

MISSION-CRITICAL
INTERCONNECT
SOLUTIONS

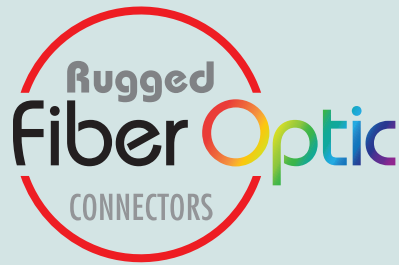


Glenair
SIGNATURE SERIES

SuperNine® Tight-Tolerance D38999 Sr. III Fiber Optics

Proven-Performance Connectors · Mil-Qualified Termini

GLENAIR
SIGNATURE
FIBER OPTIC
CONNECTION
SYSTEMS



SuperNine[®]
Tight-Tolerance
MIL-DTL-38999 Sr. III
Fiber Optic Connection
System



The high-performance D38999 type fiber optic interconnect system with qualified MIL-PRF-29504 /4 and /5 termini, successfully deployed in hundreds of commercial and military aerospace and other applications — from F-16 upgrade systems to the revolutionary F-35 Joint Strike Fighter.



Terminated and tested point-to-point and multibranch D38999 type fiber optic cable assemblies

- Composite, aluminum and stainless steel shells available
- Qualified size #16 MIL-PRF-29504 /4 and /5 precision ceramic termini
- Singlemode and multimode fiber, from 9/125 to 1000 microns
- Ultra-low insertion loss, <.50dB typical
- From 2 to 37 Termini
- Plug and In-Line, Jam Nut and Square Flange Receptacles
- Patented MIL-DTL-38999 fiber optic test probes and adapters

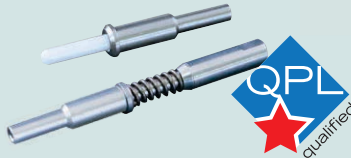
SuperNine® TIGHT-TOLERANCE MIL-DTL-38999 Series III Type



Advanced fiber optic connection system



MIL-DTL-38999 type fiber optic connection system termination, inspection, test, and cleaning tools are available now from Glenair. We also offer comprehensive F/O training services for assembly and maintenance technicians.



Glenair M29504/04 and /05 QPL termini are in stock and ready for immediate, same-day shipment



Glenair optical fiber test probes and connector adapters provide accurate and repeatable testing of MIL-DTL-38999 F/O assemblies



A complete range of metal and composite backshells and protective covers is available



Hybrid electrical/optical layouts are available including the MIL-STD-1560 17-8 layout shown above



Eye-Beam GLT termini and jumpers are easily integrated into Glenair MIL-DTL-38999 type connector packaging

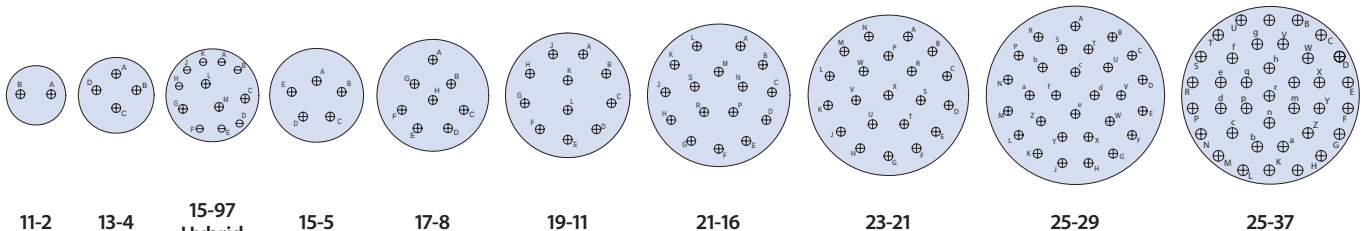
**MIL-PRF-29504/04 and /05
Fiber Optic Termini Performance Data**

Test Type	Performance Requirement
Operating Temperature	-55°C to +165°C (dependent on epoxy and cable)
Temperature Cycling	-65°C to +175°C
Thermal Shock	-55°C to +150°C, 5 cycles
Temperature Life	+150°C for 1,000 hours
Random Vibration	20-2,000 Hz, 42.2 g's
Shock (Half-sine Pulse)	300 g Peak Load
Mechanical Shock	MIL-S-901, Grade A, Type B, Class I
Mating Durability	500 cycles (cleaning after 100 matings)
Salt Spray	48 hours (Terminus only)
Cable Retention Force	22.0 lbs (dependent on cable construction)

Table I: Material and Finish

Code	Material	Finish Description
M	Aluminum Alloy	Electroless Nickel
MT		Nickel - PTFE, Grey
NF		Cadmium, Olive Drab
ZNU		Zinc-Nickel, Black
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
ZL	Stainless Steel	Electro-Deposited Nickel
Z1		Passivate

INSERT ARRANGEMENTS



Per MIL-STD-1560. Mating face of pin insert shown.

SuperNine® TIGHT-TOLERANCE MIL-DTL-38999 Series III Type

How to order Termini and Connectors



M29504/04 AND /05 TYPE, STYLE 1 PIN AND SOCKET TERMINI FOR MIL-DTL-38999 SERIES III



Part Number	Fiber Size Core/Cladding/ Coating (Microns)	Ferrule Hole Size	Ref. M29504/04-XXXX	Ref. M29504/05-XXXX
181-00X-125	9/125 (Singlemode)	125.5	M29504/04-4208	M29504/05-4237
181-00X-126S	9/125 (Singlemode)	126.0	M29504/04-4209	M29504/05-4238
181-00X-126	50/125 & 62.5/125	126.0	M29504/04-4210	M29504/05-4239
181-00X-127	50/125 & 62.5/125	127.0	M29504/04-4040	M29504/05-4046
181-00X-142	100/140	142.0	M29504/04-4043	M29504/05-4049
181-00X-144	100/140	144.0	N/A	N/A
181-00X-145	100/140	145.0	M29504/04-4044	M29504/05-4050
181-00X-156	62.5/125/155 (Polyimide)	156.0	M29504/04-4211	M29504/05-4240
181-00X-157	62.5/125/155 (Polyimide)	157.0	M29504/04-4212	M29504/05-4241
181-00X-173	100/140/172 (Polyimide)	173.0	M29504/04-4087	M29504/05-4088
181-00X-175	100/140/172 (Polyimide)	175.0	M29504/04-4213	M29504/05-4242
181-00X-231	200/230	231.0	N/A	N/A
181-00X-236	200/230	236.0	N/A	M29504/05-4243
181-00X-286	200/280	286.0	N/A	M29504/05-4244
181-00X-448	400/440	448.0	N/A	M29504/05-4245
181-00X-533	486/500	533.0	N/A	N/A

SUPERNINE FIBER OPTIC CONNECTORS



Part Number Development						
Sample Part Number	180-091	XW	06	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Material/Finish	See Material/Finish Table					
Connector Style	06 = Plug Connector					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					



Part Number Development						
Sample Part Number	180-091	XW	05	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Finish	See Material/Finish Table					
Connector Style*	05 = In-Line Receptacle					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					

SuperNine® TIGHT-TOLERANCE MIL-DTL-38999 Series III Type



How to order Connectors



Part number development						
Sample Part Number	180-091	XW	08	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Material/Finish	See Material/Finish Table					
Connector Style	08 = Jam Nut Receptacle					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					



Part number development						
Sample Part Number	180-091	XW	H7	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Material/Finish	See Material/Finish Table					
Connector Style	H7 = Wall Mount Receptacle with Round Holes (Std)					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					



Part number development						
Sample Part Number	180-091	XW	S7	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Material/Finish	See Material/Finish Table					
Connector Style	S7 = Wall Mount Receptacle with Slotted Holes					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					



Part number development						
Sample Part Number	180-091	XW	T7	-17-8	P	N
Series / Basic Part No.	D38999 Series III Type					
Material/Finish	See Material/Finish Table					
Connector Style	T7 = Wall Mount Receptacle with Threaded Insert Holes					
MIL-STD-1560 Shell Size/Insert Arr.	11-2, 13-4, 15-97 (combo), 17-8, 19-11, 21-16, 23-21, 25-29, 25-37					
Insert Designation	P = Pin S = Socket					
Alternate Key Position*	A, B, C, D, E, N = Normal; Per MIL-DTL-38999					



MISSION-CRITICAL INTERCONNECT SOLUTIONS

Glenair, Inc.

1211 Air Way • Glendale, California • 91201-2497

Telephone: 818-247-6000 • Fax: 818-500-9912 • sales@glenair.com

www.glenair.com

Glenair Power Products Group

20 Sterling Drive
Wallingford, CT
06492

Telephone:
203-741-1115
Facsimile:
203-741-0053
sales@glenair.com

Glenair UK Ltd

40 Lower Oakham Way
Oakham Business Park
Mansfield, Notts
NG18 5BY England

Telephone:
+44-1623-638100
Facsimile:
+44-1623-638111
sales@glenair.co.uk

Glenair Microway Systems

7000 North Lawndale Avenue
Lincolnwood, IL
60712

Telephone:
847-679-8833
Facsimile:
847-679-8849

Glenair Nordic AB

Gustav III : S Boulevard 42
SE-169 27 Solna
Sweden

Telephone:
+46-8-50550000
sales@glenair.se

Glenair GmbH

Schaberweg 28
61348 Bad Homburg
Germany

Telephone:
06172 / 68 16 0
Facsimile:
06172 / 68 16 90
info@glenair.de

Glenair Iberica

C/ La Vega, 16
45612 Velada
Spain

Telephone:
+34-925-89-29-88
Facsimile:
+34-925-89-29-87
sales@glenair.es

Glenair Italia S.p.A.

Via Del Lavoro, 7
40057 Quarto Inferiore –
Granarolo dell'Emilia
Bologna, Italy

Telephone:
+39-051-782811
Facsimile:
+39-051-782259
info@glenair.it

Glenair France SARL

7, Avenue Parmentier
Immeuble Central Parc #2
31200 Toulouse
France

Telephone:
+33-5-34-40-97-40
Facsimile:
+33-5-61-47-86-10
sales@glenair.fr

Glenair Korea

6-21Tapsil-ro 58beon-gil
Giheung-gu, Yongin-si
Gyeonggi-do
Republic of Korea

Telephone:
+82-31-8068-1090
Facsimile:
+82-31-8068-1092
sales@glenair.kr