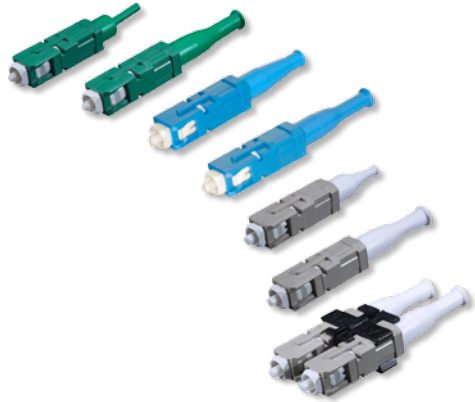![ofs logo]

A Furukawa Company

SC Connector Family
A Complete Fiber Optic Connector Solution

Features

- Field mountable connectors
- Jumpers: simplex, duplex, quad, angled connectors, hybrids
- Pigtails
- Connectorized cables
- Preterminated shelves
- Terminated angled SC connectors
- LIU and LGX® panels
- Simplex and duplex adapters
- Attenuators
- Tools and consumable kits

Benefits

- Reduces assembly time and simplifies training
- Easy-to-install adapters and connectors
- Can be used in multiple applications including desk/workspace
- Maintains optical contact under load, and helps prevent accidental disconnects
- Helps minimize transmission problems
- Optimizes optical contact

Applications

- Local Exchange Carrier (LEC)
- Competitive LEC (CLEC)
- Broadband/Cable TV (CATV)

Product Description

OFS offers a complete family of fiber optic products featuring the SC Connector. With its familiar push-pull insertion release mechanism, the SC Connector is standard in most fiber applications and well known in the industry.

SC Connectors

The SC Connector is an easily field mountable connector that is designed to mount on 900 micron buffered fiber, 1.6 mm jacketed cable and 3.0 mm jacketed cable. Jumper connector is also available with a reduced length cable support. It can be mounted on bare fiber but it is recommended that the fiber be buffered first using the D181755 kit or equivalent. The connector utilizes a zirconia ferrule for fiber alignment; and push-pull hardware for installation into the adapter. It can be used in high density applications and not be affected by axial cable loads. The cable is crimped to the outer hardware and therefore prevents momentary disconnect when axial load is placed on the cable. The 1032B5 Tool Kit contains all the tools and instructions needed to mount SC Connectors. The new MiniTool kit is available for mounting the connectors using the EZ method.

Features

- Snap-in connector design
- Rugged and adaptable compared to other connectors
- Stable performance
- Pull-proof design
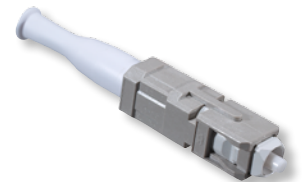- Tunable
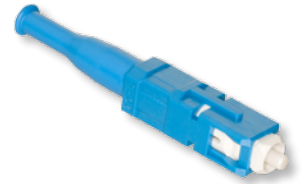
SC Single-Mode Connector (Simplex)

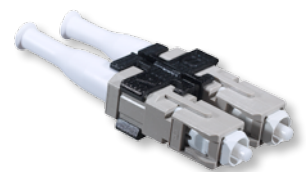*SC Single-Mode Short-Boot Connector (Simplex)*

SC Single-Mode Buffered Fiber Connector

SC Multimode Buffered Fiber Connector

SC Multimode Connector (Simplex)

SC Multimode Connector (Duplex)*

SC Connector Specifications

Cable OD, nom		Proof Test, Axial, nom	Common Specs*
3.0 mm	30 lbs, 20 lbs	Insertion Loss μ,s	0.3 dB, 0.3
1.6/2.0 mm		Fiber OD, nom	125 μm
0.9 mm	2 lbs.	Insertion Loss Stability	< 0.3 dB
		Mount Time - Epoxy	8 min. avg.
		Mount Time - EZ	5 min. avg.
		Mating Durability	< 0.2 dB
		Temperature Stability	-40 ºC to 75 ºC

* Insertion Loss Change for 500 reconnects

SC Connector Ordering Information*

| Cable OD, nom	Single	100 Pack	1000 Pack
Multimode		*Product Code (Comcode)*	
3.0 mm	P6200A-Z-126 (106917776)	P6200A-Z-126-100 BULK (107503872)	P6200A-Z-126-1000 BULK (300461803)
1.6/2.0 mm	P6200B2-Z-126 (300581576)	P6200B2-Z-126-100 BULK (300537362)	P6200B2-Z-126-1000 BULK (300537388)
0.9 mm	P6201A-Z-126 (106917800)	P6201A-Z-126-100 BULK (107503880)	P6201A-Z-126-1000 BULK (109161299)
Multimode		*Product Code (Comcode)*	
3.0 mm	P6000A-Z-126 (106917438)	P6000A-Z-126-100 BULK (107503856)	P6000A-Z-126-1000 BULK (300464740)
1.6/2.0 mm	P6000B2-Z-126 (300581584)	P6000B2-Z-126-100 BULK (300581592)	P6000B2-Z-126-1000 BULK (300537396)
0.9 mm	P6001A-Z-125 (106917586)	P6001A-Z-125-100 BULK (107503864)	P6001A-Z-125-1000 BULK (300441128)

SC Adapter

OFS offers SC Adapters in a variety of configurations. The adapters are easily mounted by simply snapping them into a panel. The blue simplex adapter C6000A-4 can mate both multimode and single-mode connectors. The beige simplex multimode adapter uses a metallic sleeve and should only be used for multimode connectors. Single-mode adapters may be used for both single-mode and multimode connectors, while multimode adapters should only be used for multimode applications. OFS also offers angled adapters in a distinctive green color per industry standards.

Note:
Attenuators in both a build-on and UMA style are also available.
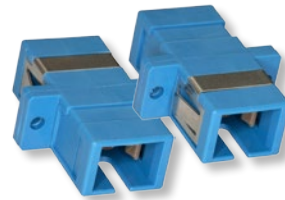
SC Single-Mode Adapter (Simplex - front & rear)

SC Multimode Adapter (Duplex)

SC Multimode Ganged Adapter

Cross-Connect Panels			
10SC1	100A and 200A LIU Panel	6 Simplex	106 371 800
10SC1-DPLX	100A and 200A LIU Panel	3 Duplex	107 025 835
1000SC1	LGX, 200B, and 400A LIU	6 Simplex	106 372 121
1000SC2	LGX, 200B, and 400A LIU	3 Duplex	106 372 139

Adapter Ordering Information		
Product Code	**Description**	**Comcode**
C6001A-5	C6001A-5, SC MM simplex adapter, short flange	300474350
C6001A-5-100	C6001A-4-100, SC MM simplex adapter, 100 pack, short flange	300471331
C6001A-RP-UA	C6001A-RP-UA, SC MM 45° mount Angled Simplex Adapter	300537990
C6001A-RP-UA-100	C6001A-RP-UA-100, SC MM 45° mount Angled Simplex Adapter, 100 pack	300538006
C6061A-4	C6061A-4, SC MM duplex adapter	107118903
C6061A-4-100	C6061A-4-100, SC MM duplex adapter, 100 pack	107504961
C6061A-4-LS	C6061A-4-LS, SC LaserWave® Duplex Adapter	108911728
C6001A-5-LS	C6001A-5-LS, SC LaserWave Simplex adapter, short flange	300474368
C6001A-RP-UA-LS	C6001A-RP-UA-LS, SC Laserwave 45° mount Angled Simplex Adapter	300538436
C6001A-RP-UA-LS-100	C6001A-RP-UA-LS-100, SC Laserwave 45° mount Angled Simplex Adapter, 100 pack	300538444
C6070A-4	C6070A-4, SC/ST MM duplex hybrid adapter	107087967
C6000A-4	C6000A-4, SC SM simplex adapter	106703200
C6000A-4-100	C6000A-4-100, SC SM simplex adapter, 100 pack	300528668
C6000A-5	C6000A-5, SC SM Simplex, short flange	107022980
C6000A-5 -100	C6000A-5-100, SC SM Simplex, short flange, 100 pack	107505042
C6000A-5 -1000	C6000A-5-1000, SC SM Simplex, short flange, 1000 pack	300471281
C6000SC-RP	C6000SC-RP, SC SM Simplex adapter, plastic latch	108988817
C6000SC-RP-100	C6000SC-RP-100, SC SM Simplex adapter, plastic latch, 100 pack	108988825
C6000A-RP-UA	C6000A-RP-UA, SC SM 45° mount Angled Simplex Adapter	300538014
C6000A-RP-UA-100	C6000A-RP-UA-100,SC SM 45° mount Angled Simplex Adapter, 100 pack	300538022
C6060A-4	C6060A-4, SC SM Duplex Adapter	106817380
C6060A-4-100	C6060A-4-100, SC SM Duplex Adapter, 100 pack	300485174
C6060A-4-1000	C6060A-4-1000, SC SM Duplex Adapter, 1000 pack	109161307

Adapter Ordering Information (Continued)

Product Code	Description	Comcode
Angled Adapters		
C6800A-4	C6800A-4, SCAPC SM Simplex Adapter	107562142
C6800A-4-100	C6800A-4-100, SCAPC SM Simplex Adapter, 100 pack	108922766
C6800A-4-1000	C6800A-4-1000, SCAPC SM Simplex Adapter, 1000 pack	300471299
C6800A-RP-UA	C6800A-RP-UA, SCAPC SM Unplated Angled Simplex Adapter	300538030
C6800A-RP-UA-100	C6800A-RP-UA-100, SCAPC SM Unplated Angled Simplex Adapter, 100 pack	300538048
C6868A-4	C6868A-4, SCAPC SM Duplex Adapter	108223199
Ganged Adapters		
C6MMSC-1	C6MMSC-1 MM Adapter Strip Single Pack	300395852
C6MMSC-10PK	C6MMSC-10PK MM Adapter Strip 10 Pack	108918442
C6MMSC-20PK	C6MMSC-20PK MM Adapter Strip 20 Pack	300472768
C6MMSC-LS-1	C6MMSC-LS-1 LaserWave Adapter Strip Single Pack	300395837
C6MMSC-LS-10PK	C6MMSC-LS-10PK LaserWave Adapter Strip 10 Pack	108911413
C6MMSC-LS-20PK	C6MMSC-LS-20PK LaserWave Adapter Strip 20 Pack	300472776
C6SMSC-1	C6SMSC-1 SM Adapter Strip Single Pack	300397866
C6SMSC-10PK	C6SMSC-10PK SM Adapter Strip 10 Pack	108168782
C6SMSC-Z-10PK	C6SMSC-Z-10PK SM Zirconia Adapter Strip 10 Pack	300472875
C6SMSC-Z-20PK	C6SMSC-Z-20PK SM Zirconia Adapter Strip 20 Pack	300472883
C6APSC-1	C6APSC-1 SMAPC Adapter Strip Single Pack	108134982
C6APSC-10PK	C6APSC-10PK SMAPC Adapter Strip 10 Pack	108168790
C6APSC-Z-1	C6APSC-Z-1 SMAPC Zirconia Adapter Strip Single Pack	108134974

SC Terminators

The SC Terminators from OFS are designed to reduce back-reflections typically found on laser-activated, connectorized access points such as those on splitters, DWDM couplers, or LGX Fiber Distribution Frames. Any single fiber connector mated to an adapter or coupling that is unused is a source of back-reflection. Back-reflection can be a major cause of bit errors. OFS terminators are operational between 1310 and 1550 nm and provide a reflectance of -45 dB.

SC Converter

The SC-to-LC Converter features a male SC connector on the front and an LC Adapter on the back. This converter can be used in those applications where customers may have chosen to convert to the LC system (connectors and jumpers) but still has an embedded base of SC adapters in their systems.

The converter has been designed to yield an insertion loss of ≤ 0.5 dB.

Terminator Codes	
Terminator, SC-T	107 796 686
Terminator, SC-T-100	107 860 157

Converter Codes	
Converter, SC-LC	109 119 834

SC Terminator

*SC Converter
(front and back)*

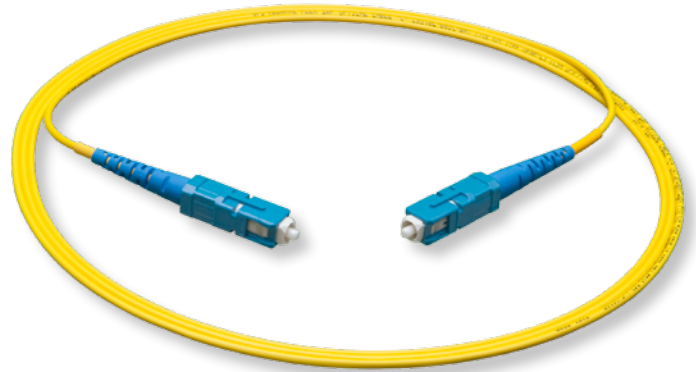## SC Jumpers

OFS offers an extensive line of fiber optic jumpers. On multimode duplex jumpers, the 2A1 clip is added in the factory to maintain the transmit/receive position of the simplex plugs. SC jumpers are available with reduced length cable supports for unique applications where space may be a constraint.

The SC Jumpers are available in both 3.0 mm and 1.6 mm diameter cordage. The 1.6 mm cordage, allows greater jumper density in a fully loaded frame and prevents congestion in overhead racks or building risers. A duplex jumper made from a figure-eight MiniCord® Cordage does not require a bulky bifurcation joint thereby saving space in the frame. The duplex MiniCord jumper can be peeled apart with ease so that two cords can be installed as one, then easily separated into two, saving time and effort. The single-mode cordage uses OFS' AllWave® *FLEX* Zero Water Peak (ZWP) Fiber providing excellent bend loss performance. The bend radius permits you to install jumpers or jumpers in spaces with limited maneuverability or around sharp corners. Quad jumpers utilize four color-coded 1.6 mm cords combined in one jacket.

Jumpers are tested and must meet a maximum insertion loss of 0.3 dB. Field terminations using proper procedures should yield similar results. Jumpers come in fixed lengths or can be ordered in custom lengths. Hybrid jumpers are also available.

SC Factory-Made Jumper Specifications

	Single-Mode PC	APC	Multimode
Loss*: Avg./Std. Dev.	0.15dB/0.08 dB (Tuned)†	0.25 dB/0.12 dB	0.2 dB/0.1 dB
Loss*: Max	0.3 dB	0.5 dB	0.5 dB
Return Loss Minimum	55 dB	65 dB	20 dB
Cable Retention: (1.6 mm), (3.0 mm)	20 lbs./89.67 N, 30 lbs./133 N	20 lbs./89.67 N, 30 lbs./133 N	20 lbs./89.67 N, 30 lbs./133 N
Mating Durability, (500 Reconnects), Insertion loss change	< 0.2 dB	< 0.2 dB	< 0.2 dB
Temp. Stability (-40 °C to 75 °C), Insertion loss change	< 0.3 dB	< 0.3 dB	< 0.3 dB

* Complete connection concatenated statistics 8.8/125 fiber, dry connection.

† Optical performance is dependant on ferrule end face cleanliness. Cleaning the end face prior to examination or installation is recommended. See Telcordia GR-326_COR, Issue 3, September 1999, Section 4.3 for recommended cleaning procedure.

Length per Code

6" Min to 12" Max
154.2mm to 304.8mm

End 1 Channel A

End 1 Channel B

Blue Fiber

Orange Fiber

End 2 Channel B

End 2 Channel A
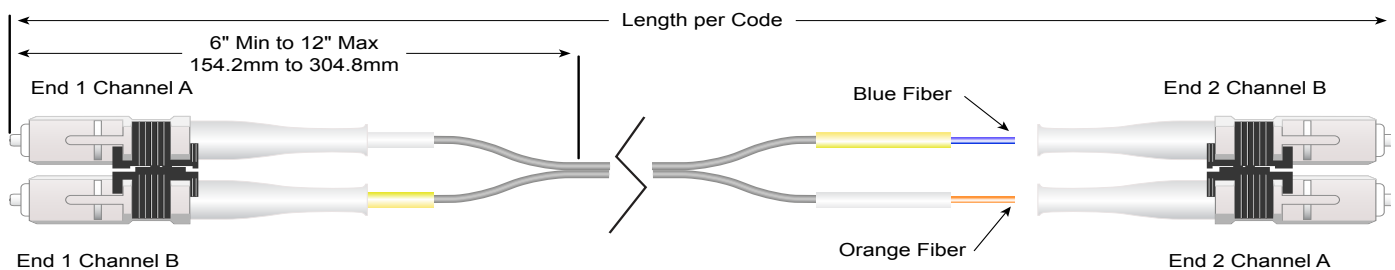
SC Jumper Assemblies SMART Coding

Examples: **JP3WY001LCUSCU003M** – Jumper Plenum 3.0 mm AllWave® *FLEX* Fiber Yellow 1 fiber (Simplex) LCU SCU 003 Meters long
 JR2WY002LCUSCU003M – Jumper Riser 2.0 mm AllWave *FLEX* Fiber Yellow 2 fibers (Zip) LCU SCU 003 Meters long
 JR9WY001LCUUNC003M – Jumper Riser 900 µm AllWave *FLEX* Fiber Yellow 1 fiber LCU UNC (Pigtail) 003 Meters long
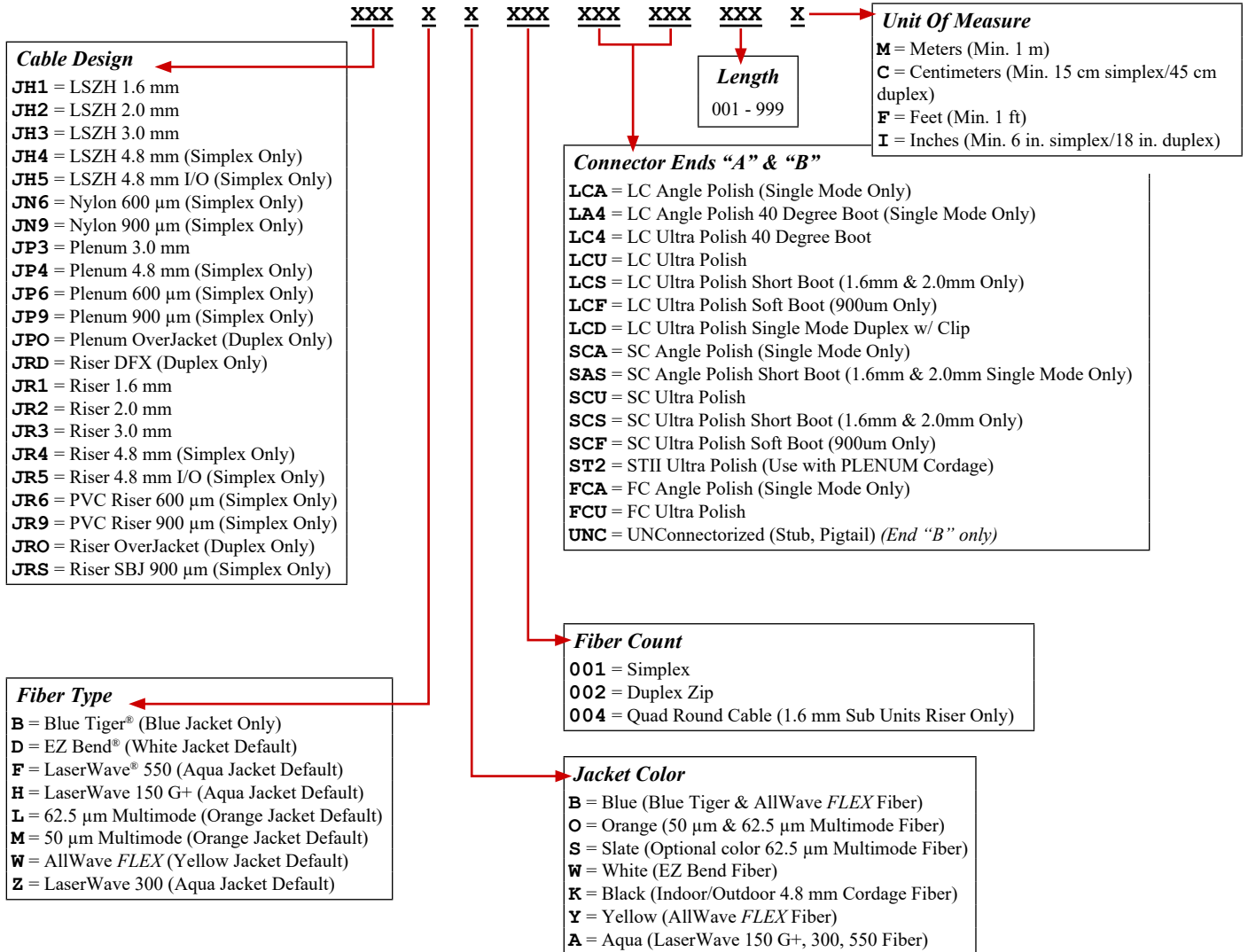
SMART Code syntax below has spaces between field sets for visibility. Actual SMART Code should not include any spacing.

XXX X X XXX XXX XXX XXX X

Unit Of Measure
M = Meters (Min. 1 m)
C = Centimeters (Min. 15 cm simplex/45 cm duplex)
F = Feet (Min. 1 ft)
I = Inches (Min. 6 in. simplex/18 in. duplex)

Length
001 - 999

Cable Design
JH1 = LSZH 1.6 mm
JH2 = LSZH 2.0 mm
JH3 = LSZH 3.0 mm
JH4 = LSZH 4.8 mm (Simplex Only)
JH5 = LSZH 4.8 mm I/O (Simplex Only)
JN6 = Nylon 600 µm (Simplex Only)
JN9 = Nylon 900 µm (Simplex Only)
JP3 = Plenum 3.0 mm
JP4 = Plenum 4.8 mm (Simplex Only)
JP6 = Plenum 600 µm (Simplex Only)
JP9 = Plenum 900 µm (Simplex Only)
JPO = Plenum OverJacket (Duplex Only)
JRD = Riser DFX (Duplex Only)
JR1 = Riser 1.6 mm
JR2 = Riser 2.0 mm
JR3 = Riser 3.0 mm
JR4 = Riser 4.8 mm (Simplex Only)
JR5 = Riser 4.8 mm I/O (Simplex Only)
JR6 = PVC Riser 600 µm (Simplex Only)
JR9 = PVC Riser 900 µm (Simplex Only)
JRO = Riser OverJacket (Duplex Only)
JRS = Riser SBJ 900 µm (Simplex Only)

Connector Ends "A" & "B"
LCA = LC Angle Polish (Single Mode Only)
LA4 = LC Angle Polish 40 Degree Boot (Single Mode Only)
LC4 = LC Ultra Polish 40 Degree Boot
LCU = LC Ultra Polish
LCS = LC Ultra Polish Short Boot (1.6mm & 2.0mm Only)
LCF = LC Ultra Polish Soft Boot (900um Only)
LCD = LC Ultra Polish Single Mode Duplex w/ Clip
SCA = SC Angle Polish (Single Mode Only)
SAS = SC Angle Polish Short Boot (1.6mm & 2.0mm Single Mode Only)
SCU = SC Ultra Polish
SCS = SC Ultra Polish Short Boot (1.6mm & 2.0mm Only)
SCF = SC Ultra Polish Soft Boot (900um Only)
ST2 = STII Ultra Polish (Use with PLENUM Cordage)
FCA = FC Angle Polish (Single Mode Only)
FCU = FC Ultra Polish
UNC = UNConnectorized (Stub, Pigtail) *(End "B" only)*

Fiber Count
001 = Simplex
002 = Duplex Zip
004 = Quad Round Cable (1.6 mm Sub Units Riser Only)

Fiber Type
B = Blue Tiger® (Blue Jacket Only)
D = EZ Bend® (White Jacket Default)
F = LaserWave® 550 (Aqua Jacket Default)
H = LaserWave 150 G+ (Aqua Jacket Default)
L = 62.5 µm Multimode (Orange Jacket Default)
M = 50 µm Multimode (Orange Jacket Default)
W = AllWave *FLEX* (Yellow Jacket Default)
Z = LaserWave 300 (Aqua Jacket Default)

Jacket Color
B = Blue (Blue Tiger & AllWave *FLEX* Fiber)
O = Orange (50 µm & 62.5 µm Multimode Fiber)
S = Slate (Optional color 62.5 µm Multimode Fiber)
W = White (EZ Bend Fiber)
K = Black (Indoor/Outdoor 4.8 mm Cordage Fiber)
Y = Yellow (AllWave *FLEX* Fiber)
A = Aqua (LaserWave 150 G+, 300, 550 Fiber)

SC Tools, Kits, and Consumables

Product Code	Description	Comcode
1032B5	Tool Kit with oven for epoxy	106 705 213
1032B6	Tool Kit with international oven for epoxy	106 919 012
D-182738	Consumables for mounting 100 MM connectors using epoxy	106 919 236
D-182739	Consumables for mounting 100 SM connectors using epoxy	106 919 244
D-182919	Consumables for mounting 100 Connectors on MiniCord Cable	107 983 041
1032H	Mini Tool Kit	108 267 279
D-182804	Consumables for mounting 100 MM Connectors using EZ	108 919 143
D-182720	Consumables for mounting 100 SM Connectors using EZ	107 834 039
1510A	Polishing Fixture - SC/ST	108 237 710
1510B	Crimping Tool - SC/ST	106 918 998
1510LC	Curing Fixture	106 919 004
Pad	Universal Polishing Pad	300 472 644
MM Kit	Universal Polishing Kit MM	300 486 552
SM Kit	Universal Polishing Kit SM	300 472 651
Primer	Primer	106 730 849
Adhesive	Adhesive	106 730 856

*1032H EZ
Termination Tool Kit*

List of Instructions

Document ID	Description	Web Address
640-252-044-UNIV	Epoxy & EZ for ST/SC	http://www.ofsoptics.com/pdfs/640-252-044-UNIV.pdf
640-252-049-03-UNIV	Epoxy for SC MM & SM Using Universal Procedure	http://www.ofsoptics.com/pdfs/640-252-049-03-UNIV.pdf
640-252-049-02-UNIV	EZ for SC MM & SM using Universal Procedure	http://www.ofsoptics.com/pdfs/640-252-049-02-UNIV.pdf
640-252-044-06-UNIV	Epoxy for ST II MM & SM using Universal Procedure	http://www.ofsoptics.com/pdfs/640-252-044-06-UNIV.pdf
640-252-053-UNIV	BTW LC Universal Procedure	http://www.ofsoptics.com/pdfs/640-252-053-UNIV.pdf
640-252-054-UNIV	LC Jumper Connector Universal Polishing Procedure	http://www.ofsoptics.com/pdfs/640-252-054-UNIV.pdf
D-182804	Consumables for mounting 100 MM Connectors using EZ	108 919 143

For additional information please contact your sales representative.
You can also visit our website at www.ofsoptics.com or call 1-888-fiberhelp (1-888-342-3743) USA or 1-770-798-5555 outside the USA.