ST Optical Fibre Connectors

Optronics manufactures a range of ST connectors suitable for various applications.

The ST connector has a quick release bayonet style body and spring loaded ferrule.

Optronics ST connectors are available in singlemode PC or APC and multimode PC. The connectors come with standard boots suitable for 900µm, 2mm and 3mm cable diameters.

Features

- **Complies with IEC 61754-2 and TIA 604-2**
- **Low insertion loss and back reflection capability**
- **Bayonet shaped housing for easy termination**
- **Nickel plated brass body**
- **Zirconia ceramic ferrule with high end PC finish**
- **RoHS, REACH SvHC compliant**

Applications

- **Local area networks**
- **Data processing networks**
- **Distribution application**
- **Premises distribution**
- **Test and laboratory equipment**

Technical Specification

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
MJating Durability	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable torsion	1.5kg - 2.5kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating temperature	-25 to +70°C, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

ST Connector PC and APC - Singlemode

OPTICAL PERFORMANCE*	GRADE A	GRADE B	GRADE C	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.15 dB	0.25 dB	IEC 61300-3-4
IL MAX/ Random	0.20 dB	0.30 dB	0.40 dB	IEC 61300-3-34
Ave/Master	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Ave/Random	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-34
Return loss	55/70 dB	55/65 dB	55/65 dB	IEC 61300-3-6

ST Connector PC - Multimode

OPTICAL PERFORMANCE*	GRADE D	GRADE S	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15	0.3	IEC 61300-3-4
IL MAX/ Random	0.25	0.4	IEC 61300-3-4
Ave/Master	0.08	0.15	IEC 61300-3-4
Ave/Random	0.1	0.2	IEC 61300-3-4

** Achievable with Optronics process and specified optical fiber*

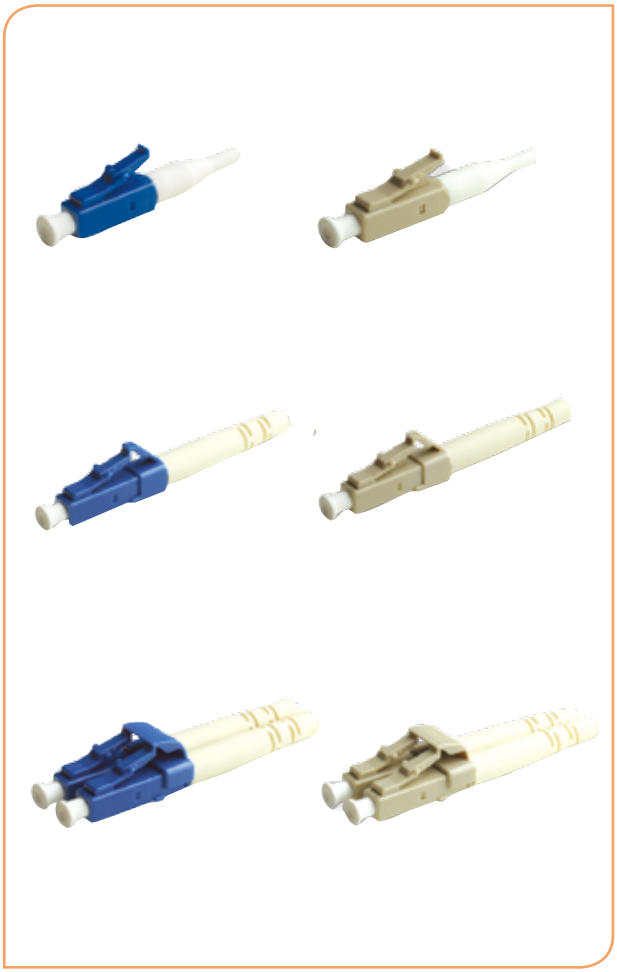
Ordering Information

			GRADE A	GRADE B	GRADE C
Singlemode					
PC	Simplex	900µm	**STSM9-H/Z**	**STSM9-P/Z**	**STSM9/Z**
		2mm	**STSM2YEL-H/Z**	**STSM2YEL-P/Z**	**STSM2YEL/Z**
		3mm	**STSM3YEL-H/Z**	**STSM3YEL-P/Z**	**STSM3YEL/Z**
				GRADE D	GRADE S
Multimode					
PC	Simplex	900µm	-	**STMM9-P/Z**	**STMM9/Z**
		2mm (Black)	-	**STMM2BLK-P/Z**	**STMM2BLK/Z**
		2mm (Red)	-	**STMM2RED-P/Z**	**STMM2RED/Z**
		3mm (Black)	-	**STMM3BLK-P/Z**	**STMM3BLK/Z**
		2mm (Red)	-	**STMM3RED-P/Z**	**STMM3RED/Z**

LC Optical Fibre Connectors

The Optronics LC Connector is a cost effective, small form factor fibre optic connector that helps to reduce space on panels or outlets by up to 50%. It uses the standard RJ-style telephone connector which gives an audible click upon engaging.

The LC connector uses a 1.25mm ferrule and is available in singlemode for both UPC and APC and in multimode PC. The connectors come with standard boots suitable for 900µm, 2mm and 3mm cable diameters. The connector is available in simplex and duplex (with clips) options available in blue, green and beige.



Features

- **Complies with IEC 61754-20 and TIA 604-10-A for intermateability**
- **Compact design based on RJ45 style interface**
- **Low insertion loss and back reflection capability**
- **Zirconia ceramic ferrule with high end PC finish**
- **RoHS, REACH SvHC compliant**

Applications

- **Telecommunications networks**
- **CATV, LAN, MAN and WAN application**
- **Data processing networks**
- **Cable television**
- **Fibre-To-The-Home (FTTH)**
- **Premises distribution**

Technical Specification

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
Mating Durability	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable Retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable Torsion	1.5kg -2.5kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating Temperature	-25 to +70°C, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

LC Connector PC and APC - Singlemode

OPTICAL PERFORMANCE*	GRADE A	GRADE B	GRADE C	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.15 dB	0.25 dB	IEC 61300-3-4
IL MAX/ Random	0.20 dB	0.30 dB	0.40 dB	IEC 61300-3-34
Ave/Master	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Ave/Random	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-34
Return loss	55/70 dB	55/65 dB	55/65 dB	IEC 61300-3-6

LC Connector - Multimode

OPTICAL PERFORMANCE*	GRADE D	GRADE S	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15	0.3	IEC 61300-3-4
IL MAX/ Random	0.25	0.4	IEC 61300-3-34
Ave/Master	0.08	0.15	IEC 61300-3-4
Ave/Random	0.1	0.2	IEC 61300-3-34

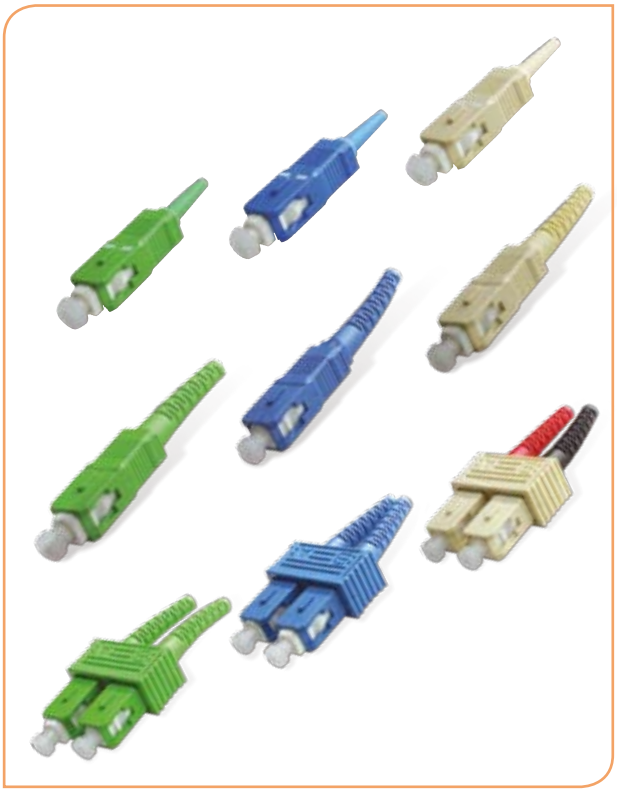
** Achievable with Optronics process and specified optical fiber*

Ordering Information

			GRADE A	GRADE B	GRADE C
Singlemode					
UPC	Simplex	900µm	**LCSM9-H/Z**	**LCSM9-P/Z**	**LCSM9/Z**
		2mm	**LCSM2-H/Z**	**LCSM2-P/Z**	**LCSM2/Z**
		3mm	**LCSM3SMPX-H/Z**	**LCSM3SMPX-P/Z**	**LCSM3SMPX/Z**
	Duplex	2mm	**LCSM2DPX-H/Z**	**LCSM2DPX-P/Z**	**LCSM2DPX/Z**
		3mm	**LCSM3DPX-H/Z**	**LCSM3DPX-P/Z**	**LCSM3DPX/Z**
APC	Simplex	900µm	**LCAPC.9MM-H/Z**	**LCAPC.9MM-P/Z**	**LCAPC.9MM/Z**
		2mm	**LCAPC2MM-H/Z**	**LCAPC2MM-P/Z**	**LCAPC2MM/Z**
	Duplex	2mm	**LCAPC2DPX-H/Z**	**LCAPC2DPX-P/Z**	**LCAPC2DPX/Z**
				GRADE D	GRADE S
Multimode					
UPC	Simplex	900µm	-	**LCMM9-P/Z**	**LCMM9/Z**
		2mm	-	**LCMM2-P/Z**	**LCMM2/Z**
		3mm (Black)	-	**LCMM3BLK-P/Z**	**LCMM3BLK/Z**
		3mm (Red)	-	**LCMM3RED-P/Z**	**LCMM3RED/Z**
	Duplex	2mm	-	**LCMM2DPX-P/Z**	**LCMM2DPX/Z**
		3mm	-	**LCMM3DPX-P/Z**	**LCMM3DPX/Z**

SC Connectors

Optronics manufactures a range of SC connectors suitable for various applications.
The SC connectors are available in singlemode for both PC and APC and in multimode PC. The connectors come with standard Optronics boots suitable for 900µm, 2mm and 3mm cable diameters.
The Optronics SC connector is available in standard colours including blue, green and beige.



Features

- **Complies with IEC 61754-4, IEC 60874-14 and TIA 604-3**
- **A push-pull coupling mechanism for easy insertion and consistent connection**
- **Zirconia ceramic ferrule available in several performance grades**
- **Low insertion loss and back reflection capability**
- **RoHS, REACH SvHC compliant**

Application

- **Data centres, premise installations, telecommunication networks**
- **Ethernet, fibre channel, ATM, LAN, MAN and WAN**

Technical Specification

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
Mating Durability	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable Retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable Torsion	1.5kg - 2.5kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating Temperature	-25 to +70°C, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

SC Connector PC and APC - Singlemode

OPTICAL PERFORMANCE*	GRADE A	GRADE B	GRADE C	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.15 dB	0.25 dB	IEC 61300-3-4
IL MAX/ Random	0.20 dB	0.30 dB	0.40 dB	IEC 61300-3-34
Ave/Master	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Ave/Random	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-34
Return loss	55/70 dB	55/65 dB	55/65 dB	IEC 61300-3-6

SC Connector PC - Multimode

OPTICAL PERFORMANCE*	GRADE D	GRADE S	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15 dB	0.30 dB	IEC 61300-3-4
IL MAX/ Random	0.25 dB	0.40 dB	IEC 61300-3-34
Ave/Master	0.08 dB	0.15 dB	IEC 61300-3-4
Ave/Random	0.10 dB	0.20 dB	IEC 61300-3-34

** Achievable with Optronics process and specified optical fiber*

Ordering Information

			GRADE A	GRADE B	GRADE C
Singlemode					
PC	Simplex	900µm	**SCSM9SMPX-H/Z**	**SCSM9SMPX-P/Z**	**SCSM9SMPX/Z**
		2mm	**SCSM2SMPX-H/Z**	**SCSM2SMPX-P/Z**	**SCSM2SMPX/Z**
		3mm	**SCSM3SMPX-H/Z**	**SCSM3SMPX-P/Z**	**SCSM3SMPX/Z**
	Duplex	2mm	**SCSM2DPX-H/Z**	**SCSM2DPX-P/Z**	**SCSM2DPX/Z**
		3mm	**SCSM3DPX-H/Z**	**SCSM3DPX-P/Z**	**SCSM3DPX/Z**
APC	Simplex	900µm	**SCAPC.9MM-H/Z**	**SCAPC.9MM-P/Z**	**SCAPC.9MM/Z**
		2mm	**SCAPC2MM-H/Z**	**SCAPC2MM-P/Z**	**SCAPC2MM/Z**
		3mm	**SCAPC3MM-H/Z**	**SCAPC3MM-P/Z**	**SCAPC3MM/Z**
	Duplex	2mm	**SCAPC2DPX-H/Z**	**SCAPC2DPX-P/Z**	**SCAPC2DPX/Z**
		3mm	**SCAPC3DPX-H/Z**	**SCAPC3DPX-P/Z**	**SCAPC3DPX/Z**
				GRADE D	GRADE S
Multimode					
PC	Simplex	900µm	-	**SCMM9SMPX-P/Z**	**SCMM9SMPX/Z**
		2mm	-	**SCMM2SMPX-P/Z**	**SCMM2SMPX/Z**
		3mm	-	**SCMM3SMPX-P/Z**	**SCMM3SMPX/Z**
	Duplex	2mm	-	**SCMM2DPX-P/Z**	**SCMM2DPX/Z**
		3mm	-	**SCMM3DPX-P/Z**	**SCMM3DPX/Z**

FC Optical Fibre Connectors

The Optronics FC connector features a 2.5 mm ferrule and a threaded coupling nut for a secure connection in high vibration environments and in lab testing for consistent results.
The FC connectors are available in singlemode in both PC and APC and in multimode PC. The connectors come with standard Optronics boots suitable for 900µm, 2mm or 3mm cable diameters. The FC connectors are available in blue, green and beige.

Features

- **Complies with IEC 61754-13 and TIA 604-4-A for intermatability**
- **Low insertion loss and back reflection capability**
- **Precision anti rotation key for mechanical stability**
- **Nickel plated metal body corrosion resistant**
- **Zirconia ceramic ferrule with high end PC finish or APC finish**
- **RoHS, REACH SvHC compliant**
- **Individual parts packed in bulk package**

Applications

- **Telecommunications networks**
- **Local area networks**
- **Data processing networks**
- **Distribution application**
- **Premises distribution**
- **Test and laboratory equipment**

Technical Specification

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
Mating Durability	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable Retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable Torsion	1.5kg - 2.5kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating Temperature	-25 to +70 °C, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

FC Connector PC and APC - Singlemode

OPTICAL PERFORMANCE*	GRADE A	GRADE B	GRADE C	CONFORMANCE
IL MAX/ Master (Acceptance)	0.10 dB	0.15 dB	0.25 dB	IEC 61300-3-4
IL MAX/ Random	0.20 dB	0.30 dB	0.40 dB	IEC 61300-3-34
Ave/Master	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Ave/Random	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-34
Return loss	55/70 dB	55/65 dB	55/65 dB	IEC 61300-3-6

FC Connector - Multimode

OPTICAL PERFORMANCE*	PREMIUM	STANDARD	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15	0.3	IEC 61300-3-4
IL MAX/ Random	0.25	0.4	IEC 61300-3-34
Ave/Master	0.08	0.15	IEC 61300-3-4
Ave/Random	0.1	0.2	IEC 61300-3-34

** Achievable with Optronics process and specified optical fiber*

Ordering Information

			GRADE A	GRADE B	GRADE C
Singlemode					
PC	Simplex	900µm	**FCSM9-H/Z**	**FCSM9-P/Z**	**FCSM9/Z**
		2mm	**FCSM2-H/Z**	**FCSM2-P/Z**	**FCSM2/Z**
		3mm	**FCSM3-H/Z**	**FCSM3-P/Z**	**FCSM3/Z**
APC	Simplex	900µm	**FCAPC.9MM-H/Z**	**FCAPC.9MM-P/Z**	**FCAPC.9MM/Z**
		2mm	**FCAPC2MM-H/Z**	**FCAPC2MM-P/Z**	**FCAPC2MM/Z**
		3mm	**FCAPC3MM-H/Z**	**FCAPC3MM-P/Z**	**FCAPC3MM/Z**
				GRADE D	GRADE S
Multimode					
PC	Simplex	900µm	**FCMM9-H/Z**	**FCMM9-P/Z**	**FCMM9/Z**
		2mm	**FCMM2-H/Z**	**FCMM2-P/Z**	**FCMM2/Z**

MU Optical Fibre Connector

Optronics MU connectors are the new generation small form factor connectors developed by NTT, Japan. MU connectors are similar to the SC connectors in construction and mechanical function, but have a ferrule diameter of 1.25mm.

Optronics offers a range of MU connectors suitable for various applications. Our connectors are subjected to intense mechanical testing and can withstand harsh environments and therefore we are proud to say that our products are of high quality.

The Optronics MU connectors are available in singlemode PC only.

Features/Benefits

- **Complies with IEC 61754-6**
- **Fewer parts for easy assembly and corrosion resistant thermoplastic body.**
- **A push-pull coupling mechanism for easy insertion and high repeatability.**
- **Two connections in one SC shape adaptor**
- **Zirconia ceramic ferrule with high end PC finish.**
- **Low insertion loss and back reflection.**
- **ROHS, REACH SvHC**
- **Available in standard colours and standard packaging.**

Applications

- **Data centres, Premise installations, telecommunication networks.**
- **Ethernet, Fibre Channel, ATM, LAN, MAN and WAN**
- **Suited for high density application**
- **Distribution cable assemblies**
- **Board mounted application.**
- **Data processing networks.**

Technical Specification

OPTICAL PERFORMANCE	SINGLEMODE	MULTIMODE	CONFORMANCE
IL MAX/ Master (Acceptance)	0.15 dB	0.15 dB	IEC 61300-3-4
IL MAX/ Random	0.30 dB	0.25 dB	IEC 61300-3-4
Ave/Master	0.12 dB	0.08 dB	IEC 61300-3-4
Ave/Random	0.12 dB	0.10 dB	IEC 61300-3-34
Return loss	55/65 dB	-	IEC 61300-3-6

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
Mechanical endurance	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55 Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable torsion	1.5kg-2.5 kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating temperature	-25 to +70, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

Ordering Information

DESCRIPTION	PART NO.
MU Optical Fibre Connector	**Please contact our sales team**

SC Field Installable Connectors

Optronics SC field-installable connectors (FIC) are factory terminated and polished to make fibre terminations fast, easy and reliable. These fibre optic connectors offer terminations in less than 2 minutes without any difficulty and require no epoxy, polishing or crimping. The FIC greatly reduces the installation and set up time. It has a window feature to allow testing with a visual fault locator.

Features/Benefits

- **Polished connector incorporating a mechanical splice**
- **Available in singlemode and multimode (50/125 and 62.5/125)**
- **Durable, reliable and superior optical performance**
- **Compatible with standard SC adaptors**
- **Termination can be repeated 2-3 times**
- **Packaging comes with a cable/buffer stripping template**
- **Complies with IEC, EIA/TIA and Telecordia standards**
- **Fibre preparation kit available**

Applications

- **Rapid repair of optical networks**
- **FTTH end user termination**
- **Hazardous environment termination where fusion splicing is prohibited**

Technical Specification

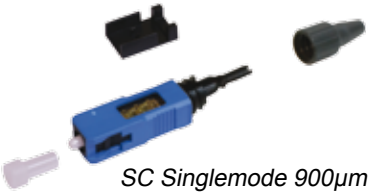
DESCRIPTION	
Fibre Type	*Singlemode and Multimode*
*Insertion Loss (Max)**	*0.5dB*
*Insertion Loss (Typical)**	*0.3dB*
*Return Loss (Typical)**	*50db/55dB*
Polishing Type	*UPC and APC*

**Using proper cleave process*

Ordering Information

DESCRIPTION	PART NO.
Multimode PC 62.5/125 Simplex 900µm	***SC62MM9BGFIC/Z***
Multimode PC 62.5/125 Simplex 3mm	***SC62MM3BGFIC/Z***
Multimode PC 50/125 Simplex 900µm	***SC50MM9BGFIC/Z***
Multimode PC 50/125 Simplex 3mm	***SC50MM3BGFIC/Z***
Multimode PC 50/125 OM3 Simplex 900µm	***SCOM3MM9BGFIC/Z***
Multimode PC 50/125 OM3 Simplex 3mm	***SCOM3MM3BGFIC/Z***
Singlemode PC 9/125 Simplex 900µm	***SC09SM9BLFIC/Z***
Singlemode PC 9/125 Simplex 3mm	***SC09SM3BLFIC/Z***
Singlemode APC 9/125 Simplex 900µm	***SCA09SM9GNFIC/Z***
Singlemode APC 9/125 Simplex 3mm	***SCA09SM3GNFIC/Z***
Field Installable Connector Preparation Kit	***OPT-FIC-PREPKIT***
Field Installable Connector Preparation Kit and Inspection Kit	***OPT-FIC-PREPKITPLUS***

SC Singlemode 3mm
Exploded view



SC Singlemode 900µm
Exploded View

SC APC Singlemode 3mm

SC APC Singlemode 900µm

SC Multimode 3mm

SC Multimode 900µm

SC Singlemode 3mm

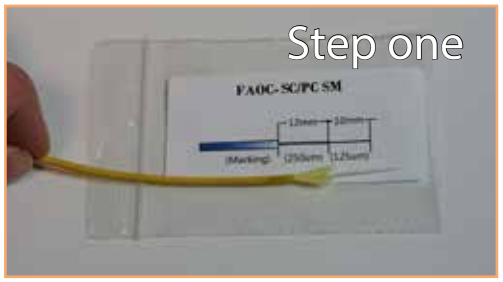
SC Singlemode 900µm

Use with an Optronics Field Installable Preparation and Inspection Kit to make fibre terminations fast, easy and reliable.

1

Strip fibre

Strip and cleave the fibre according to the template provided.



2

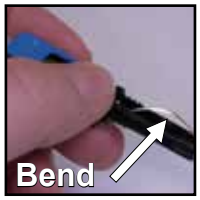
Insert fibre

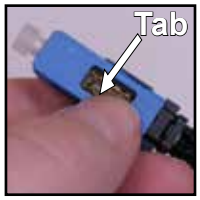
Insert the pre-prepared fibre carefully in to the connector body, gently push the fibre towards the body until it stops.

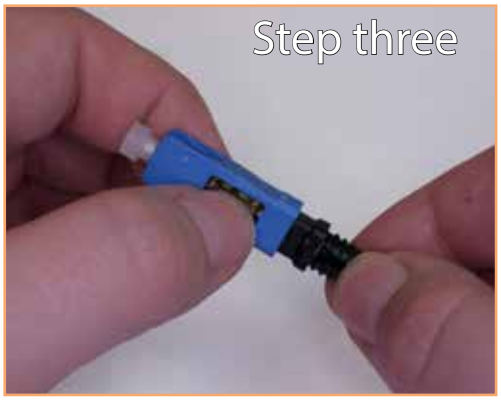
3

Activate tab

Ensure that the fibre has a bend, then, using your index finger, press the button-like activator tab to commence the splice and crimp. Keeping the tab pressed while slowly releasing the bent fibre.







4

Remove the jig

Remove the plastic jig attached to the underside of the connector.

5

Complete the assembly

Tighten the screw-on boot to the terminated assembly. If there is an aramid strength member, trap it in the screw-thread and trim.

LC Field Installable Connectors

Optronics LC field-installable connectors (FIC) are factory terminated and polished to make fibre terminations fast, easy and reliable. These fibre optic connectors offer terminations in less than 2 minutes without any difficulty and require no epoxy, polishing or crimping. The FIC greatly reduces the installation and set up time. It has a window feature to allow testing with a visual fault locator.

Features/Benefits

> **Polished connector incorporating a mechanical splice**
> **Available in singlemode and multimode (50/125 and 62.5/125)**
> **Durable, reliable and superior optical performance**
> **Compatible with standard LC adaptors**
> **Termination can be repeated 2-3 times**
> **Packaging comes with a cable/buffer stripping template**
> **Complies with IEC, EIA/TIA and Telecordia standards**
> **Fibre preparation kit available**

Applications

> **Rapid repair of optical networks**
> **FTTH end user termination**
> **Hazardous environment termination where fusion spicing is prohibited**

Technical Specification

DESCRIPTION	
Fibre Type	*Singlemode and Multimode*
Insertion Loss	*≤ 0.4dB (Typical)*
*Return Loss (Typical)**	*50db/55dB*
Polishing Type	*UPC and APC*

**Using proper cleave process*

Ordering Information

DESCRIPTION	PART NO.
Multimode PC 62.5/125 Simplex 900µm	*LC62MM9BGFIC*
Multimode PC 62.5/125 Simplex 2mm	*LC62MM2BGFIC*
Multimode PC 50/125 Simplex 900µm	*LC50MM9BGFIC*
Multimode PC 50/125 Simplex 2mm	*LC50MM2BGFIC*
Multimode PC OM3 50/125 Simplex 900µm	*LCOM3MM9BGFIC*
Multimode PC OM3 50/125 Simplex 2mm	*LCOM3MM2BGFIC*
Singlemode PC 9/125 Simplex 900µm	*LC09SM9BLFIC*
Singlemode PC 9/125 Simplex 2mm	*LC09SM2BLFIC*
Singlemode APC 9/125 Simplex 900µm	*LCA09SM9GNFIC*
Singlemode APC 9/125 Simplex 2mm	*LCA09SM2GNFIC*
Field Installable Connector Preparation Kit	*OPT-FIC-PREPKIT*
Field Installable Connector Preparation Kit and Inspection Kit	*OPT-FIC-PREPKITPLUS*

LC APC Singlemode 2mm / 900µm

LC Multimode 2mm / 900µm

LC Singlemode 2mm / 900µm

Use with an Optronics Field Installable Preparation and Inspection Kit to make fibre terminations fast, easy and reliable.

LC Singlemode Exploded view

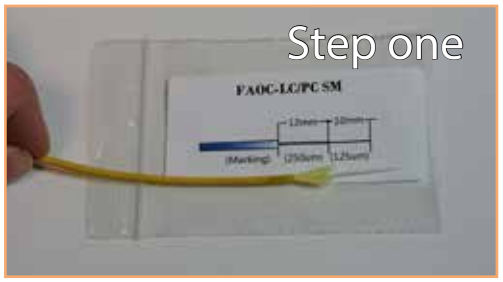
LC Multimode Exploded View

LC APC Singlemode Exploded View

1

Strip fibre

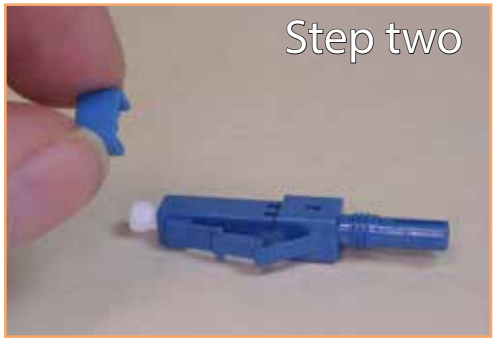
Strip and cleave the fibre according to the template provided.



2

Remove the jig

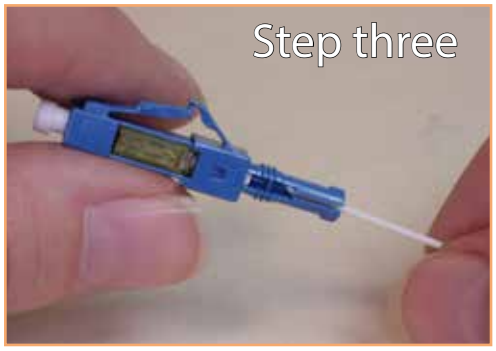
Remove the plastic jig attached to the underside of the connector.



3

Insert fibre

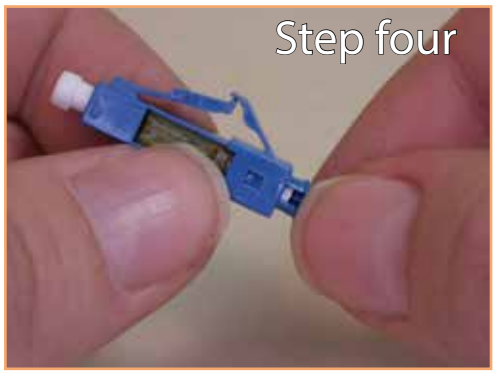
Insert the pre-prepared fibre carefully in to the connector body, gently push the fibre towards the body until it stops.



4

Activate tab

Ensure that the fibre has a bend, then, using your thumb finger, press the button-like activator tab to commence the splice and crimp. Keeping the tab pressed while slowly releasing the bent fibre.



5

Complete the assembly

Tighten the screw-on boot to the terminated assembly.

Watch the Field Installable Connector Video <<Click Here>>

ST Field Installable Connectors

Optronics ST field-installable connectors (FIC) are factory terminated and polished to make fibre terminations fast, easy and reliable. These fibre optic connectors offer terminations in less than 2 minutes without any difficulty and require no epoxy, polishing or crimping. The FIC greatly reduces the installation and set up time. It has a window feature to allow testing with a visual fault locator.

Features/Benefits

> **Polished connector incorporating a mechanical splice**
> **Available in singlemode and multimode (50/125 and 62.5/125)**
> **Durable, reliable and superior optical performance**
> **Compatible with standard ST adaptors**
> **Termination can be repeated 2-3 times**
> **Packaging comes with a buffer stripping template**
> **Complies with IEC, EIA/TIA and Telecordia standards**
> **Fibre preparation kit available**

Applications

> **Rapid repair of optical networks**
> **FTTH end user termination**
> **Hazardous environment termination where fusion splicing is prohibited**

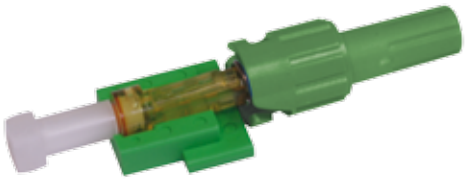
Technical Specification

DESCRIPTION	
Fibre Type	*Singlemode and Multimode*
*Insertion Loss (Max)**	*0.5 dB*
*Insertion Loss (Typical)**	*0.3 dB*
*Return Loss (Typical)**	*50db/55dB*
Polishing Type	*UPC and APC*

** Using proper cleave process*

Ordering Information

DESCRIPTION	PART NO.
Multimode PC 62.5/125 Simplex 900µm	*ST62MM9BGFIC/Z*
Multimode PC 50/125 Simplex 900µm	*ST50MM9BGFIC/Z*
Multimode PC OM3 50/125 Simplex 50/125 900µm	*STOM3SM9BLFIC/Z*
Singlemode PC 9/125 Simplex 900µm	*ST09SM9BLFIC/Z*
Singlemode APC 9/125 Simplex 900µm	*STA09SM9GNFIC/Z*
Field Installable Connector Preparation Kit	*OPT-FIC-PREPKIT*
Field Installable Connector Preparation Kit and Inspection Kit	*OPT-FIC-PREPKITPLUS*



ST APC Singlemode 900µm

ST Multimode 900µm

ST Singlemode 900µm

Use with an Optronics Field Installable Preparation and Inspection Kit to make fibre terminations fast, easy and reliable.

ST Singlemode Exploded view

ST Multimode Exploded View

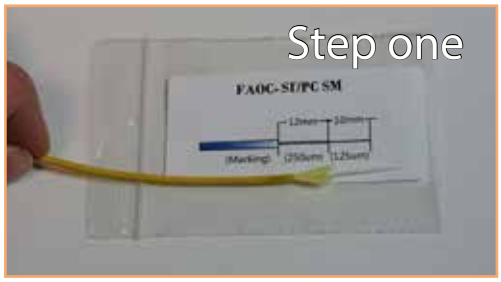
STAPC Singlemode Exploded View

ST Field Installable Connectors - Termination Guide

1

Strip fibre

Strip and cleave the fibre according to the template provided.



2

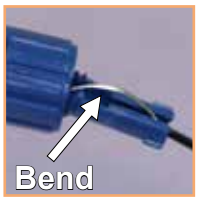
Insert fibre

Insert the pre-prepared fibre carefully in to the connector body, gently push the fibre towards the body until it stops.

3

Activate tab

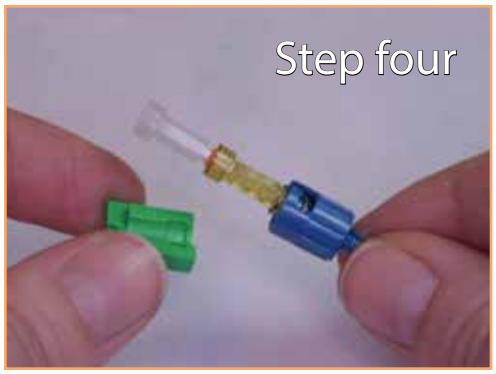
Ensure that the fibre has a bend, then, using your thumb finger, press the button-like activator tab to commence the splice and crimp. Keeping the tab pressed while slowly releasing the bent fibre.



4

Remove the jig

Remove the plastic jig attached to the underside of the connector.



5

Complete the assembly

Tighten the screw-on boot to the terminated assembly. If there is an aramid strength member, trap it in the screw-thread and trim.

ST Field Installable Connectors - Disassembly Guide

1

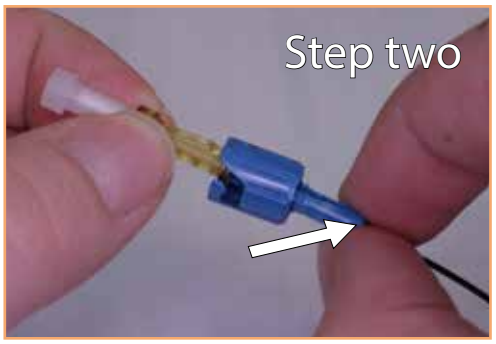
Unscrew

Unscrew the boot from the terminated assembly.

2

Fibre

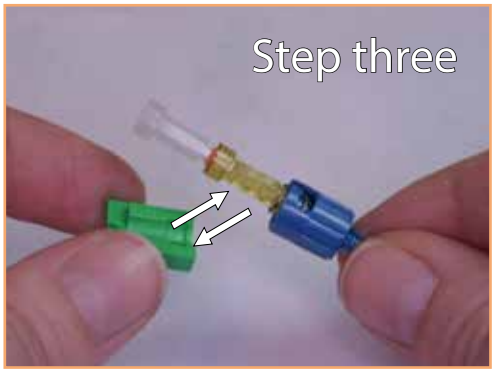
Grip the fibre.



3

Align the jig

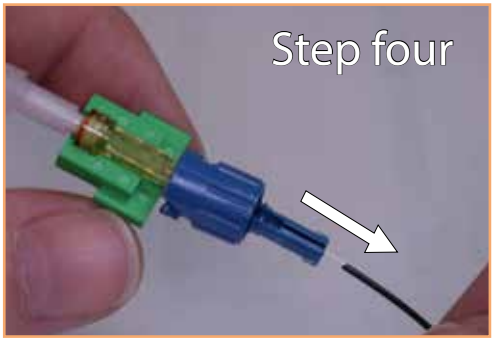
Align assembly key to the hole in the jig and click into place.



4

Remove fibre

Slowly remove the fibre.



MTP®/MPO Optical Fibre Connector

The Optronics MTP® cabling solution utilises MTP® branded MPO connectors manufactured by US Conec Ltd. The MTP® connector provides rapid connection of 12 fibres.
US Conec MTP® connector introduces many features which give technical superiority over the standard MPO design providing excellent physical and optical properties. The integrity of the connection is provided by latches within the adaptor which are secured into place on the connector with a spring loaded mechanism. Precision alignment is achieved with specially designed guide pins. MTP® connectors have a unique removable housing which allows for a quick change of gender, ferrule cleaning, interferometric inspection or connector re-work.

MTP is a registered EC trademark of US Conec Ltd

Features

- Patented floating ferrule design ensures fibre contact integrity
- Terminate ribbon fibre or loose individual fibres
- Low loss and standard loss SM and MM versions
- Patented elliptical guide pin tip to Minimise ferrule debris
- Ruggedised round cable, oval cable and bare ribbon options available
- Housing is removable for quick change of pin clamps and easy ferrule cleaning / re-polishing
- Alignment achieved with high precision guide pins
- Family of bulkhead adaptors available

Connector Performance Specifications

	MTP ELITE® SINGLEMODE MT FERRULE	STANDARD SINGLEMODE MT FERRULE	MTP ELITE® MULTIMODE MT FERRULE	STANDARD MULTIMODE MT FERRULE
INSERTION LOSS	0.10dB Typical 0.35dB Max	0.25dB Typical 0.75dB Max	0.10dB Typical 0.35dB Max	0.20dB Typical 0.6dB Max
RETURN LOSS	>55dB (Angle Polish)	>55dB (Angle Polish)	>20dB	>20dB
OPERATIONAL TEMP	- 40°C to + 70°C	- 40°C to + 70°C	- 40°C to + 70°C	- 40°C to + 70°C

MTRJ Optical Fibre Connector

The MTRJ connector is a development of the now legendary MT ferrule. This amazing technology is at the heart of many state-of-the-art connectors. The MT ferrule in its various designs, has the ability to connect anything from 2 fibres in the MTRJ connector, to 12 fibres in the latest versions of the MPO connector.
The Optronics version of the MTRJ, is capable of terminating any 125µm fibre. The flexibility of the connector allows it to be used in short run local area networks in addition to longer haul cabling using singlemode fibre.

It is designed to terminate two fibres within a single connector, reducing the risk of operator error when inter-connecting equipment and distribution panels. The MTRJ has been deliberately designed to look and feel like the industry standard copper connector.
The high-density MTRJ connector allows the termination of high fibre count backbone cables into smaller distribution panels.

The MTRJ connector is a high-density small form factor (SFF) connector, designed to reduce the space required in the distribution cabinet. Optronics has a full range of tools and products to assist you with the termination of the MTRJ connector. For those who prefer to purchase pre-terminated pigtails, Optronics can supply all your needs. For information on the full range Optronics MTRJ products and tooling please contact us for a data sheet.

Technical Specifications

DESCRIPTION	SPECIFICATIONS			
Fiber type	9/125 µm singlemode	50/125 µm multimode	62.5/125 µm multimode	
Fiber count available	2			
Insertion loss (with master plug)	Standard loss: < 0.5 dB		Low loss: < 0.35 dB	
Return loss	=45dB (SM only)			
Cable type	Mini zip			
Adaptor bulkhead	Single connector / Duplex			
Intermateability	Optically and mechanically compatible with all equivalent connectors. Compliant with IEC 61754-18			
Product packaging	Connector in kit form, packaged in 100pcs			
Temperature cycle	(61300-2-18)		-40 to +75°C, 40 cycles	< 0.2dB change
High temperature	(61300-2-18)		70°C for 96 hours	< 0.2dB change
Operating temperature	-40°C to +85°C			
Vibration (mated pair)	(61300-2-1)		10-55 Hz, 1.5mm P to P	< 0.2dB change
Mating durability	(61300-2-2)		500 mating cycles Clean every 25	< 0.2 dB change
Damp heat	(61300-2-19)		40°C at 93% RH, 96 hours	< 0.2dB change

Please call our sales team for ordering information