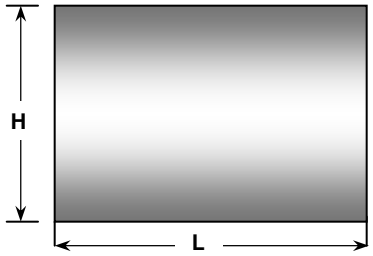
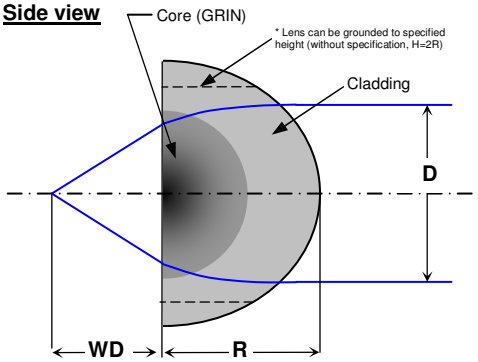
HALF-DORIC GRADIENT-INDEX CYLINDRICAL LENSES

LENS DRAWING

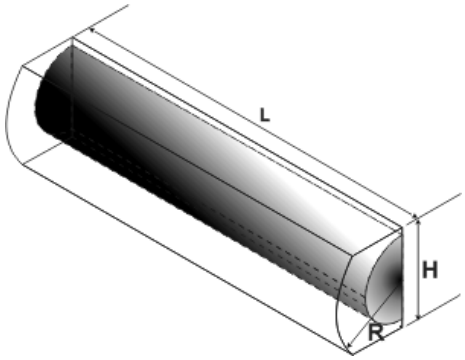
Front view



Side view



3D view



LENS DESIGN INFORMATIONS

Ordering Code CYL_HDG_R_H_L_AR(λ_1 - λ_2)	Paraxial data [1]		Dimensions [1]		
	EFL	WD	R	H	L
Material: Fused silica (cladding) and GRIN (core) **Design wavelength:** visible and near IR **Numerical aperture:** NA = 0.35					
CYL_HDG_0.50_H_L_AR(λ_1 - λ_2)	0.931	0.631	0.50	custom	custom
CYL_HDG_0.75_H_L_AR(λ_1 - λ_2)	1.397	0.946	0.75	custom	custom
CYL_HDG_1.25_H_L_AR(λ_1 - λ_2)	2.328	1.576	1.25	custom	custom
CYL_HDG_1.50_H_L_AR(λ_1 - λ_2)	2.793	1.891	1.50	custom	custom

1. Units: mm

Useful formulae

$$EFL = 1.862 \times R$$

$$WD = 1.262 \times R$$

$$D = 2 \cdot EFL \cdot NA$$

Legend

R: Rod radius (half-diameter) **H:** Rod height **L:** Rod length **EFL:** Effective focal length
WD: Working distance **NA:** Numerical aperture **AR(λ_1 - λ_2):** Anti-reflection coating wavelength range