

FiberKey® C

Fiber Coupling Unit for CO₂ Lasers

CO₂ lasers are cost-effective and powerful lasers of very high efficiency. They are mainly used in medical applications, material processing and marking. Until recently, it was difficult to get the laser beam to the desired location. With the fiber coupling unit developed by LASER COMPONENTS, it is now possible to focus the laser beam into a suitable optical fiber. With the help of the optical fiber, CO₂ laser light can be transmitted easily and at low loss to the desired location (see also separate data sheet).

The fiber coupling unit is designed for lasers with four mounting screws. Using fine adjustment the laser beam can be optimally coupled into the fiber. The fiber connection is designed in accordance with the SMA connector standard IEC 61754-22:2005



Technical Specifications

Description	Value
Damage thresholds of the internal lenses	typ. 3 kW/cm ² (cw)
Incoupling loss	< 1 dB
Dimensions	Ø 60 mm, 87.5 mm length
Max. permissible diameter of the input beam	5 mm
Suitable for Hollow Silica Waveguide	> 750 µm core diameter
Optical interface	SMA
Mechanical interface	4 x Ø 4.4 mm, borehole spacing 1.6" x 1.125"