TOPTICA PHOTONICS

Scientific Diode Lasers

Femtosecond Fiber Lasers

OEM Lasers

Laser Diodes

Optical Data Storage Products

Laboratory Tools

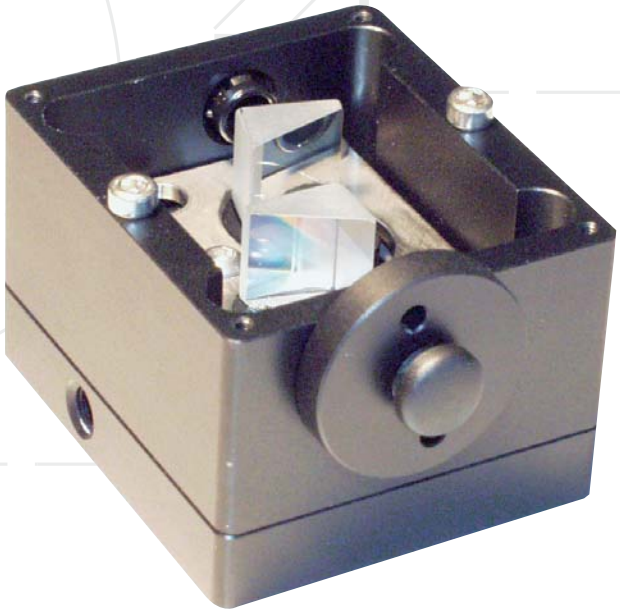
ToptiCalc

www.toptica.com

The world of diode lasers.

APP J

The affordable, versatile anamorphic prism pair that makes your diode laser beam circular.



Adjustable Anamorphic Prism Pair.

The APP J is an adjustable anamorphic prism pair specially designed for circularizing diode laser beams with a large variety of elliptical beam profiles.

The elliptical beam profile of diode lasers often have to be made circular for many applications, e.g. to improve single mode fiber coupling or for mode matching to an external resonator. Anamorphic prism pairs can be used to circularize an elliptical beam either by expanding or by compressing one of the beam axes. As each laser diode exhibits its own individual beam ellipticity, adjustable rather than fixed prism pairs are required to achieve good circularity.

The APP J allows adjustment of both prisms inside the housing, resulting in a continuously variable magnification between 2

...

TOPTICA Photonics AG · Fraunhoferstraße 14 · 82152 Martinsried/Munich · Germany
T +49 (89) 89 99 69-0 · **F** +49 (89) 89 99 69-35 · sales@toptica.com · www.toptica.com

APP J

The affordable, versatile anamorphic prism pair that makes your diode laser beam circular.

... and 5, or in a variable compression between 0.5 and 0.2, of one axis of the elliptical beam profile. The result is a perfect circular beam for all kinds of diode lasers. At all magnifications and compressions the output beam remains parallel to the incident beam with a constant beam displacement of 8 mm.

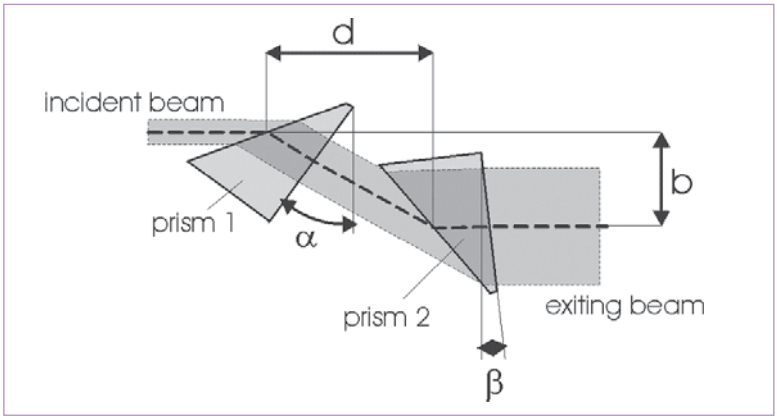
For applications where a perfectly circularized beam is not required, the fixed APP anamorphic prism pair can be used.

Both APP J and APP are designed to be used with p-polarized light (polarization parallel to the plane of incidence), ensuring maximum overall transmission due to nearly Brewster conditions on one side, and an AR-coating on the other side of each prism.

The versatile housings can easily be mounted to any standard mirror holder or any standard posts.

Available prism pairs

Article #	Description	Wavelength nm	Compression / Magnification	Transmis-sion (typ.)
APP J 405	Adjustable prism pair	390 - 420	2:1 to 5:1	95%
APP J 633	Adjustable prism pair	600 - 690	2:1 to 5:1	95%
APP J 735	Adjustable prism pair	635 - 800	2:1 to 5:1	95%
APP J 830	Adjustable prism pair	700 - 1000	2:1 to 5:1	95%
APP 633	Fixed prism pair	600 - 690	3:1	95%
APP 735	Fixed prism pair	635 - 800	3:1	95%
APP 830	Fixed prism pair	700 - 1000	3:1	95%



Magnification of one axis of an elliptical beam profile by using an anamorphic prism pair. The other axis keeps constant.

TOPTICA PHOTONICS

TOPTICA Photonics AG · Fraunhoferstraße 14 · 82152 Martinsried/Munich · Germany
T +49 (89) 89 99 69-0 · **F** +49 (89) 89 99 69-35 · sales@toptica.com · www.toptica.com

Worldwide distribution offices:
TOPTICA USA / Canada · China · France · India · Israel · Italy · Japan · South Korea · Taiwan · United Kingdom / Ireland

The world of diode lasers.

#BR-39005A APP J 04-12