

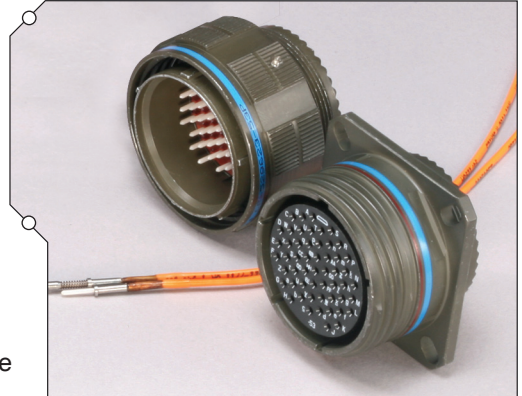
Amphenol® Tri-Start, Series III MIL-DTL-38999 Connector

The ideal choice for Fiber Optics

- Meets or exceeds MIL-DTL-38999 Series III requirements
- EMI Shielding-solid metal to metal coupling, grounding fingers, electroless nickel plating, and thicker wall sections provide superior EMI shielding capability of 65dB min. at 10 GHz.
- Termini Protection-recessed pins in this 100% scoop-proof connector minimize potential termini damage
- Corrosion Resistance-shells of stainless steel or cadmium over nickel plating withstand 500 hr. salt spray exposure
- Vibration/Shock-operates under severe high temperature vibration
- Threaded coupling quickly and completely mates in one 360° turn of the coupling nut

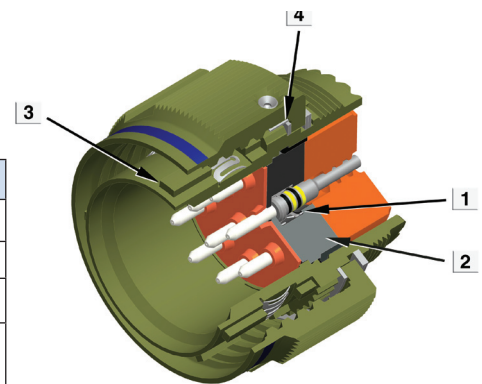
Amphenol® Composite Tri-Start, Qualified to MIL-DTL-38999, Rev. J. Same high performance features as metal Tri-Start connectors, but also includes the following features:

- Lightweight - 17%-70% weight savings
- Increased Corrosion Resistance-olive drab cadmium (175°C) and electroless nickel plating (200°C) both withstand 2000 hours of salt spray exposure.
- Durability-1500 couplings minimum (in reference to connector couplings, not termini)



MECHANICAL/ENVIRONMENTAL

PARAMETER	PERFORMANCE
Maintenance Aging	MIL-STD-1344 Method 2002
Mating Durability	500 mating cycles
Insert Retention	100 PSI/25 lbs minimum
Sine Vibration	60 G (140-2000 Hz), 4 hours each at ambient, -55 deg C, and +175 deg C
Standard Shock	300 G half-sine, 3 ms duration
High Impact Shock	MIL-S-901 grade A with lightweight fixture
Temperature Life	1000 hours @ high temp rating
Thermal Shock	-55° C to +165° C - 5 cycles



The illustration above shows the key features of the MIL-DTL-38999 CF-50- The highest optical performance connector.

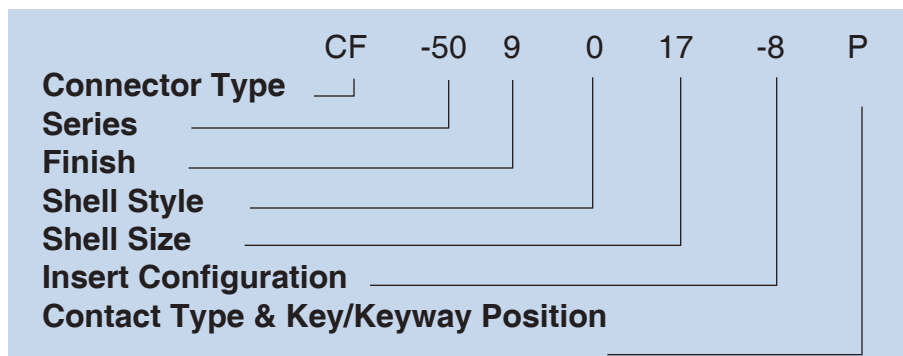
1. Beryllium-copper retention clip for improved termini stability
2. Precision-aligned inserts
3. Modified master key
4. Integrated wave washer for improved performance in high vibration environments

MATERIALS & FINISH CHARACTERISTICS

SHELL MATERIAL/FINISH	TEMPERATURE RATING (DEG C)	SALT SPRAY RATING (HOURS)	MIL-DTL-38999 SERVICE CLASS
Aluminum/Durmalon	-65 to +175	500	T
Aluminum/electroless nickel	-65 to +200	500	F
Aluminum/olive drab cadmium plate nickel base	-65 to +175	500	W
Stainless steel	-65 to +200	500	K
Composite/electroless nickel	-65 to +200	2000	M
Composite/ olive drab cadmium plate nickel base	-65 to +175	2000	J

Multi-Channel Fiber Optic Cylindrical Connectors Tri-Start (MIL-DTL-38999, III) How to Order

Amphenol® Multi-Channel fiber optic connectors for use with multi-mode and single mode termini can be ordered by coded part number. Ordering procedure is illustrated by part number CF-509017-8P as shown below:



Connector Type

CF Designates multi-channel fiber optic

Series

- 50 Designates aluminum shell, tight tolerance
- 60 Designates composite shell, tight tolerance
- 80 Designates stainless steel shell, tight tolerance

Finish

- 4 designates electroless nickel plated aluminum, 48 hour salt spray resistance, 200°C
- 5 designates unplated composite
- 6 designates corrosion resistant stainless steel, 500 hour salt spray resistance, 200°C
- 9 designates corrosion resistant olive drab cadmium plate aluminum, 500 hour salt spray resistance, 175°C
- D designates Durmalon™ (Nickel-PTFE)

Shell Style

- 0 Designates wall mount receptacle
- 1 Designates line receptacle
- 2 Designates box mount receptacle
- 6 Designates straight plug
- 7 Designates jam nut receptacle

Shell Size

See Insert Availability online at www.amphenol-aerospace.com/fiberoptic.asp click on Fiber Optic section of Amphenol's combined circular catalog 12-C().

Insert Configuration

See Insert Availability online at www.amphenol-aerospace.com/fiberoptic.asp click on Fiber Optic section of Amphenol's combined circular catalog 12-C().

Contact Type and Key/Keyway Position

P designates pin contacts
S designates socket contacts

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

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

For more information on key/keyway rotation, see Amphenol Circular Catalog 12-C, MIL-DTL-38999 Series III section.

Notice: Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all connectors.

AMPHENOL is a registered trademark of Amphenol Corporation.

2012 Amphenol Corporation Printed in U.S.A. 7/2012



The Interconnection Leader

Call 800-678-0141 or visit us at www.amphenol-aerospace.com