



Zero Order Waveplates

Specifications:

Material Optical grade crystal quartz
 Parallelism <0.5 arc seconds
 Diameter Tolerance +0.0, -0.13mm
 Surface Quality 10/5
 Retardation Tolerance $\lambda/200 - \lambda/600$
 Transmitted Wavefront Distortion $\lambda/10$ @ 632.8nm
 Clear Aperture Central 90%

To order a waveplate, construct a part number using the codes for the desired retardation, part diameter and wavelength listed in the tables below. To order a narrowband AR coated waveplate, append -2000 to the product number. Performance specifications for this coating can be found on page 51.

In addition to these standard parts, VLOC can produce a wide variety of custom products. Please contact our sales engineers for assistance with your custom requirement.

Part Number: WZ - -

Retardation Diameter Wavelength AR Coating

Retardation	
Quarter-wave	Q
Half-wave	H

Diameter		
mm	(inches)	
10.0	0.394	100
12.7	0.500	127
15.0	0.591	150
20.0	0.787	200
25.4	1.000	254
30.0	1.181	300
38.1	1.500	381
50.0	1.969	500
50.8	2.000	508

Wavelength		
nm		
248.0		0248
266.0		0266
308.0		0308
354.7		0355
441.6		0442
457.9		0458
488.0		0488
514.5		0514
523.0		0523
532.0		0532
632.8		0633
694.3		0694
750.0		0750
780.0		0780
790.0		0790
800.0		0800
810.0		0810
820.0		0820
830.0		0830
850.0		0850
860.0		0860
946.0		0946
986.0		0986
1047		1047
1053		1053
1054		1054
1064		1064
1319		1319
1550		1550

Example: A 38.1mm diameter zero order half-wave plate at 830nm with a narrowband AR coating would be part number:
WZH381-0830-2000