

LOW ORDER WAVEPLATES

Features

- Thickness 0.15–0.35 mm
- Thinner than multiple order

Low order plates are less temperature sensitive and temperature dependent than multiple order plates. These plates are suitable for high and low power applications.

Ø12.7 mm waveplates. Clear aperture Ø11 mm, unmounted

Wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	461-4205D12	105	461-4405D12	105
532	461-4230D12	105	461-4430D12	105
355	461-4240D12	115	461-4440D12	115

Ø20 mm waveplates. Clear aperture Ø17 mm, mounted into Ø25.4 mm ring holder

Wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	461-4205	160	461-4405	160
532	461-4230	160	461-4430	160
355	461-4240	192	461-4440	192

Specifications

Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Clear aperture	Ø17 mm (other dimensions on request)
Ring mount outer diameter	25.4 +0.0 / -0.12 mm
Nominal thickness of waveplate	0.15 – 0.35 mm
Surface quality	20–10 scratch & dig (MIL-PRF-13830B)
Wavefront distortion	$\lambda/10$ @ 633 nm
Parallelism	< 10 arcsec
AR coating	R < 0.4%
Damage threshold	10 J/cm ² , 10 nsec pulse, 1064 nm typical

Related Products

Low Order Plates of other wavelengths

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High Precision Rotation Polarizer, Waveplate Mount 840-0186

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MULTIPLE ORDER WAVEPLATES

Features

- Polished to 1 – 1.5 mm thickness
- Made from a single crystalline plate

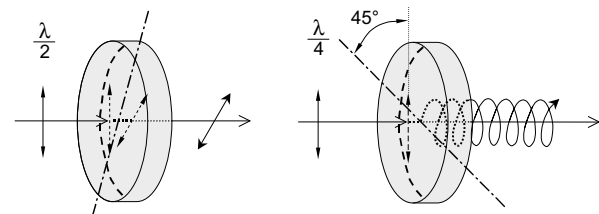
Multiple order plates are more dependent on the temperature changes than zero order plates. A change of $\pm 1\%$ from the designed wavelength of multiple order plate can result in difficulties in retardation. Contrary, with zero order plates $\pm 1\%$ and even $\pm 2\%$ change from the designed wavelength can cause only small retardation change.

Ø12.7 mm waveplates. Clear aperture Ø11 mm, unmounted

Wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	462-4205D12	90	462-4405D12	90
532	462-4230D12	90	462-4430D12	90
355	462-4240D12	95	462-4440D12	95

Ø20 mm waveplates. Clear aperture Ø17 mm, mounted into Ø25.4 mm ring holder

Wavelength, nm	Retardation $\lambda/2$		Retardation $\lambda/4$	
	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	462-4205	138	462-4405	138
532	462-4230	138	462-4430	138
355	462-4240	143	462-4440	143
266	462-4245	153	462-4445	153



Specifications

Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Clear aperture	Ø17 mm (other dimensions on request)
Ring mount outer diameter	25.4 +0.0 / -0.2 mm
Nominal thickness of waveplate	0.8 – 1.5 mm
Surface quality	20–10 scratch & dig (MIL-PRF-13830B)
Wavefront distortion	$\lambda/10$ @ 633 nm
Parallelism	< 10 arcsec
AR coating	R < 0.4%
Damage threshold	10 J/cm ² , 10 nsec pulse, 1064 nm typical

Related Products

Multiple Order Plates of other wavelengths

See page 1.69

Adjustable Polarizer Holder of Side Drive 840-0195

Find more at EksmaOptics.com

