



江苏田信塑料光纤有限公司

Jiangsu TX Plastic Optical Fibers Co.,Ltd

单芯塑料光纤光缆

产品规格书

Single core plastic optical fiber cable

Product specifications

TX-SCC8000-1/11

2023.03

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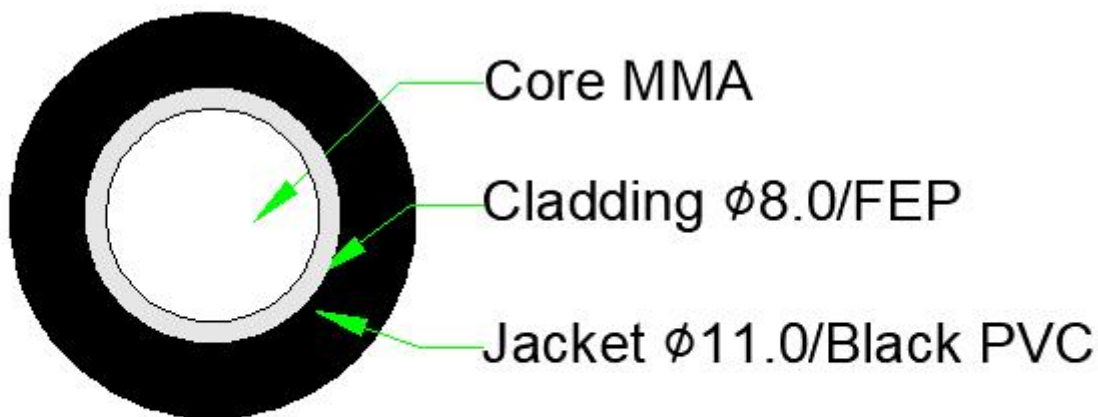
1. 产品名称(Product name): 单芯塑料光纤光缆(Single core plastic optical fiber cable)

2. 产品型号(Product model): TX-SCC8000-1/11

3. 产品结构(Product mix):

项目(Item)	技术参数(Technical parameter)	单位(Unit)	
塑料光纤 Plastic optical fiber	纤芯材料 (Core material)	甲基丙烯酸甲酯(MMA)	——
	包层材料 (Cladding material)	聚四氟乙烯(PTFE)	——
	纤芯折射率 (Core refractive index)	1.475	——
	包层折射率 (Cladding refractive index)	1.375	——
	纤芯直径 (Core diameter)	7500±150	μm
	包层直径 (Cladding diameter)	8000±200	μm
	纤芯数量 (Number of cores)	1	cores
护套 Jacket	材料 (Material)	聚氯乙烯(Polyvinyl chloride)	——
	尺寸 (Dimensions)	11±0.5	mm
	颜色 (Colour)	黑色(Black)	——
	阻燃等级 (Flame retardant grade)	——	——
产品标准(Product standard)	ROHS,REACH,SGS, (YD/T 1447-2013)	——	

4. 产品结构示意图(Product structure diagram):



TX-SCC8000-1/11.0
Structure diagram



5. 产品性能(Product performance):

项目(Item)		试验条件 (Test conditions)	检验结果 (Inspection results)
光学性能 Optical performance	衰减 (Attenuation)	@650nm	≤320dB/km
机械性能 Mechanical properties	拉伸屈服强度 (Tensile yield strength)	Loading rate: 100mm/min Sample length: 100~200mm Duration: reach 4% elongation	Tensile load: ≥70N
	最小弯曲半径 (Minimum bending radius)	Number of coils per time: 6 Number of cycles: 10 Attenuation change ≤ 2dB	Minimum bending radius: 80mm
	冲击附加衰减 (Additional attenuation of impact)	Radius of impact surface:12.5mm Impact energy: 0.2N · M Impact times: at least 3 times, and the distance between each impact point shall be at least 500mm	Attenuation change ≤2dB
	反复弯曲附加衰减 (Repeated bending additional attenuation)	Bending radius: 80mm Number of cycles: 200 Load: 5N	Attenuation change ≤2dB
	扭转附加衰减 (Torsional additional attenuation)	Number of cycles: 5 Torsional length: 250mm Torsion angle: ± 180 ° Axial tension: 5N	Attenuation change ≤2dB

*以上所有的测试，均在 25℃ 温度下进行，除非另有说明。

All the above tests are carried out at 25 °C unless otherwise specified.

*温度范围: -20~+70℃

Temperature range : -20~+70℃

*应用领域: 适用于照明装饰、光纤照明

Application: Applicable to lighting decoration and optical fiber lighting