

Beam Expander 1x-4x Steadfast

Very Robust Fused Silica Systems

- Lockable optical elements
- High beam pointing stability (< 1 mrad)
- Diffraction-limited performance over the whole range of magnifications
- Novel mechanical design

	1030-1080 nm	515-540 nm	355 nm
GDD ¹⁾ :	134 fs ²	547 fs ²	972 fs ²
LIDT coating pulsed; CW ²⁾ :	5.0 J/cm ² * (τ /[ns]) ^ 0.30; 5.0 MW/cm ²	2.5 J/cm ² * (τ /[ns]) ^ 0.35; 2.5 MW/cm ²	1.0 J/cm ² * (τ /[ns]) ^ 0.40; 1.0 MW/cm ²
LIDT system pulsed; CW ²⁾ :	1.00 J/cm ² * (τ /[ns]) ^ 0.30; 1.00 MW/cm ²	0.50 J/cm ² * (τ /[ns]) ^ 0.35; 0.50 MW/cm ²	0.20 J/cm ² * (τ /[ns]) ^ 0.40; 0.20 MW/cm ²

Zoom factor	1030-1080 nm	515-540 nm	355 nm
1x	4.0 mm	4.0 mm	4.0 mm
2x	4.0 mm	4.0 mm	4.0 mm
3x	4.0 mm	4.0 mm	4.0 mm
4x	4.0 mm	4.0 mm	4.0 mm
Order Number:	739795*	739797*	739798*

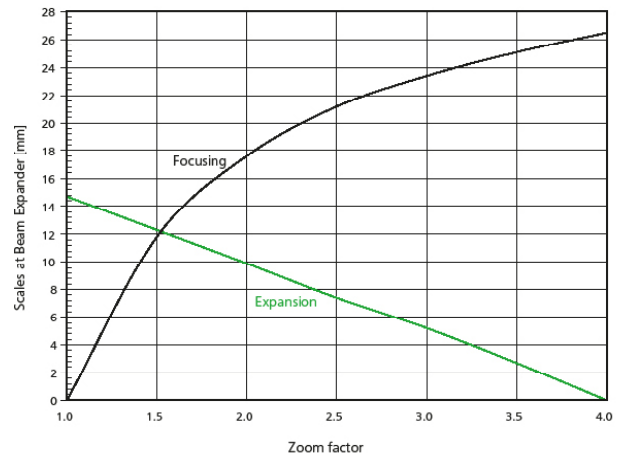
* Please note: Order number was changed. Previous one was 582823, 593355 and 593354.

¹⁾ Group delay dispersion | ²⁾ See technical note

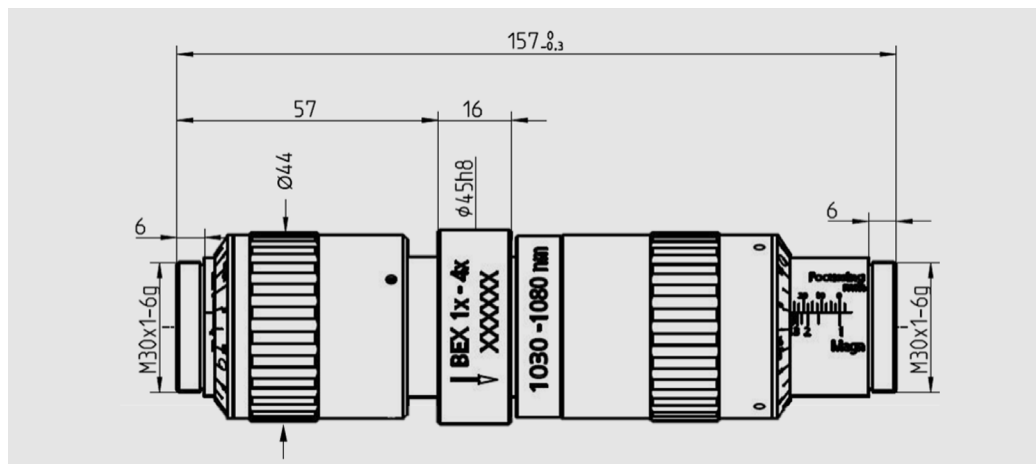
³⁾ Recommended maximum diameter of entrance pupil

Specification

Materials		
Entrance elements:	Fused silica	
Exit elements:	Fused silica	
Transmission:	≥ 97 %	
Beam pointing stability:	≤ 1 mrad	
Mounting Ø:	45.0 (+0.0/-0.04) mm or M30x1 mounting threads at both entrance and exit	
Weight:	0.37 kg	
Magnification	Expansion scale	Focusing scale
1x	14.8 mm	0.0 mm
4x	0.0 mm	26.5 mm



Fine adjustment of the zooming and focusing scale by the combination of mm scales and vernier scales.



Pending Design in
DE 40 2016 001 282.4

Patent
DE 10 2015 009 124.7

Granted Patent
DE 10 2015 009 124

Patent pending CN-,
CZ-, KR-, US-Appl.

Same dimensions for
all wavelength