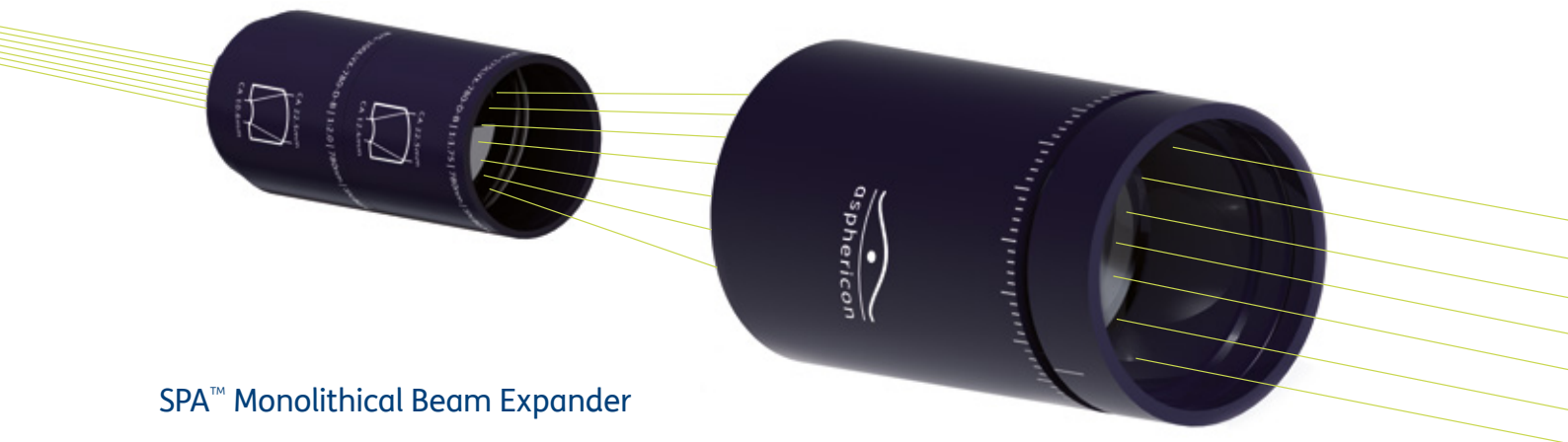


asphericon SPA™ – Standard Precision Aspheres

# Monolithical Beam Expander Waveλdapt

## Next Level of Beam Expansion

Diffraction limited beam expansion for wavelengths from 500 nm to 1600 nm.



### SPA™ Monolithical Beam Expander

#### Key Benefits:

- = Monolithical Beam Expander with just one aspherical lens for the highest level of precision
- = Available with expansions of 1.5, 1.75, 2.0
- = Possibility of combining up to five expanders for up to 32 times beam expansion and over 60 intermediate stages
- = Completely diffraction-limited with up to five expanders – individually measured and guaranteed by an original asphericon certificate
- = Delivered from stock in a practical protective case
- = RoHS compliant



### SPA™ Waveλdapt

#### Key Benefits:

- = Optimized adaptation to all wavelengths [500 nm to 1600 nm]
- = Combinable with up to five monolithical beam expanders – completely diffraction-limited
- = Expansion of 1.0x to fit all set-ups
- = Easy and flexible handling
- = Compensation of divergent incoming beams up to 1 mrad

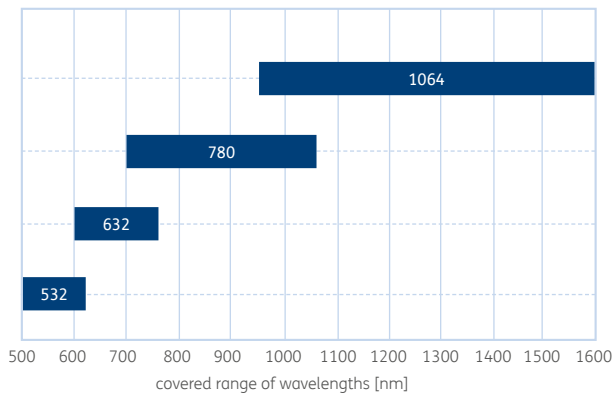
#### Lens Description

	Product Code	Expansions	Input Apertures [mm]	Output Apertures [mm]
SPA™ Waveλdapt	B25-100LVX-... <sup>+</sup> -D	1.0	22.5	22.5
SPA™ Beam Expander	B25-150LVX-... <sup>+</sup> -D	1.5	14.7	22.5
SPA™ Beam Expander	B25-175LVX-... <sup>+</sup> -D	1.75	12.4	22.5
SPA™ Beam Expander	B25-200LVX-... <sup>+</sup> -D	2.0	10.6	22.5

\*532, 632, 780, 1064 [nm]

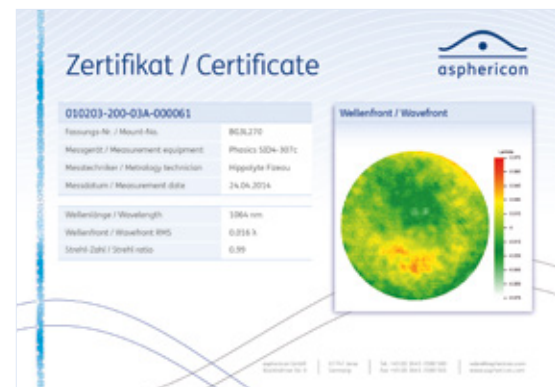
### Wavelength range

Covered range of wavelengths for all different SPATM Beam Expander sets when using SPATM Waveλdapt.



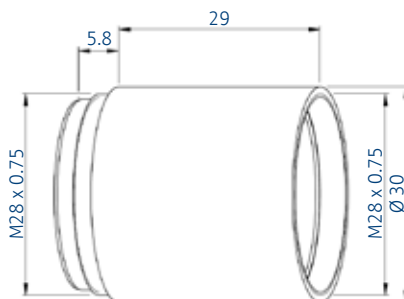
### Certificate

For each individual element a certificate based on wave front measurement guarantees diffraction limited performance.



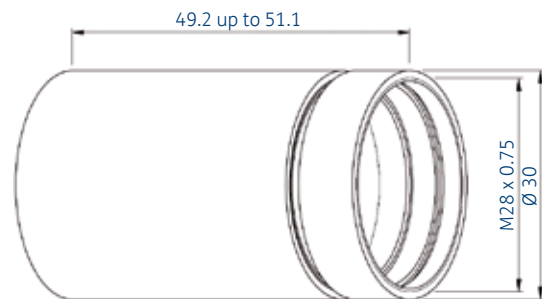
### Technical dimensions [mm]

SPATM Monolithical Beam Expander



### Technical dimensions [mm]

SPATM Waveλdapt



### Cascade combinations

Selected expansion steps and the combination of Beam Expanders required.

	1.5	1.75	2.0
3.00x expansion	1	-	1
5.25x expansion	1	1	1
8.00x expansion	-	-	3
10.5x expansion	1	1	2
16.0x expansion	-	-	4
21.0x expansion	1	1	3

### SPATM Monolithical Beam Expander Configurator

Easily find your cascade combination by using the online configurator.

- ≡ Calculate combinations near your target expansion
- ≡ Calculate combinations by a given number of lenses
- ≡ Calculate the required lenses to get a target expansion

Download your configurator at:

[www.monolithical-beamexpander.com](http://www.monolithical-beamexpander.com)