



Dragon 30 kW LOE Compatible High Power Laser Cable (Dragon Series)

Rev 11

Description

AFR's Dragon 30kW product provides LOE compatible connector for high power fiber lasers up to 30 kW. Technologies incorporated include cladding mode stripping, indirect water cooling, and safety interlock.

Key Features

- Low Insertion Loss
- High Power Handling
- High Backward Power Handling
- Indirect Water Cooling
- Safety Interlock

Applications

- Fiber Laser
- Fiber Coupling

Specifications

Parameter	Unit	Value
Operation Wavelength	nm	1080 ± 30
Numerical Aperture (NA)	-	≤ 0.22
Max. Transmission Loss of Fiber Core	%	2
Max. Power Handling	kW	30
Max. Peak Power	-	Max. 50 kW @ 1 ms
	-	Max. 1 mW @ 50 ns
Max. Stripping Cladding Power	-	1.5 kW for 10 min
	-	1 kW Continuously
Max. Z-Position Tolerance	μm	± 80
Max. Angular Deviation	mrاد	10

Cooling Water Requirements

Min. Flow Rate	L/min	4.0
Min. Water Pressure	Mpa	0.8
Water Temperature	°C	10 - 45
Water Hose Diameter	mm	ID/OD = 6/8

Others

Mechanical Interface	-	Compatible with the Standard LOE Interface
Type of Cable Gland	-	Metal
Min. Fiber Tensile Load	N	5
Operating Ambient Temperature	°C	+ 5 to + 50
Storage Temperature	°C	- 20 to + 70

