

Waterless Lightcomm High Power Laser Cable

Description

Waterless Lightcomm High Power Laser Cable (WLC), 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. WLC 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
- Safety Interlock Function Available

Specifications

| Optical Parameters | | | Min | Тур. | Max | Unit | Note |
|--------------------|-------------------------|--------------|------|------|------|------|--------|
| | | | 890 | | 1000 | | |
| 1 | Operating Wavelength | velength | | or | | nm | R≤0.2% |
| | | | 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 | | | | 0.8 | KW | |
| 10 | Peak Power | @ 10ms pulse | | | 8 | KW | |
| 11 | | @ 1ms pulse | | | 40 | KW | |
| 12 | | @ 50ns pulse | | | 8 | MW | |
| 13 | | @ 10s | | | 1.5 | KW | |
| 14 | Reflection Power | @ 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 | \geq 1m (Exposed length from the hexagonal bolt) | | | |
| 4 | Copper Wire Circuit Resistance | 3.3±0.2 KΩ | | | |



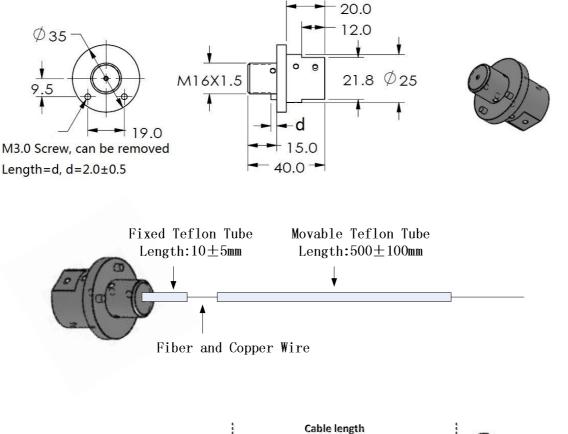
Mechanical Dimension

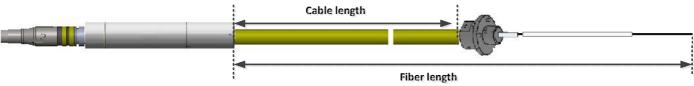
Head size(Protection cap with window plate): FEP = Fiber End Plane

 $\begin{array}{c} 0 = \mathsf{FEP} \\ \phi 12.2 \\ \phi 10.2 \\ \phi 10.2 \\ \hline 12.2 \\ \hline 12.2 \\ \hline 0 \\ \hline 185 \\ \hline \end{array}$

Fix method and hexagonal bolt size:

Unit: mm

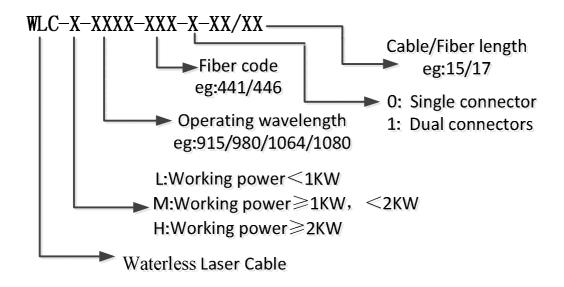




Unit: mm



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: WLC-L-1064-441-0-15/17