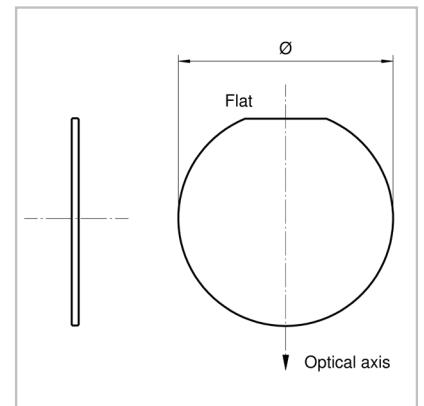


Low Order Waveplates

Low order waveplates are similar to multiple order waveplates. However, they are thinner and, therefore, have the advantage of a larger spectral bandwidth and a greater temperature stability.

Because of their typical range of thickness, the plates are fragile. It is extremely important to handle them with care.



Nomenclature

QWPL	-1064	-05	-2	AR/AR
Product Code (Low Order)	Wavelength in nm	Diameter in inches x 10	Retardation 2: $\lambda/2$ 4: $\lambda/4$	Coating Specification

Specifications

Spectral bandwidth	Typ. $\lambda \pm 1.5\%$
Typical range of thickness	0.10 mm to 0.25 mm
Wavefront error	$\lambda/10$ at 632.8 nm (transmission)
Retardation tolerance	$\lambda/100$ to $1/600$
Surface quality	5/4 x 0.025 for 1.0" substrates according to ISO 10110 10-5 according to MIL-O-1380A
Parallelism	Wedge < 0.5 arcsec
Damage threshold	LDT > 10 J/cm ² (10 ns; 1064 nm)
Clear aperture	85 % of diameter
Wavelength	For single wavelength in the range of 248 nm – 2200 nm
Dimensions [mm]:	12.7; 15.0; 20.0; 25.4; 30.0; 38.1; 50.8

Low order waveplates are also available with reduced specifications.