

Single Lightcomm High Power Laser Cable

Description

Lightcomm High Power Laser Cable (LLC), integrating high power cladding power stripper and end cap technology, is used in high power fiber laser as output termination for high power laser delivery. LLC package can be fully compatible with the standard industrial processing equipment interface.

Key Features

- Low Transmission Loss
- High Power Handling Capability
- High Reflection Power Endurance
- Water Cooling & Safety Interlock Function Available

Specifications

Optical Parameters		Min	Typ.	Max	Unit	Note
1	Operating Wavelength	890		1000	nm	R≤0.2%
		or				
		1030		1100		
2	Fiber Core Diameter	10		800	μm	
3	Fiber NA	0.06		0.22	-	
4	Fiber Type					
5	Transmission Power Loss			3.0	%	
6	Point Angle			2	mrad	
7	Forward cladding power			100	W	
8	Stripping Efficiency	10			dB	
9	Average Power			5.0	KW	
10	Peak Power	@ 10ms pulse		8	KW	
11		@ 1ms pulse		40	KW	
12		@ 50ns pulse		8	MW	
13	Reflection Power	@ 10s		1.5	KW	
14		@ 50s		1	KW	
15		@ long time		0.6	KW	

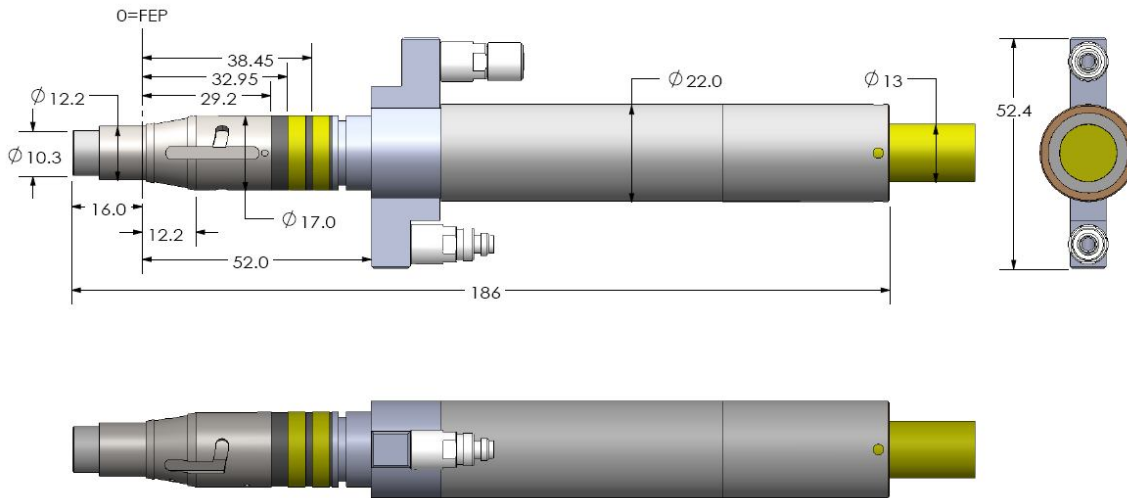
Mechanical/Application Parameters

1	Mechanical Interface	Compatible with standard industrial processing equipment interface
2	Cable Diameter	13mm
3	Copper Wire Length	≥1m (Exposed length from the hexagonal bolt)
4	Water Quality	Purified and Distilled Water
5	Water Pressure	≤0.3Mpa
6	Water Temperature	≥5°C above Dew Point Temperature
7	Water PH Value	5.6~7.9
8	Water Hose Diameter	ID/OD=4mm/6mm

Mechanical Dimension

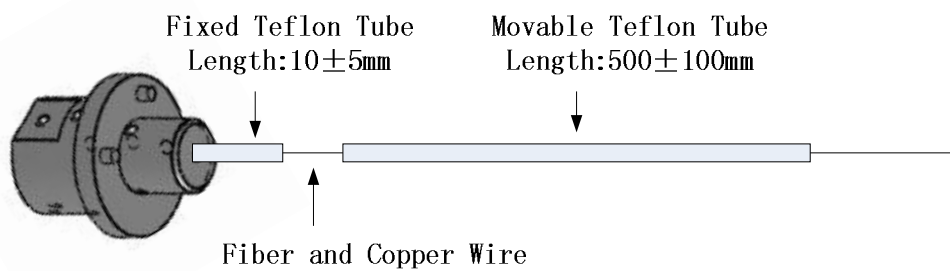
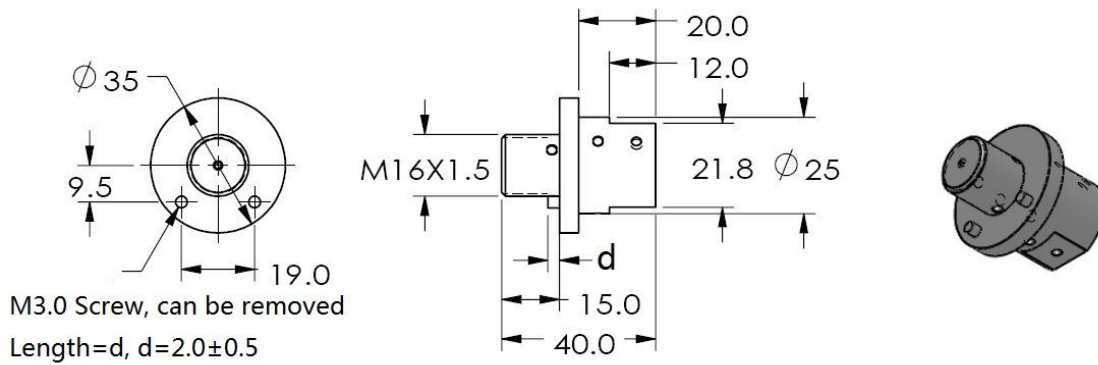
Head size(Protection cap with window plate): FEP = Fiber End Plane

Unit: mm

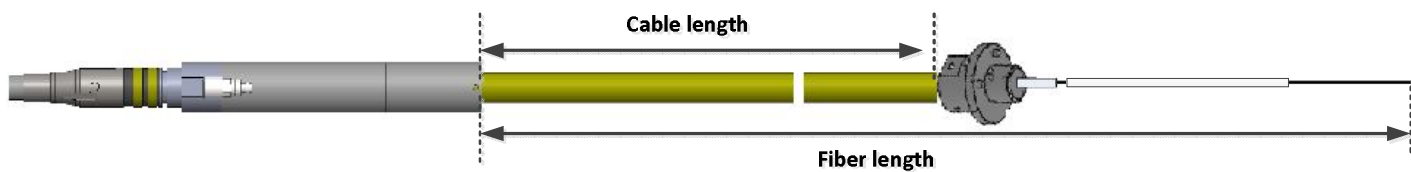


Fix method and hexagonal bolt size:

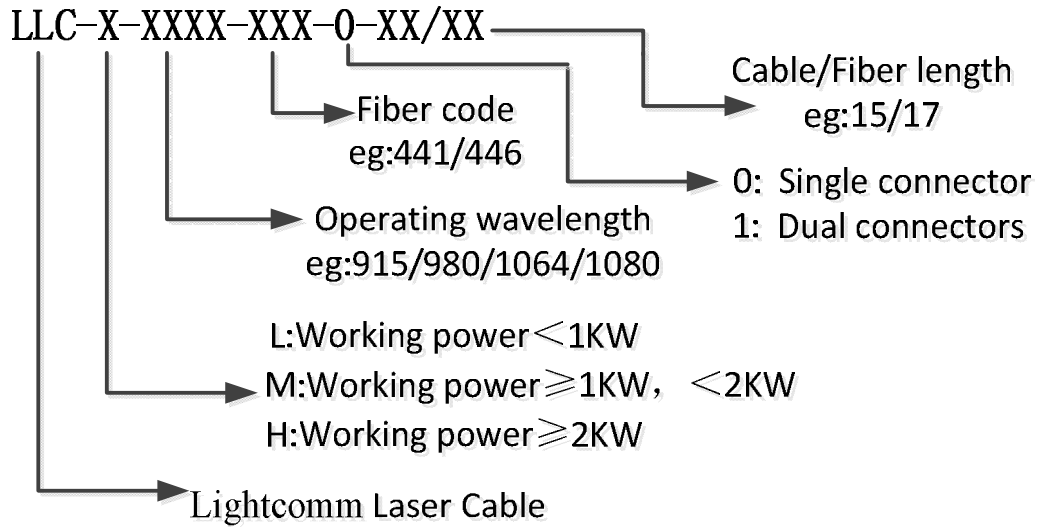
Unit: mm



Cable Length



Ordering Information



Note:

Fiber code: refer to Lightcomm's fiber code list.

Special code: "0" stands for single connector type, "1" stands for symmetrical dual connector type, "2" stands for asymmetrical dual connector type which including one D80 connector.

Cable/Fiber Length: measured from the junction between metal parts and cable, 15/17 stands for total 15m cable length and total 17m fiber length

Cable length tolerance is -0/+0.3m for single connector type; Cable length tolerance is -0/+0.5m for dual connector type.

Example: LLC-H-1064-441-0-15/17