High Performance Fiber Optic Connector

(IEC Grade B Patch Cord)

Description

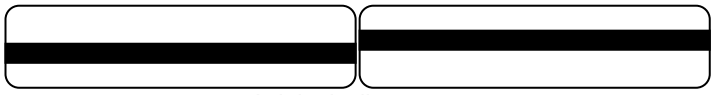
For the high speed data and telecommunication fiber optic network, the attenuation of each connecting node is required as low as possible.

According to IEC 61753-1 and IEC61300-3-34 standard, there four grades of attenuation for single mode fiber optic connector:

Attenuation Grade	Attenuation random mated IEC 61300-3-34	
Grade A*	≤ 0.07 dB mean	≤ 0.15 dB max. for >97% of samples
Grade B	≤ 0.12 dB mean	≤ 0.25 dB max. for >97% of samples
Grade C	≤ 0.25 dB mean	≤ 0.50 dB max. for >97% of samples
Grade D	≤ 0.50 dB mean	≤ 1.00 dB max. for >97% of samples

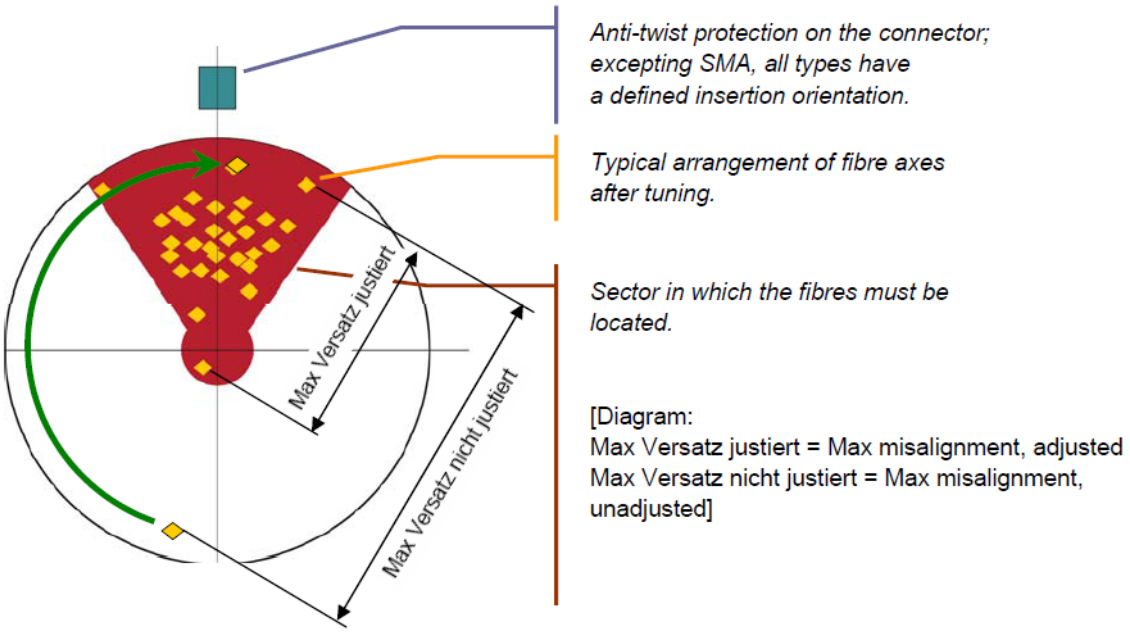
Return Loss Grade	Return Loss Random mated IEC 61300-3-6
Grade 1	≥ 60 dB (mated) and ≥ 55 dB (unmated)
Grade 2	≥ 45 dB
Grade 3	≥ 35 dB
Grade 4	≥ 26 dB

Grade C connectors are the universal product and they are very easy to meet when low concentricity ferrules are used. However grade B connectors are more difficult to100% meet by a general assembly process because of the axial misalignment of ferrules.



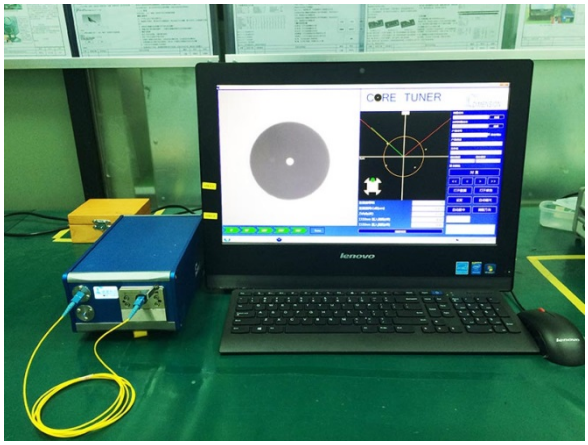
Axial misalignment

For grade B connectors, the axial misalignment of the two ferrules must be as small as possible. All the fiber cores must be adjusted in a defined zone to get low attenuation of random mating.

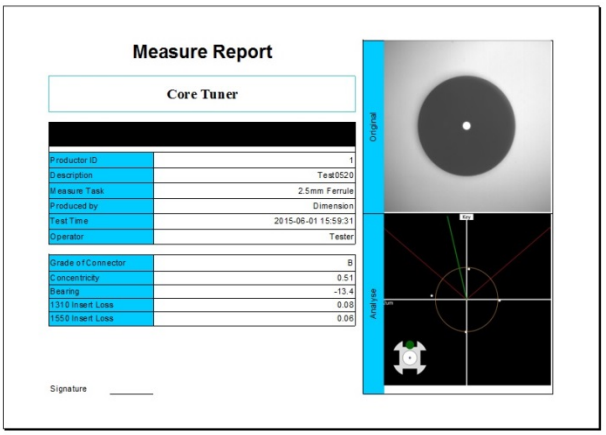


How KOC do for IEC Grade B connector assembly?

Beside to use low concentricity ferrules for the products, all the Grade B connectors must be tuned by using the core adjustment machine. It is a very important procedure to make high quality Grade B connectors. 100% connectors will be tuned in KOC factory.



Core Adjustment Machine



Tuned result

Specifications

Item	Units	Specification
Random Mated Insertion Loss	dB	Typical ≤0.12, Max ≤0.25
Return Loss	nm	UPC≧50dB, APC≧60dB
Repeatability	dB	≤0.1
Durability	dB	≤0.2 @ 1000 matings
Operating Temperature	℃	-40~+ 85 or -20~+70
Connector Type	/	SC / LC / FC
Fiber Type	/	G652D / G657A
Cable Type	/	0.9 / 2.0 / 3.0 mm
Jacket Material	/	LSZH / PVC
Length of Patch Cord	mm	Customized

Please contact us for more information.
Thank you!