



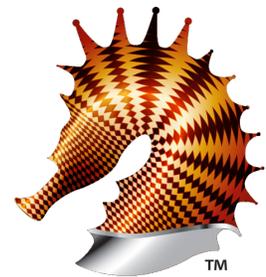
**DEEP
WATER**



DEEP WATER

SeaKing™ Fiber Optic

10K PSI open-face pressure rated fiber optic connectors, cables and jumpers—singlemode and multimode with low dB data loss



SeaKing
Fiber

Data-intensive applications such as towed array sonar systems, well logging and monitoring equipment, digital seismic streamers, as well as magnetic flux leakage and ultrasonic inspection sensors used in intelligent pipeline inspection are ideally suited for ruggedized high-pressure fiber optics. Fiber optic interconnect systems deliver ultra high data bandwidth, immunity from RFI and other forms of electromagnetic interference, as well as reduced size and weight compared to high-speed copper. Glenair SeaKing™ Fiber Optic solutions include harsh-environment overmolded cable assemblies, multibranch inside-the-box jumpers, as well as Glenair signature high-temp, high-vibration transceivers and optical-to-electrical media converters. Pressure-balanced oil-filled (PBOF) cable assemblies are also available for deep subsea applications.



- **Overmolded and PBOF butt-joint assemblies**
- **Full hydrostatic qualification test report available**
- **Wide range of fiber and hybrid fiber/electric layouts**
- **Singlemode and multimode**
- **<1.0db data loss for singlemode**

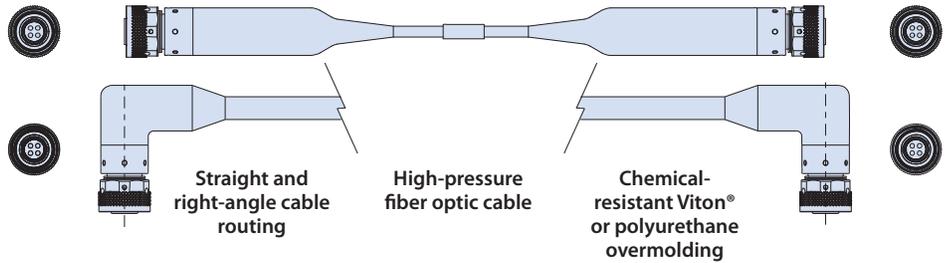


DEEP WATER SeaKing™ Fiber Optic

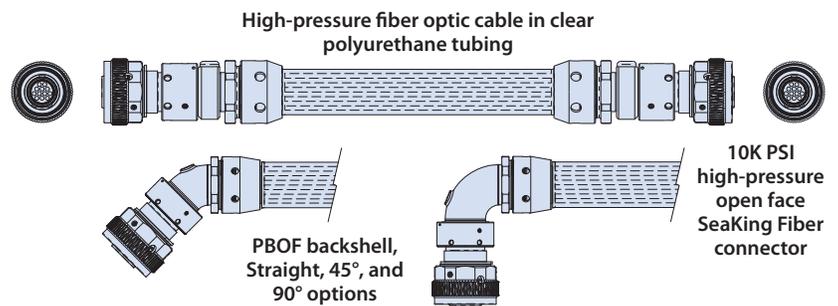


10K PSI open-face pressure-rated fiber optic connectors and cables

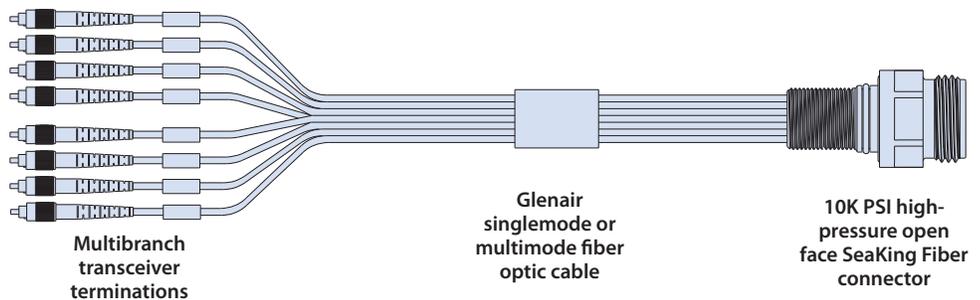
ENVIRONMENTAL OVERMOLDED FIBER OPTIC JUMPERS



PRESSURE-BALANCED OIL-FILLED (PBOF) HIGH-PRESSURE FIBER OPTIC ASSEMBLIES

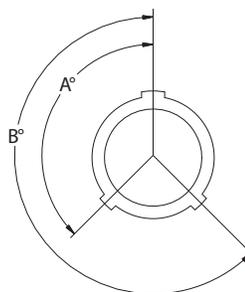


SEAKING™ BCR OR FCR TO COMMERCIAL FIBER OPTIC PIGTAIL ASSEMBLY FOR I/O-TO-BOARD MODULE APPLICATIONS

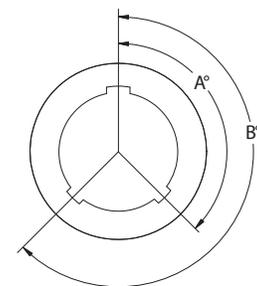


KEY AND KEYWAY POSITIONS

Alternate Keyway Positions		
Key Position	Key Rotation	
	A°	B°
Normal (N)	150°	210°
A	75°	210°
B	95°	230°
C	140°	275°



Plug (Key)



Receptacle (Keyway)

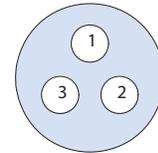
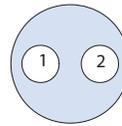


DEEP WATER SeaKing™ Fiber Optic



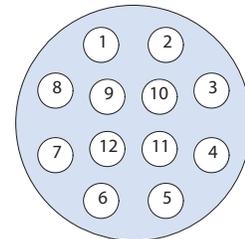
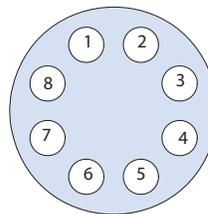
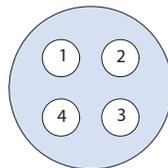
Fiber optic insert arrangements

Fiber Only



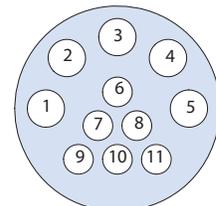
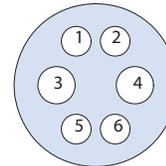
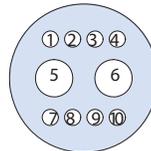
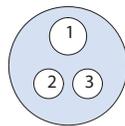
Shell Size	E	K	L
Insert Arrangement	EF1	KF2	LF3
No. of Contacts	1 FO	2 FO	3 FO

Fiber Only



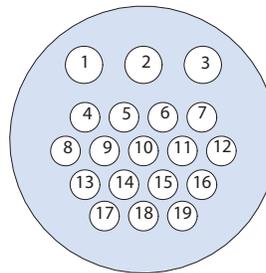
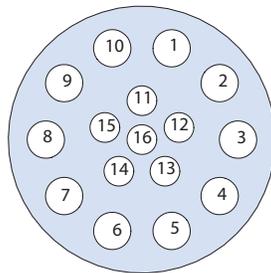
Shell Size	M	O	P
Insert Arrangement	MF4	OF8	PF12
No. of Contacts	4 FO	8 FO	12 FO

Copper/Fiber



Shell Size	K	L	M	O
Insert Arrangement	KH12	LH28	MH24	OH56
No. of Fiber Contacts	1 FO	2 FO	2 FO	5 FO
No. of Copper Contacts	2 #16	8 #22	4 #16	6 #16

Copper/Fiber



Shell Size	Q	Q
Insert Arrangement	QH106	QH316
No. of Fiber Contacts	10 FO	3 FO
No. of Copper Contacts	6 #16	16 #16

Contact Specifications		
Contact Size	#22	#16
Amps	3	10
Wire Gage Accommodation	22	16

All contact arrangements are rated for 600 volts.

Contact arrangements are shown as face view of receptacle insert. Contact arrangements of plug inserts are reverse.

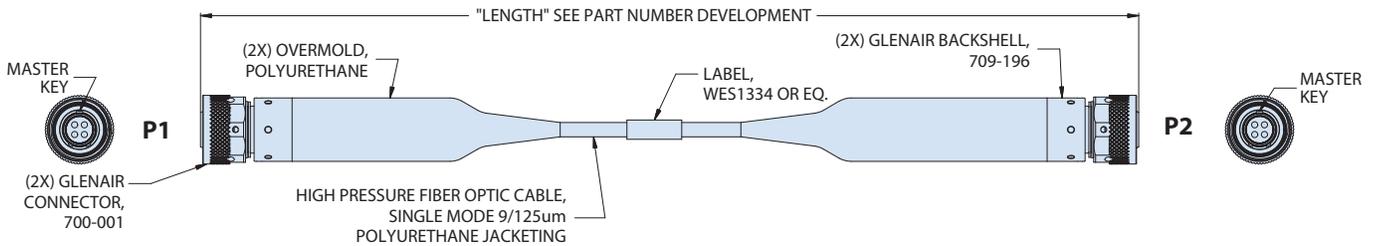


DEEP WATER SeaKing™ Fiber Optic



Overmolded assemblies with SeaKing™ connectors or SeaKing™ to commercial fiber optic connectors

SeaKing Fiber - How To Order	
Sample Part Number	FA09648 -MF4 -Z1 -N -N -XXXX C -XXXX -CFM
Basic Number	SeaKing Fiber Optic overmolded plug jumper/breakout assembly
Shell Size & Insert Arrangement	See Glenair drawing 709-098
Shell Material	Z1 = 316 Stainless Steel (Consult Factory For Titanium or Peek Options)
P1 Connector Key Arrangement	(N, A, B, C)
P2 Connector Key Arrangement	(N, A, B, C) (1 = Blunt End Cable, Less P2 Connector, Backshell, & Overmold)
Length In Inches	See Standard Tolerance Table
Pressure Cap Option	C = Provided With Pressure Caps N = No Pressure Caps
Serial Number	Glenair Use Optional, Omit For None
CFM Option	Glenair Use Optional, Omit For None



NOTES

- Optical performance: insertion loss shall be <1.0dB when measured @ 1310nm wavelength. Insertion loss can be measured at 1550nm upon customer request.
- Unit pack: 1 EA. In a bag and/or cardboard box, label package iaw illustration.
- Molding process for high pressure applications shall be used for polyurethane overmolds.
- See drawing 700-001 for connector dimensions, materials, and finishes; see drawing 709-196 for backshell dimensions, materials, and finishes; see drawing 709-098 for available insert arrangement.
- Wiring for each arrangement is one to one.
- Cables over 240" (20ft) shall be shipped on reel.
- Pressure rating up to 3,000 PSI.

Standard-Tolerance	
Length	Tolerance
Up to 24 In	+1 In -0
24 Up to 120 In	+3 In -0
120 Up to 600 In	+6 In -0
600 Up to 1200 In	+12 In -0
1200 In and Up	+24 In -0

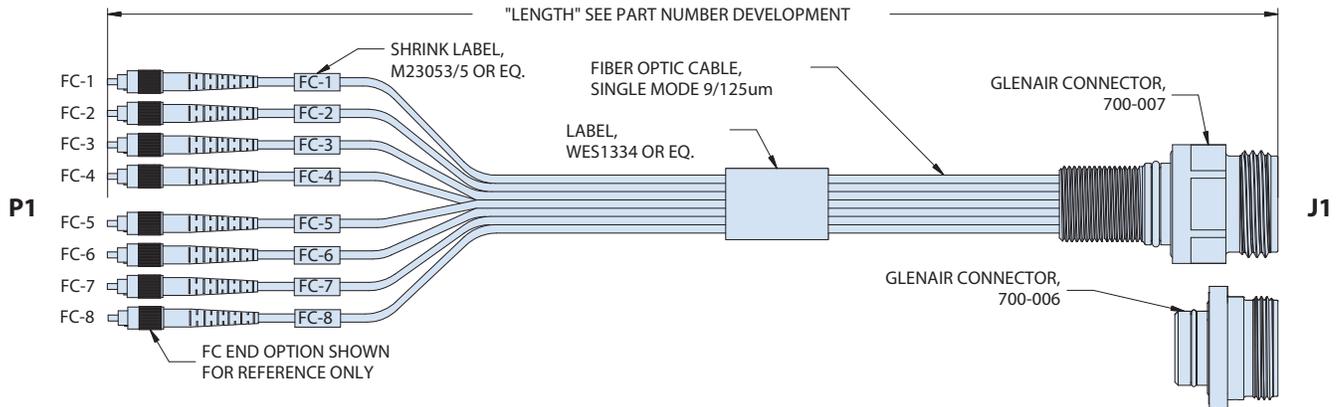


DEEP WATER SeaKing™ Fiber Optic



SeaKing™ BCR or FCR to commercial fiber optic pigtail assembly for I/O-to-board module applications

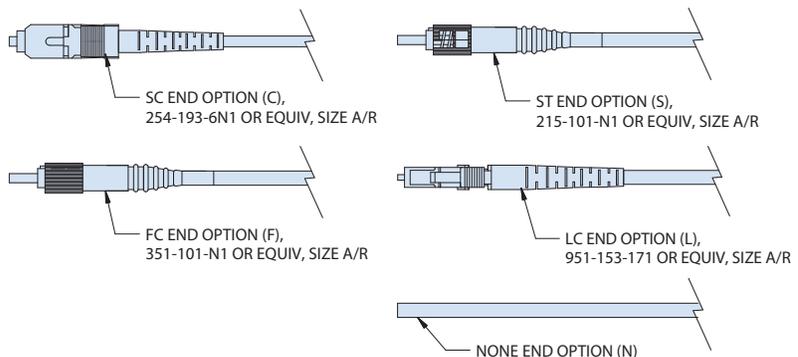
SeaKing Fiber - How To Order	
Sample Part Number	FA09649 -B F Z1 -0F8 N -XXXX C
Basic Number	SeaKing Fiber Optic receptacle breakout assembly
J1 Option	B = BCR F = FCR
P1 Option	C = SC Leads F = FC Leads L = LC Leads N = None S = ST Leads
Shell Material	TC = Titanium Z1 = 316 Stainless Steel
Insert Arrangement	See Table I & II Insert Body Material: 316 SST
Key Arrangement	A, B, or C; N = normal,
Length	In inches (See Standard Tolerance Table)
Pressure Cap Option	C = Provided With Pressure Caps N = No Pressure Caps



NOTES

- Optical performance:
Insertion loss shall be <1.0dB when measured @ 1310nm wavelength. Insertion loss can be measured at 1550nm upon customer request.
- Unit pack: 1 EA. In a bag and/or cardboard box, label package IAW illustration.
- Mark reference designators as shown. Reference designator number shall match the contact number.
- See drawing 700-006 and 700-007 for connector dimensions, materials, and finishes.
- Wiring for each arrangement is one to one.

END 2 COMMERCIAL FIBER OPTIC CONNECTOR OPTIONS



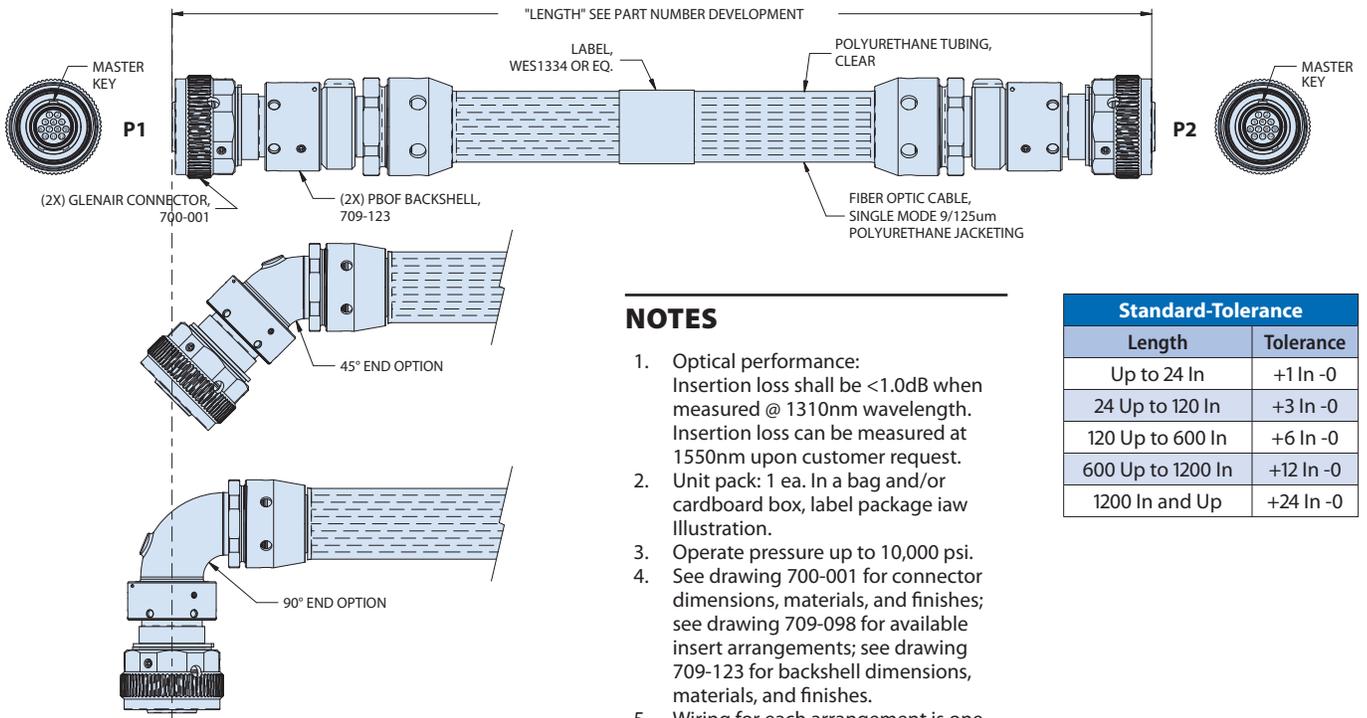


DEEP WATER SeaKing™ Fiber Optic



PBOF back-to-back SeaKing fiber optic assembly with straight, 45°, or 90° connectors

HOW TO ORDER	
Sample Part Number	FA09650 -MF4 -Z1 -N L 1 S -N L 1 S -XXXX C
Basic Number	SeaKing Fiber Optic PBOF point-to-point assembly
Shell Size & Insert Arrangements	See Insert Arrangements Table
Shell Material	Z1 = 316 Stainless Steel (Consult Factory For Titanium Or Peek Options)
P1 Connector Key Arrangements	(N, A, B, C)
P1 Backshell Style	L = Straight M = 45 Degree N = 90 Degree
P1 Fill Port Option	0 = No 1 = Yes
P1 Swivel/Fixed Option	F = Fixed S = Swivel
P2 Connector Key Arrangements	(N, A, B, C)
P2 Backshell Style	L = Straight M = 45 Degree N = 90 Degree
P2 Fill Port Option	0 = No 1 = Yes
P2 Swivel/Fixed Option	F = Fixed S = Swivel
Length	In inches (See Standard Tolerance Table)
Pressure Cap Option	C = Provided With Pressure Caps N = No Pressure Caps



NOTES

- Optical performance: Insertion loss shall be <1.0dB when measured @ 1310nm wavelength. Insertion loss can be measured at 1550nm upon customer request.
- Unit pack: 1 ea. In a bag and/or cardboard box, label package iaw Illustration.
- Operate pressure up to 10,000 psi.
- See drawing 700-001 for connector dimensions, materials, and finishes; see drawing 709-098 for available insert arrangements; see drawing 709-123 for backshell dimensions, materials, and finishes.
- Wiring for each arrangement is one to one.

Standard-Tolerance	
Length	Tolerance
Up to 24 In	+1 In -0
24 Up to 120 In	+3 In -0
120 Up to 600 In	+6 In -0
600 Up to 1200 In	+12 In -0
1200 In and Up	+24 In -0



DEEP WATER SeaKing™ Fiber Optic

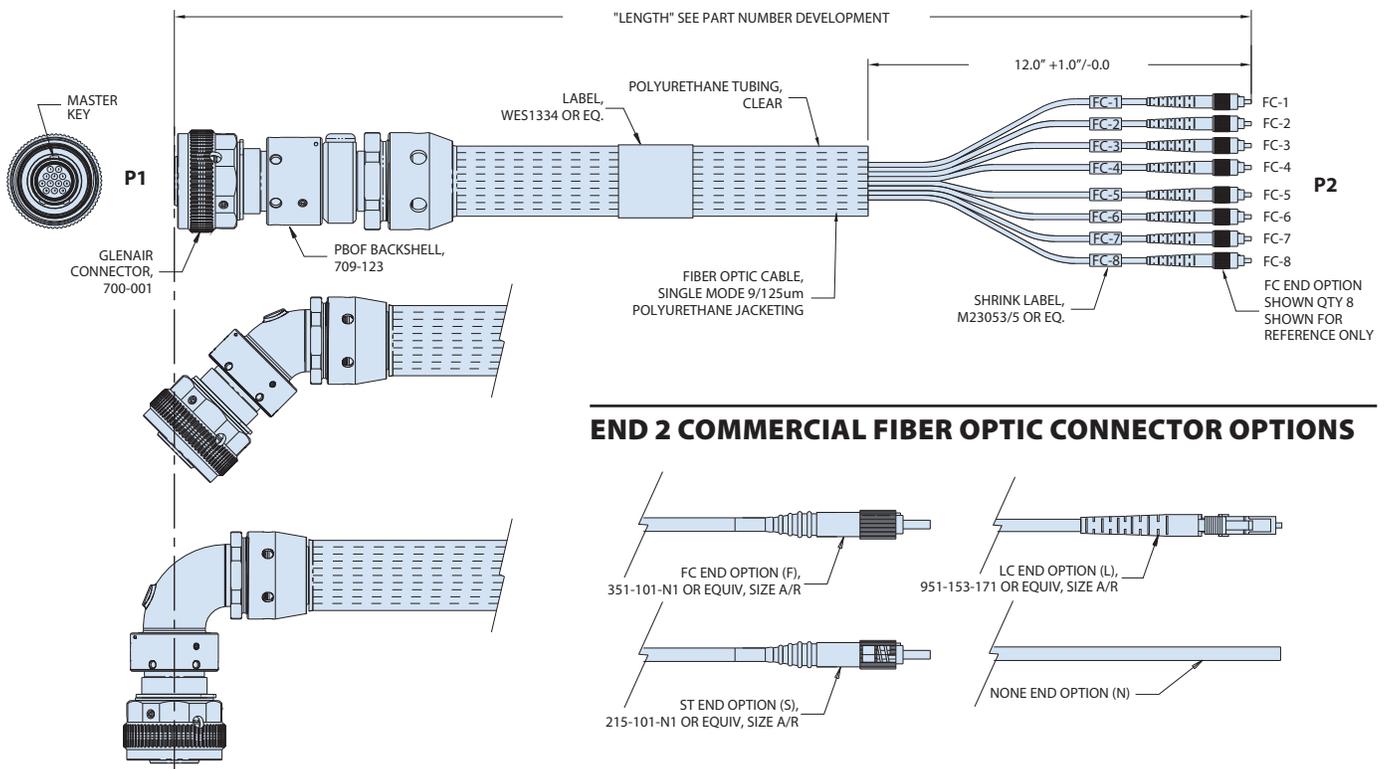


PBOF single-ended fiber optic pigtail cable assembly with straight, 45°, and 90° routing

SeaKing Fiber - How To Order	
Sample Part Number	FA09781 -MF4 -Z1 -N L 1 S -N -XXXX C
Basic Number	SeaKing Fiber Optic PBOF Break-out Plug Assembly
Shell Size & Insert Arrangements	See Glenair Drawing 709-098
Shell Material	Z1 = 316 Stainless Steel (Consult Factory For Titanium Or Peek Options)
P1 Connector Key Arrangements	(N, A, B, C)
P1 Backshell Style	L = Straight M = 45 Degree N = 90 Degree
P1 Fill Port Option	0 = No 1 = Yes
P1 Swivel/Fixed Option	F = Fixed S = Swivel
P2 Option	F = FC Leads L = LC Leads N = None S = ST Leads
Length In Inches	In inches (See Standard Tolerance Table)
Pressure Cap Option	C = Provided With Pressure Caps N = No Pressure Caps

NOTES

- Optical performance: Insertion loss shall be <1.0dB when measured @ 1310nm wavelength. Insertion loss can be measured at 1550nm upon customer request.
- Unit pack: 1 ea. In a bag and/or cardboard box, label package iaw Illustration.
- Operate pressure up to 10,000 psi.
- See drawing 700-001 for connector dimensions, materials, and finishes; see drawing 709-098 for available insert arrangements; see drawing 709-123 for backshell dimensions, materials, and finishes.
- Wiring for each arrangement is one to one.



END 2 COMMERCIAL FIBER OPTIC CONNECTOR OPTIONS

