

Beam Expander

HIGH PRECISION Optics, made in Japan.

GEO MATEC

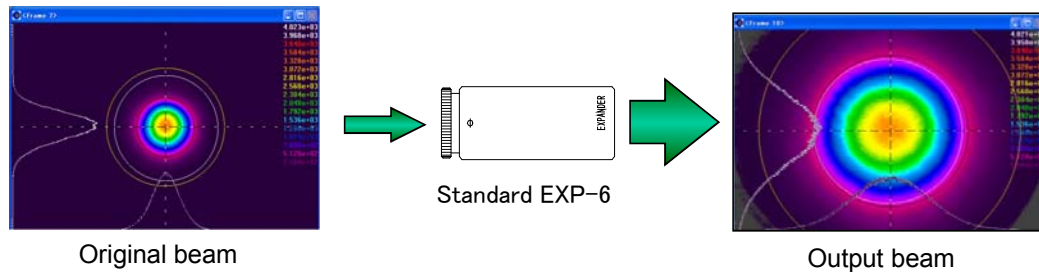
GEOMATEC beam expanders are used in many material processing markets including laser marking systems and semiconductor processing devices because of the high quality output beam and attractive pricing. All the fixed beam expanders have the same housing size regardless of the expansion ratio and wavelength.

Features

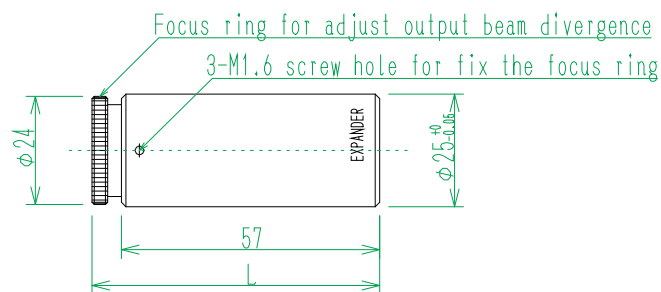
- Highly transmittance (>96% guaranteed)
- Very compact unified housing size ($\phi 25\text{mm}$)
- Easy adjustment of output beam divergence
- Very low beam shape distortion
- Custom designed models are available



Beam profile after beam expande!



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		$\phi 8.0\text{ mm}$	$\phi 8.5\text{ mm}$	$\phi 6.0\text{ mm}$	$\phi 5.0\text{ mm}$	$\phi 3.0\text{ mm}$	$\phi 2.0\text{ mm}$	$\phi 1.8\text{ mm}$
Maximum output beam diameter		$\phi 12.0\text{ mm}$	$\phi 17.0\text{ mm}$	$\phi 18.0\text{ mm}$	$\phi 20.0\text{ mm}$	$\phi 18.0\text{ mm}$	$\phi 16.0\text{ mm}$	$\phi 18.0\text{ mm}$
Transmittance		>96%						

Zoom Expander

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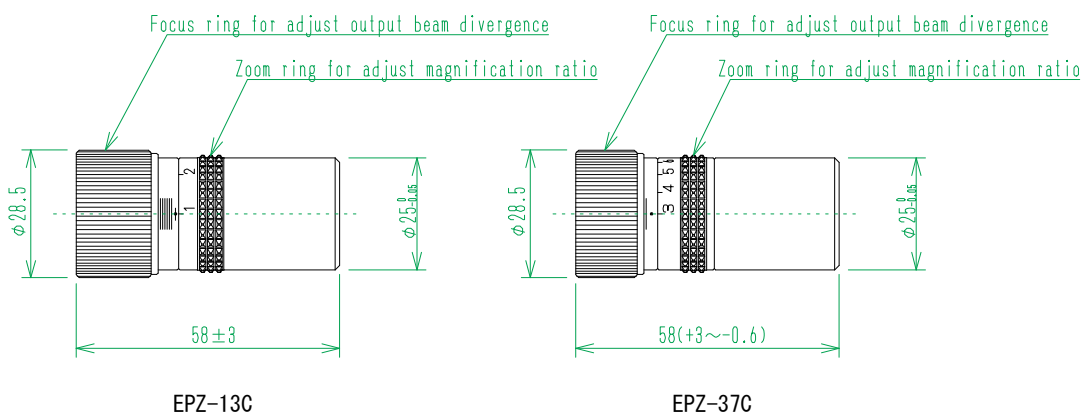
GEOMATEC zoom expanders are a very compact design but have wide range of adjustment. Precise adjustment of zoom and beam divergence. Controls are isolated so sensitive adjustment of one function does not interact with the other.

Features

- Very functional design with a compact housing
- Wide adjustable range for output beam divergence (0~10mrad)
- Expansion ratio changes linearly



Dimensions



Specifications

Expansion ratio	×1~×3	×3~×7
Model	EPZ-13C	EPZ-37C
Wavelength	1064 nm	
Input Beam Diameter	φ8.0 mm (1×) ~ φ3.5 mm (3×)	φ4.5 mm (3×) ~ φ1.8 mm (7×)
Output Beam Diameter	φ8.0 mm (1×) ~ φ10.5 mm (3×)	φ13.5 mm (3×) ~ φ12.6 mm (7×)
Transmittance	>96%	

Ordering and technical information



PRECISION LASER SCANNING

【Produced by】
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