

DLA-QUALIFIED  
CLASSES J AND  
M COMPOSITE

 **SuperNine**®



PEEK composite MIL-DTL-38999 Series III  
DLA-qualified plug and receptacles



Glenair SuperNine  
versions available with  
integrated band porch

**SuperNine®** is a “Better-than-QPL” MIL-DTL-38999 Series I, II, III, and IV connector family. Glenair’s complete capability in this benchmark series now includes qualified Series III plug and wall-mount receptacles in 100% molded composite thermoplastic PEEK, classes J (Cad / O.D.) and M (Electroless Nickel). The series offers outstanding weight savings and unlimited corrosion protection compared to metal versions.

#### PRODUCT FEATURES

- DLA-qualified and Glenair signature composite classes J (Cad) and M (Electroless Nickel)
- D38999/26 plug and D38999/20 wall-mount receptacle
- 20% weight savings versus aluminum class connectors
- Band porch designs = 50% weight savings over backshell / connector configurations
- 100% molded composite (not machined) for superior strength and durability
- 40% carbon-filled PEEK

# DLA-QUALIFIED MIL-DTL-38999 Series III Composite



Advanced performance mil-aero / defense connectors

## ABOUT GLENAIR 100% MOLDED PEEK COMPOSITE THERMOPLASTIC CONNECTORS



40% carbon-filled PEEK (Polyether Ether Ketone) is a high-performance material used in aerospace-grade connectors due to its superior mechanical strength, thermal stability, and resistance to harsh chemicals and environments. The addition of carbon fibers enhances the material's rigidity and dimensional stability, making it ideal for demanding aerospace applications where high strength-to-weight ratios are crucial. This composite material can withstand extreme temperatures and mechanical stresses, ensuring reliable, lightweight performance in critical interconnect systems in all aircraft zones subject to environmental exposure, high temperatures, vibration and shock.

## MIL-DTL-38999 SERIES III SUPERNINE® COMPOSITE CONNECTOR PERFORMANCE

SuperNine is a high-performance connector family designed for cable-to-panel, I/O and inline applications in military aerospace and other demanding situations. Environmental composite class versions are supplied with crimp removable contacts as well as PC tails in plug and wall-mount receptacle configurations. This table describes the most basic attributes for environmental class products supplied by Glenair.

Series Description	Scoop-Proof, Triple Start, Self-Locking			
Supported Contact Types and Gauges	8, 12, 16, 20, and 22D gauge contacts, standard density and 23 gauge high density arrangements; 1 to 187 contacts. Crimp, solder and PCB tails			
Coupling/Mating Design	Triple-start threaded coupling design, rapid advance, self-locking and full-mate indicator, keyed			
EMI Shielding	Shell to shell bottoming, grounding fingers, conductive finish and thick shell wall cross-sections provide effective EMI shielding to 65 dB minimum up to 10 GHz			
Vibration and Shock	Excellent resistance to vibration and shock with no electrical discontinuity and no disengagement of the mated connectors per MIL-DTL-38999 (paragraph 3.27 & 3.28)			
Mating Speed	360 ° or one full turn to full mate			
Materials	100% molded PEEK carbon filled shells, Fluorosilicone/Silicone blend seals, Beryllium Copper alloy, Gold-plated contacts			
Durability	1500 mating cycles			
IP Rating	Receptacles with non-removable PC tail contacts IP67; Removable contacts in mated condition, IP68			
Outgassing	Available in accordance with NASA standards			
Current Rating	Contact Size	Maximum Amps Crimp Contact	Contact Size	Maximum Amps Crimp Contact
		Environmental		Environmental
	23	5	16	13
	22D	5	12	23
20	7.5	8	46	