

# Specification Sheet

CK - 20

Plastic Optical Fiber

ESKA

High - Performance Plastic Optical Fiber

E s k a<sup>™</sup>

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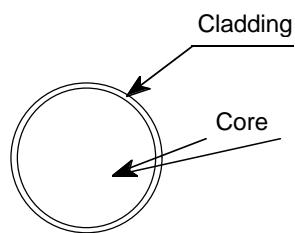
## 1.Scope

This specification covers basic requirements for the structure, optical and mechanical performances of CK-20.

## 2. Structure

Table1

Item		CK - 20			
		Unit	Min.	Typ.	Max.
Optical Fiber	Core Material	—	Polymetyl - Methacrylate Resin		
	Cladding Material	—	Fluorinated Polymer		
	Core Refractive Index	—	1.49		
	Numerical Aperture	—	0.5		
	Refractive Index Profile	—	Step Index		
	Core Diameter	μm	456	486	516
	Cladding Diameter	μm	470	500	530
Approximate Weight		g / m	0.3		

Sectional View

## 3.Performance

Table2		CK - 20				
		Item	Acceptance Criterion and / or [Test Condition ]	Specification		
Unit	Min.			Typ.	Max.	
Maximum Rating	Storage and Operation Temperature	No Deterioration in Optical Properties*	°C	- 55	—	+ 70
	Operation Temperature under high humidity	No Deterioration in Optical Properties** [ 95 %RH]	°C	-	—	+ 60
Optical Properties	Transmission Loss	650 nm Collimated Light ] [ Standard condition ] [ 10 m - 1 m cutback ]	dB/km	—	—	250
Mechanical Characteristics	Minimum Bend Radius	Loss Increment =< 0.5 dB [ Quarter bend ]	mm	10	—	—
	Tensile Strength	[Tensile Force at Yield Point] [ JIS C 6861]	N	14	—	—

All tests are carried out under temperature of 25°C unless otherwise specified.

\* Attenuation change shall be within 10 % after 1,000 hours.

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The specification is subject to change without notice.

The information contained herein is presented as a guide for the product selection. Please contact our business department for the issue of an official specification sheet.