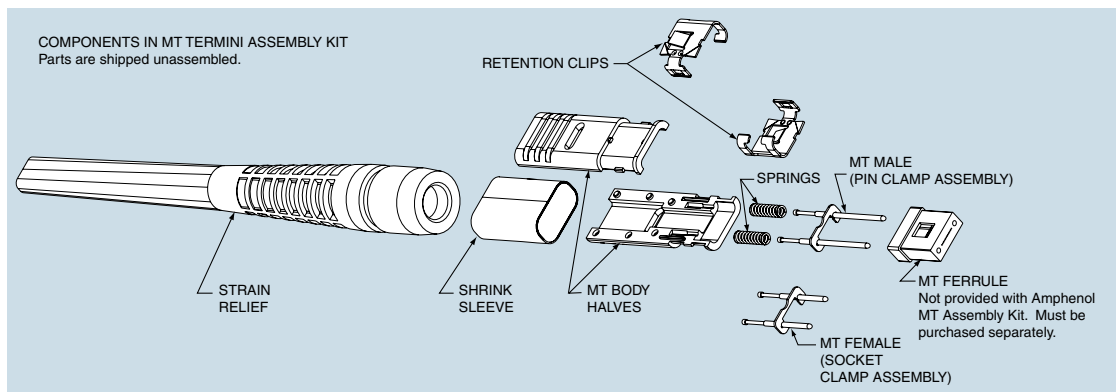
MT Termini Assembly Kit

Amphenol supplies MT termini assemblies in kits, minus the MT ferrule. MT ferrules that meet the IEC1754-5 specification are recommended for use.

Kit Order Numbers (each are minus the MT ferrules):

MT male assembly kit (flat ribbon): CF-198136-000

MT female assembly kit (flat ribbon): CF-198137-000



(MT assembly kit shown)

Easy Steps to build a part number... **MT38999**

1.	2.	3.	4.	5.	6.	7.
Connector Type	Connector Class	Terminus Style	Shell Finish	Shell Style	Shell Size- Insert Arrangement	Insert Type & Key/Keyway Position
CF-	6	9	9	0	11-01	P

Step 1. Select a Connector Type

CF-	Designates Multi-Channel Fiber Optic Connector
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Step 2. Select a Connector Class

	Designates
5	Aluminum
6	Composite
8	Stainless Steel

Step 3. Terminus Style

	Designates
9	MT terminus - Flat ribbon cable

Step 4. Select a Shell Finish

	Designates
4	electroless nickel plated aluminum
6	Corrosion resistant stainless steel (connector class 8 only)
9	Corrosion resistant olive drab cadmium plate aluminum
D	Durmalon™ (Nickel-PTFE)

Durmalon is a trademark of Amphenol Aerospace. For more information on Durmalon, go to www.amphenol-aerospace.com/durmalon.asp

Other shell finishes are available. Consult Amphenol Aerospace for more information.

Step 5. Select a Shell Style

	Designates
0	Wall mount receptacle
1	Line receptacle
6	Straight plug
7	Jam nut receptacle

Step 6. Select a Shell Size- Insert Arrangement

Shell Size - Insert Arrg.	Designates
11-01	Shell size 11 - Single cavity
21-04	Shell size 21 - Four Cavity

Step 7. Insert Type & Key/Keyway Position

Insert Type and Keyway Position

P designates plin insert

S designates socket insert

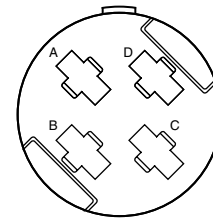
For keyway positioning, choose the alternate rotation suffix from the chart below.

ALTERNATE POSITION SUFFIX

Alternate Position	Suffix Letter	
	Pins	Sockets
Normal	P	S
A	G	H
B	I	J
C	K	L
D	M	N
E	R	T

MT Insert Availability

Front face of pin inserts illustrated

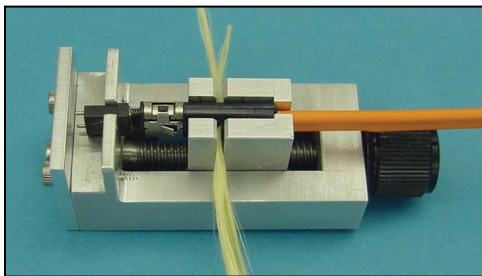


Insert Arrangement 11-1

21-4

MT Assembly Tool

Order Number: 11-10000-000

**MT Removal Tool**

Order Number: CF-008025-000



See the Fiber Optic section of Amphenol's combined circular product catalog, 12-C3 - online at www.amphenol-aerospace.com

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