

Beam Expander 2x-10x

Large Magnification Range



- Diffraction-limited performance for all magnifications
- No internal foci
- No internal reflections in elements for all magnifications

| | 1030-1080 nm | 515-540 nm | 355 nm |
|---|---|---|---|
| GDD ¹⁾ : | 288 fs ² | 1070 fs ² | 1640 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 ⁴⁾ |
| LIDT system pulsed; CW ²⁾ : | 0.50 J/cm ² * (τ /[ns]) [^] 0.30; 0.50 MW/cm ² | 0.25 J/cm ² * (τ /[ns]) [^] 0.35; 0.25 MW/cm ² | 0.10 J/cm ² * (τ /[ns]) [^] 0.40; 0.10 MW/cm ² ⁴⁾ |

| Zoom factor | Ø entrance pupil ³⁾ | | |
|-------------|--------------------------------|------------|--------|
| | 1030-1080 nm | 515-540 nm | 355 nm |
| 2x | 8.0 mm | 8.0 mm | 6.0 mm |
| 3x | 8.0 mm | 7.0 mm | 6.0 mm |
| 4x | 7.0 mm | 6.0 mm | 5.0 mm |
| 5x | 6.0 mm | 5.0 mm | 4.5 mm |
| 6x | 5.0 mm | 4.0 mm | 4.0 mm |
| 7x | 4.0 mm | 4.0 mm | 3.5 mm |
| 8x | 3.5 mm | 3.5 mm | 3.0 mm |
| 9x | 3.2 mm | 3.2 mm | 2.7 mm |
| 10x | 3.0 mm | 3.0 mm | 2.2 mm |

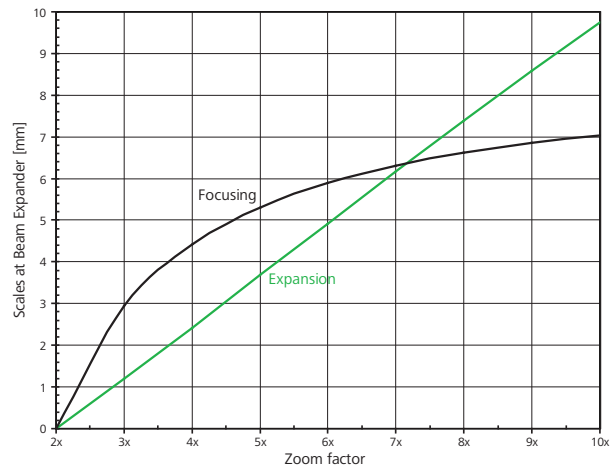
Order Number: **017052-001-26** **017052-201-26** **017052-401-26**

¹⁾ Group delay dispersion | ²⁾ See technical note
³⁾ Recommended maximum diameter of entrance pupil
⁴⁾ For UV lasers, the LIDT values are valid for pulse durations > 10 ps. For shorter pulses please be advised to test.

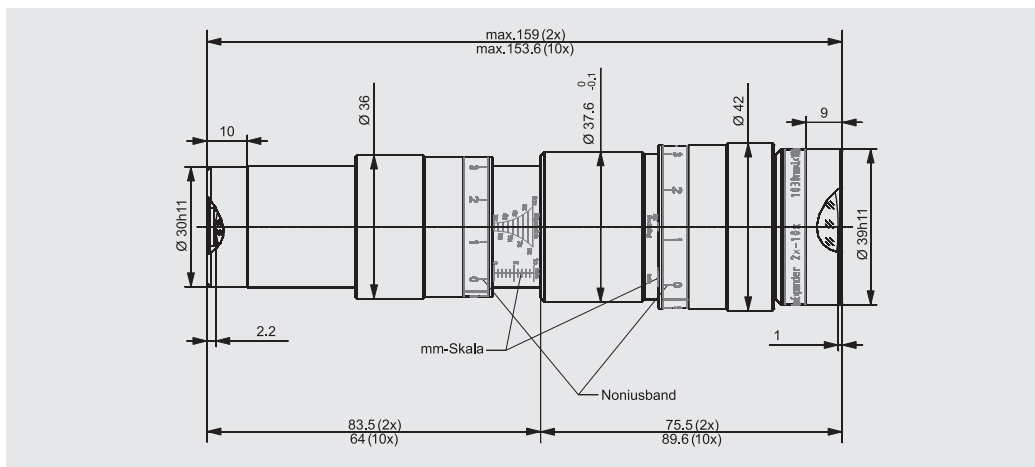
Specification

| Materials | |
|--------------------|---|
| Entrance elements: | Fused silica |
| Exit elements: | Highly laser-resistant materials (532 nm and 1030...1080 nm) or fused silica (355 nm) |
| Transmission: | ≥ 96 % |
| Mounting Ø: | 37.6 (0/-0.1) mm |
| Weight: | 0.23 kg |

| Magnification | Expansion scale | Focusing scale |
|---------------|-----------------|----------------|
| 2x | 0.0 mm | 0.0 mm |
| 10x | 9.7 mm | 7.1 mm |



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



Registered Design in EU 000952049
 Granted Patent DE 10 2009 025 182

Same dimensions for all wavelength versions.