

# Optical Elements



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- 70ND Circular Gradient Density Filters
- 70AM1.5 series Solar Simulation Filters with A Class
  - 70G series Gratings
  - 70W series Windows
  - 70L series Lens

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## 700 Achromatic Microscope Objectives



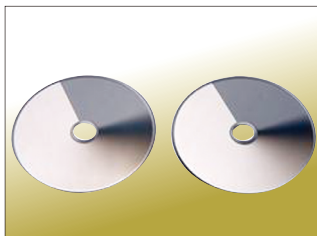
### Specifications:

Model	Magnifications	Numerical aperture	Effective working distance (mm)	Conjugate distance (mm)	Parfocal distance (mm)
700104	4X	0.1	37.5	195	45
700110	10X	0.25	2.043		
700120	20X(S)	0.4	2		
700140	40X(S)	0.65	0.6		
700160	60X(S)	0.85	0.185		
7001100	100X(S)(OIL)	1.25	0.195		

**Note:** The effective working distance refers to the top of the front lens to the surface of the cover glass along the axial distance.

S-spring objective OIL-Oil immersion objective

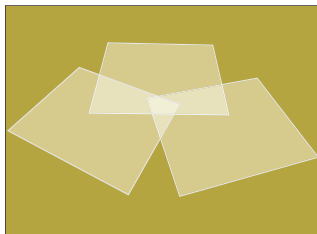
## 70ND Circular Gradient Density Filters



### Specifications:

Model	Optical density (OD)	Wavelength range (nm)	Diameter of outer circle (mm)	Diameter of inner hole (mm)
70ND50-1.0	0.0~1.0	400~1100	50±0.25	8±0.25
70ND50-1.5	0.0~1.5			
70ND50-2.0	0.0~2.0			
70ND50-3.0	0.0~3.0			

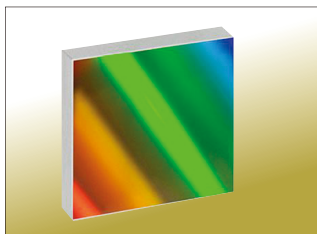
## 70AM1.5 series Solar Simulation Filters with A Class



### Specifications:

Model	Size(mm)	Thickness(mm)	Grade	Matching degree
70AM1.5-R50	Φ50	1.1	A	0.9~1.1
70AM1.5-S50×50	50×50			
70AM1.5-R100	Φ100			
70AM1.5-S100×100	100×100			

## 70G series Gratings



### Specifications:

Model (groove number-blazed wavelength)	Products S (Length×Width×Thickness)	Model (groove number-blazed wavelength)	Products S (Length×Width×Thickness)
70G1800-300	Grating S20×20×4	70G1800-250	Grating S30×30×6
70G600-300	Grating S20×20×4	70G1800-500	Grating S30×30×6
70G600-400	Grating S20×20×4	70G1200-250	Grating S30×30×6
70G2400-250	Grating S30×30×6	70G1200-300	Grating S30×30×6

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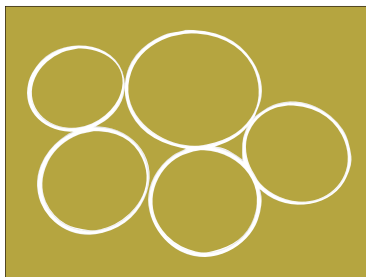


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Model (groove number-blazed wavelength)	Products S (Length × Width × Thickness)
7OG1200-500	Grating S30×30×6
7OG600-300	Grating S30×30×6
7OG600-400	Grating S30×30×6
7OG600-500	Grating S30×30×6
7OG600-750	Grating S30×30×6
7OG600-1000	Grating S30×30×6
7OG600-1250	Grating S30×30×6
7OG300-500	Grating S30×30×6
7OG300-1250	Grating S30×30×6
7OG300-1800	Grating S30×30×6
7OG300-3000	Grating S30×30×6
7OG150-4000	Grating S30×30×6
7OG66-DB	Grating S30×30×6
7OG50-12000	Grating S30×30×6
7OG2400-250	Grating S55×55×6
7OG1800-250	Grating S55×55×6
7OG1800-500	Grating S55×55×6
7OG1200-250	Grating S55×55×6
7OG1200-300	Grating S55×55×6
7OG1200-500	Grating S55×55×6
7OG600-500	Grating S55×55×6
7OG600-750	Grating S55×55×6
7OG600-1000	Grating S55×55×6
7OG600-1250	Grating S55×55×6

Model (groove number-blazed wavelength)	Products S (Length × Width × Thickness)
7OG300-500	Grating S55×55×6
7OG300-1250	Grating S55×55×6
7OG300-1800	Grating S55×55×6
7OG300-3000	Grating S55×55×6
7OG150-4000	Grating S55×55×6
7OG66-DB	Grating S55×55×6
7OG50-12000	Grating S55×55×6
7OG2400-250	Grating S68×68×6
7OG1800-250	Grating S68×68×6
7OG1800-500	Grating S68×68×6
7OG1200-250	Grating S68×68×6
7OG1200-300	Grating S68×68×6
7OG1200-500	Grating S68×68×6
7OG600-500	Grating S68×68×6
7OG600-750	Grating S68×68×6
7OG600-1000	Grating S68×68×6
7OG600-1250	Grating S68×68×6
7OG300-500	Grating S68×68×6
7OG300-1250	Grating S68×68×6
7OG300-1800	Grating S68×68×6
7OG300-3000	Grating S68×68×6
7OG150-4000	Grating S68×68×6
7OG66-DB	Grating S68×68×6
7OG50-12000	Grating S68×68×6

### 7OW series Windows



### 7OWG1 series K9 Glass Windows with surface accuracy $\lambda/2$

**Specifications:**

Model	Diameter(mm)	Thickness(mm)
7OWG1-5	5	2
7OWG1-10	10	2
7OWG1-12.5	12.5	2
7OWG1-20	20	2

Model	Diameter(mm)	Thickness(mm)
7OWG1-25	25	2
7OWG1-30	30	3
7OWG1-38	38	4
7OWG1-50	50	4

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- 70LGB
- 70LSB
- 70LGC
- 70LSC



### 7OWG2 series K9 High Precision Glass Windows with surface accuracy $\lambda/10$

#### Specifications:

Model	Diameter(mm)	Thickness(mm)	Model	Diameter(mm)	Thickness(mm)
7OWG2-5	5	2	7OWG2-25	25	6
7OWG2-10	10	2	7OWG2-30	30	10
7OWG2-12.5	12.5	6	7OWG2-38	38	10
7OWG2-20	20	6	7OWG2-50	50	10

### 7OWS1 series Quartz Windows with surface accuracy $\lambda/2$

#### Specifications:

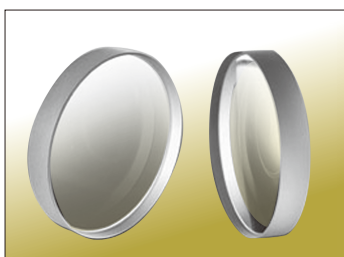
Model	Diameter(mm)	Thickness(mm)
7OWS1-5	5	2
7OWS1-10	10	2
7OWS1-12.5	12.5	2
7OWS1-20	20	2
7OWS1-25	25	2
7OWS1-30	30	3
7OWS1-38	38	4
7OWS1-50	50	4

### 7OWS2 series High Precision Quartz Windows with surface accuracy $\lambda/10$

#### Specifications:

Model	Diameter(mm)	Thickness(mm)
7OWS2-5	5	2
7OWS2-10	10	2
7OWS2-12.5	12.5	6
7OWS2-20	20	6
7OWS2-25	25	6
7OWS2-30	30	10
7OWS2-38	38	10
7OWS2-50	50	10

### 7OL series Lens

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## 7OLGA series K9 Glass Plano-convex Lens

### Specifications:

Model	Diameter	Focal length
7OLGA10-10	10	10
7OLGA10-12.5	10	12.5
7OLGA10-16	10	16
7OLGA10-20	10	20
7OLGA10-25	10	25
7OLGA10-32	10	32
7OLGA10-40	10	40
7OLGA10-50	10	50
7OLGA10-63	10	63
7OLGA10-100	10	100
7OLGA12.7-12.7	12.7	12.7
7OLGA12.7-25.4	12.7	25.4
7OLGA12.7-38.1	12.7	38.1
7OLGA12.7-50.8	12.7	50.8
7OLGA15-20	15	20
7OLGA15-60	15	60
7OLGA15-75	15	75
7OLGA15-85	15	85
7OLGA15-100	15	100
7OLGA15-200	15	200
7OLGA16-20	16	20
7OLGA16-25	16	25
7OLGA16-32	16	32
7OLGA16-40	16	40
7OLGA16-50	16	50
7OLGA16-63	16	63
7OLGA16-80	16	80
7OLGA16-100	16	100
7OLGA16-160	16	160
7OLGA20-30	20	30
7OLGA20-40	20	40
7OLGA20-50	20	50
7OLGA20-60	20	60
7OLGA20-80	20	80
7OLGA20-100	20	100
7OLGA25-25	25	25

Model	Diameter	Focal length
7OLGA25-32	25	32
7OLGA25-40	25	40
7OLGA25-50	25	50
7OLGA25-60	25	60
7OLGA25-80	25	80
7OLGA25-100	25	100
7OLGA25-160	25	160
7OLGA25-175	25	175
7OLGA25-200	25	200
7OLGA25-250	25	250
7OLGA25-500	25	500
7OLGA25-630	25	630
7OLGA25-1000	25	1000
7OLGA25-2000	25	2000
7OLGA25.4-38	25.4	38
7OLGA25.4-50	25.4	50
7OLGA25.4-75	25.4	75
7OLGA25.4-100	25.4	100
7OLGA25.4-150	25.4	150
7OLGA25.4-175	25.4	175
7OLGA30-60	30	60
7OLGA30-100	30	100
7OLGA30-120	30	120
7OLGA30-150	30	150
7OLGA38.1-75	38.1	75
7OLGA38.1-125	38.1	125
7OLGA38.1-200	38.1	200
7OLGA38.1-300	38.1	300
7OLGA40-50	40	50
7OLGA40-63	40	63
7OLGA40-80	40	80
7OLGA40-100	40	100
7OLGA40-125	40	125
7OLGA40-150	40	150
7OLGA40-160	40	160
7OLGA40-200	40	200

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Model	Diameter	Focal length
7OLGA40-250	40	250
7OLGA40-350	40	350
7OLGA40-500	40	500
7OLGA50-63	50	63
7OLGA50-80	50	80
7OLGA50-100	50	100
7OLGA50-160	50	160
7OLGA50-250	50	250
7OLGA50-500	50	500
7OLGA50.8-100	50.8	100
7OLGA50.8-250	50.8	250
7OLGA50.8-400	50.8	400
7OLGA60-200	60	200
7OLGA60-300	60	300

Model	Diameter	Focal length
7OLGA60-500	60	500
7OLGA60-600	60	600
7OLGA60-800	60	800
7OLGA76.2-175	76.2	175
7OLGA76.2-300	76.2	300
7OLGA76.2-500	76.2	500
7OLGA76.2-700	76.2	700
7OLGA76.2-1000	76.2	1000
7OLGA100-160	100	160
7OLGA100-250	100	250
7OLGA100-500	100	500
7OLGA100-800	100	800
7OLGA100-1000	100	1000

#### 7OLSA series UV Quartz Plano-convex Lens

##### Specifications:

Model	Diameter	Focal length
7OLSA10-12	10	12
7OLSA10-15	10	15
7OLSA10-20	10	20
7OLSA10-25	10	25
7OLSA10-40	10	40
7OLSA10-50	10	50
7OLSA12.7-20	12.7	20
7OLSA12.7-25	12.7	25
7OLSA12.7-30	12.7	30
7OLSA12.7-40	12.7	40
7OLSA12.7-50	12.7	50
7OLSA12.7-100	12.7	100
7OLSA15-20	15	20
7OLSA15-45	15	45
7OLSA25.4-35	25.4	35
7OLSA25.4-50	25.4	50
7OLSA25.4-75	25.4	75
7OLSA25.4-100	25.4	100
7OLSA25.4-150	25.4	150
7OLSA25.4-175	25.4	175
7OLSA25.4-200	25.4	200
7OLSA25.4-250	25.4	250
7OLSA25.4-400	25.4	400

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## 7OLGB series K9 Glass Biconvex Lens

### Specifications:

Model	Diameter	Focal length	Model	Diameter	Focal length
7OLGB6.5-8	6.5	8	7OLGB30-29	30	29
7OLGB8-8	8	8	7OLGB30-60	30	60
7OLGB8-11	8	11	7OLGB30-70	30	70
7OLGB10-10	10	10	7OLGB30-87	30	87
7OLGB10-15	10	15	7OLGB30-120	30	120
7OLGB10-30	10	30	7OLGB30-180	30	180
7OLGB12.5-12	12.5	12	7OLGB30-250	30	250
7OLGB12.5-14	12.5	14	7OLGB30-300	30	300
7OLGB12.5-17	12.5	17	7OLGB38.1-75	38.1	75
7OLGB12.5-19	12.5	19	7OLGB38.1-125	38.1	125
7OLGB12.7-25	12.7	25	7OLGB38.1-200	38.1	200
7OLGB12.7-38	12.7	38	7OLGB38.1-300	38.1	300
7OLGB20-24	20	24	7OLGB40-40	40	40
7OLGB20-30	20	30	7OLGB40-85	40	85
7OLGB20-40	20	40	7OLGB40-100	40	100
7OLGB20-55	20	55	7OLGB40-150	40	150
7OLGB20-60	20	60	7OLGB40-250	40	250
7OLGB20-75	20	75	7OLGB50-50	50	50
7OLGB25-25	25	25	7OLGB50.8-150	50.8	150
7OLGB25-46	25	46	7OLGB50.8-250	50.8	250
7OLGB25.4-50	25.4	50	7OLGB50.8-400	50.8	400
7OLGB25.4-100	25.4	100	7OLGB63-63	63	63
7OLGB25.4-150	25.4	150	7OLGB100-100	100	100
7OLGB25.4-175	25.4	175			

## 7OLSB series UV Quartz Biconvex Lens

### Specifications:

Model	Diameter	Focal length
7OLSB15-60	15	60
7OLSB25.4-25	25.4	25
7OLSB25.4-30	25.4	30
7OLSB25.4-60	25.4	60
7OLSB25.4-75	25.4	75
7OLSB25.4-80	25.4	80
7OLSB25.4-100	25.4	100
7OLSB25.4-300	25.4	300
7OLSB25.4-500	25.4	500

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## 7OLGC series K9 Glass Plano-concave Lens

### Specifications:

Model	Diameter	Focal length
7OLGC10-12	10	-12
7OLGC10-15	10	-15
7OLGC10-20	10	-20
7OLGC10-25	10	-25
7OLGC10-30	10	-30
7OLGC10-40	10	-40
7OLGC10-50	10	-50
7OLGC10-63	10	-63
7OLGC10-100	10	-100
7OLGC12.7-19	12.7	-19
7OLGC12.7-25	12.7	-25
7OLGC12.7-38	12.7	-38
7OLGC20-30	20	-30
7OLGC20-50	20	-50
7OLGC20-60	20	-60
7OLGC20-80	20	-80
7OLGC25-25	25	-25
7OLGC25-32	25	-32
7OLGC25-40	25	-40
7OLGC25-50	25	-50
7OLGC25-60	25	-60
7OLGC25-80	25	-80
7OLGC25-100	25	-100
7OLGC25-125	25	-125
7OLGC25-160	25	-160
7OLGC25-200	25	-200
7OLGC25-250	25	-250
7OLGC25-366	25	-366
7OLGC25-400	25	-400
7OLGC25-500	25	-500

Model	Diameter	Focal length
7OLGC25-1000	25	-1000
7OLGC25.4-50	25.4	-50
7OLGC25.4-75	25.4	-75
7OLGC25.4-100	25.4	-100
7OLGC25.4-150	25.4	-150
7OLGC30-60	30	-60
7OLGC30-120	30	-120
7OLGC30-150	30	-150
7OLGC40-50	40	-50
7OLGC40-63	40	-63
7OLGC40-80	40	-80
7OLGC40-100	40	-100
7OLGC40-125	40	-125
7OLGC40-160	40	-160
7OLGC40-200	40	-200
7OLGC40-250	40	-250
7OLGC40-400	40	-400
7OLGC40-500	40	-500
7OLGC50-63	50	-63
7OLGC50-80	50	-80
7OLGC50-100	50	-100
7OLGC50-160	50	-160
7OLGC50-250	50	-250
7OLGC50-500	50	-500
7OLGC50-1000	50	-1000
7OLGC50.8-250	50.8	-250
7OLGC50.8-400	50.8	-400
7OLGC50.8-500	50.8	-500

## 7OLSC series UV Quartz Plano-concave Lens

### Specifications:

Model	Diameter	Focal length
7OLSC25.4-35	25.4	-35
7OLSC25.4-50	25.4	-50
7OLSC25.4-75	25.4	-75
7OLSC25.4-100	25.4	-100
7OLSC25.4-150	25.4	-150

Model	Diameter	Focal length
7OLSC25.4-175	25.4	-175
7OLSC25.4-200	25.4	-200
7OLSC25.4-250	25.4	-250
7OLSC25.4-400	25.4	-400

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