

## **ALE 030096**

Production Proven 24/7  
CO<sub>2</sub> Laser  
Cutting Head

### *Key Features*

- CO<sub>2</sub> laser power: up to 4 kW
- Clear aperture: 19 mm
- Crash protector
- Cartridge style lens holder
- X-Y centering
- Gas manifold with 10 mm fine focus adjustment
- Compact and lightweight modular design
- Compatible with a variety of beam expanders
- Upgradable to be used with fiber lasers



### *Typical Applications*

Automotive	Aerospace	Electronics
Medical Device	Art&Crafts	Fabrics
Engineering	Plastics	and many more...

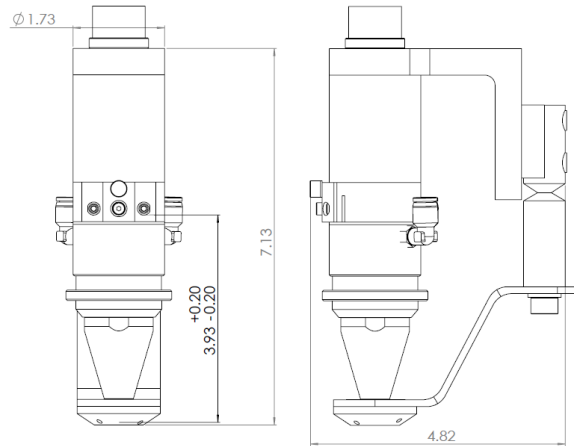
**American Laser Enterprises, LLC** has decades of combined experience in optical, electrical, and mechanical design of laser applications and systems. We pride ourselves on the ability to provide our clients with specialized services from application engineering and system prototyping to large quantity component production orders.

We offer a family of laser cutting heads designed to work with CO<sub>2</sub>, Nd:YAG, and Fiber lasers. It has served a variety of industries, including automotive, aerospace, and defense. Our cutting heads come in various configurations, are versatile and fully customizable to your application.



## Specifications

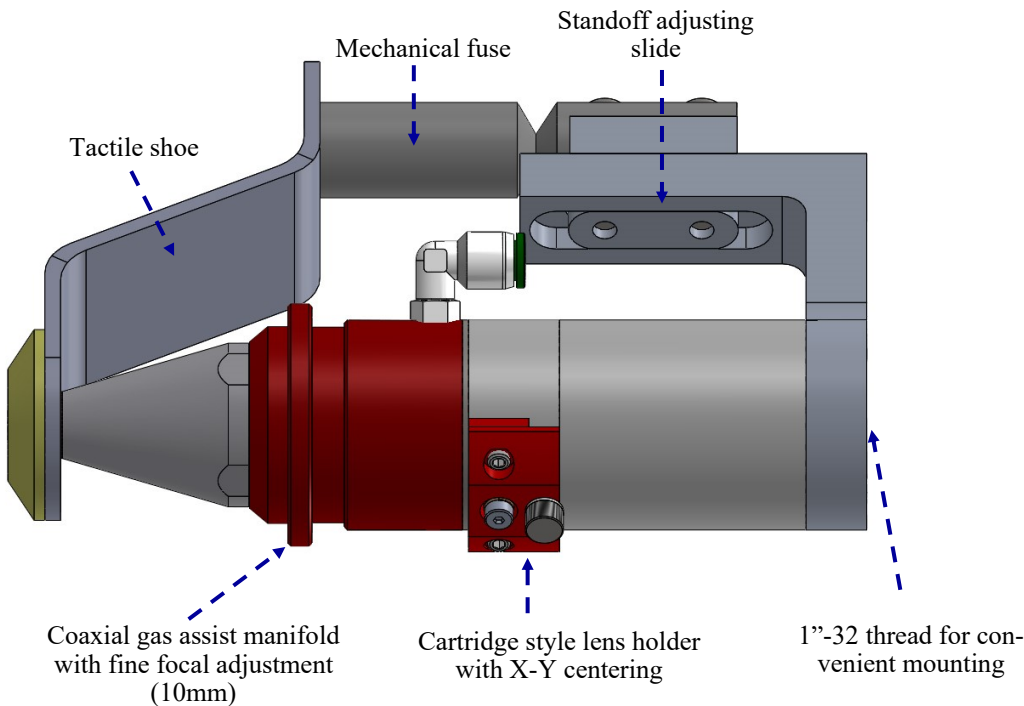
↳ <b>Dimensions * (WxDxH)</b>	8.3x2.25x6.8 (in) 211x57x173 (mm)
↳ <b>Weight</b>	≥ 6.5 lb (3 kg)
↳ <b>Laser Power</b>	up to 4 kW
↳ <b>Laser Wavelength</b>	8- 12 μm
↳ <b>Focal Distance</b>	63 to 250 mm
↳ <b>Clear Aperture</b>	19 mm



CAD model is available for [download](#)

This high-power CO<sub>2</sub> cutting head provides a versatile solution to laser cutting of a variety of materials including metals, wood, plastics, or fabric. The cartridge style optics holders allow for an in-the-field service or replacement with standard off-the-shelf optics. Due to a modular design, this processing head is customizable to many cutting applications. A mechanical fuse device prevents damage in the event of a crash. An adjustable vernier gas manifold with a precision scale provides repeatable focus settings and immediate focal changes. Requiring minimal maintenance, this reliable cutting head offers precision, consistency, high repeatability and productivity at a low price.

## Standard Features



- Gas Assist
- Crash Protection
- 10 mm manual focal adjustment
- Modular Components
- Aluminum Construction
- No Special Tools Required
- Beam Expanders Available
- High Quality Optics

