Instruction for products handling, cleaning and managing conditions
for all industrial cables and bundles produced by Ceram Optec SIA

1. Ceram Optec SIA has its "General Conditions for Delivery and Service".
   The document can be found on the company's web page:
   http://www.ceramoptec.de/contact-us/general-trade-conditions/ceram-optec-sia.html;
   Customer accepts and follows "General Conditions for Delivery and Service", if decides to order any product produced by Ceram Optec SIA;
2. Optic bundle is fragile, please handle with care.
3. It is not allowed to drop the optic 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;
4. 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
   $R_{short\text{-}term}$ is equal to 100 x R_{fiber}
   $R_{long\text{-}term}$ is equal to 300 x R_{fiber}

   For multifiber (bundle) products
   $R_{short\text{-}term}$ is equal to 110 x R_{fiber}
   $R_{long\text{-}term}$ is equal to 330 x R_{fiber}

   Example:
   UV 100/**110**/125 P
   R_{fiber} = 55 µm
   $R_{short\text{-}term}$ = 100 * 55 = 5500 µm = 5.5 mm
   $R_{long\text{-}term}$ = 300 * 55 = 16500 µm = 16.5 mm

   Indications:
   R_{fiber} is fiber clad radius
   $R_{short\text{-}term}$ is minimum short term bending radius
   $R_{long\text{-}term}$ is minimum long term bending radius

For shielded common part minimum short term bending radius R≥35mm. In special cases $R_{short\text{-}term}$ and $R_{long\text{-}term}$ 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 of damage the product.
- Do not merge the product in liquids or aggressive environments if it is not specified otherwise in the drawing.*[1]
- Do not remove or unplug the product from a socket pulling by protection tube or ferrule(-es), which is (are) not in the socket.
- The end-face surfaces should be protected by caps during handling and transportation.
- Scratches and contaminations on the fiber end-face surfaces may lead to overheat and damage of a product and equipment. End-face surface should be checked for damage and contamination before installing and using the product. If necessary, clean the surface by isopropyl alcohol and lint-free soft cleaning products.
- To avoid product's damage, it should be used in accordance with specified parameters such as wavelengths, powers, numerical apertures of sources, bending radii, mechanical stresses etc. listed in the drawing.*[1]
- Light must be entered into fiber core(-es), if not specified otherwise.
- To avoid product's damage, it must be stored in original packaging.

Products should be disposed according to local regulations.

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