



ST PATCHCORDS/PIGTAILS

Features

- Connector's design complies with IEC 61754-2 standard
- Extremely low insertion loss and high return loss
- End-face geometry and quality superior than IEC and Telcordia standards
- LSZH, OFNP, OFNR cable jacket
- RoHS and REACH materials compliant

OPTICAL CHARACTERISTICS

Item	Parameter		Reference
	Single mode	Multimode	
Insertion loss	Random mated average \leq 0.07dB; Random mated for 97% \leq 0.12dB	Random mated average \leq 0.05dB; Random mated for 97% \leq 0.10dB	IEC 61300-3-34
Return loss	\geq 55dB	\geq 45dB	IEC 61300-3-6

END-FACE GEOMETRY

Item	PC (Ref: IEC 61755-3-1)
Radius of curvature (mm)	10 to 15
Fiber height (nm)	-30 to 30
Apex offset (μ m)	0 to 30
APC angle ($^{\circ}$)	/
Key error ($^{\circ}$)	/

END-FACE QUALITY (SM)

Zone	Range (μ m)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

END-FACE QUALITY (MM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	IEC 61300-3-35:2015
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

CONNECTOR TYPES

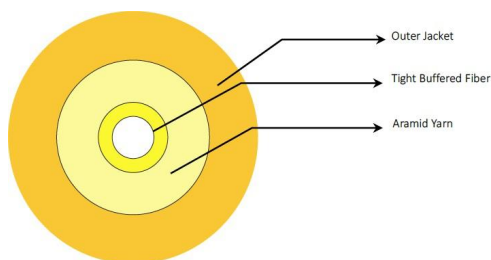
Type	Reference	Note
ST	IEC 61754-2	Single mode simplex UPC boots: Yellow, Light Blue
		Single mode duplex UPC boots: Yellow, Light Blue
		Multimode simplex PC boots: Black
		Multimode duplex PC boots: Black

MECHANICAL CHARACTERISTICS

Test	Conditions	Reference
Endurance	500 matings	IEC 61300-2-2
Vibration	Frequency: 10 to 55Hz, Amplitude: 0.75mm	IEC 61300-2-1
Cable retention	100N (patch cable); 5N (pigtail)	IEC 61300-2-4
Strength of coupling mechanism	80N for 2 to 3mm cable	IEC 61300-2-6
Cable torsion	15N for 2 to 3mm cable	IEC 61300-2-5
Fall	10 drops, 1m drop height	IEC 61300-2-12
Static lateral load	1N for 1h (patch cable); 0.2N for 5min (pigtail)	IEC 61300-2-42
Cold	-25°C, 96h duration	IEC 61300-2-17
Dry heat	+70°C, 96h duration	IEC 61300-2-18
Change of temperature	-25°C to +70°C, 12 cycles	IEC 61300-2-22
Humidity	+40°C at 93%, 96h duration	IEC 61300-2-19

CABLE SPECIFICATIONS

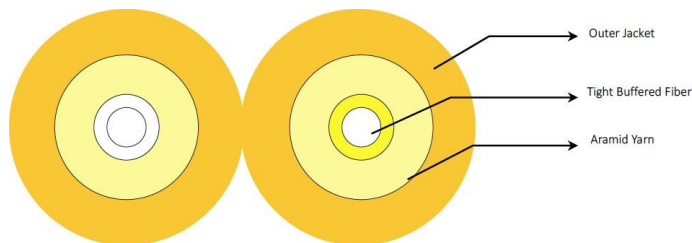
Cable Structure (Simplex)



Cable Characteristics (Simplex)

Fiber count		1			
Outer diameter (mm)		1.5 to 1.6	1.70 to 1.80	1.80 to 2.00	2.85 to 3.05
Nominal weight (kg/km)		3.0	3.3	4.0	8.0
Max. tensile strength (N)	Short term	50	70	70	90
	Long term	20	40	40	50
Max. crush resistance (N/100mm)	Short term	500			
	Long term	100			
Min. bending radius (mm)	Short term	20D			
	Long term	10D			
Sheath compound		RoHS compliant LSZH/OFNP/PVC			
Color		Customized			
Strength members		Aramid yarn			
Temperature (°C)	Storage or transportation	-25 to 70			
	Operation	-25 to 70			

Cable Structure (Duplex)

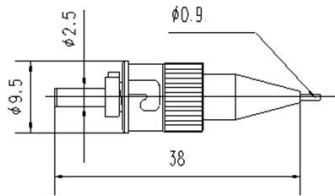


Cable Characteristics (Duplex)

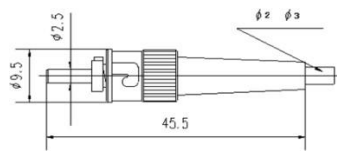
Fiber Count		2			
Out diameter (mm)		(1.55 to 1.65) x (3.20 to 3.60)	(1.70 to 1.80) x (3.60 to 4.20)	(1.80 to 2.00) x (3.90 to 4.30)	(2.65 to 2.85) x (5.30 to 5.80)
Nominal weight(kg/km)		5.7	6.7	8.2	13.2
Max. tensile strength (N)	Short-term	120	160	200	300
	Long-term	60	80	100	160
Max. crush resistance (N/100mm ²)	Short term	1000			
	Long term	300			
Min. bending radius (mm)	Short term	20D			
	Long term	10D			
Sheath compound		RoHS compliant LSZH/OFNP/PVC			
Color		Customized			
Strength members		Aramid yarn			
Temperature (°C)	Storage or transportation	-25 to 70			
	Operation	-25 to 70			

DIMENSIONAL DIAGRAMS

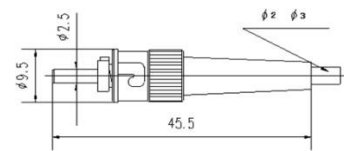
ST \varnothing 0.9mm connector



ST \varnothing 2.0mm connector

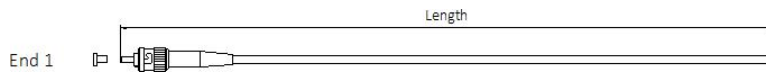


ST \varnothing 3.0mm connector

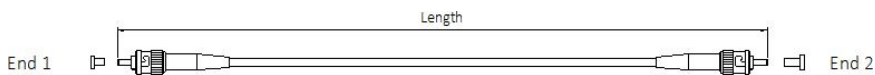


SCHEMATIC DIAGRAMS

ST pigtail



ST simplex patchcord



ST duplex patchcord

