

Specification Sheet

SK - 20

Plastic Optical Fiber

Super ESKA

High - Performance Plastic Optical Fiber

E s k aTM

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1.Scope

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

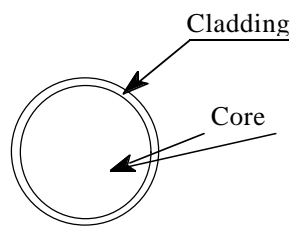
2. Structure

Table1

SK - 20

| 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 | 456 | 486 | 516 |
| | Cladding Diameter | μm | 470 | 500 | 530 |
| Approximate Weight | | g / m | 0.3 | | |

Sectional View



3.Performance

| Table2 | | SK - 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 | — | — | 200 |
| 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.
 ** 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.