

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

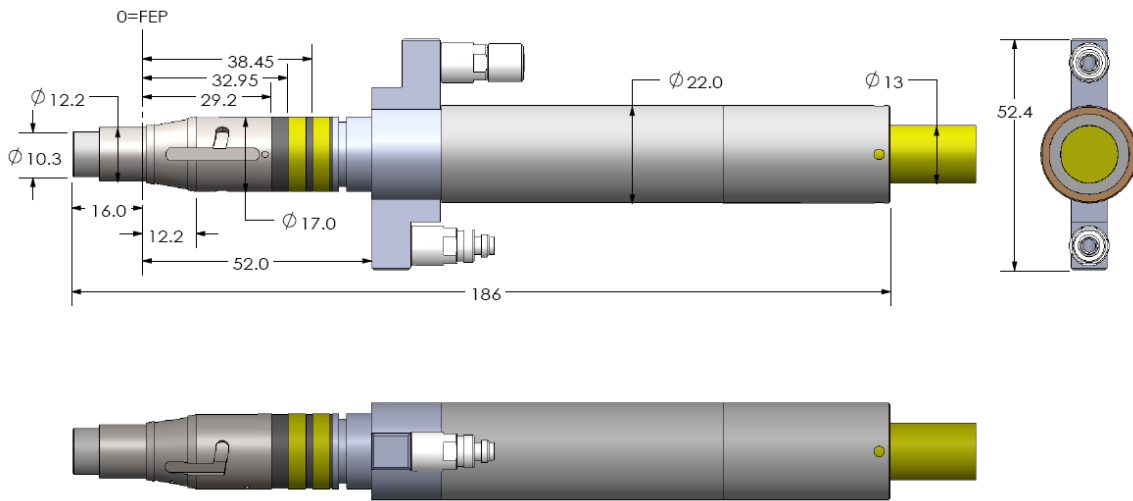
Optical Parameters		Min	Typ.	Max	Unit	Note
1	Operating Wavelength	1034	1064	1094	nm	R≤0.2%
		970	975	980	nm	
		910	915	920	nm	
2	Fiber Core Diameter	10		800	μm	
3	Fiber NA	0.06		0.22	-	
4	Transmission Power Loss			3.0	%	
5	Point Angle			2	mrad	
6	Forward cladding power			100	W	
7	Stripping Efficiency	10			dB	
8	Average Power		5		KW	
9	Peak Power @ 915, 975, 1064nm	@ 10ms pulse		8	KW	
10		@ 1ms pulse		40	KW	
11		@ 50ns pulse		8	MW	
12	Reflection Power @ 915, 975, 1064nm	@ 10s		1.5	KW	
13		@ 50s		1	KW	
14		@ long time		0.6	KW	

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

Mechanical Dimension

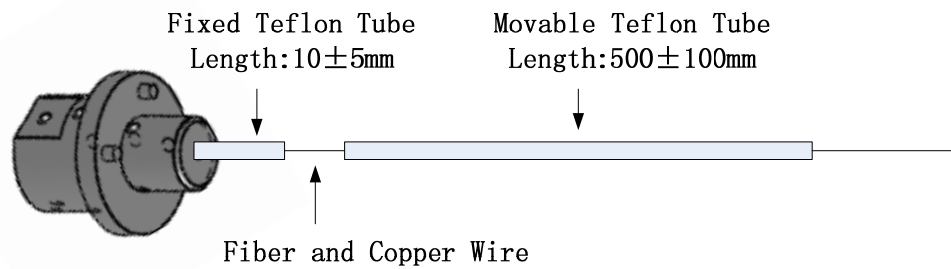
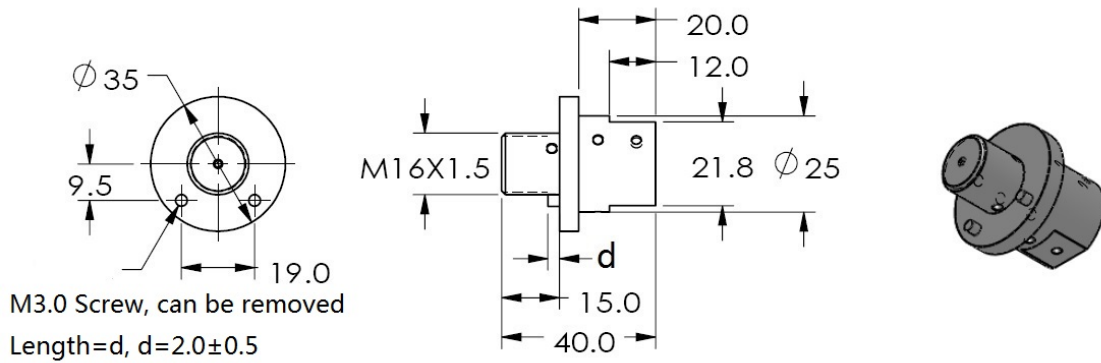
Head size(Protection cap with window plate): FEP = Fiber End Plane

Unit: mm



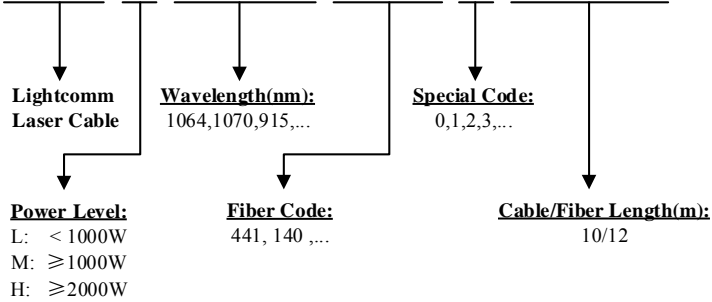
Fix method and hexagonal bolt size:

Unit: mm



Ordering Information

LLC-X-XXXX-XXX-X-XX/XX



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, 10/12 stands for total 10m cable length and total 12m fiber length

Example: LLC-M-1064-441-0-10/12