# CO2 Laser Tube 80W Model:F2



#### Overview:

F series CO2 laser tube is an upgraded laser machine accessory equipped with a German discharge tube that has been galvanized with a catalyst. Its laser power reaches up to 200W, which is 30% more than traditional laser tubes. This cost-effective classic CO 2 laser tube has a compact size, stable laser power, high-quality laser beam, great beam mode, a small light spot, a fast speed and a service life of up to 6,000 hours.

Model	Length(mm)	Outer Diameter(mm)	Outer Power(W)	Maximum Power(W)	Operating Current	Catalyst
F08	850±20	¢ 80±2	40	50	22	Yes
F0	1050±20	¢ 80±2	50	60	22	Yes
F2	1250±20	¢ 80±2	80	<mark>95</mark>	28	Yes
F4	1450±20	¢ 80±2	100	120	30	Yes
F6	1650±20	¢ 80±2	130	150	30	Yes
F8	1850±20	¢ 80±2	150	165	30	Yes
F10	2050±20	¢ 80±2	170	185	30	Yes

#### <u>Features:</u>

- High Power: Equipped with a German discharge tube galvanized with a catalyst, this upgraded laser cutting machine replacement part has 30% more power than an ordinary laser tube of the same length, with a power up to 200W.
- Reliable Stability: We carry out strict quality control during the firing process of the CO 2laser tube, and ensure they have a guaranteed reliability and stability.
- Long Service Life: Due to the galvanization of the catalyst inside and specially treated electrodes, the discharge tube has a better stability, and a long service life of up to 6,000 hours, ensuring long term reliable operations.

## **Specifications:**

- Cooling Method: Water cooling
- Cooling Liquid: clean water
- Flow Rate: 3-5L/min. (F2 CO 2laser tube has the flow rate of 2-5L/min.)
- Standard Water Temperature:  $10^{\circ}\mathrm{C}\text{-}40^{\circ}\mathrm{C}$

- Ambient Temperature: 2°C -40°C

- Ambient Humidity: 10-60%

Model	Input Current (mA)	Max. Operating Current (mA)	Max Current in Long-term Operation	Service Life	Matched EFR Power Supply	Starting Voltage
F08	22mA	22mA and below	20mA and below	6000 hrs. (operation current ≤20mA)	PS-T60	14KV
F0	22mA	22mA and below	20mA and below	6000 hrs. (operation current ≤20mA)	PS-T60	16KV
F2	28mA	28mA and below	25mA and below	6000 hrs. (operation current ≤25mA)	PS-80, PS- ES80, PS- F80	19KV
F4	30m <i>A</i>	30mA and below	28mA and below	6000 hrs. (operation current ≤28mA)	PS-100, PS-ES100, PS-F100	24KV
F6	30m <i>A</i>	30mA and below	28mA and below	6000 hrs. (operation current ≤28mA)	PS-150, PS-ES150, PS-F150	28kv
F8	30m <i>A</i>	30mA and below	28mA and below	6000 hrs. (operation current ≤28mA)	PS-150, PS-ES150, PS-F150	30KV
F10	30m <i>A</i>	30mA and below	28mA and below	6000 hrs. (operation current ≤28mA)	PS-150, PS-ES150, PS-F150	30KV

### Performance and Applications:

- With a small light spot, stable performance and service life of 6,000 hours, EFR's 200W CO 2laser tube can be applied to different laser machining equipment, including laser engraving machines, laser cutting machines, laser marking machines and laser die cutting machines.
- We have supplied a number of laser equipment accessories for different laser engraving machine and laser cutting machine manufacturers. As they are popular among customers, the CO 2laser tube is widely used in laser cutting, laser engraving, and laser marking in advertising, packaging, craftwork processing, decorative building materials and leather product industries.
- -Engraving: F2 and F4 CO 2 laser tubes have excellent performances in laser engraving, under preionization conditions and a current of 5mA. (F2 CO 2 laser tubes require a 4mA current). Our laser tubes can carry out high-frequency pulse engraving.