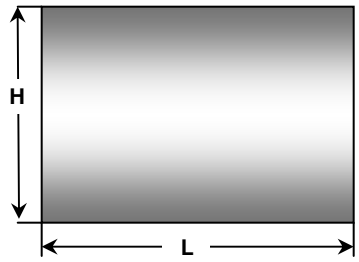
PLANO CONVEX F2 ACYLINDRIC LENSES

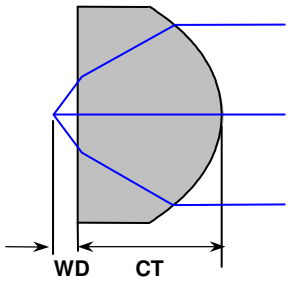
INFINITE CONJUGATES
SURFACE 1: PLANO
SURFACE 2: HIGH ORDER ACYLINDRIC

LENS DRAWING

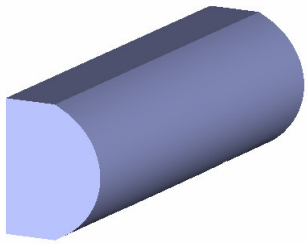
Front view



Side view



3D view



LENS DESIGN INFORMATIONS

Ordering Code	Paraxial data [1]		Dimensions [1]			Surfaces data [1,2,3]					
						1	2				
ACL_PCX_INF_F2_EFL_L_AR(λ_1 - λ_2)	EFL	WD	H	CT	L	R	R	CC	A_6	A_8	A_{10}
Material: F2 **Design wavelength** : λ_0 = 810 nm **Refractive index:** n(λ_0) = 1.608043 **Numerical aperture:** NA = 0.41											
ACL_PCX_INF_F2_0.1215_L_AR(λ_1 - λ_2)	0.1215	0.0282	0.100	0.150	custom	plano	-0.0739	-0.4475			

1. Units: mm
2. The acylinder coefficients are given only as guidance for optical modeling. The actual surface is different, analytically designed higher order curve and gives better lenses.
3. Surface 1 faces focal point

General acylinder equation :

$$surf(x) = \frac{Cx^2}{1+\sqrt{1-C^2(CC+1)x^2}} + A_6x^6 + A_8x^8 + A_{10}x^{10} + \ldots$$

Legend

ACL : Acylindric lens
PCX : Plano convex
INF : Infinite conjugates
EFL : Effective focal length
WD : Working distance
NA : Numerical aperture
H : Lens height
CT : Central thickness
L : Cylinder length
R : Radius of curvature
C = 1/R : Curvature
CC : Conic constant
Ai : General acylindric coefficients
AR(λ_1 - λ_2) : Anti-reflection coating wavelength range
MAG : Magnification