

Beam Expander

High Quality Optics Optics for YAG LASER made in Japan

GEO MATEC

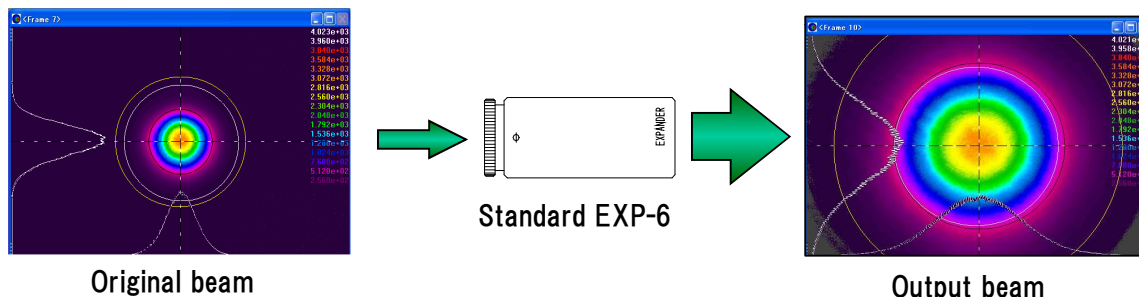
GEOMATEC beam expander are used in several market such as simple laser marking system and semiconductor processing devices because of high quality output beam and convenient pricing. All fixed beam expanders have same housing size regardless of different expansion ratio and wavelength.

Features

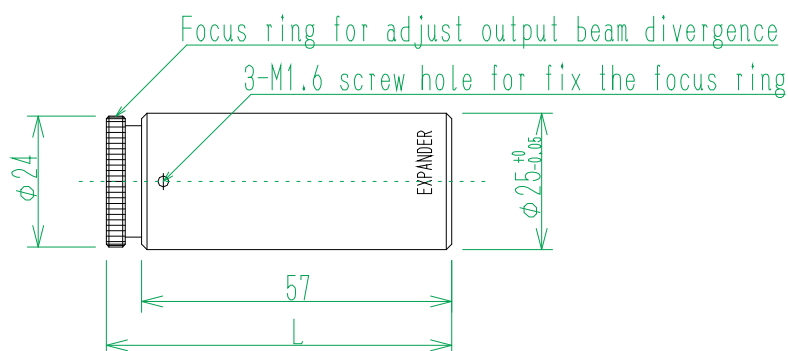
- Highly transmittance (>96% guarantee)
- Very compact and unified housing size (ϕ 25mm)
- Easy control for output beam divergence
- Lower beam shape error
- Custom designed model are available



Beam profile after beam expander



Dimensions



Specifications

Expansion Ratio		×1.5	×2	×3	×4	×6	×8	×10
1064 nm	Model	EXP-1.5W	EXP-2W	EXP-3	EXP-4	EXP-6	EXP-8	EXP-10
	Housing length	63.8 mm	63.4 mm	62.4 mm	63.5 mm	63.5 mm	65.0 mm	64.8 mm
532 nm	Model	EXP-1.5W	EXP-2W	EXP(SHG)-3	EXP(SHG)-4	EXP(SHG)-6	EXP(SHG)-8	EXP(SHG)-10
	Housing length	62.7 mm	62.5 mm	61.2 mm	62.3 mm	62.2 mm	63.8 mm	63.9 mm
355 nm	Model	-	-	EXP(THG)-3	EXP(THG)-4	EXP(THG)-6	EXP(THG)-8	EXP(THG)-10
	Housing length	-	-	63.8 mm	63.6 mm	63.7 mm	63.3 mm	63.9 mm
Maximum input beam diameter		ϕ 8.0 mm	ϕ 8.5 mm	ϕ 6.0 mm	ϕ 5.0 mm	ϕ 3.0 mm	ϕ 2.0 mm	ϕ 1.8 mm
Maximum output beam diameter		ϕ 12.0 mm	ϕ 17.0 mm	ϕ 18.0 mm	ϕ 20.0 mm	ϕ 18.0 mm	ϕ 16.0 mm	ϕ 18.0 mm
Transmittance		>96%						

Zoom Expander

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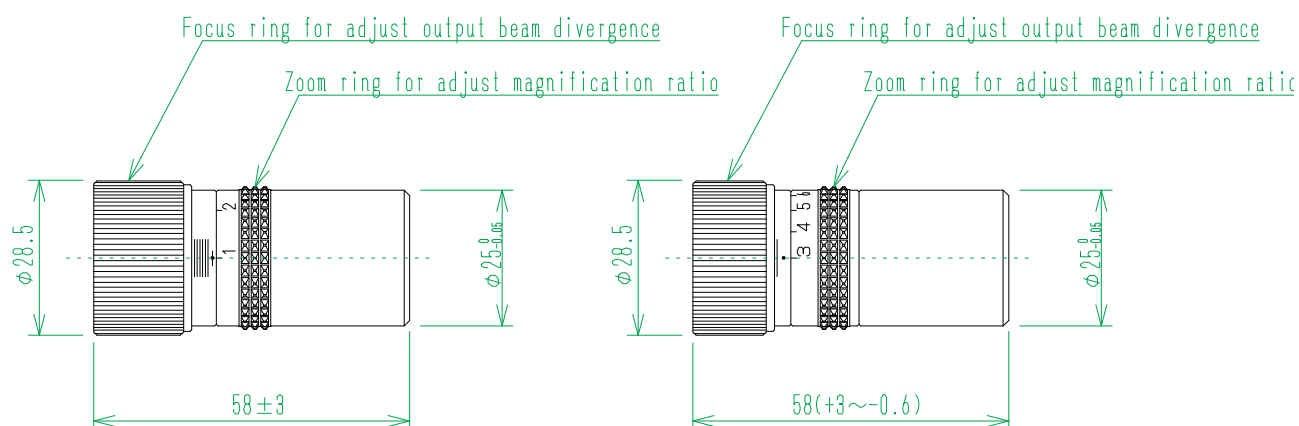
GEOMATEC zoom expanders are very compact design which has wide adjustable range for output beam divergence. Requested detail output expansion ratio and beam divergence are changeable. Isolated each function part enables to allow sensitive adjustment.

Features

- Very functionable design despite of extreme compact housing
- Wide adjustable range for output beam divergence (0~10mrad)
- Expansion ratio can change linearly



Dimensions



Specifications

EPZ-130

EPZ-37C

Expansion ratio	×1~×3	×3~×7
Model	EPZ-130	EPZ-37C
Wavelength	1064 nm	
Input Beam Diameter	φ 8.0 mm (1×) ~ φ 3.5 mm (3×)	φ 4.5 mm (3×) ~ φ 1.8 mm (7×)
Output Beam Diameter	φ 8.0 mm (1×) ~ φ 10.5 mm (3×)	φ 13.5 mm (3×) ~ φ 12.6 mm (7×)
Transmittance	>96%	