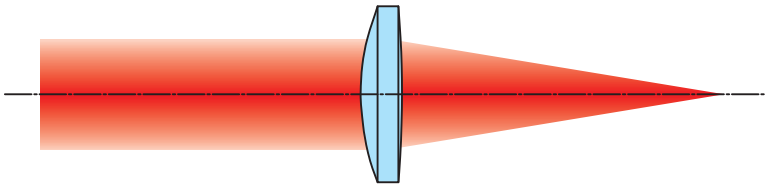
The lens or a combination of these lenses found in this section will have limited applications compared with single spherical lens but very high performance can be achieved in a dedicated application.

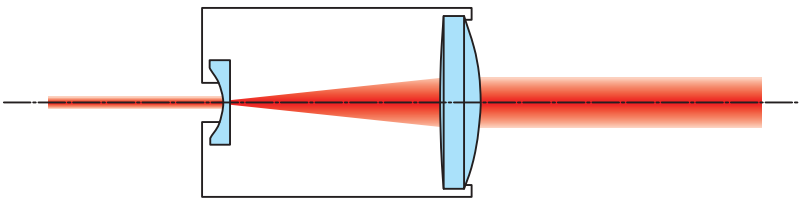
Beam Focusing

Type	Features	Applications
Achromatic Lens	Chromatic and spherical aberration is minimized. Large line-up of focal length and aperture.	Focus ability in low power lasers. Imaging system for infinity object
Focusing Lens	High laser damage threshold Spot size is minimized and near to the diffraction limit.	Lens for various laser fabrication such as laser marking, cutting and welding.
Objective Lens	Highly corrected lens with high magnification Large numerical aperture produces minimum spot size. Fully usable throughout the visible wavelength spectrum.	Microscopic imaging for the visible, ultra-violet and near infrared wavelength spectrum. Focusing a laser beam into a minimal spot. Micro-fabrication for lasers.

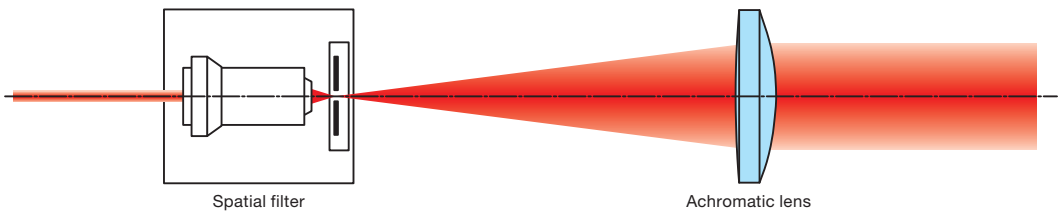


Beam Expanding

Type	Features	Applications
Beam Expander	Optimized design for minimum spherical aberration Integrated design with reduced size	Magnifying the laser aperture (for interferometer and projection) Reducing the focal spot size (by enlarging the incident laser beam diameter)
Spatial filter (objective lens) + Achromatic lens	Large choice of expansion ratios. Provides a high purified beam profile.	When using a very large collimated beam. When changing the beam aperture (with switching the achromatic lenses)



Beam expander



Spatial filter

Achromatic lens