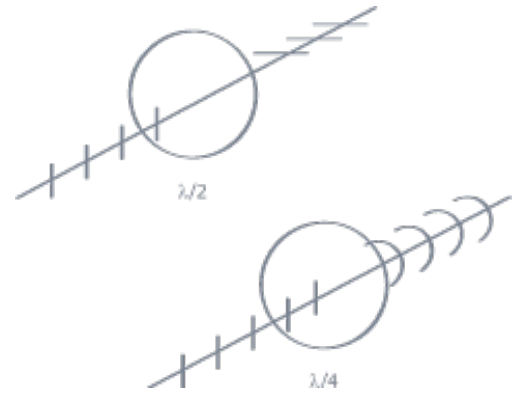


QUARTER AND HALF WAVE RETARDATION PLATE

- Material: Quartz
- Spectral range: 190 to 4000 nm
- Tolerance retardance: $\lambda / 300$
- Wavefront Deformation:
 - Quartz between glass plate : λ
 - Quartz alone : $\lambda / 10$
- Standard wavelengths:
 - 355, 488, 515, 532, 550, 633, 694, 780, 830,
 - 852, 1053, 1064, 1300, 1550 nm



3 types of waveplate for every wavelength:

- **Low order quartz waveplate:**

Thin quartz plate (60 μ m to 200 μ m), 1st , 2nd or 3rd order.

Unmounted – cemented between glass plates – mounted on or between glass ring.

- **Multiple order quartz waveplate:**

Quartz plate, thickness around 1mm.

- **Zero order quartz waveplate:**

2 quartz plates, optically cemented, thickness around 1mm.

Standard dimensions and references

Plate dimension (mm)	Retardation plate					
	Low order		Multiple order		Zero order	
	$\lambda/4$	$\lambda/2$	$\lambda/4$	$\lambda/2$	$\lambda/4$	$\lambda/2$
Ø 8	QROF4002(M)	QROF2002(M)	QROM4002(M)	QROM2002(M)	QROZ4002(M)	QROZ2002(M)
Ø 10	QROF4003(M)	QROF2003(M)	QROM4003(M)	QROM2003(M)	QROZ4003(M)	QROZ2003(M)
10 x 10	QROF4052	QROF2052	QROM4052	QROM2052	QROZ4052	QROZ2052
Ø 12	QROF4004(M)	QROF2004(M)	QROM4004(M)	QROM2004(M)	QROZ4004(M)	QROZ2004(M)
12 x 12	QROF4053	QROF2053	QROM4053	QROM2053	QROZ4053	QROZ2053
Ø 15	QROF4005(M)	QROF2005(M)	QROM4005(M)	QROM2005(M)	QROZ4005(M)	QROZ2005(M)
15 x 15	QROF4055	QROF2055	QROM4055	QROM2055	QROZ4055	QROZ2055
Ø 20	QROF4006(M)	QROF2006(M)	QROM4006(M)	QROM2006(M)	QROZ4006(M)	QROZ2006(M)
20 x 20	QROF4058	QROF2058	QROM4058	QROM2058	QROZ4058	QROZ2058
Ø 25	QROF4007(M)	QROF2007(M)	QROM4007(M)	QROM2007(M)	QROZ4007(M)	QROZ2007(M)
Ø 30	QROF4008(M)	QROF2008(M)	QROM4008(M)	QROM2008(M)	QROZ4008(M)	QROZ2008(M)
Ø 40	QROF4009(M)	QROF2009(M)	QROM4009(M)	QROM2009(M)	QROZ4009(M)	QROZ2009(M)
Ø 50	QROF4010(M)	QROF2010(M)	QROM4010(M)	QROM2010(M)	QROZ4010(M)	QROZ2010(M)
Ø 60	QROF4011(M)	QROF2011(M)	QROM4011(M)	QROM2011(M)	QROZ4011(M)	QROZ2011(M)
Ø 70	QROF4012(M)	QROF2012(M)	QROM4012(M)	QROM2012(M)	QROZ4012(M)	QROZ2012(M)
Ø 80	QROF4014(M)	QROF2014(M)	QROM4014(M)	QROM2014(M)	QROZ4014(M)	QROZ2014(M)
Ø 90	QROF4015(M)	QROF2015(M)	QROM4015(M)	QROM2015(M)	QROZ4015(M)	QROZ2015(M)
Ø 100	QROF4016(M)	QROF2016(M)	QROM4016(M)	QROM2016(M)	QROZ4016(M)	QROZ2016(M)

*(M) : Available mount

On request : other dimensions to Ø150 mm

Round zero order plates are square section cut to the right \emptyset . Fast and slow axes are perpendicular to the section.

Antireflection coating : every wavelength : $R < 0.2$ to 0.3% .

Dimensions

Dimension	Mount (ref : M)		
	\emptyset (mm)	Thickness (mm)	Clear Aperture (mm)
\emptyset 8	20	8	7
\emptyset 10	20	8	9
\emptyset 12	20	8	11
\emptyset 15	25	10	14
\emptyset 20	30	10	19
\emptyset 25	35	10	24
\emptyset 30	40	12	28
\emptyset 40	50	15	38
\emptyset 50	60	15	48
\emptyset 60	70	15	58
\emptyset 70	80	20	67
\emptyset 80	90	20	77
\emptyset 90	100	20	87
\emptyset 100	110	20	96

Wavelength references

Wavelength reference before « M »														
nm	355	488	515	532	550	633	694	780	830	852	1053	1064	1300	1550
Ref	20	21	22	23	24	25	26	27	28	29	30	31	32	33