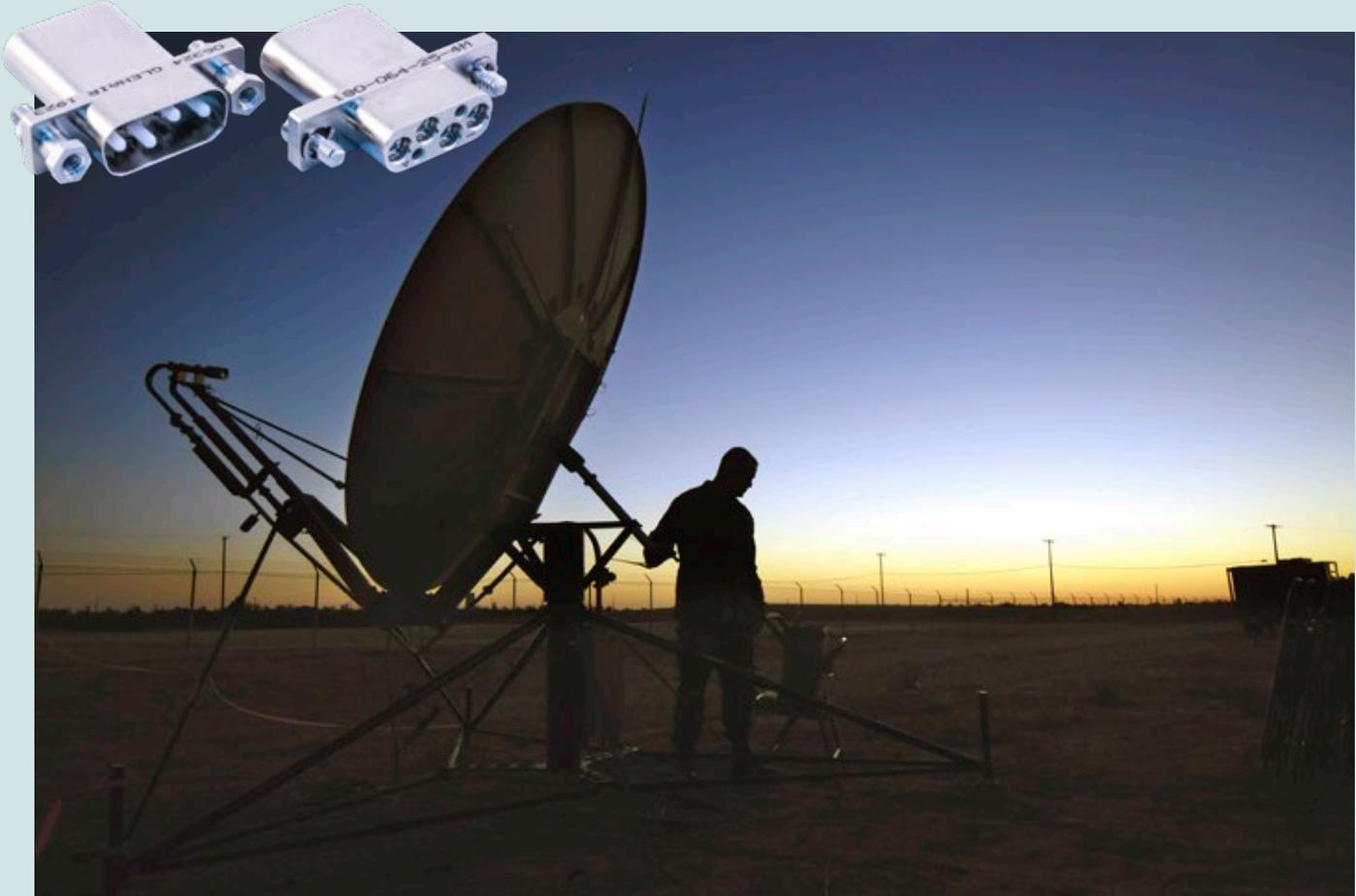


Glenair Front Release (GFR) Fiber Optic Connection System: the Fast Road to Fiber Optic Integration



The Glenair Front Release system allows for rapid connector integration of optical media by placing retention and environmental sealing components directly on the termini. Glenair GFR enables fast design and development of unique fiber optic connector shell packages without costly tooling and engineering.

- Precision size 16 pin-socket front release termini with integrated retention clip
- Singlemode and multimode for all popular fiber sizes
- Typical insertion loss less than 0.5 dB
- Supports cylindrical and rectangular connectors
- Connector shells available in aluminum and stainless steel



GFR fiber optic termini integration in micro miniature rectangular and circular connector packaging

RAPID INTEGRATION

Glenair Front Release (GFR)



Signature fiber optic connection system



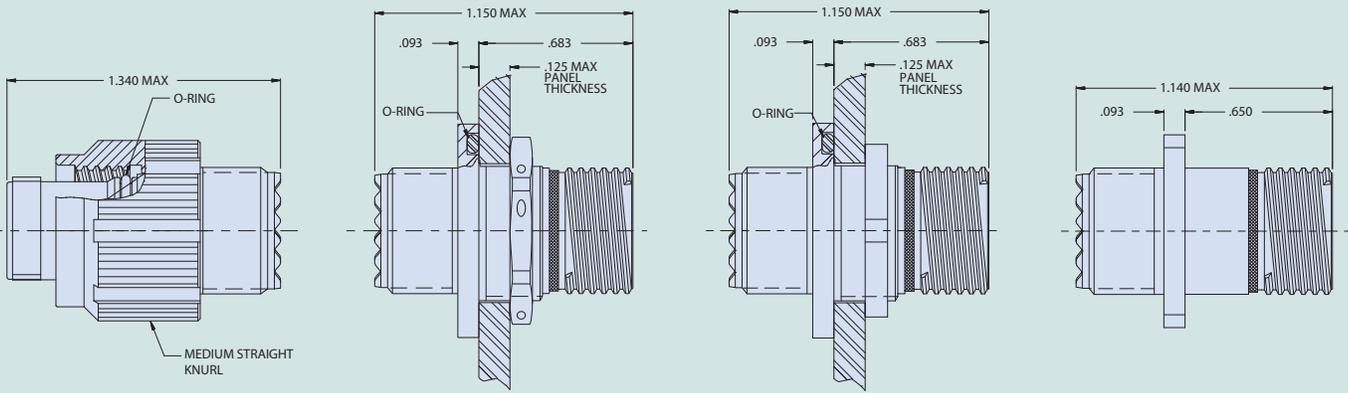
Glenair Front Release (GFR) fiber optic connection systems perform at insertion loss levels equivalent to other high-performance, tactical fiber optic systems such as M29504 termini used in D38999 and M28876 connectors. The GFR system enables Glenair to integrate optical media in Micro-D and D-Subminiature shells as well as micro miniature circular packaging. Contact the factory for availability and application engineering assistance for both standard and custom fiber optic connection systems.

GFR GLENAIR FRONT RELEASE MICRO MINIATURE CIRCULAR CONNECTORS



Contact the Factory for circular connectors requiring enhanced vibration and mechanical shock performance

How To Order GFR Micro Miniature Circular Connectors						
Sample Part Number	180-132	M	06-	9-4	P	A
Series	180-132 GFR Micro Miniature Circular					
Shell Size	C	Aluminum Alloy	Anodize, Black			
	M		Electroless Nickel			
	NF		CAD/Olive Drab over Electroless Nickel			
	ZN		Zinc-Nickel/Olive Drab over Electroless Nickel			
	ZNU		Black Zinc-Nickel over Electroless Nickel			
	Z1	Stainless Steel	Passivate			
Connector Style	04- Jam Nut w/ Wire Holes		06- Plug			
	08- Jam Nut Receptacle		07- Wall Mount Receptacle			
Shell Size/Insert Arr.	9-2, 9-4, 13-8, 16-12					
Contact Type	P - Pin Termini S - Socket Termini					
Key Polarization	A, B, C, D (See Table). Omit for 9-2 Arrangement which has 2 Keys/Keyways only.					



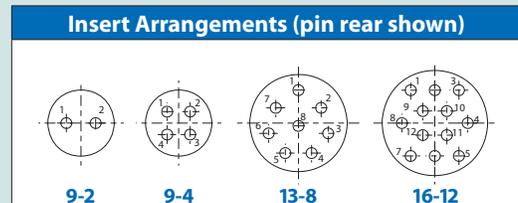
06- Plug

04- Jam Nut Receptacle with Wire Holes

08- Jam Nut Receptacle

07- Wall Mount Receptacle

Key Polarization		
Position	A°	B°
A	150°	210°
B	75°	210°
C	95°	230°
D	140°	275°

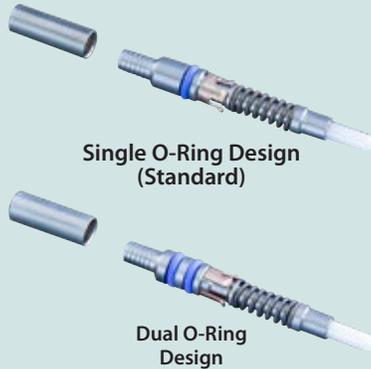


RAPID INTEGRATION Glenair Front Release (GFR)

How to order GFR Termini



PIN TERMINI



SOCKET TERMINI



DUMMY TERMINUS



How To Order GFR Fiber Optic Termini				
Sample Part Number	181-011	-126	K	D
Series	181-012 GFR front-release pin terminus 181-011 GFR front-release socket terminus			
Dash No.	Dash No.	Ferrule Hole Ø	Typical Fiber Type	Typical Fiber Size core/cladding/coating
	-125	125.5 µm	Singlemode	9/125 µm
	-126S	126.0 µm	Singlemode	9/125 µm
	-126	126.0 µm	Multimode	50/125, 62.5/125 µm
	-142	142.0 µm	Multimode	100/140 µm
	-156	156.0 µm	Multimode	62.5/125/155 µm (Polyimide)
	-173	173.0 µm	Multimode	100/140/172 µm (Polyimide)
	-175	175.0 µm	Multimode	100/140/172 µm (Polyimide)
	-231	231.0 µm	Multimode	200/225 µm
	-236	236.0 µm	Multimode	200/230 µm
-286	286.0 µm	Multimode	200/280 µm	
-448	448.0 µm	Multimode	400/440 µm	
Alignment Sleeve (socket only)	K = Stainless Steel Sleeve Omit = Ceramic Sleeve (standard) Omit designator for pin terminus			
O-Ring Option	D = Dual O-Rings Omit = Single O-Ring (standard)			
Dummy Terminus				
181-051	Size 16 Dummy Terminus for GFR Connectors			

TERMINI MATERIAL AND FINISH

Ferrule: Zirconia Ceramic
 Alignment Sleeve (socket): Zirconia Ceramic or Stainless Steel/Passivate
 Protective Cover (socket): BeCu Alloy/Nickel
 Body: Stainless Steel/Passivate
 Spring (pin): Stainless Steel/Passivate
 Bushing (pin): Stainless Steel/Passivate
 Retention Clip: BeCu Alloy
 O-Ring(s): Fluorosilicone
 Crimp Sleeve: Brass Alloy/Nickel

NOTES

Crimp sleeves are supplied with terminus assemblies. Spares may be ordered separately. See Glenair GAP-031 and GAP-031B for termination and assembly tools/procedures.

Table II: Tools and Accessories	
182-005S	Polishing Tool, socket
182-005P	Polishing Tool, pin
182-012	Crimp Tool
182-013	Insertion Tool, Straight
182-014	Insertion Tool, 90 Degree
182-015	Removal Tool
182-016	Insertion/Removal Tool, Alignment Sleeve, socket
181-011-S	Protective Cover with Ceramic Sleeve
181-011-K	Protective Cover with Stainless Steel Sleeve
265-002	Crimp Sleeve, Ø 2.2mm Max Jacket

RAPID INTEGRATION Glenair Front Release (GFR)

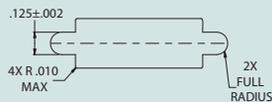


How to order GFR Micro-D and D-Subminiature connectors

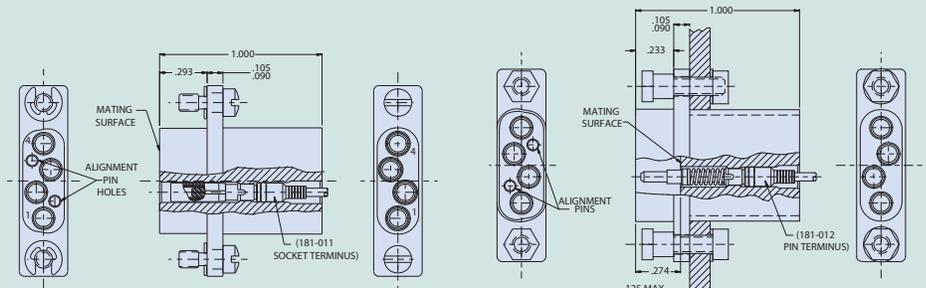


Avoid damage! Consult the factory for mating / unmating instructions

How To Order GFR Micro-D Connectors				
Sample Part Number	180-064	-25	-4	M
Series	180-064 GFR Micro-D Plug 180-063 GFR Micro-D Receptacle			
Shell Size	-9 (1 terminus max) -15 (2 termini max) -21 (3 termini max) -25 (4 termini max) -31 (5 termini max) -100 (8 termini max)			
No. of Termini	1, 2, 3, 4, 5, 8			
Material / Finish	C	Aluminum Alloy	Anodize, Black	
	M		Electroless Nickel	
	NF		CAD/Olive Drab over Electroless Nickel	
	ZN		Zinc-Nickel/Olive Drab over Electroless Nickel	
	Z1	Stainless Steel	Passivate	



Recommended Panel Cutout



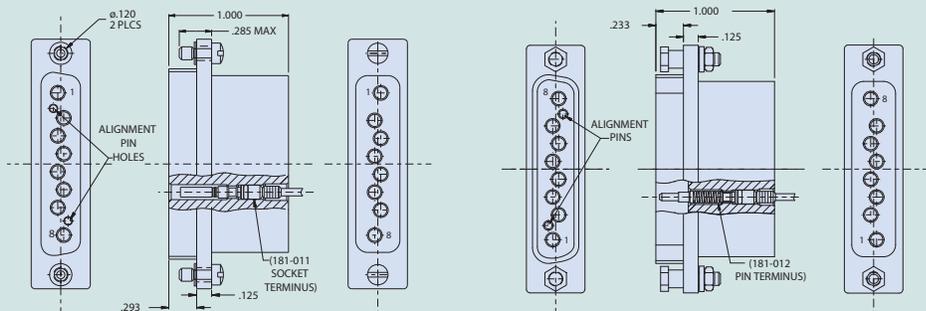
180-064 Plug

180-063 Receptacle



Avoid damage! Consult the factory for mating / unmating instructions

How To Order GFR D-Subminiature Connectors				
Sample Part Number	180-066	-15	-5	-M
Series	180-066 GFR D-Sub Plug 180-065 GFR D-Sub Receptacle			
Shell Size	-9 (4 termini max) -15 (5 termini max) -25 (8 termini max) -50 (12 termini max)			
No. of Termini	4, 5, 8, 12			
Material / Finish	C	Aluminum Alloy	Anodize, Black	
	M		Electroless Nickel	
	NF		CAD/Olive Drab over Electroless Nickel	
	ZN		Zinc-Nickel/Olive Drab over Electroless Nickel	
	Z1	Stainless Steel	Passivate	



180-066 Plug

180-065 Receptacle