

**Achromatic** waveplate is similar to Zero-order waveplate except that the two plates are made from different materials, such as crystal quartz and magnesium fluoride. Since the dispersion of the birefringence can be different for the two materials, it is possible to specify the retardation values at a wavelength range. Hence, the retardation of the resulting waveplate can be made to low sensitivity to wavelength change. Based on the contact methods of two plates, we classify the achromatic waveplate to two types: Airspaced and Cemented.



<b>Material:</b>	Quartz and MgF <sub>2</sub>
<b>Parallelism:</b>	<1 arc second
<b>Diameter Tolerance:</b>	+0.0, -0.1mm
<b>Surface Quality:</b>	20/10
<b>Retardation Tolerance:</b>	$\lambda/200$
<b>Wavelength Distortion:</b>	$\lambda/8@632.8\text{nm}$
<b>Clear aperture:</b>	central 90%
<b>AR Coated:</b>	S1&S2: R<0.5% @ wavelength
<b>Wavelength:</b>	VIS: 465–650nm; NIR: 700–1000nm; IR: 1200–1650nm

Half Waveplates P/N#	Quarter Waveplates P/N#	Diameter(mm)
WPH210	WPH410	10.0
WPH212	WPH412	12.7
WPF215	WPH415	15.0
WPH220	WPH420	20.0
WPH225	WPH425	25.4

**SAMPLE INSPECTION**

 WPH  $\lambda/2@460-610\text{nm}$ 
