

INSTRUCTIONS FOR USE

Instruction for products handling, cleaning and managing conditions

for industrial fiber cables and bundles

1. Fiber cable and bundle are fragile, please handle with care.
2. It is not allowed to drop the fiber bundle or to keep it in place where the bundle is submitted to vibrations. During bundle transportation it must be packed properly to avoid its damage by vibration or shock;
3. Indication for mounting:

- Bundles have defined short term minimum bending radius (less than 60sec). Optic fiber can be irreversibly damaged and broken if submitted to bending under indicated short term bending radius.
- Bundles have defined long term bending radius. For long term handling it is recommended not to submit bundle to bending under indicated long term bending radius:

For single fiber products

$R_{\text{short-term}}$ is equal to $100 \times D_{\text{fiber}}$

$R_{\text{long-term}}$ is equal to $300 \times D_{\text{fiber}}$

For multifiber (bundle) products

$R_{\text{short-term}}$ is equal to $110 \times D_{\text{fiber}}$

$R_{\text{long-term}}$ is equal to $330 \times D_{\text{fiber}}$

Example for single fiber:

Coherent MM-S105/125

$D_{\text{fiber cladding}} = 125 \mu\text{m}$

$R_{\text{short-term}} = 125 * 100 = 12500 \mu\text{m} = 12.5 \text{ mm}$

$R_{\text{long-term}} = 125 * 300 = 37500 \mu\text{m} = 37.5 \text{ mm}$

Indications:

D_{fiber} is fiber cladding diameter

$R_{\text{short-term}}$ is minimum short term bending radius

$R_{\text{long-term}}$ is minimum long term bending radius

For shielded common part minimum short term bending radius $R \geq 35\text{mm}$. In special cases, $R_{\text{short-term}}$ and $R_{\text{long-term}}$ may be specified in the drawing

Please, take into account the following details:

Improper use of product may lead to decrease of its performance, deterioration, destruction of the product, equipment damages and injuries!

- Inspect the product for damages when received
- Do not use the product if damaged
- Do not disassemble the damaged product
- Do not merge the product in liquids or aggressive environments if it is not specified otherwise in the drawing.
- Do not remove or unplug the product from a socket pulling by protection tube or ferrules (-es), which is (are) not in the socket.
- The fiber facets should be protected by caps during handling and transportation

- Scratches and contaminations on the fiber facets may lead to overheat and damage of a product and equipment. Fiber facets should be checked for damage and contamination before installing. If necessary, clean the facets by isopropyl alcohol and lint-free soft cleaning products.
- To avoid damaging product, it should be used in accordance with specified parameters such as wavelength range, maximum handling power, numerical aperture of light sources, bending radius, mechanical stresses etc.
- Light must be entered into fiber core (-es), if not specified otherwise.
- To avoid damaging product, it must be stored in original packaging in dry environment.

Products should be disposed according to local regulations.

¹ All special conditions of use must be agreed at the design stage of product