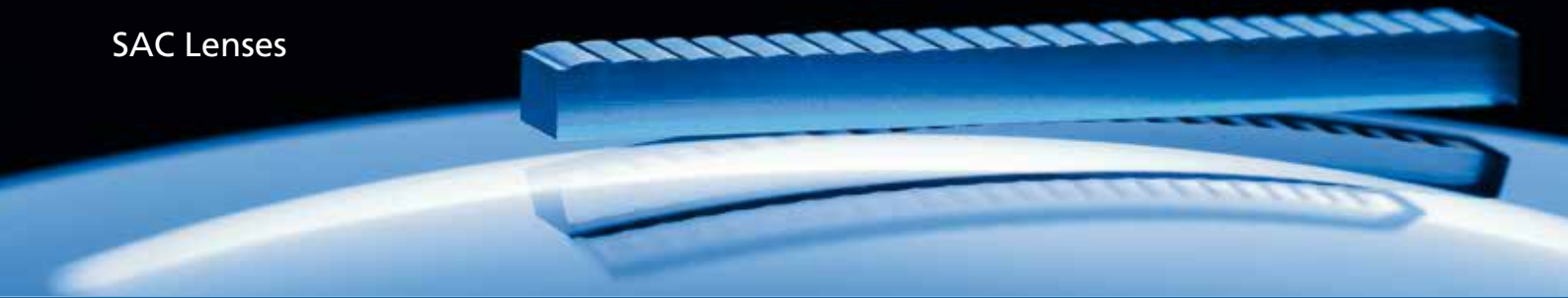


## SLOW-AXIS COLLIMATION

### SAC Lenses



#### GENERAL DESCRIPTION

---

The Slow-Axis Collimation optic is a highly efficient means of forming the beam in the slow-axis of diode lasers. It is available either as a monolithic array of cylindrical lenses or as a single lens. All of our optics are produced using high-quality optical glass. The exacting product tolerances guarantee efficient collimation of the light from all emitters and compatibility with laser bars and stacks.

#### ADVANTAGES

---

- transmission up to 99%
- minimized dead zones
- highest level of precision and uniformity
- customized solutions with small NRE-costs
- highly economical manufacturing process for large quantities
- reliable and stable quality

#### PRODUCT SPECTRUM

---

In order to offer the best solution for your application INGENERIC provides a broad spectrum of Slow-Axis Collimation optics from the shelf. With respect to length and height the lenses can be tailored to your specific needs. For details please refer to the technical specifications on the next side.

#### SERVICE AND OPTIONS

---

INGENERIC also designs, develops and manufactures customized SAC lenses, which have been optimized to meet the specific requirements of your application.

- customized numerical aperture, focal length, back focal length and pitch
- customized length and height
- customized coating
- bottom taps, side taps or shoulders for mounting
- single SACs for collimation of single emitters

#### QUALITY

---

We operate an extended quality control policy. By testing the lenses with state-of-the-art metrology equipment we ensure superior performance of the SACs within the application at your site. In conjunction with our sophisticated manufacturing technology, this guarantees the production of optics with unsurpassed collimation characteristics.

## Slow-Axis Collimation

### SAC Lenses

#### SPECIFICATION DATA

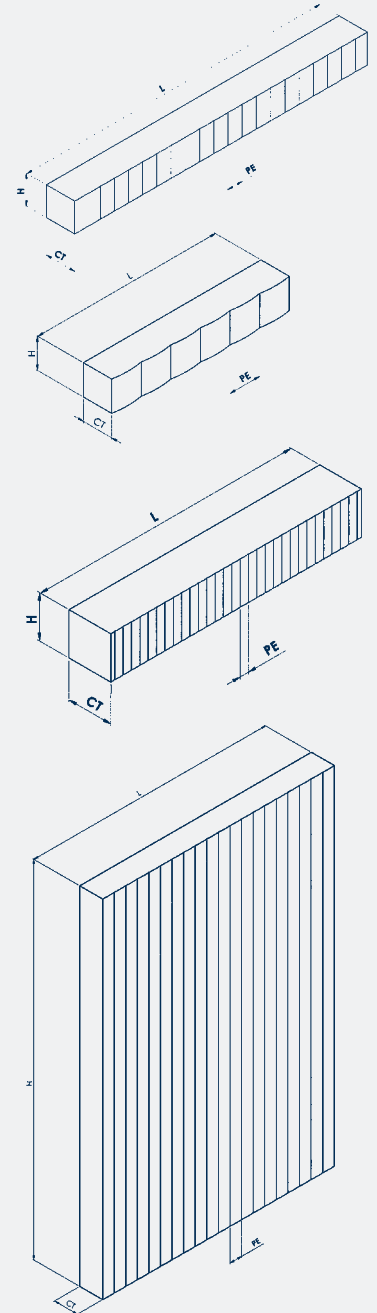
Lens Type	NA	EFL [mm]	PE [mm]	L* [mm]	H** [mm]	CT [mm]
<b>Pitch</b>				<b>200 µm</b>		
SAC-010-200	0.10	1.00	0.20	tbd.	tbd.	1.00
<b>Pitch</b>				<b>400 µm</b>		
SAC-015-400	0.13	1.50	0.40	tbd.	tbd.	1.00
SAC-029-400	0.07	2.90	0.40	tbd.	tbd.	1.00
<b>Pitch</b>				<b>498 µm</b>		
SAC-028-498	0.07	2.80	0.49	tbd.	tbd.	1.00
<b>Pitch</b>				<b>500 µm</b>		
SAC-022-500	0.11	2.20	0.50	tbd.	tbd.	1.00
SAC-026-500	0.09	2.60	0.50	tbd.	tbd.	1.00
SAC-030-500	0.08	3.00	0.50	tbd.	tbd.	1.00
SAC-033-500	0.07	3.30	0.50	tbd.	tbd.	1.00
SAC-035-500	0.07	3.50	0.50	tbd.	tbd.	1.00
SAC-037-500	0.07	3.70	0.50	tbd.	tbd.	1.00
SAC-039-500	0.07	3.90	0.50	tbd.	tbd.	1.00
SAC-040-500	0.06	4.00	0.50	tbd.	tbd.	1.00
SAC-042-500	0.06	4.20	0.50	tbd.	tbd.	1.00
SAC-045-500	0.05	4.50	0.50	tbd.	tbd.	1.00
<b>Pitch</b>				<b>710 µm</b>		
SAC-058-710	0.05	5,8	0.71	tbd.	tbd.	1.00
<b>Pitch</b>				<b>1000 µm</b>		
SAC-035-1000	0.14	3.50	1.00	tbd.	tbd.	1.00
SAC-060-1000	0.08	6.19	1.00	tbd.	tbd.	1.00
SAC-069-1000	0.07	6.90	1.00	tbd.	tbd.	1.00
SAC-073-1000	0.07	7.30	1.00	tbd.	tbd.	1.00
SAC-080-1000	0.06	8.25	1.00	tbd.	tbd.	1.00
SAC-100-1000	0.05	10.30	1.00	tbd.	tbd.	1.00

We further offer SACs with an EFL up to 29.00 mm and a PE up to 3500 µm. Please contact our service team to learn more.

#### Special Solutions / Smile-Compensating SACs

Upon request, pointing-errors of the fast-axis can be compensated with an SAC  
Precondition: Smile-profile of the bar has to be known

Lens Type	NA	EFL [mm]	PE [mm]	L [mm]	H [mm]	CT [mm]	compensated smile-error (mrad)
SAC-035-1000-Smile 1	0.14	3.50	1.00	tbd.	tbd.	1.00	1.00



NA: Numerical aperture  
EFL: Effective focal length @ 808 nm  
BFL: dependent on used FAC  
PE: Pitch of emitter  
Coating: Standard AR 780-1020 nm

Transmission: > 99%  
L\*: Length 1.0...14.0mm (+/-0.10 mm) according to customer specification  
H\*\*: Height 0.5...15.0 mm (+/- 0.02 mm)  
CT: Center Thickness (+/- 0.02 mm)