

Specification Sheet

CK - 40

Plastic Optical Fiber

ESKA

High - Performance Plastic Optical Fiber

E s k aTM

MITSUBISHI RAYON CO., LTD.
ESKA OPTICAL FIBER DIVISION

6-41 Kounan 1-Chome, Minato-ku, Tokyo, Japan

Phone : + 81 - 3 - 5495 - 3060

Facsimile : + 81 - 3 - 5495 - 3212

1.Scope

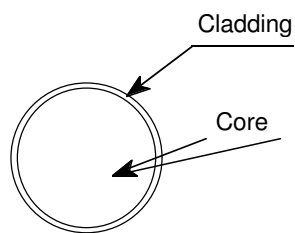
This specification covers basic requirements for the structure, optical and mechanical performances of CK-40.

2. Structure

Table1

		CK - 40			
Item		Specification			
		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	920	980	1,040
	Cladding Diameter	μm	940	1,000	1,060
Approximate Weight		g / m	1		

Sectional View



3.Performance

Table2

		CK - 40				
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	—	—	200
Mechanical Characteristics	Minimum Bend Radius	Loss Increment =< 0.5 dB [Quarter bend]	mm	20	—	—
	Tensile Strength	[Tensile Force at Yield Point] [JIS C 6861]	N	65	—	—

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

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

** Attenuation change shall be within 10 % after 1,000 hours, except that due to absorbed water .

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.