

Bestform-Linsen

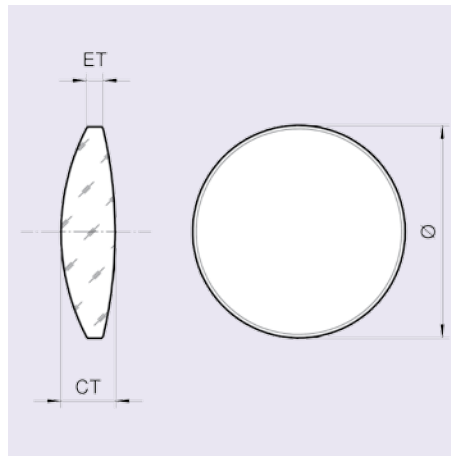
Best Form Lenses

Bei Bestform-Linsen handelt es sich um Positivlinsen, deren sphärische Aberration minimiert ist. Sie werden eingesetzt, wenn höchste Anforderungen an das Spotbild gestellt werden.

Die sphärische Aberration wird eindeutig über den Durchmesser des Eingangsstrahls und dessen Wellenlänge definiert. Sind diese Größen bekannt, so werden die Krümmungsradien der Linse so ausgelegt, dass der Abbildungsfehler möglichst gering ist.

Bestform-Linsen haben allgemein höhere Abbildungsqualitäten als herkömmliche Positivlinsen.

In der Tabelle finden Sie Brennweiten-Werte für häufig verwendete Wellenlängen.



Best form lenses are positive lenses with minimized spherical aberrations. They are used if the highest demands are made of the spot image.

The spherical aberration is clearly defined by the diameter of the incident beam and its wavelength. If these values are known, then the radii of curvature of the lens can be designed to create as low an aberration as possible.

Best form lenses generally have better imaging qualities than conventional positive lenses.

In the table, you will find focal length values for commonly used wavelengths.

Nomenklatur – Nomenclature

BFPL	-25.4	/200.0	C
Product code (Best Form Positive Lens)	Diameter in mm	Focal length in mm	Material code C: BK7

SPECS	Material:	BK7	Surface figure:	Both surfaces: 3/-(0.2/-) according to ISO 10110 λ/10 according to MIL-O-1380A
	Diameter tolerance:	+ 0.00 mm; - 0.20 mm	Surface quality:	5/4 x 0.025 for 1.0" substrates according to ISO 10110 10-5 according to MIL-O-1380A
	Thickness tolerance:	± 0.20 mm	Protective chamfer:	0.2 - 0.4 mm x 45°
	Focus tolerance:	± 2 %	Clear aperture:	85 % of diameter
	Centering tolerance:	4/3' according to ISO 10110		



Positive Bestform-Linsen aus BK7 – BK7 Bestform Positive Lenses

Part No.	Diameter Ø [mm]	f [mm] (488 nm) n = 1.5222	f [mm] (532 nm) n = 1.5195	f [mm] (633 nm) n = 1.5151	f [mm] (1064 nm) n = 1.5066	Input Diameter [mm]	Spot Diameter [µm]	Center Thickness CT [mm]	Edge Thickness ET [mm]
BFPL-12.7/25.0C	12.7	24.3	24.4	24.6	25.0	4.0	6.8	4.0	2.3
BFPL-25.4/50.0C	25.4	50.0	50.2	50.7	51.5	7.0	8.5	4.0	0.8
BFPL-25.4/75.0C	25.4	73.3	74.1	74.7	76.0	10.0	11.5	4.0	1.9
BFPL-25.4/100.0C	25.4	100.3	100.3	101.6	103.3	12.0	10.8	4.0	2.4
BFPL-25.4/125.0C	25.4	123.0	123.0	124.7	126.8	14.5	12.6	4.0	2.7
BFPL-25.4/150.0C	25.4	146.4	146.4	148.5	151.0	16.5	13.1	4.0	2.9
BFPL-25.4/200.0C	25.4	197.3	197.3	200.0	203.4	20.5	13.8	4.0	3.2

Other sizes and materials are available upon request.

