

ZERO ORDER AIR-SPACED WAVEPLATES

Features

- For high power laser applications



Specifications

Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Clear aperture	Ø17 mm
Ring mount outer diameter	25.4 +0.0/ -0.12 mm
Wavefront distortion	$\lambda/10$ @ 633 nm
Surface quality	20 – 10 scratch & dig (MIL-PRF-13830B)
Parallelism	< 10 arcsec
AR coating	R < 0.5%
Laser damage threshold	100 mJ/cm ² , 50 fsec pulse, 800 nm typical

Housing Accessories

Polarizer Holder 840-0180
Find more at EksmaOptics.com



Center wavelength, nm	AR coating range, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
		Catalogue number	Price, EUR	Catalogue number	Price, EUR
1030	1000-1060	464-4208	310	464-4408	310
800	760-840	464-4215	310	464-4415	310
780	740-820	464-4220	310	464-4420	310
515	500-530	464-4232	310	464-4432	310
400	380-420	464-4235	310	464-4435	310
343	333-353	464-4241	335	464-4441	335
266	257-275	464-4245	345	464-4445	345
257	250-265	464-4246	345	464-4446	345

ZERO ORDER DUAL WAVELENGTH WAVEPLATES

When optical axis is turned by 45 degrees to input polarization, the waveplate rotates polarization of Ti:Sapphire laser fundamental (800 nm) by 90 degrees and the polarization of Ti:Sapphire second harmonic (400 nm) remains the same.

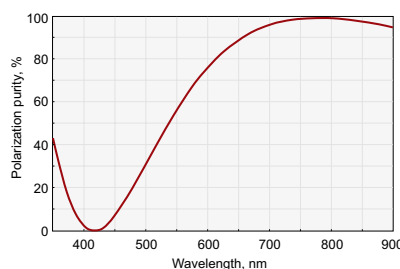
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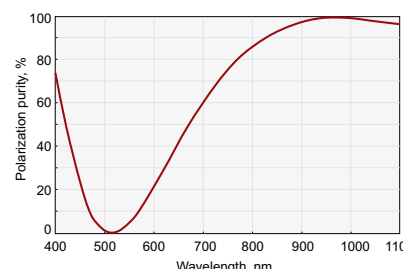
Description	AR coated	Laser Damage Threshold	Application	Catalogue number	Price, EUR
optically contacted $\lambda/2@800$ nm + $\lambda@400$ nm	800+400 nm	>10 mJ/cm ² , 50 fsec pulse, 800 nm typical	Ti:Sapphire	465-4211	345
air-spaced $\lambda/2@800$ nm + $\lambda@400$ nm	800+400 nm	100 mJ/cm ² , 50 fsec pulse, 800 nm typical	Ti:Sapphire	466-4211	410
optically contacted $\lambda/2@1030$ nm + $\lambda@515$ nm	1030+515 nm	>10 mJ/cm ² , 50 fsec pulse, 1030 nm typical	Yb:KGW/KYW	465-4212	345
air-spaced $\lambda/2@1030$ nm + $\lambda@515$ nm	1030+515 nm	100 mJ/cm ² , 50 fsec pulse, 1030 nm typical	Yb:KGW/KYW	466-4212	410

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Polarization purity of zero order dual waveplate. $\lambda/2@800$ nm + $\lambda/400$ nm



Polarization purity of zero order dual waveplate. $\lambda/2@1030$ nm + $\lambda/515$ nm