# **Optical Components**

# Product Information

SCHOTT offers a broad range of cutting-edge components for applications in optics, lithography and science. Known for its leading edge innovations, its highest product quality and its service excellence, Advanced Optics is integrated from material development to finishing operations. We master the entire value chain! Processed products include precision-molded, polished and coated aspherical lenses, prisms, optical glass filters and interference filters as well as precision components, such as CNC-processed parts, plane-parallel substrates and wafers. Further details on our comprehensive portfolio on high precision optical components can be found at: www.schott.com/advanced\_optics/overview-optical-components



#### Main Products and its Applications



**Aspherical Lenses** 

Aspheres for superior image quality

Due to their unique surface structure, aspherical lenses eliminate monochromatic aberrations and therefore deliver superior overall image quality. They are being used to replace multi-spherical element assemblies and enable a more compact design.



### **Cylindrical Lenses**

#### Wide variety of specific lenses

Cylindrical lenses have a spherical radius in one direction. This enables the light to be focused in one axis. A point of light can thus be stretched into a single line. Cylindrical lenses can be used in a variety of different applications, including bar code scanning or laser projection, for example.



#### **Glass Wafers & Substrates**

A variety of different sizes, structures and materials

SCHOTT is the world's leading supplier of thin and ultra-thin glass wafers and substrates made of different materials in sizes of between 4" and 12" with various surface gualities and customized features. The use of proprietary production processes, a wide selection of different materials, and continuous expansion of state-of-the-art processing capabilities make SCHOTT's wafer offerings unique in the industry.

Processing capabilities:

- Polishing
- Structuring
- Ultrasonic washing Clean room packaging
- Edge treatment



**Optical Filters** 

Optical filters made by SCHOTT are widely used, including medical, imaging, surveillance and industrial applications. Working in close collaboration with our customers SCHOTT has become one of the world's most prefered and comprehensive supplier of filters. The offered portfolio comprises of optical filter glasses, interference filters as well as special filters like contrast enhancement or night vision filters.



#### Main Products and its Applications



#### Perfect custom optical components

Prisms are transparent optical elements with flat polished surfaces that refract, reflect or disperse light. They can be positioned rather easily inside an optical system and offer excellent thermal stability. Total internal reflection is possible to avoid light loss in the optical path.

## **Spherical Lenses**

Prisms

As singlets, doublets, and triplets in different shapes

Spherical lenses are used in many different applications, such as cameras, projectors and microscopes, to collect, focus and diverge light and are often components of lens systems that perform an achromatic function.



### Windows & Substrates

Highest precision made of various materials

Substrates are components that serve as the base to be coated to produce products like interference filters. Windows are transparent, mostly plano-plano parallel polished and/or coated components that are used in optical systems to achieve highly-efficient, distortion-free light and perfect image transmission.



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