

# Product Specifications

**Product No: Part# FF-HEB3.0/4.0**

## 1. Scope

This specification covers basic requirements for the structure and optical performances of FF-HEB3.0/4.5.

End Emitting Fiber, 3.0mm dia. fiber with a 4.0mm dia. black PVC jacket

## 2. Structure

|  |  |  |
|--|--|--|
| <b>Product Data:</b><br>1. Fiber core material      MMA Polymer<br>2. Cladding material        PTFE<br>3. Jacket material            Black PVC<br>4. Minimum bending radius   6 x diameter<br>5. Wavelength range        400-700nm<br>6. Interior Refractive Index   1.475 |  |  |
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### Specifications:

| Item                  |                             | Unit   | Index         | Testing method   |
|-----------------------|-----------------------------|--------|---------------|------------------|
| Structural Parameters | Core diameter               | mm     | 3             | JIS C 6863       |
|                       | Outer diameter              | mm     | 4             |                  |
|                       | Cladding non-circularity    | %      | ≤6            |                  |
|                       | Length                      | m/roll | 100           |                  |
| Optical Properties    | Attenuation                 | dB/km  | ≤700          | 650nm JIS C 6863 |
|                       | Numerical Apertures         | /      | 0.68          |                  |
|                       | Attenuation (95% RH)        | dB/km  | 300-350       |                  |
| Mechanical Properties | Repeated bending (200times) | dB     | Loss added ≤2 | JIS C 6861       |
|                       | Tensile strength            | N      | 70            |                  |
|                       | Twisting (5times)           | dB     | Loss added ≤2 |                  |
|                       | Impacting (0.4N/meter)      | dB     | Loss added ≤2 |                  |

Operating temperature: -40°C to 70°C

Recommended Storage temperature: -10°C to 35°C