

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