

# Plano Optics

## Product Information

Our products serve as the platform for customized coatings or transparent components in order to achieve efficient, distortion-free light within optical and imaging systems.

## Advantages

- SCHOTT masters the entire value chain from raw glass to coated components in-house
- Extensive CNC-machining, single and double side and polishing capabilities
- Coating design and fabrication according to customer needs
- From prototyping to mass production
- Sub-Assembly: Expertise in gluing, cementing and integration of plano optics in custom-designed hardware



## Materials

- Optical glasses
- Technical glasses
- Filter glasses
- Fused silica
- ZERODUR® glass-ceramic
- Sapphire and other crystals

## Examples of Products

- Plane parallel windows
- Protective windows
- Laser line windows
- Optical flats
- Mirror substrates

## Manufacturing Capabilities

Attribute	Standard	Precision	High Precision
Diameter		from 2 mm to 700 mm	
Diameter Tolerance	±0.25 mm	±0.05 mm	±0.02 mm
Thickness Tolerance	±0.1 mm	±0.05 mm	±0.005 mm
Parallelism	< 1 arc minute	< 30 arc seconds	< 10 arc seconds
Surface Accuracy	2 λ	λ/4	λ/10
Surface Quality (Scratch & Dig)	40/20	20/10	10/5
Surface Roughness	2 nm	1 nm	0.5 nm

All parameters depending on size, shape, material and the other parameters.  
Tighter tolerances upon request.

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