



Fiber Optics in MIL-DTL-38999 Series III Connectors

Amphenol Aerospace offers a wide range of fiber optic interconnect solutions for use in the harsh environments found in military and aerospace applications. Amphenol Aerospace has established the rugged and reliable MIL-DTL-38999 as a common connector shell platform that houses a wide variety of fiber optic termini including MIL-PRF-29504 commercial equivalent*, HDF20, ARINC 801 and MT ferrules.

MIL-DTL-38999 Series III Tri-Start connectors are available in various insert arrangements, materials and finishes to meet any type of environmental requirement. Our MIL-PRF-29504 style and HD20 termini can be combined with most of our copper contacts to create a large assortment of hybrid fiber/copper connector combinations.

*MIL-PRF-29504 supersedes MIL-T-29504. (MIL-T-29504 is still available; consult Amphenol Aerospace for more information.)

Connector	Termination	Features
	MIL-PRF-29504	CF38999 pin and socket termini that feature high precision, pre-radiused ceramic ferrules to help improve insertion loss performance and reduce polishing time. Products are available in both single mode and multi-mode versions. The socket has a plastic protective shroud over the ceramic alignment sleeve that incorporates a built-in anti-rotation feature. HD20 - Pin and socket termini that have the same benefits of the MIL-PRF-29504 termini, but in a smaller size 20 contact that allows for increased density in D38999 connector shells.
	JSF	Tight tolerance, nickel-plated composite plugs and receptacles approved for use in F35/JSF applications.
	ARINC 801 termini	Genderless fiber optic termini that use a precision 1.25 mm ceramic ferrule. Precision inserts with guide pins and keyed termini enhance multi-mode and single mode performance. ARINC 801 termini facilitate an angled polish for improved return loss.
	MT ferrules	Industry-standard, very high density plastic ferrules available in either 12-fiber or 24-fiber versions, in multi-mode PC, single mode PC, and single mode APC configurations.

Amphenol Aerospace also supplies a wide range of rectangular interconnect products containing MIL-PRF-29504 style, HD20 and MT Fiber Optic termini. Our rectangular interconnect products include a variety of applications including LRM surface mount and rack & panel styles - all available in hybrid fiber/copper configurations

38999

- III
- HD
- Dualok
- II
- I
- SJT
- Accessories
- Aquacon
- Herm/Seal
- PCB

HIGH SPEED

Fiber Optics

- Contacts
- Connectors
- Cables

EMI Filter
Transient

26482
Matrix 2

83723 III
Matrix | Pyle

26500
Pyle

5015
Crimp Rear Release Matrix

22992
Class 1

Back-Shell

Options
Others