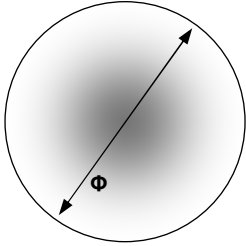


MENISCUS AXICONS

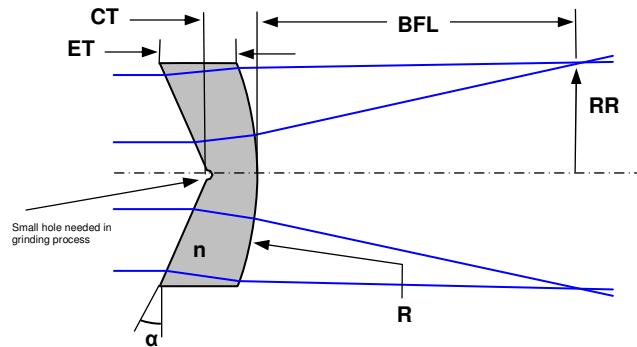
SURFACE 1: CONCAVE CONE
SURFACE 2: PURE RADIUS CONVEX

LENS DRAWING

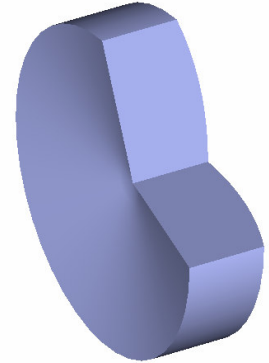
Front view



Side view



3D view



LENS DESIGN INFORMATIONS

Ordering Code AXI_MEN_MAT_α_R_Φ_CT_AR(λ ₁ - λ ₂)	Dimensions ¹			
	α	R	Φ	CT
Material : BK7				
AXI_MEN_BK7_5_R_Φ_CT_AR(λ ₁ - λ ₂)	5°	custom	custom	custom
AXI_MEN_BK7_10_R_Φ_CT_AR(λ ₁ - λ ₂)	10°	custom	custom	custom
AXI_MEN_BK7_25_Φ_CT_AR(λ ₁ - λ ₂)	25°	custom	custom	custom
Material : Fused silica				
AXI_MEN_FS_5_R_Φ_CT_AR(λ ₁ - λ ₂)	5°	custom	custom	custom
AXI_MEN_FS_10_R_Φ_CT_AR(λ ₁ - λ ₂)	10°	custom	custom	custom
AXI_MEN_FS_25_Φ_CT_AR(λ ₁ - λ ₂)	25°	custom	custom	custom
Material : S-TiH53				
AXI_MEN_S-TiH53_5_R_Φ_CT_AR(λ ₁ - λ ₂)	5°	custom	custom	custom
AXI_MEN_S-TiH53_10_R_Φ_CT_AR(λ ₁ - λ ₂)	10°	custom	custom	custom
AXI_MEN_S-TiH53_25_Φ_CT_AR(λ ₁ - λ ₂)	25°	custom	custom	custom

1. Units: mm

Useful formulae

$$BFL = \frac{R}{(n-1)}$$

$$\beta = \arcsin(n \cdot \sin \alpha) - \alpha$$

$$RR = BFL \cdot \tan \beta$$

Presently, most of our productions of axicons are custom order.

Use the ordering code below to place an order at:

sales@doriclenses.com

or call us at 418.877.5600

Ordering code: AXI_MEN_MAT_α_R_Φ_CT_AR(λ₁-λ₂)

AXI: Axicon group
MEN: Meniscus (radius convex – conical concave)
MAT: Material (FS=fused silica, BK7, F2, S-TiH53, LaSFN9, ...)
α: Axicon angle absolute value (°)
R: Radius of curvature
Φ: Lens diameter (mm)
CT: Central thickness (mm)
AR(λ₁-λ₂): Anti-reflection coating wavelength range (nm)

Legend:

Φ: Axicon lens diameter
 β: Beam deviation angle
 n: Refractive index

CT: Central thickness
 D: Incident beam diameter
 MAT: Material

ET: Edge thickness
 BFL: Back focal length
 AR(λ₁ - λ₂): Anti-reflection coating wavelength range

α: Axicon angle
 RR: Ring focus radius

