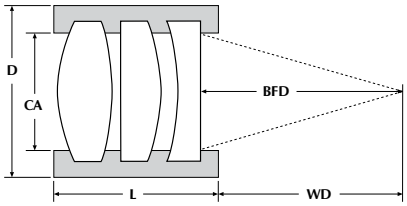
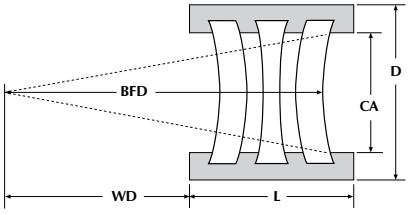
YAP, YAN

1064/532nm Air-Spaced Laser Achromats



YAP Series Positive Laser Achromats

Substrate Material	BK7 and SF11 glass
Surface Quality	40-20 per MIL-PRF-13830B
Housing Tolerance	± 0.005"
Antireflection Coating	R < 0.3% per surface at 1064nm and R < 0.6% per surface at 532nm
Transmitted Wavefront Distortion	λ/2 p-v over 95% of CA at 633nm
Damage Threshold	4J/cm², 20ns, 20Hz at 1064nm

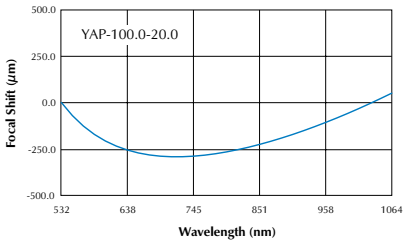


YAN Series Negative Laser Achromats

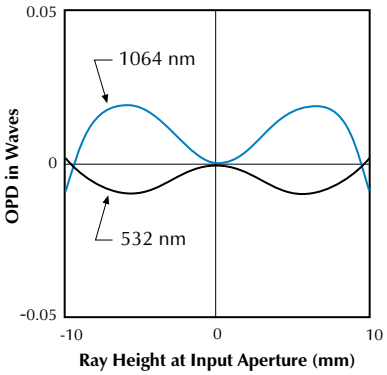
- **Dual wavelength beamsteering applications**
- **Same focal length for 1064nm and 532nm**
- **Air-spaced design for high energy laser applications**
- **All surfaces AR coated for both 1064nm and 532nm**

These lenses are achromatized for 1064nm and 532nm. They are air-spaced and all surfaces are coated with double-V AR coatings that have anti-reflection of less than 0.6% at both 1064nm and 532nm. These lenses can be used to focus Nd:YAG and doubled Nd:YAG beams simultaneously or to form a beam expander that is concurrently collimated for Nd:YAG and doubled Nd:YAG.

OPD shows the fans for this lens at the best common focus. Both wavelengths are theoretically less than λ/20 peak-to-valley transmitted wavefront distortion.



Chromatic focal shift vs. wavelength for YAP-100.0-20.0 1064/532 achromat.



1064/532nm Air-Spaced Laser Achromats

Part Number	Focal Length	Clear Aperture CA	Working Distance WD	Back Focal Distance BFD	Outside Diameter D	Length L
Positive Achromats						
YAP-10.0-2.0	10.0	2.0	6.0	7.5	12.7	4.3
YAP-15.0-3.0	15.0	3.0	10.0	13.6	12.7	11.4
YAP-25.0-5.0	25.0	5.0	21.0	21.7	19.0	7.1
YAP-50.0-10.0	50.0	10.0	41.0	45.6	19.0	11.8
YAP-75.0-15.0	75.0	15.0	65.0	68.9	25.4	14.7
YAP-100.0-20.0	100.0	20.0	89.0	94.2	28.6	14.4
YAP-125.0-25.0	125.0	25.0	111.0	117.7	31.8	19.0
YAP-150.0-30.0	150.0	30.0	136.0	142.4	40.6	19.0
YAP-200.0-40.0	200.0	40.0	184.0	190.6	50.8	22.4
YAP-250.0-50.0	250.0	50.0	233.0	239.1	61.3	22.7
Negative Achromats						
YAN-10.0-2.0	-10.0	2.0	12.0	-10.7	12.7	7.4
YAN-15.0-3.0	-15.0	3.0	16.0	-15.0	12.7	8.1
YAN-25.0-5.0	-25.0	5.0	28.0	-26.0	14.0	12.7
YAN-50.0-10.0	-50.0	10.0	55.0	-52.2	19.0	19.3

Unless otherwise noted, all measurements in mm.