

## Notation according to DIN 1335 and DIN 4522:

Focal length	$f', F'$	
Front focal length	$SF$	
Back focal length	$S'F'$	
Principal point / Nodal point separation	$HH'$	(+) Front nodal point is to the left of the rear nodal point (-) Front nodal point is to the right of the rear nodal point
Pupil magnification	$\beta'P$	Diameter of exit pupil / Diameter of entrance pupil
Entrance pupil Position	$Sep$	Distance from Front Glass Vertex to Entrance Pupil
Exit pupil position	$S'ap$	Distance from Rear Glass Vertex to Exit Pupil
Overall optical length	$Ed$	Distance from front vertex of first lens to rear vertex of last lens
Image to Object distance	$OO'$	Total length from image plane to object plane
Magnification ratio	$\beta'$	$u'/u$
Object Height	$u$	1/2 actual object height
Image Height	$u'$	1/2 actual image height

\*All distances are measured from left to right.

