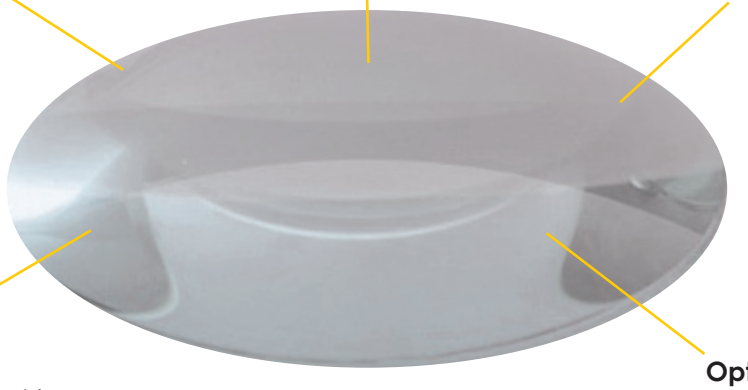
Why daylight™ magnification is good for you

daylight™ has 25 years' expertise in providing solutions for glass and acrylic magnifying lenses to be made to the highest standards to allow crystal clear optical quality.

Magnification & Diameter
daylight™ produces some of the largest lens sizes and a wide range of magnifications

Viewing area
daylight™ maximises viewing area

Coatings
daylight™ provides high-technology lens coating
- XR Anti-scratch
- ESD Electrostatic Discharge

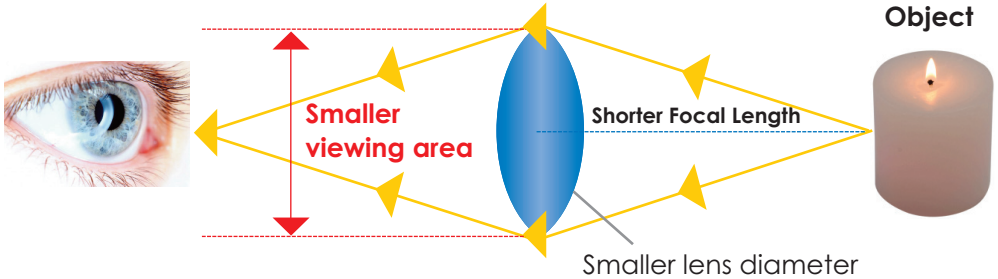


Applications
daylight™ provides different lens types for various applications
- Green or white glass lens
- Lightweight acrylic lens

Optical high-quality
daylight™ quality testing for crystal clear optical quality

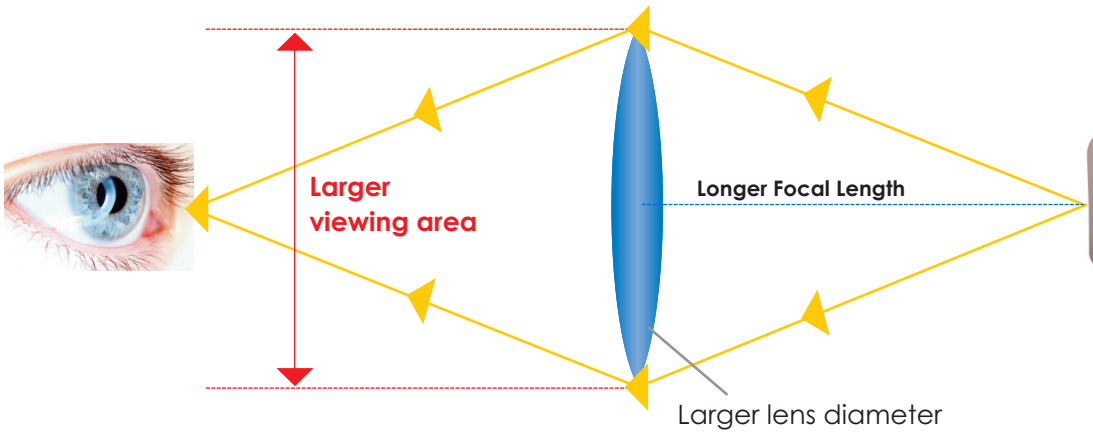
Generally, higher magnification reduces viewing area, reduces focal length and lens diameter

Higher magnification



Ideal for close work activity with high magnification

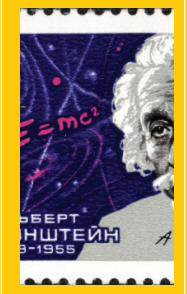
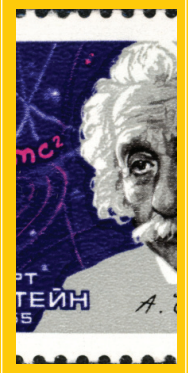
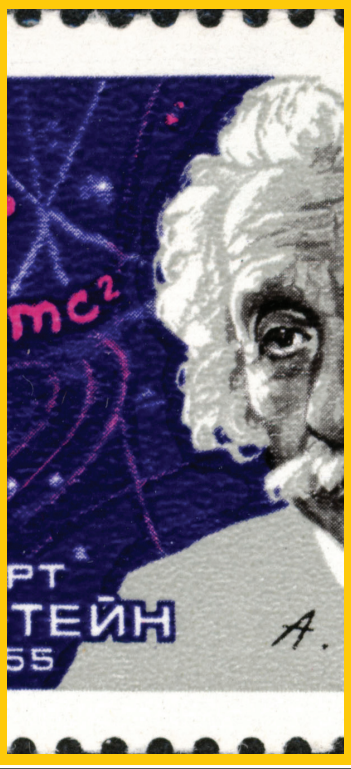
Lower magnification



Ideal for working at a distance with less magnification

daylight™ magnification explained

Magnification Relationships

Stamp unmagnified	3 Diopter	5 Diopter	8 Diopter	12 Diopter	15 Diopter
0%	75%	125%	200%	300%	375%
					
Magnification	**1.75X**	**2.25X**	**3.00X**	**4.00X**	**4.75X**
Focal Length	33cm (13")	20cm (8")	12.5cm (5")	8cm (3.5")	6.5cm (2.6")

Viewing Area: The area of the lens surface through which the viewer sees the object in clear focus without any distortion. It is important to note that, on our lenses, generally as magnification increases, viewing areas and focal lengths decrease.

Magnification: The degree to which the viewed object is enlarged. Magnification is usually expressed by a number followed by an "x", the symbol used to express power or the size of the object in relationship to its actual size. The formula for calculation Magnification.

$$\text{Magnification} = \frac{\text{Diopter}}{4} + 1$$

Diopter: Is related to the curvature of the lens. As the diopter increases, the lens has greater curvature. As the curvature increases, the object fills a greater portion of the viewer's retina which makes the object look bigger.

$$\text{Diopter} = 4 \times (\text{Magnification} + 1)$$

Focal Length: This is the optimal focus point from the middle of a lens surface to the object being magnified (it is the distance where the object is at its sharpest). The focal length decreases as the diopter / magnification increases. Therefore, with high magnification lenses, the object being magnified has to be much closer to the lens (thus giving less room for hands and tools).

$$\text{Focal length (in cm)} = \frac{100}{\text{Diopter}} \qquad \text{Focal length (in inches)} = \frac{39.37}{\text{Diopter}}$$