

LINOS Beam Expander

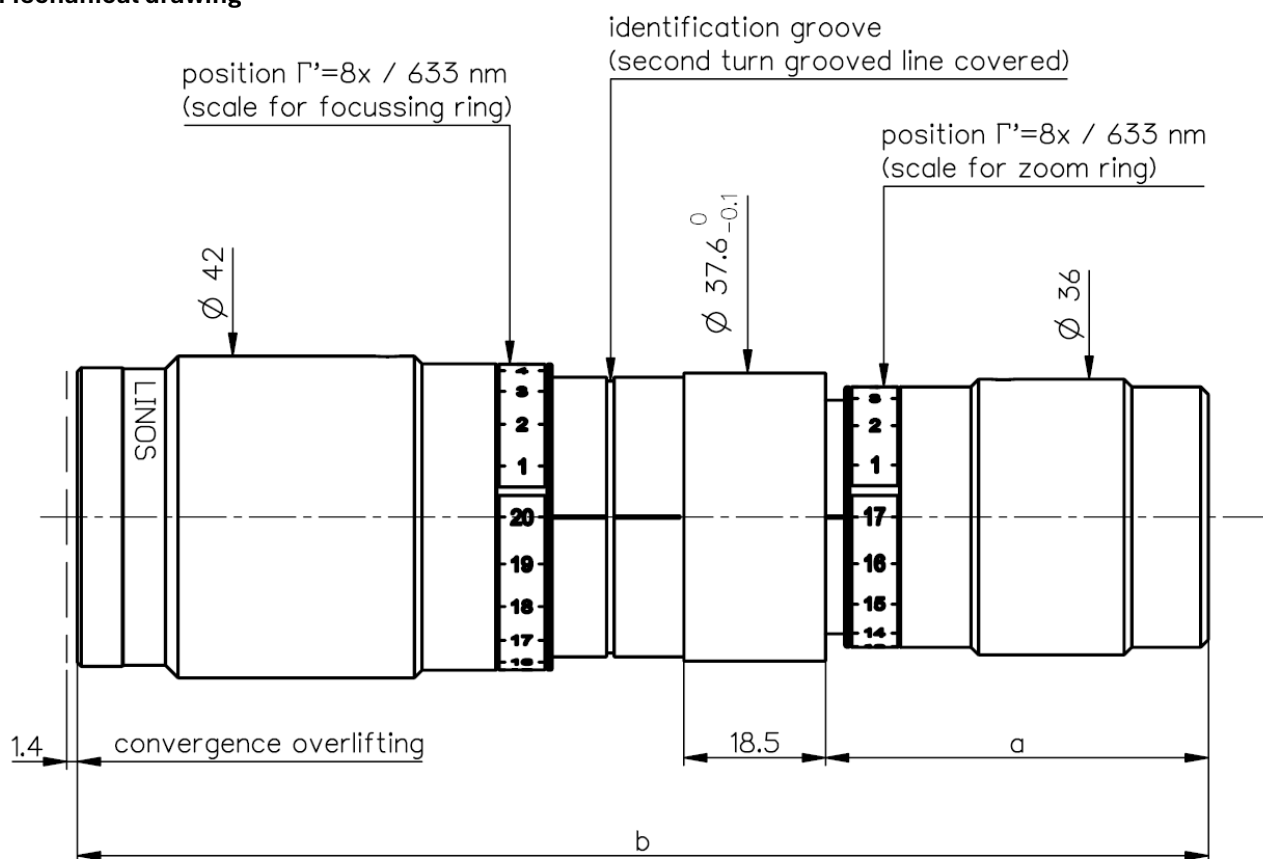
2 – 8x, 630 - 980nm



Part number	4401-258-000-20		
Design wavelength	λ	(nm)	633
Coating wavelength	λ	(nm)	630 - 980
Expansion	Γ'		2x – 8x
Lens material			Optical glass
Material			Aluminium, black anodized
Max. entrance beam diameter ($1/e^2$ truncated) for $2.0 \leq \Gamma \leq 3.9$	$E_{\max} \varnothing$	(mm)	8.0
Max. entrance beam diameter ($1/e^2$ truncated) for $3.9 < \Gamma \leq 8.0$	$E_{\max} \varnothing$	(mm)	4.0

Subject to technical change

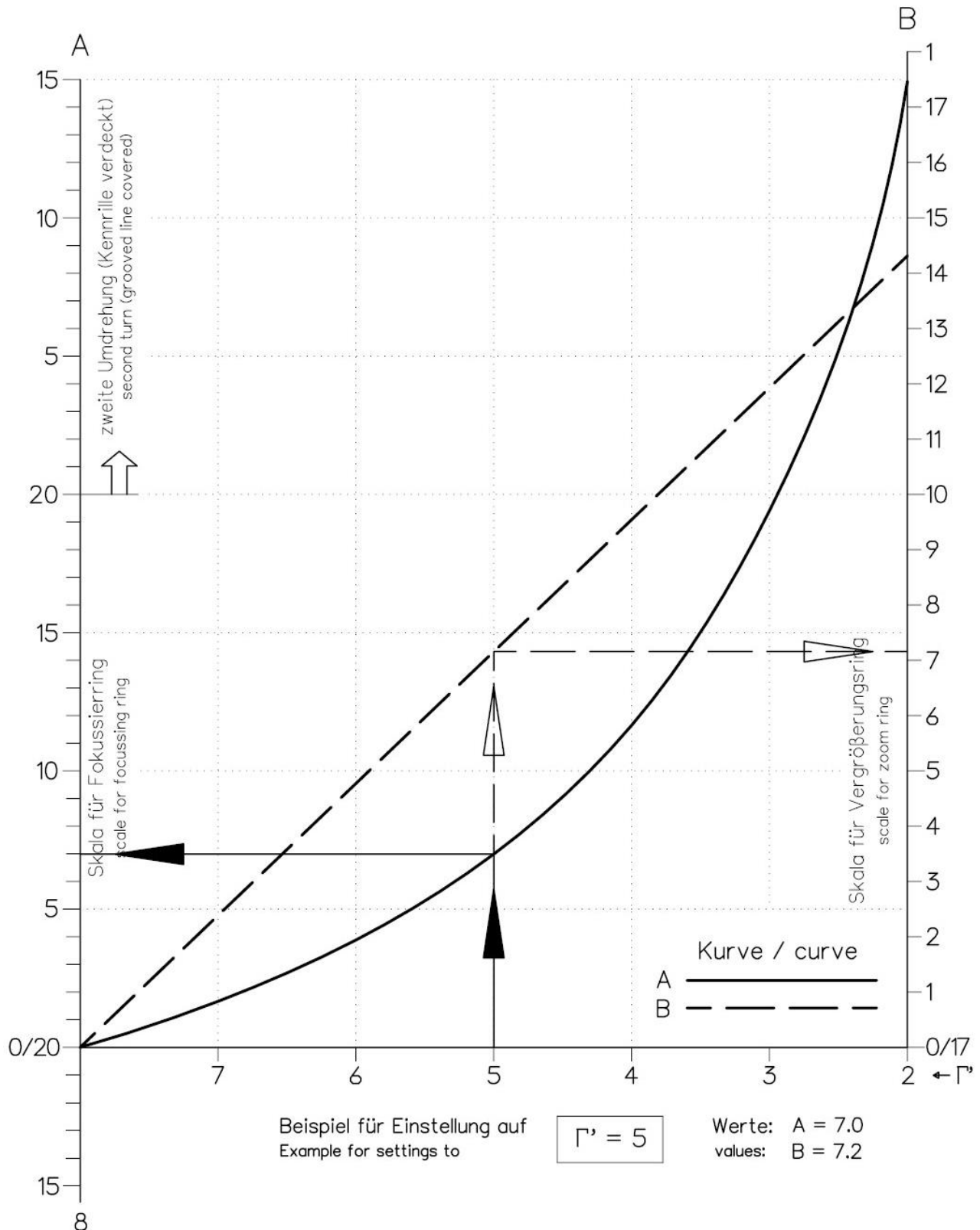
Mechanical drawing



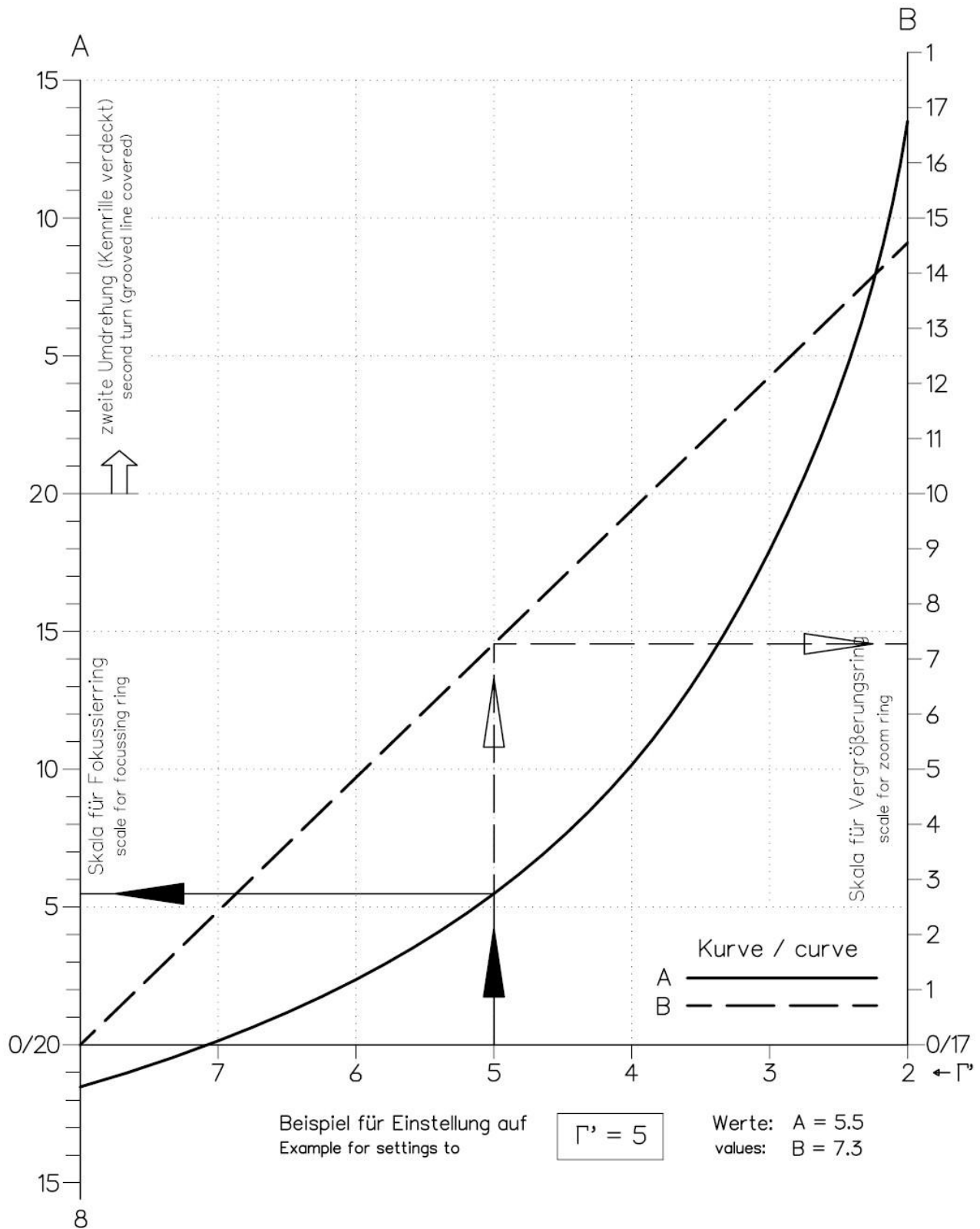
Dimensions without tolerances are nominal values and illustration not to scale

λ	633nm	780nm	830nm	980nm
Γ'	2x / 8x	2x / 8x	2x / 8x	2x / 8x
a	65.1 / 50.0	65.4 / 50.0	65.5 / 50.0	65.6 / 50.0
b	147.1 / 147.7	148.0 / 148.4	148.3 / 148.6	148.9 / 149.1
$B_{\max} (\Gamma' = 4x)$	152.5	153.4	153.6	154.2

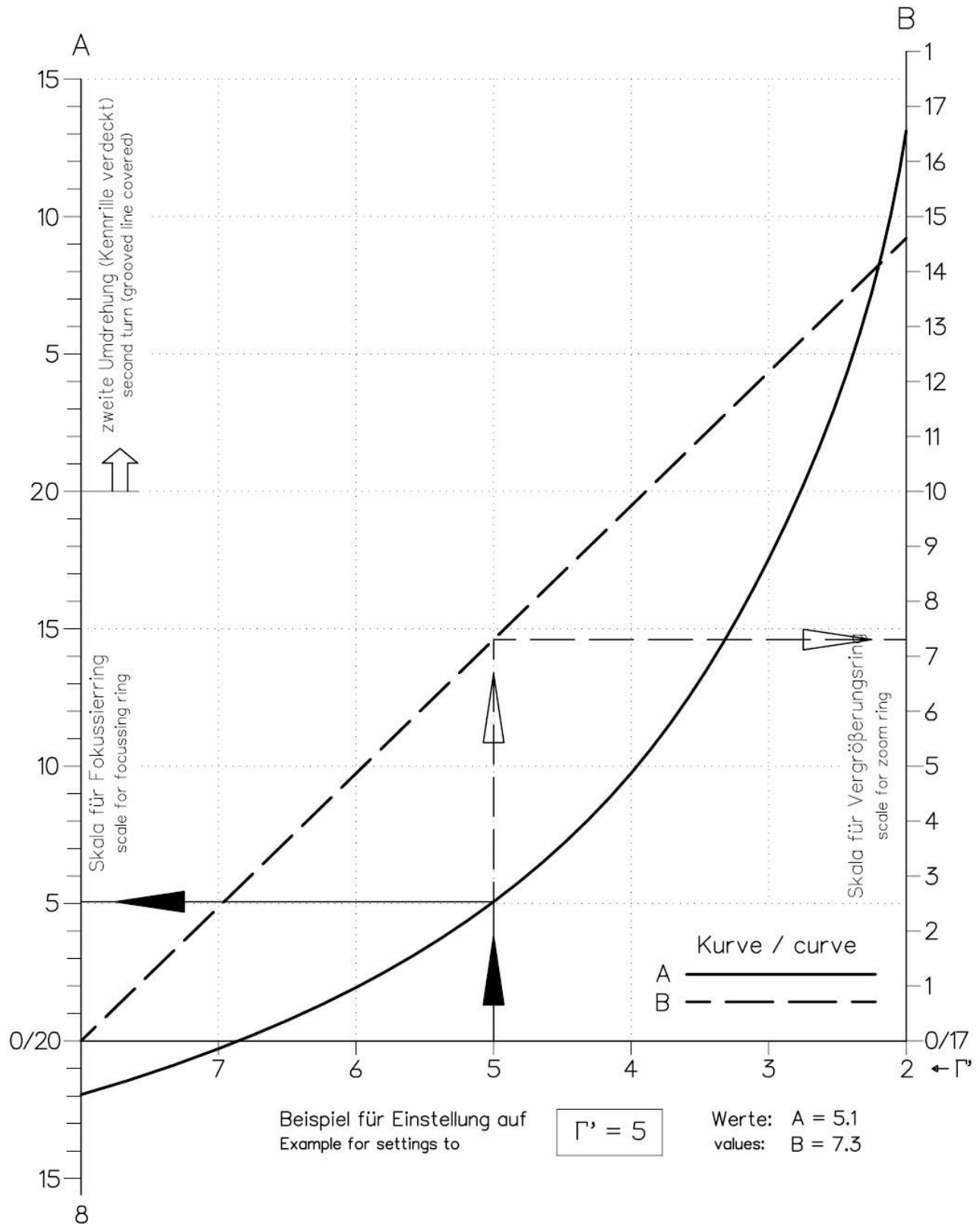
Setting values for a given expansion Γ' , $\lambda = 633\text{nm}$



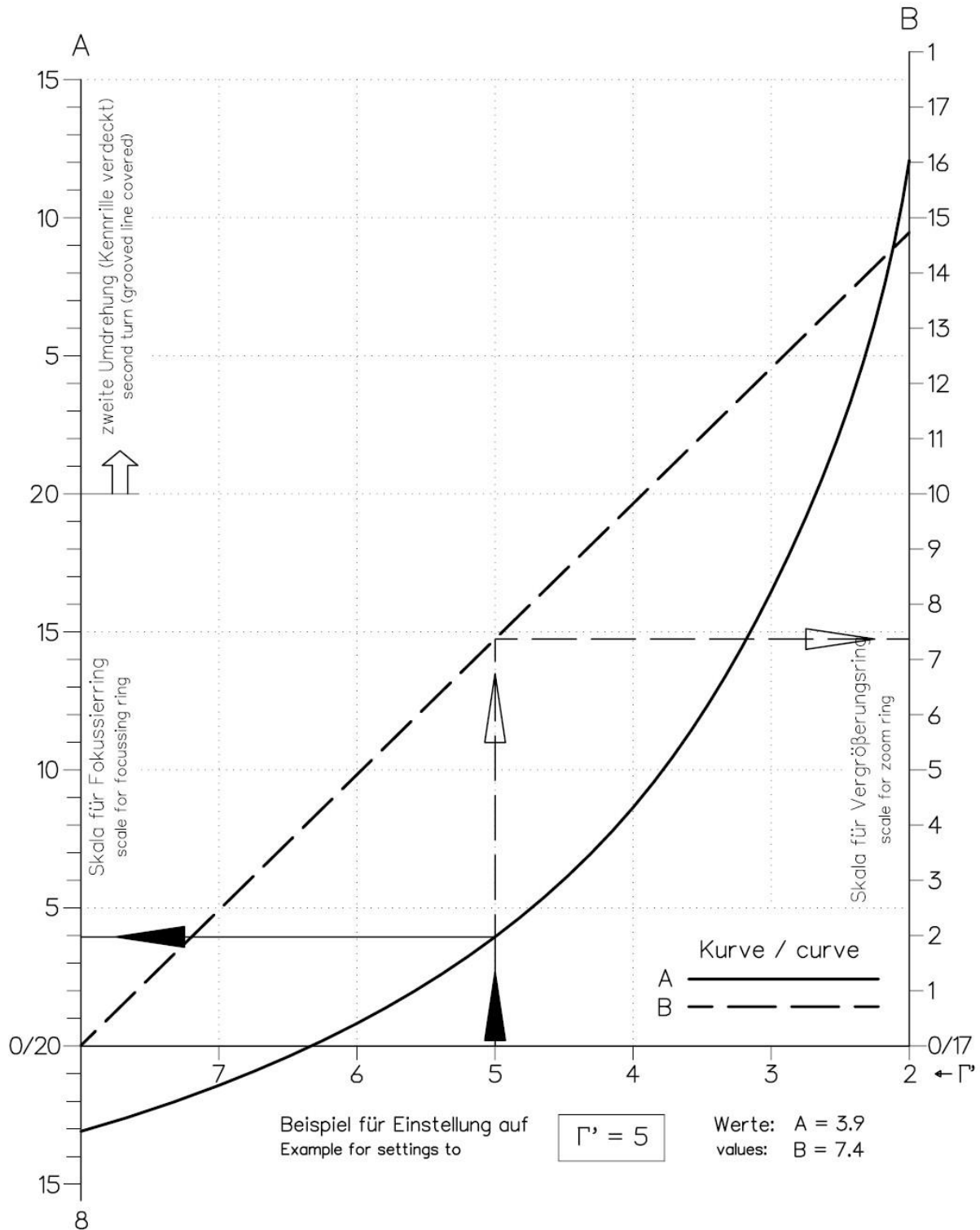
Setting values for a given expansion Γ' , $\lambda = 780\text{nm}$



Setting values for a given expansion Γ' , $\lambda = 830\text{nm}$



Setting values for a given expansion Γ' , $\lambda = 980\text{nm}$



Notes

For technical explanations, see our homepage.

[LINOS Laser Material Processing Optics | Excelitas](https://www.excelitas.com)

The actual LIDT of the Beam Expander, as well as effects such as thermal focus shift, depend on the specific system setup and laser parameters. We recommend testing the respective optical components before use. We are happy to support and advise you in selecting the right Beam Expander!