

1.1.2.9 Beam Dumps

Up to 11kW

Features

- Up to 11kW CW
- Water or Fan cooled
- High Power Density
- Ø45-65mm aperture

BDFL500A-BB-50



BDFL1500A-BB-65



BD5000W-BB-50



BD10K-W



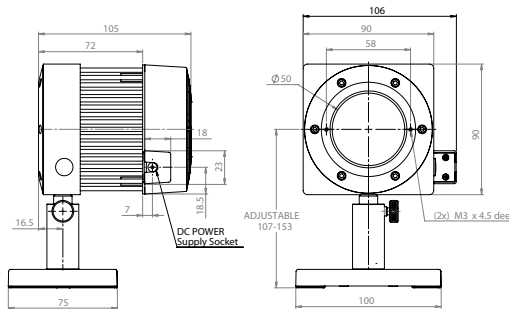
Model	BDFL500A-BB-50	BDFL1500A-BB-65	BD5000W-BB-50	BD10K-W
Use	General purpose High power beam dump			
Absorber Type	Broadband	Broadband	Broadband	Beam Deflector + Broadband
Spectral Range μm	0.19 - 20	0.19 - 20	0.19 - 20	0.8 - 20
Typical Absorption	86% for 600 to 2500nm, 82% for 10.6 μm			
Aperture mm	Ø50mm	Ø65mm	Ø50mm	Ø45mm
Maximum Incident Power	500W	1500W	5000W	11,000W
Maximum Average Power Density	7kW/cm ²	6kW/cm ² at 1000W 1.5kW/cm ² at 1500W	6kW/cm ² at 1000W 3kW/cm ² at 5000W	See note (b) below
Maximum Energy Density J/cm ²	See note (b) below			
<100ns	0.3	0.3	0.3	
1 μs	0.4	0.4	0.4	
0.5ms	5	5	5	
2ms	10	10	10	
10ms	30	30	30	
Cooling	fan	fan	water	water
Minimum Water Flow Rate at Full Power	N/A	N/A	5 liter/min (a)	8 liter/min (a)
Accessories for High Power Sensors	See pages 80-84	See pages 80-84	See pages 80-84	See pages 80-84
Weight kg	0.9	2.4	2.8	4.5
Compliance	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS	CE, UKCA, China RoHS
Version				
Part number	7Z17200	7Z17203	7Z17201	7Z17202

Notes: (a) Water temperature range 18-30°C. Water temperature rate of change <1°C/min. Pressure drop across BD5000W-BB-50 beam dump 0.06MPa. Pressure drop across BD10K-W beam dump 0.1MPa.

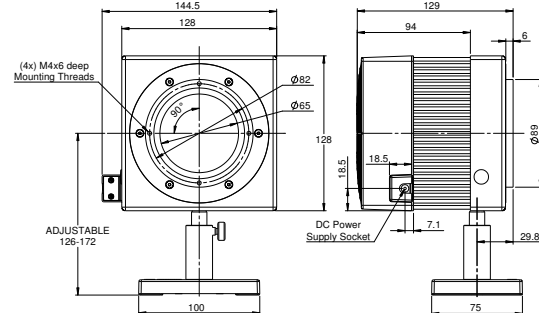
Notes: (b) Max power and energy density

Beam diameter	Max power density	Max energy density	1ms pulse width	3ms pulse width	10ms pulse width
<15mm					
15 - 20mm	10kW/cm ²	30J/cm ²	60J/cm ²	150J/cm ²	100J/cm ²
20 - 40mm	7kW/cm ²	20J/cm ²	40J/cm ²	70J/cm ²	100J/cm ²
40 - 45mm	5kW/cm ²	15J/cm ²	30J/cm ²	70J/cm ²	60J/cm ²

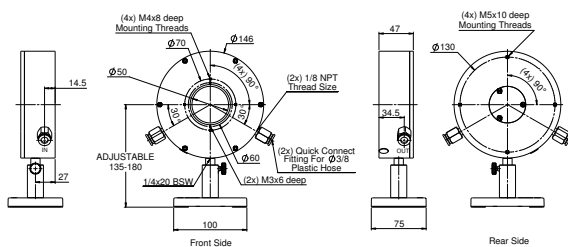
BDFL500A-BB-50



BDFL1500A-BB-65



BD5000W-BB-50



BD10K-W

