Optics

Anamorphic Prism Pairs

Anamorphic Prism Pairs are used to transform elliptical laser diode beams into nearly circular beams. An average throughput of 95% can be achieved by carefully designing the prism pair optical system. The prisms must be oriented so that the light is incident at Brewster's angle and each surface must be coated with an AR coating specifically designed for the wavelength, angle, and high index SF11 glass.

n

Out

Surface Flatness: $\lambda/10$

High-Performance MultiLayer

Antireflective Coatings 650-1050nm and 1050-1620nm

Ø1.00"

(25.4mm)

AR Coatings:

Pre-Aligned and Mounted





Photograph of an actual 635nm beam from a Hitachi laser diode beam before and after an anamorphic prism pair.





11.0mm (0.433") 1.0mm (0.433")

40.00mm Long x Ø25.40mm

Specifications

Material: SF11

±0.15mm

Scratch-Dig

D

In

Housing Size

Dimensional Tolerances:

Angular Tolerances: ±10arcmin Surface Quality: 40-20

1.225"

(31.1mm)

Visible to Near IR Mounted Anamorphic Prism Pairs – AR Coated 650-1050nm

0.535"-40 Threads

(SM05 Compatible)

ITEM #	\$		£		€		RMB	ANAMORPHIC MAGNIFICATION @ 670nm	INPUT OFFSET L (mm)
PS875-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	2.0	3.9
PS876-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	2.2	4.2
PS877-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	2.5	4.6
PS878-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	2.8	4.7
PS879-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	3.0	4.8
PS880-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	3.2	5.0
PS881-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	3.5	5.1
PS882-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	3.8	5.2
PS883-B	\$ 319.30	£	201.20	€	296,90	¥	3,049.30	4.0	5.3

*Price includes AR coating

IR Mounted Anamorphic Prism Pairs – AR Coated 1050-1620nm

ITEM #	\$	£	€	RMB	ANAMORPHIC MAGNIFICATION at 670nm	INPUT OFFSET L (mm)
PS875-C	\$ 319.30	£ 201.20	€ 296,90	¥ 3,049.30	2.0	3.9
PS879-C	\$ 319.30	£ 201.20	€ 296,90	¥ 3,049.30	3.0	4.8
PS883-C	\$ 319.30	£ 201.20	€ 296,90	¥ 3,049.30	4.0	5.3

See Our Selection of Cylindrical Lenses on Page 729

*Price includes AR coating

Unmounted Anamorphic Prism Pairs



SPECIAL NOTE ON UNMOUNTED PAIRS

The anamorphic expansion (one-dimensional expansion) of our prism pairs can be adjusted by changing the angles α_1 and α_2 and the offset between the prisms. Visit www.thorlabs.com for details on angular dependence of expansion.

Prism Pair Only (Unmounted Prisms)

ANGE	AR COATING RANG	RMB*		€*	£*		\$*	ITEM #
	Uncoated	1,082.00	¥	€105,40	71.40	£	\$ 113.30	PS870
n	650-1050nm	1,367.60	¥	€133,20	90.20	£	\$ 143.20	PS871-B
m	1050-1620nm	1,367.60	¥	€133,20	90.20	£	\$ 143.20	PS872-C
	1050-1620n	1,367.60	¥	€133,20	90.20	£	1	PS872-C * Price is per p



Diffusers

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Prisms

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Cylindrical Lenses

Aspheric Lenses

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