

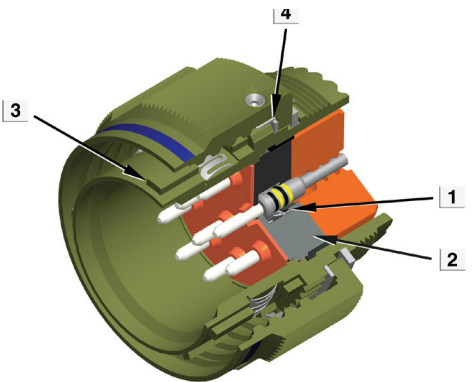
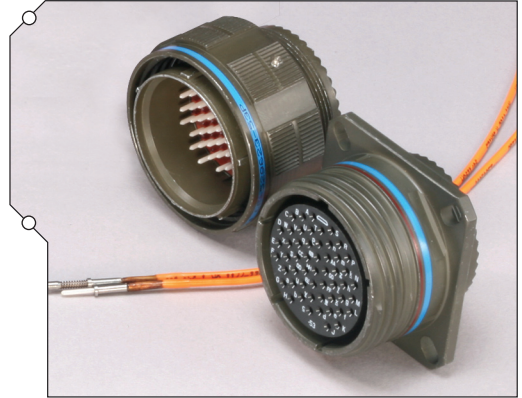
Amphenol® Tri-Start, Series III MIL-DTL-38999 Connector

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)



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

MECHANICAL/ENVIRONMENTAL

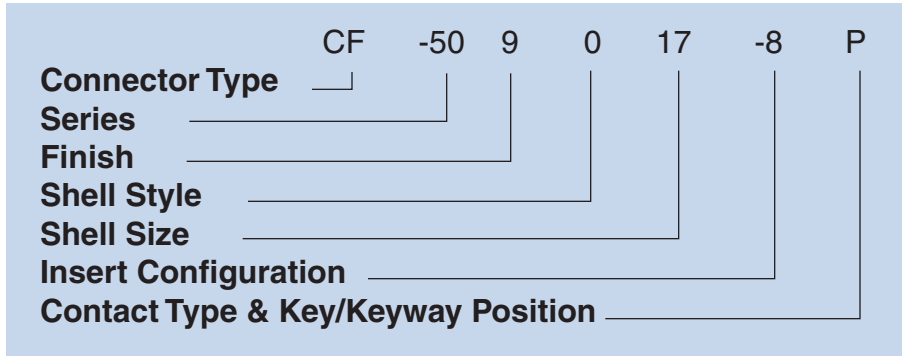
PARAMETER	PERFORMANCE
Maintenance Aging	MIL-STD-1344 Method 2002
Mating Durability	500 mating cycles
Insert Retention	100 PSI/25 lbs minimum
Sine Vibration	60 G (140-2000 Hz), 4 hours each at ambient, -55 deg C, and +175 deg C
Standard Shock	300 G half-sine, 3 ms duration
High Impact Shock	MIL-S-901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

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 Catalog 12-352 chart on page 13.

Insert Configuration

See Insert Availability online at www.amphenol-aerospace.com/fiberoptic.asp click on Catalog 12-352 chart on page 13.

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 Tri-Start Cylindrical catalog, 12-092

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