

MULTIPLE ORDER DUAL WAVELENGTH WAVEPLATES

SPECIFICATIONS

Material	Single crystal quartz
Optical axis	normal to facet on circumference of retarder
Wavefront distortion	$\lambda/10$ @ 633 nm
Clear aperture	Ø17 mm
Ring mount outer diameter	25.4 +0.0 / -0.12 mm
Surface quality	20-10 scratch & dig (MIL-PRF-13830B)
Parallelism	< 10 arcsec
AR coating	R < 0.5%
Nominal thickness of waveplate	0.2-1.2 mm
Laser damage threshold	>100 mJ/cm ² , 50 fsec pulse, 800 nm typical

RELATED PRODUCTS

Dual Wavelength Plates
of other wavelengths

See page 1.55

High Precision Rotation
Polarizer, Waveplate
Mount 840-0186

See page 8.88

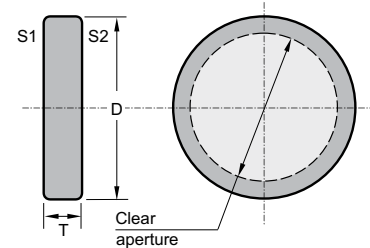


Retardation and Wavelength	Catalogue number	Price, EUR
λ @ 800 nm + $\lambda/2$ @ 400 nm	463-4121	215
λ @ 800 nm + $\lambda/4$ @ 400 nm	463-4141	215
$\lambda/2$ @ 800 nm + λ @ 400 nm	463-4211	215
$\lambda/2$ @ 800 nm + $\lambda/2$ @ 400 nm	463-4221	215
$\lambda/2$ @ 800 nm + $\lambda/4$ @ 400 nm	463-4241	215
$\lambda/4$ @ 800 nm + λ @ 400 nm	463-4411	215
$\lambda/4$ @ 800 nm + $\lambda/2$ @ 400 nm	463-4421	215
$\lambda/4$ @ 800 nm + $\lambda/4$ @ 400 nm	463-4441	215

POLARIZATION PLANE ROTATORS

- Made of crystalline quartz
- Intended to rotate a beam polarization plane strictly to an appropriate angle using circular birefringent effect

Compared to a waveplate, a rotator has an intrinsic advantage, being independent of rotation around its own optical axis. It needs no adjustment, only to be installed normal to incident radiation. A polarization plane rotator is normally used for the specific wavelength. It is only slightly dependent on ambient temperature.



SPECIFICATIONS

Material	Single crystal quartz
Optical axis	Normal to faces S1, S2 of rotator
Clear aperture	Ø17 mm
Ring mount outer diameter	25.4 +0.0/-0.12 mm
Surface quality	20-10 scratch & dig (MIL-PRF-13830B)
Wavefront distortion	$\lambda/10$ @ 633 nm
Parallelism	< 10 arcsec
AR coating	R < 0.5%
Laser damage threshold	100 mJ/cm ² , 50 fsec pulse, 800 nm typical

Polarization plane rotators for any wavelength from 200 to 2300 nm are available.

Catalogue number	Center wavelength, nm	Rotation angle of polarization plane, deg	AR coating range, nm	Price, EUR
470-4904	1030	45	1000-1060	215
470-4909	1030	90	1000-1060	215
470-4804	800	45	760-840	195
470-4809	800	90	760-840	195
470-4784	780	45	740-820	195
470-4789	780	90	740-820	195
470-4514	515	45	500-530	195
470-4519	515	90	500-530	195
470-4044	400	45	380-420	195
470-4049	400	90	380-420	195
470-4344	343	45	333-353	195
470-4349	343	90	333-353	195
470-4264	266	45	257-275	245
470-4269	266	90	257-275	245
470-4254	257	45	250-265	245
470-4259	257	90	250-265	245

RELATED PRODUCTS

Polarization plane rotators
of other wavelengths

See page 1.56

Kinematic Mirror and
Beamsplitter Mount
840-0020

See page 8.58



Kinematic Positioning
Mount 840-0193

See page 8.90

