

PLANO-CYLINDRICAL LENSES

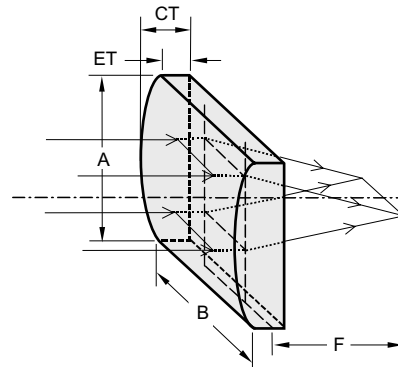
- Condense or expand light in one dimension only
- Ideal for producing line images, for scanning and projection

Most of the lenses are available from stock and can be shipped the same day an order is placed.

We offer a selection of cylindrical lenses that are either plano-convex or plano-concave in form and rectangular in shape. These lenses are used to focus light to a thin line in laser scanners, spectroscopy, dye lasers, acousto-optics, optical processors and other similar applications. They are the best for circularisation of diode laser outputs, energy collection for linear detectors or for coupling to a slit input.

Earlier remarks made about plano-convex and plano-concave spherical lenses with regard to aberrations and conjugate ratios are also applicable to cylindrical lenses.

A variety of anti-reflection coatings is available for these lenses. For an appropriate coating, please refer to the Coatings section.



Please contact us for other size, focus or precision requirements. We can supply custom cutting, edging, coating or complete fabrication if required. If you do not find what you need in our list of stock items, please send your specification or drawings for a custom quotation.

SPECIFICATIONS

Material	BK7, FS, UV FS
Surface quality	40–20 scratch & dig
Clear aperture	90% of the diameter
Diameter tolerance	+0.00 -0.12 mm
Thickness tolerance	±0.5 mm
Surface irregularity	1λ @ 633 nm
Paraxial focal length	BK7 ±2% @ 546 nm FS, UV FS ±2% @ 355 nm

BK7 Plano-Convex Cylindrical Lenses

Catalogue number BK7	Dimensions Metric		Dimensions English		Focal length F, mm	Centre thickness CT, mm	Edge thickness ET, mm	Price, EUR
	A, mm	B, mm	A, mm	B, mm				
120-0105	10.0	10.0	12.7	12.7	15	3.7	1.5	59
120-0110	19.0	25.0	19.1	25.4	25	6.1	2.0	88
120-0205	25.0	50.0	25.4	50.8	50	5.2	2.0	106
120-0210	25.0	50.0	25.4	50.8	75	4.1	2.0	106
120-0215	25.0	50.0	25.4	50.8	100	3.5	2.0	103
120-0220	25.0	50.0	25.4	50.8	150	3.0	2.0	103
120-0225	25.0	50.0	25.4	50.8	200	2.8	2.0	101
120-0230	25.0	50.0	25.4	50.8	300	2.5	2.0	101
120-0235	25.0	50.0	25.4	50.8	500	2.4	2.0	101
120-0240	25.0	50.0	25.4	50.8	1000	2.3	2.0	99
120-0245	25.0	50.0	25.4	50.8	1500	2.2	2.0	99

Please add code M to the catalogue number for metric dimensions and code E for English.

UV FS & FS Plano-Convex Cylindrical Lenses

Catalogue number		Dimensions Metric		Dimensions English		Focal length F, mm	Centre thickness CT, mm	Edge thickness ET, mm	Price, EUR UV FS / FS
UV FS	FS	A, mm	B, mm	A, mm	B, mm				
120-1105	120-3105	19.0	25.0	19.1	25.4	25	8.0	3.0	97 / 94
120-1205	120-3205	25.0	50.0	25.4	50.8	50	7.1	3.5	188 / 184
120-1210	120-3210	25.0	50.0	25.4	50.8	75	5.6	3.3	188 / 184
120-1215	120-3215	25.0	50.0	25.4	50.8	100	4.7	3.0	179 / 175
120-1220	120-3220	25.0	50.0	25.4	50.8	150	4.1	3.0	179 / 175
120-1225	120-3225	25.0	50.0	25.4	50.8	200	4.3	3.5	179 / 175
120-1230	120-3230	25.0	50.0	25.4	50.8	300	4.1	3.5	179 / 175
120-1235	120-3235	25.0	50.0	25.4	50.8	500	3.8	3.5	179 / 175
120-1240	120-3240	25.0	50.0	25.4	50.8	1000	2.5	2.3	177 / 173
120-1245	120-3245	25.0	50.0	25.4	50.8	1500	2.2	2.0	177 / 173

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BK7 Plano-Concave Cylindrical Lenses

Catalogue number BK7	Dimensions Metric		Dimensions English		Focal length	Centre thickness	Edge thickness	Price, EUR
	A, mm	B, mm	A, mm	B, mm	F, mm	CT, mm	ET, mm	
122-0105	10.0	10.0	12.7	12.7	-15	1.4	3.7	68
122-0110	19.0	25.0	19.1	25.4	-25	2.0	6.0	99
122-0205	25.0	50.0	25.4	50.8	-50	2.0	5.2	119
122-0210	25.0	50.0	25.4	50.8	-75	2.0	4.1	119
122-0215	25.0	50.0	25.4	50.8	-100	2.0	3.5	116
122-0220	25.0	50.0	25.4	50.8	-150	2.0	3.0	116
122-0225	25.0	50.0	25.4	50.8	-200	2.0	2.8	114
122-0230	25.0	50.0	25.4	50.8	-300	2.0	2.5	114
122-0235	25.0	50.0	25.4	50.8	-500	2.0	2.4	114

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UV FS & FS Plano-Concave Cylindrical Lenses

Catalogue number		Dimensions Metric		Dimensions English		Focal length	Centre thickness	Edge thickness	Price, EUR
UV FS	FS	A, mm	B, mm	A, mm	B, mm	F, mm	CT, mm	ET, mm	UV FS / FS
122-1105	122-3105	19.0	25.0	19.1	25.4	-25	3.0	8.0	110 / 107
122-1205	122-3205	25.0	50.0	25.4	50.8	-50	3.5	7.1	209 / 205
122-1210	122-3210	25.0	50.0	25.4	50.8	-75	3.3	5.6	209 / 205
122-1215	122-3215	25.0	50.0	25.4	50.8	-100	3.0	4.7	199 / 195
122-1220	122-3220	25.0	50.0	25.4	50.8	-150	3.0	4.1	199 / 195
122-1225	122-3225	25.0	50.0	25.4	50.8	-200	3.8	4.6	199 / 195
122-1230	122-3230	25.0	50.0	25.4	50.8	-300	3.5	4.1	199 / 195
122-1235	122-3235	25.0	50.0	25.4	50.8	-500	3.5	3.4	199 / 195

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HOUSING ACCESSORIES

- Prism Holders 840-0170
See page 5.73



COATINGS

MIRRORS

LENSES

WINDOWS & FILTERS

PRISMS

POLARISING OPTICS

UV & IR OPTICS