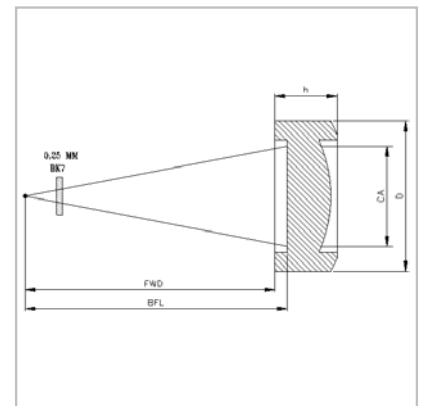


Overview Plastic Collimating Lenses

General Data

- Transmission [%]: 90
- Lens material: optical plastic
- Designed with laser coverglass:
BK7, 0.25 mm thick, 0.55 mm from source
- Designs available in Zemax
- Lenses could be used at other wavelengths than the design wavelengths*



	CAY033/40	CAY033	CAY046	CAY046/55	CAX100	CAW100	CAX183
Lenstype	bi-aspherical	bi-aspherical	bi-aspherical	mono-aspherical	mono-aspherical	bi-aspherical	mono-aspherical
Outer diameter D [mm]	Ø 4.00	Ø 7.40	Ø 7.40	Ø 5.50	Ø 6.28	Ø 5.20	Ø 6.28
Thickness lens h [mm]	3.00	3.05	2.70	2.70	1.25	2.44	2.44
N. A.	.38	.40	.40	.37	.20	.195	.12
Clear aperture CA [mm]	2.50	2.70	3.70	3.40	4.10	3.90	4.30
Wavelength [nm]*	670	670 785	670 780	670 780	670	785	670 785
Focal length [mm]	3.35	3.30 3.32	4.60 4.62	4.60 4.62	9.97	9.85	18.18 18.33
Back focal length BFL [mm]	2.07	2.08 2.10	3.10 3.12	3.09 3.12	9.17	8.40	17.51 17.69
Free working distance FWD [mm]	1.97	1.97 2.00	3.00 3.02	2.89 2.92	8.44	8.30	16.30 16.48
RMS wavefront [ml]							
on axis	40	40	40	40	80	40	30
total	65	65	70	80	90	50	35
Optical tolerance [mm]	.10	.10	.10	.10	.10	.15	.10
Field radius [mm]	.05	.05	.10	.10	.20	.15	.30
Storage temperature [°C]	-25 to 70	-25 to 70	-10 to 70	-25 to 70	0 to 65	0 to 65	-25 to 100
Operating temperature [°C]	5 to 65	5 to 65	5 to 65	5 to 65	0 to 65	0 to 65	-10 to 75