

3M™ Fiber Optic Products

FC/PC Connectors and Accessories

The 3M PC/FC Connector is designed for advanced fiber optic systems requiring exceptional stability and low reflections. It is a field mountable, pull-proof connector that is fully compatible with all PC connectors adhering to NTT specifications.

The FC/PC connector is available in single-mode and multimode utilizing epoxy adhesive and in multimode preloaded with 3M's Hot Melt adhesive, which enables field terminations in less than two minutes, for multiple terminations.

The FC/PC Hot Melt connector is intended for ease of termination in environmentally controlled applications. The extended ferrule collar ensures that the adhesive encapsulates the end of the buffer without wicking or spreading. The three-piece connector design (connector, crimp ring, and boot) is mounted using the same simple process used for other 3M connectors.

Specifications

Connector Durability (after 200 matings): <0.2 change

Temperature (operating and storage):

-40 to 85°C/-40 to 185°F

(FC/PC Connector 6200 operating range is -40 to 60°C)

Cable Tension (in service)

Straight Pull: <0.5 dB increase at 90N (20.5 lb.)

Side Pull: <0.5 dB increase at 13N (3 lb.)

Material:

Connector Ferrule: zirconia ceramic

Connector Housing & Body: engineering thermoplastic

Boot: polyester

Flame Retardancy: UL-94 V-O

FC/PC Connectors

Product	UPC	Mode	Type	Size	Attenuation	Reflection
6200	91717	Multi	Hot Melt	125 μm	<0.2 dB typical	≤25 dB typical
6202	91716	Single-	Epoxy	125 μm	<0.2 dB typical	≤25 dB typical
8203	91719	Single-	Epoxy	126 μm	<0.3 dB typical	≤45 dB typical
8204	91720	Single-	Epoxy	127 μm	<0.3 dB typical	≤45 dB typical

UPC prefix 054007-

FC/PC Couplings

Product	UPC	Mode	Housing Design	Operating Temperature
6210	70872	Multi	Square Flanged	-40 to 85°C/-40 to 185°F
8210	48805	Single-	Square Flanged	-40 to 85°C/-40 to 185°F
8211	11913*	Single-	D-Mount	-40 to 85°C/-40 to 185°F
8211 APC	36650*	Single-	D-Mount	-40 to 85°C/-40 to 185°F

UPC prefix 054007-

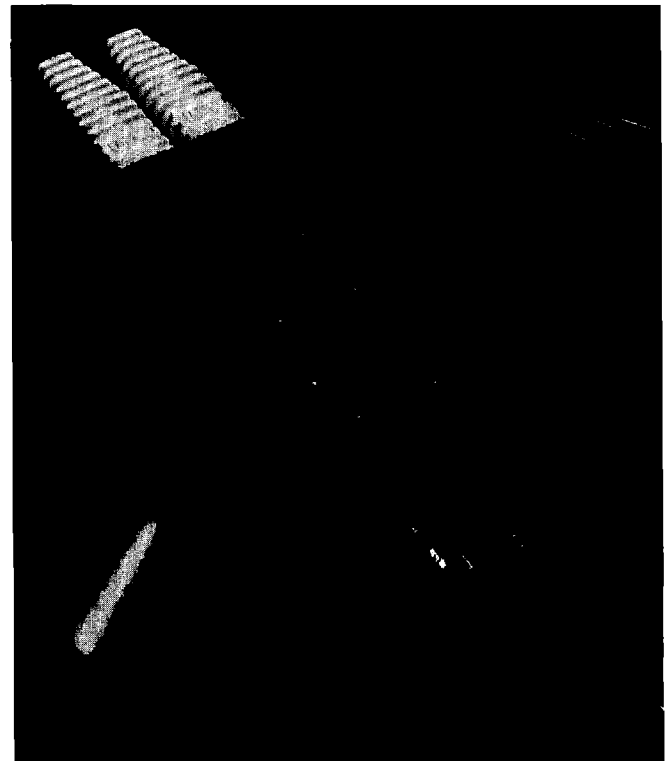
* UPC prefix 051138-

FC/PC Single-Mode Attenuators

Product	UPC	Housing	Attenuation	Reflection	Operating Temperature
8212-A	92470	Buildout*	0 dB	-40 dB typical	-40 to 149°F (-40 to 65°C)
8221	71138	Bulkhead	5 dB	-14 dB	-40 to 176°F (-40 to 80°C)
8222	71137	Bulkhead	10 dB	-14 dB	-40 to 176°F (-40 to 80°C)
8223	71136	Bulkhead	15 dB	-14 dB	-40 to 176°F (-40 to 80°C)
8224	71135	Bulkhead	20 dB	-14 dB	-40 to 176°F (-40 to 80°C)
8225	92471	Buildout*	5 dB	-40 dB typical	-40 to 149°F (-40 to 65°C)
8226	92472	Buildout*	10 dB	-40 dB typical	-40 to 149°F (-40 to 65°C)
8227	92473	Buildout*	15 dB	-40 dB typical	-40 to 149°F (-40 to 65°C)
8228	92474	Buildout*	20 dB	-40 dB typical	-40 to 149°F (-40 to 65°C)

UPC prefix 054007-

ST* Connectors and Accessories



The design of the 3M ST* Connector product line is compatible with AT&T ST* connectors, Systemax* components, and other ST* connector products. 3M ST* connectors provide high repeatability and low light loss for premises, LAN, and telco applications. The 3M products are made with a high quality PC finish on zirconia ceramic ferrules.

Hot Melt ST* Connector, Bayonet

The 3M Hot Melt ST* Fiber Optic Connector is a quick mount fiber optic connector that delivers low light-loss, solid intermateability, and mechanical stability, while costing less to install. It is a keyed bayonet-style multimode/single-mode connector which incorporates 3M's Hot Melt adhesive technology and 3M's pre-radiused PC zirconia ceramic ferrule technology.

Crimplok™ ST* Connector, Bayonet

The 3M Crimplok ST* Fiber Optic Connector is the ideal solution for emergency restoration and work for quickly making fiber connections at a desk. This connector combines the speed of non-adhesive connectors with the performance characteristics of epoxy and hot-melt connectors.

Epoxy ST* Connector, Bayonet

The 3M Epoxy ST* Fiber Optic Connector is a single-/multimode bayonet-style for quick interconnect and high repeatability.

Push-Pull ST* Connector

The 3M Push-Pull ST* Fiber Optic Connector has a boot actuation that allows use in high density configurations and hard-to-reach places such as board mounts and recessed outlets. It is a high-performance connector with a rectangular push-pull coupling mechanism that provides easy insertion and high repeatability.

Push-Pull ST* connectors are available in single- or multimode versions, with color-coded boots and housings to simplify identification. The multimode version accepts epoxy, or it may be ordered pre-loaded with Hot Melt adhesive.

Simplex and duplex versions comply with industry standards and are compatible with all standard ST* connectors and related accessories. The Push-Pull connector converts from simplex to duplex quickly and easily using the Duplex Clip Package.

Specifications for ST* Bayonet Connectors

Connector Durability (after 500 matings): <0.2 change
(6901 is <0.3 change. 6105 is for 1000 matings.)

Operating Temperature:

-40 to 60°C/-40 to 140°F (Hot Melt and Crimplok)
-40 to 80°C/-40 to 176°F (Epoxy)

Storage Temperature:

-40 to 85°C/-40 to 185°F
(8100YS and 6901 storage temperature is -40 to 80°C/-40 to 176°F)

Cable Tension (in service)

Straight Pull: <0.5 dB increase at 90N (20.5 lb.)
Side Pull: <0.5 dB increase at 13N (3 lb.)

Material:

Connector Ferrule: zirconia ceramic (Zirconia for Epoxy)
Connector Housing: nickel plated zinc (6901 is thermoplastic polymer)
Boot: Estane® (6901 is elastomeric resin)

Flame Retardancy: UL-94 V-O

ST* Bayonet Connectors

Product	UPC	Mode	Type	Size	Attenuation*	Reflection
6100	91141	Multi	Hot Melt	125 µm	<0.2 dB typical	≤25 dB typical
6100-R	91143	Multi	Hot Melt	125 µm	<0.2 dB typical	≤25 dB typical
6100-B	91142	Multi	Hot Melt	125 µm	<0.2 dB typical	≤25 dB typical
6105	91144	Multi	Epoxy	125 µm	<0.2 dB typical	≤25 dB typical
6901	92813	Multi	Crimplok	125 µm	<0.2 dB typical	≤29 dB typical
8100YS	36650*	Single-	Hot Melt	125 µm	<0.2 dB typical	≤30 dB typical**
8106	17772	Single-	Epoxy	126 µm	<0.3 dB typical	≤45 dB typical
8107	70637	Single-	Epoxy	127 µm	<0.3 dB typical	≤45 dB typical

UPC prefix 054007-.

*UPC prefix 051138-.

**-.30 is typical for one step polish. -.45 is typical for two step polish.

Specifications for ST* Push-Pull Connectors

Connector Durability (dB) 500 matings: <0.2 change

Operating Temperature: -10 to 40°C/14 to 104°F

Storage Temperature: -40 to 85°C/-40 to 185°F

Cable Tension (in service)

Straight Pull: <0.2 dB increase at 20 lb.

Side Pull: <0.5 dB increase at 5 lb.

Ultimate Pull-Out from Coupling: 25 lb. minimum

Material:

Connector Ferrule: zirconia ceramic

Connector Housing & Body: engineering thermoplastic

Boot: thermoplastic elastomer

Flame Retardancy: UL-94 V-O

ST* Push-Pull Connectors

Product	UPC	Mode	Type	Size	Attenuation	Reflection
6102-H	91148	Multi	Hot Melt	125 µm	<0.2 dB typical	≥25 dB typical
6102	91149	Multi	Epoxy	125 µm	<0.2 dB typical	≥25 dB typical
8103	59531	Single-	Epoxy	126 µm	0.3 dB typical	≥45 dB typical
8104	59532	Single-	Epoxy	127 µm	0.3 dB typical	≥45 dB typical

UPC prefix 054007-.

ST* Couplings

Product	UPC	Mode	Description	Sieve Material
6110	91151	Multi	Threaded coupling PAL nut	Beryllium copper
6111	91152	Multi	Flanged coupling	Beryllium copper
6112	91153	Multi	Threaded coupling w/ panel nut and lock washer	Beryllium copper
6113	91025	Multi	Duplex threaded	Beryllium copper
8110	17775	Single-	Threaded coupling	Zirconia ceramic
8111	17776	Single-	Flanged coupling	Zirconia ceramic
8113	91026	Single-	Duplex threaded coupling	Zirconia ceramic
8119	68747	Single-	Threaded coupling w/ panel nut and lock washer	Zirconia ceramic

UPC prefix 054007-.

Note: Operating temperature is -40 to 85°C/-40 to 185°F. Housing material is nickel plated zinc.

ST* Push-Pull Clips

Product	UPC	Spacing	Description
6199 DC	91114	Duplex 0.5 inch	Duplex clip
6199 DFC	91995	Duplex 0.7 inch	Locking clip
6199 DLC	91969	Duplex 0.5 inch locking	Duplex locking clip
6199 LC	11912	Simplex locking	Locking clip

UPC prefix 054007-.