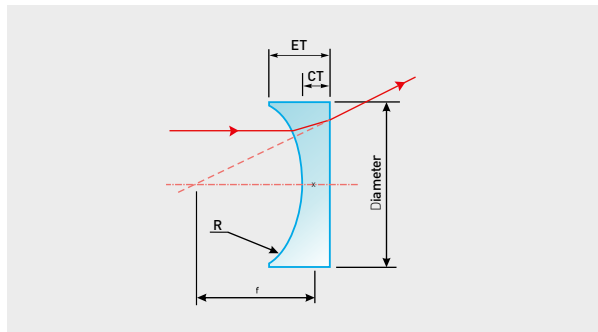
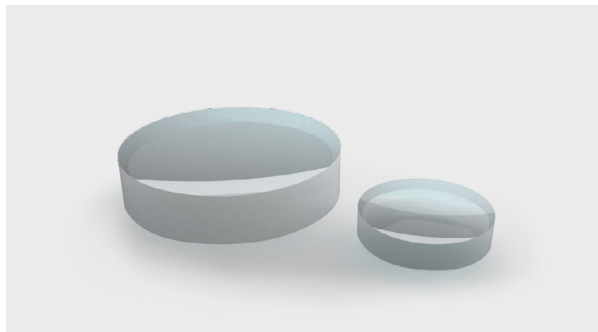


## Plano-concave spherical lenses



Plano-concave spherical lenses have one plano and one spherical concave surface, while their focal lengths are negative. These lenses provide the best performance when used for 5X to infinite-conjugate

ratio applications, e.g. collimating a convergent beam, diverging a collimated beam. To prevent spherical aberrations collimated beam should always be incident on curved lens surface and vice versa.

### Main features

- Fabricated from high-quality UV grade fused silica and BK7 glasses
- Standard diameters are  $\varnothing 12,7$  mm and  $\varnothing 25,4$  mm
- Focal length selection from -20 mm to -10000 mm
- Antireflective coatings, custom substrate material, dimensions, and focal lengths available upon request

### Application examples

- Collimating a convergent beam
- Diverging a collimated beam
- Relay imaging

### Standard specifications

PLANO-CONCAVE LENSES	
Substrate material	BK7, UVFS
Wavelength range	Uncoated BK7 lenses: 350 nm - 2 $\mu$ m Uncoated UVFS lenses: 185 nm - 2,1 $\mu$ m
Clear aperture	>90%
Diameter tolerance	+0/-0,1 mm
Edge thickness	2 mm
Thickness tolerance	$\pm 0,5$ mm
Centration error	<3 arcmin
Focal length tolerance	$\pm 3\%$ @632,8 nm
Protective chamfers	<0,35 mm at 45°
Surface quality	40-20 S-D
Surface irregularity	$\leq N/8$ @632,8 nm
Coatings	Uncoated, available upon request

### Standard products

MATERIAL	DIAMETER	FOCAL LENGTH	SKU	PRICE
BK7	$\varnothing 12,7$ mm	-25 mm	7507	15 €
		-50 mm	7508	15 €
		-60 mm	7509	15 €
		-75 mm	7510	15 €
		-100 mm	7511	15 €
		-150 mm	7512	15 €
		-200 mm	7513	15 €
		-250 mm	7514	15 €
		-300 mm	7515	15 €
		-30 mm	7525	19 €
		-40 mm	7543	19 €
		-50 mm	7526	19 €
		-75 mm	7527	19 €
		-100 mm	7528	19 €
		-125 mm	7544	19 €
BK7	$\varnothing 25,4$ mm	-150 mm	7545	19 €
		-200 mm	7529	19 €
		-250 mm	7546	19 €
		-300 mm	7530	19 €
		-400 mm	7531	19 €
		-500 mm	7532	19 €
		-750 mm	7547	19 €
		-1000 mm	7533	19 €
		-1500 mm	7549	19 €
		-2000 mm	7548	19 €
		-3000 mm	7550	19 €
		-5000 mm	7551	19 €

MATERIAL	DIAMETER	FOCAL LENGTH	SKU	PRICE
UVFS	$\varnothing 12,7$ mm	-20 mm	7516	32 €
		-50 mm	7518	32 €
		-100 mm	7519	32 €
		-200 mm	7520	32 €
		-300 mm	7521	32 €
		-400 mm	7522	32 €
		-500 mm	7523	32 €
		-1000 mm	7524	32 €
		-30 mm	7534	38 €
		-40 mm	7553	38 €
		-50 mm	7535	38 €
		-60 mm	7554	38 €
		-70 mm	7555	38 €
		-80 mm	7556	38 €
		-90 mm	7557	38 €
UVFS	$\varnothing 25,4$ mm	-100 mm	7537	38 €
		-150 mm	7558	38 €
		-200 mm	7538	38 €
		-300 mm	7539	38 €
		-400 mm	7540	38 €
		-500 mm	7541	38 €
		-700 mm	7559	38 €
		-1000 mm	7542	38 €
		-2000 mm	7536	38 €
		-3000 mm	7560	38 €
		-5000 mm	7561	38 €
		-10000 mm	7562	38 €