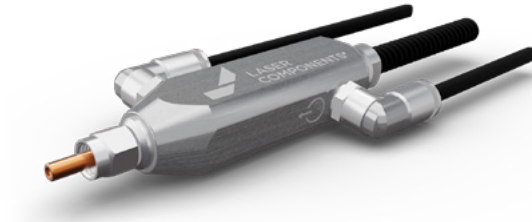


HIGH POWER LASER FIBER CABLES ACTIVE/PASSIVE COOLING

Fiber Optics



Depending on the fiber diameter, these high-performance laser fiber cables ensure efficient laser transmission of more than 200W while preventing overheating caused by unwanted cladding modes. Their passive heat sink, optionally enhanced with active water cooling, guarantees stable operation and extends fiber lifespan.

Compared to most conventional designs, they offer an additional level of safety and durability by using a bare fiber design without flammable adhesives. They offer optimal beam quality at a wide range of wavelengths (300–1900nm), which makes them an ideal solution for laser cutting, welding, cleaning, and soldering applications. Performance can be further improved with an optional anti-reflective (AR) coating.

Available as a modular system with both active and passive cooling options, these cables accommodate diverse power and thermal management needs. Designed for reliability, they support SMA and optional D80 connectors, making them a versatile choice for industrial laser systems requiring precision and stability.

FEATURES

- / Active water cooling
- / All wavelengths from UV to IR (300–1900nm)
- / Optimum beam quality
- / Optional AR coating

APPLICATIONS

- / Laser cutting
- / Laser welding
- / Laser cleaning
- / Laser soldering

VERSIONS

- / Active version with water cooling
- / Passive version

/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864-0 info@lasercomponents.com www.lasercomponents.com
 / France LASER COMPONENTS S.A.S. Tel +33 1 39 59 52 25 info@lasercomponents.fr www.lasercomponents.fr
 / United Kingdom LASER COMPONENTS (UK) Ltd. Tel +44 1245 491 499 info@lasercomponents.co.uk www.lasercomponents.co.uk
 / Nordic Countries LASER COMPONENTS Nordic AB Tel +46 31 703 71 73 info@lasercomponents.se www.lasercomponents.se
 / USA LASER COMPONENTS USA, Inc. Tel +1 603 821-7040 info@laser-components.com www.laser-components.com

FIBER OPTICS

High Power Laser Fiber Cables active/passive cooling



SPECIFICATIONS

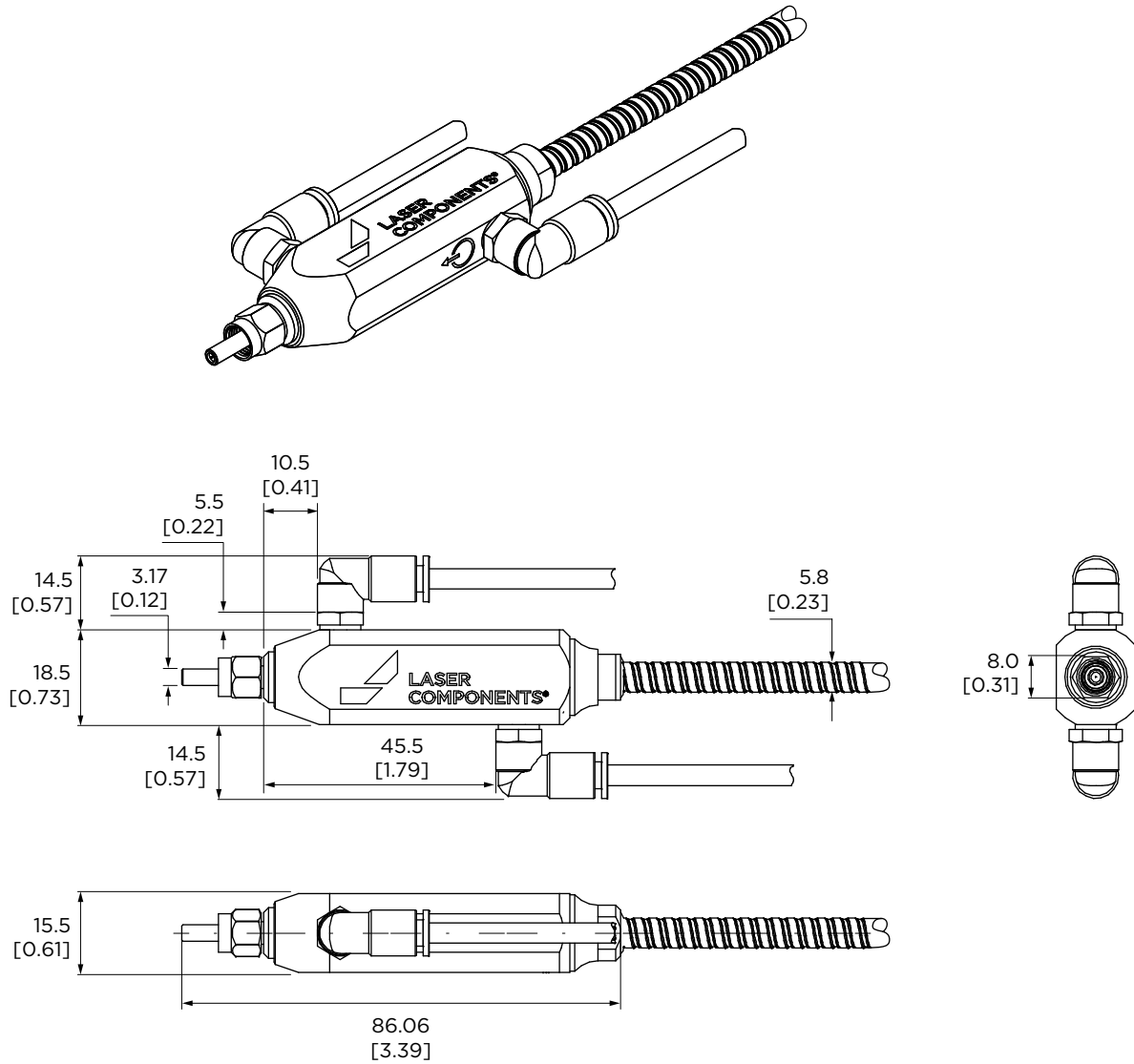
Active Cooling Design

- / >450 W (depending on fiber diameter, max. 200 W @200 μm)
- / Wavelength 300–1900 nm
- / Heat sink stainless steel or copper
- / Cooling medium distilled water
- / Water temperature 20–25 °C input side
- / Flow rate min. 30 l/h
- / ModeStrip
- / SMA connector
- / D80 connector (on request)

Passive Cooling Design

- / >130 W (depending on fiber diameter, max. 60 W @200 μm)
- / Wavelength 300–1900 nm
- / Fiber diameter 100–1000 μm
- / Heat sink stainless steel or copper
- / ModeStrip
- / SMA connector
- / D80 connector (on request)

TECHNICAL DRAWING



Fiber Cable with Water Cooled SMA Fiber Connector

Units: mm [inch]

Dimensions are in millimeters - [inches] and are for reference only.

FIBER OPTICS

High Power Laser Fiber Cables active/passive cooling



ORDERING CODE

	Material	Connector Type	Wavelength Range [nm]	Fiber Diameter [μm]	Fiber Length [m]	Option	Coating
LCF-PAC	X	X	X	X	X	X	X
	CU VA	SMA D80	300-1900	200-1000	up to 5	BC BP CP BMP CMP	AR NAR

Foot Note / Abbreviations

CU = Copper VA = Vanadium
BC = Both Cooled BP = Both Passive Cooled CP = Cooled Passive
BMP = Both Modular Passive CMP = Cooled Modular Passive
AR = Anti Reflective Coating NAR = No Anti Reflective Coating

Example: LCF-PAC-CU-SMA-900-200-3-CP-AR

PRODUCT CHANGES

LASER COMPONENTS reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application.

ORDERING INFORMATION

Products can be ordered directly from LASER COMPONENTS or its representatives.
For a complete listing of representatives, visit our website at www.lasercomponents.com
Custom designed products are available on request.

LASER SAFETY

Personal Hazard

Depending on the mode of operation, these devices emit highly concentrated non visible infrared light which can be hazardous to the human eye. Products which incorporate these devices have to follow the safety precautions given in IEC 60825-1 »Safety of laser products«.



Handling Precautions

Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload.

/ Germany and Other Countries LASER COMPONENTS Germany GmbH Tel +49 8142 2864-0 info@lasercomponents.com www.lasercomponents.com
/ France LASER COMPONENTS S.A.S. Tel +33 1 39 59 52 25 info@lasercomponents.fr www.lasercomponents.fr
/ United Kingdom LASER COMPONENTS (UK) Ltd. Tel +44 1245 491 499 info@lasercomponents.co.uk www.lasercomponents.co.uk
/ Nordic Countries LASER COMPONENTS Nordic AB Tel +46 31 703 71 73 info@lasercomponents.se www.lasercomponents.se
/ USA LASER COMPONENTS USA, Inc. Tel +1 603 821-7040 info@laser-components.com www.laser-components.com