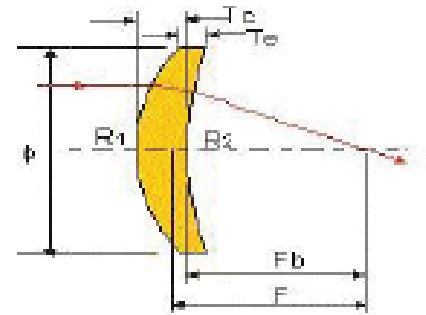


# Positive Meniscus Glass Lenses



Material Option: N-BK7  
 Focal Length Tolerance:  $\pm 2\%$   
 Diameter Tolerance:  $+0.00/-0.10\text{mm}$   
 Clear Aperture: 90%  
 Center Thickness Tolerance:  $\pm 0.20\text{mm}$   
 Centration Tolerance:  $<0.05\text{mm}$   
 Scratch/Dig: 40-20  
 Surface Irregularity:  $\lambda/4$   
 Coating option: VIS, NIR, SWIR



## ORDERING INFORMATION

| Product code | Diameter | Focal length | Material | Coating                          |
|--------------|----------|--------------|----------|----------------------------------|
| LPM          | D        | f            | N-BK7    | None<br>VIR<br>NIR<br>SWIR<br>UV |

## COMMON PRODUCT LIST

| Part Number       | Diameter $\varnothing$ (mm) | Focal Length (mm) | CT (mm) | ET (mm) |
|-------------------|-----------------------------|-------------------|---------|---------|
| LPM-D25-f100-BK7  | 25                          | 100               | 4       | 2.5     |
| LPM-D25-f125-BK7  |                             | 125               | 4       | 2.8     |
| LPM-D25-f150-BK7  |                             | 150               | 4       | 3       |
| LPM-D25-f175-BK7  |                             | 175               | 4       | 3.1     |
| LPM-D25-f200-BK7  |                             | 200               | 3.5     | 2.8     |
| LPM-D25-f250-BK7  |                             | 250               | 3.5     | 2.9     |
| LPM-D25-f300-BK7  |                             | 300               | 3.5     | 3       |
| LPM-D25-f350-BK7  |                             | 350               | 3.5     | 3.1     |
| LPM-D25-f400-BK7  |                             | 400               | 3.5     | 3.1     |
| LPM-D25-f500-BK7  |                             | 500               | 3.5     | 3.2     |
| LPM-D25-f600-BK7  |                             | 600               | 3.5     | 3.2     |
| LPM-D25-f800-BK7  |                             | 800               | 3.5     | 3.3     |
| LPM-D25-f1000-BK7 |                             | 1000              | 3.5     | 3.3     |

## Positive Meniscus Glass Lenses

| Part Number       | Diameter Ø (mm) | Focal Length (mm) | CT (mm) | ET (mm) |
|-------------------|-----------------|-------------------|---------|---------|
| LPM-D50-f100-BK7  | 50              | 100               | 10.3    | 2.8     |
| LPM-D50-f125-BK7  |                 | 125               | 8       | 2.3     |
| LPM-D50-f150-BK7  |                 | 150               | 7       | 2.4     |
| LPM-D50-f175-BK7  |                 | 175               | 7       | 3.2     |
| LPM-D50-f200-BK7  |                 | 200               | 6.5     | 3.2     |
| LPM-D50-f250-BK7  |                 | 250               | 4.8     | 2.3     |
| LPM-D50-f300-BK7  |                 | 300               | 4.8     | 2.7     |
| LPM-D50-f350-BK7  |                 | 350               | 4.5     | 2.8     |
| LPM-D50-f400-BK7  |                 | 400               | 4.5     | 3       |
| LPM-D50-f500-BK7  |                 | 500               | 4.5     | 3.3     |
| LPM-D50-f600-BK7  |                 | 600               | 4       | 3       |
| LPM-D50-f800-BK7  |                 | 800               | 4       | 3.2     |
| LPM-D50-f1000-BK7 |                 | 1000              | 4       | 3.4     |

### COATING CODE: AR COATING, R AVG<0.5% AT WAVELENGTH RANGE

None=no coating

VIR = AR Coating at 400~700nm.

NIR= AR Coating at 650~1050nm.

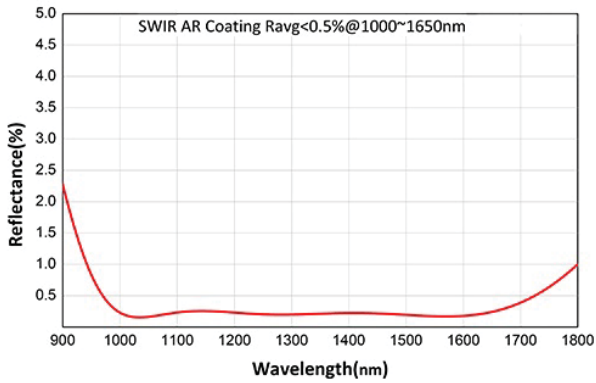
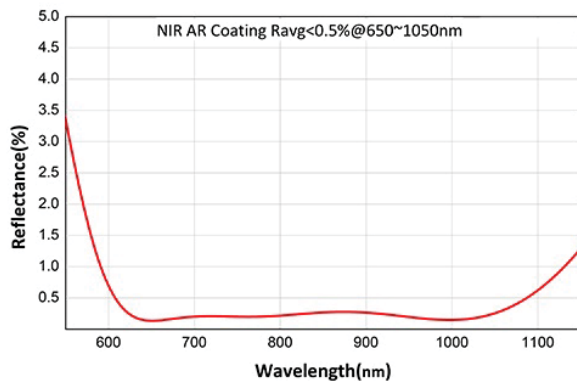
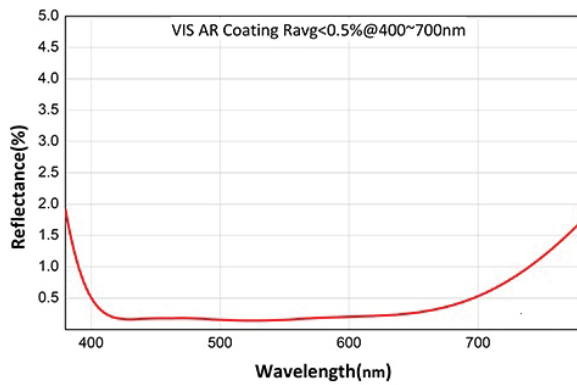
SWIR = AR Coating at 1000~1650nm.

### MATERIAL REFRACTION INDEX:

N-BK7, Index of refraction is 1.517 at 587.6 nm.

## Positive Meniscus Glass Lenses

### POSITIVE MENISCUS GLASS LENSES COATING

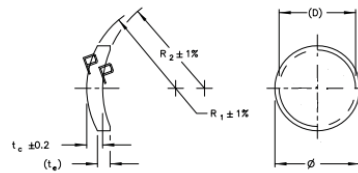




## Positive Meniscus Glass Lenses

### POSITIVE MENISCUS GLASS LENSES DRAWING

**NOTES:**

1. ALL DIMENSIONS IN MILLIMETERS.
2. SURFACES MARKED "P" POLISH, ALL OTHERS FINISH GROUND
3. FOCAL LENGTH TOLERANCE ( f ):  $\pm 2\%$ .
4. SCRATCH/DIG: 40-20
5. CENTRITION: 3 ARC MINUTES
6. SURFACE ACCURACY: 1/4 WAVE
7. EDGE BEVEL:
  - a. 0.10~0.25mm FACE WIDTH AT 45° FOR Dia  $\leq$  25.0mm
  - b. 0.25~0.50mm FACE WIDTH AT 45° FOR Dia  $\geq$  25.0mm
8. MIN. CLEAR APERTURE IS CENTRAL 90% OF DIAMETER
9. MATERIAL OPTION: N-BK7
10. COATING OPTION:
  - a. UNCOATED
  - b. VIR AR COATING,  $R_{avg} \leq 0.5\%$  @ 400~700nm
  - c. NIR AR COATING,  $R_{avg} \leq 0.5\%$  @ 650~1050nm
  - d. SWIR AR COATING,  $R_{avg} \leq 0.5\%$  @ 1000~1650nm



|  |         |   |                |
|--|---------|---|----------------|
| Third Angle Projection   |         |  |                |
|  |         | TITLE: Positive Meniscus Lens   |                |
| SIZE   | DWG NO. | REV   |                |
| A4   | LPM-    | A   |                |
| ALL DIMS IN  | mm      | SCALE   | SHEET 01 OF 01 |