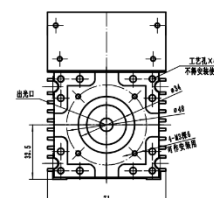
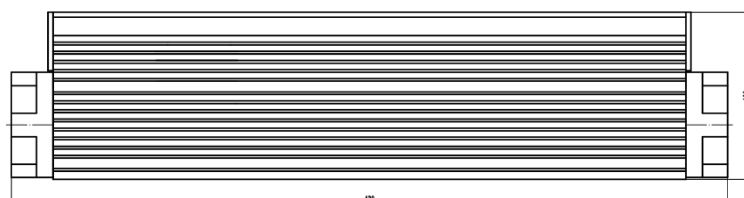
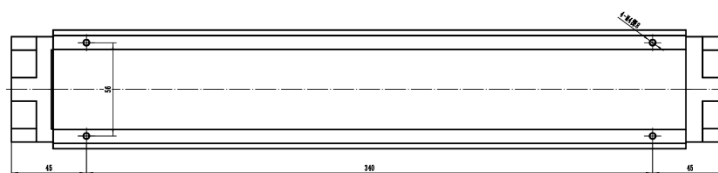
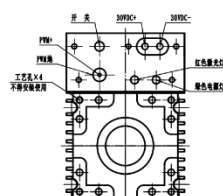


10W – CR12 RF CO2 Laser

The CR12 RF CO2 laser provides 12W output power, adopts sealed waveguide and integrated RF power design, and has high product reliability. It can work continuously for 7×24 hours in harsh industrial environments. The CR12 laser has excellent beam quality and power stability. The laser wavelength ranges from 9.3 to 10.6μm, and can be configured with air cooling and water cooling. These features make it the first choice for high-performance laser marking and engraving systems, and it only requires low use and maintenance costs. The CR12 laser is ideal for laser processing of many materials, including paper, plastic, wood, and thin leather.



CR12 Specification

MODEL	CR12	CR12i
Wavelength (μm)	10.55 - 10.63 μm	9.24 - 9.35 μm
Output Power (W) ^①	> 12 W	
Power Stability (%) ^{②③}	< ±6%	
Mode Quality (M ²)	< 1.2	
Beam Ellipticity	< 1.2	
Beam Diameter(1/e ²)	3.5 mm	
Full-Angle Beam Divergence (mrad)	< 4	
Light Outlet Height (mm)	32.5 mm	
Typical Polarization (parallel to baseplate)	> 50:1	
Pulse Frequency (kHz)	0 - 20 kHz	
Duty Cycle Limit (%)	0 - 100%	
Weight	4.1 kg(Fan) / 4.3 kg(Water)	
Dimensions (L x W x H)	430 × 71 × 100 mm(Fan) / 460 × 71 × 100 mm(Water)	
Cooling	Fan / Water	
Heat Load (W)	< 210 W	
Input Power		
DC Input Voltage (VDC)	30 VDC	
DC Input Current (A)	7 A	
Environment Condition		
Maximum Case Temperature	< 60°C	
Environment Temperature	5°C ~ 40°C	
Altitude	< 2000m	
Humidity	< 95%, Non-Condensing	
Shipping / Storage Environment	-10°C ~ 60°C, Non-Condensing	
Coolant		
Dynamic Coolant Flow Rate (l/min.)	4L / min	
Coolant Temperature Range	20 - 25°C	
Coolant Maximum Pressure (kPa)	0.6 MPa	

The above specifications are subject to change without prior notice.

① Measured at temperature of 25°C. For every 1°C increase above 25°C, the output power decreased by approximately 1%

② Power Stability definition: At a constant water temperature, $\pm (P_{max}-P_{min})/(2P_{max})$

③ Power Stability measurement conditions: At normal working conditions, with a constant duty cycle, after 10 minutes of laser output