

Tailored Distortion™ Miniature SuperFisheye™ Lens



Description

The DSL183 lens is a miniature SuperFisheye™ lens with Tailored Distortion™ designed with a field of view of up to 181 degrees on 1/3.2" to 1/1.8" format imagers with HD resolution. The low F-number, thermal stability, and special distortion characteristics make this lens ideal for exterior based camera applications.

Key Features

- SuperFisheye FOV: 181°
- Tailored Distortion™
- Superior low light performance: F/2.2 aperture
- Compact size

Optical Specifications

Sunex PN DSL183	
Description	Tailored Distortion™ Fisheye Lens
Imager Format	Up to 1/1.8"
Nominal Imager Resolution	1.3MP
Focal Length	1.3mm
Relative Aperture (F/#)	F/2.2
Image Circle	5.0mm
Field of View	181° at 5.0mm image circle
Total Track Length	17.0mm
Distortion	+20% from F-θ
Chief Ray Angle	16.0° at 5.0mm image circle
IR cut-off filter	Optional IR cut-off filter at 650 nm

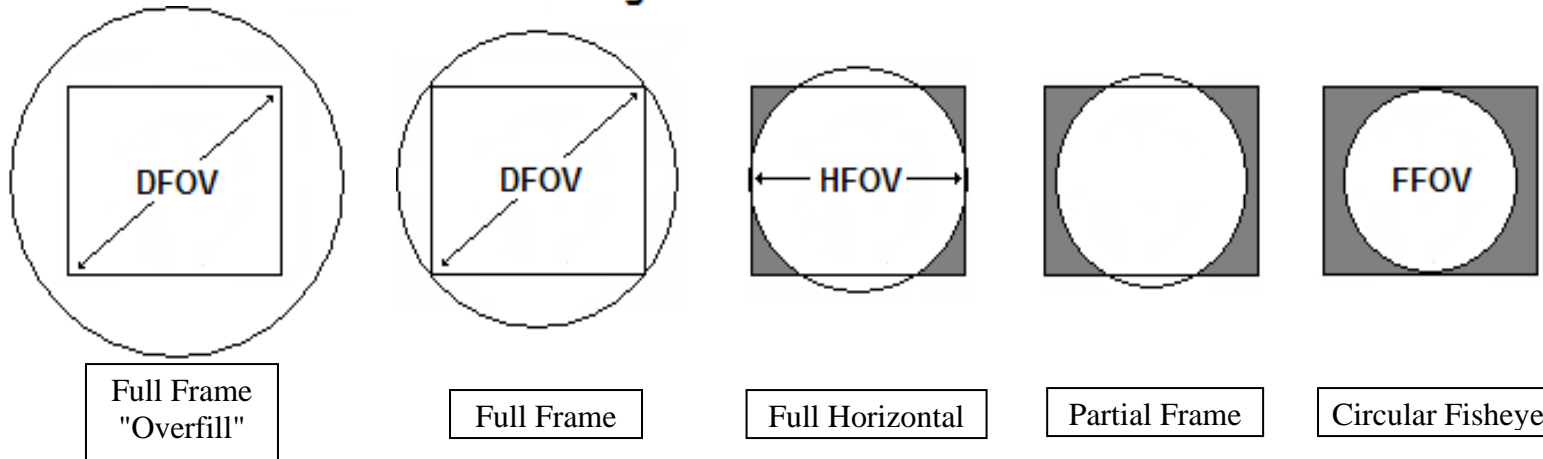
Applications

- Automotive Surround View
- Security and Surveillance
- Internet of Things (IoT)
- Computer Vision

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Image circle format using a 4:3 aspect ratio imager:

Image Circle vs. Sensor Format



DSL183 on: 1/3.6" and smaller

~1/3.6"

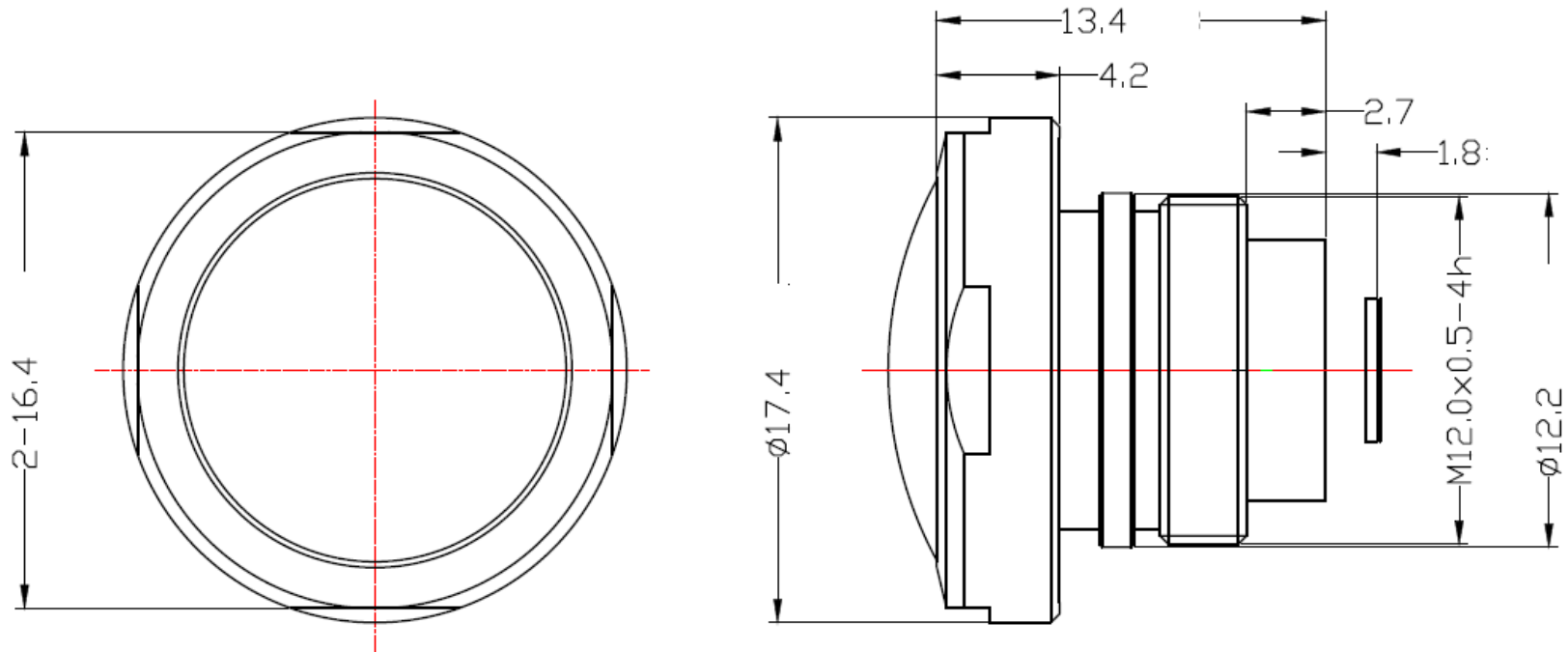
~1/3"

~1/2.7"

1/1.8" or larger

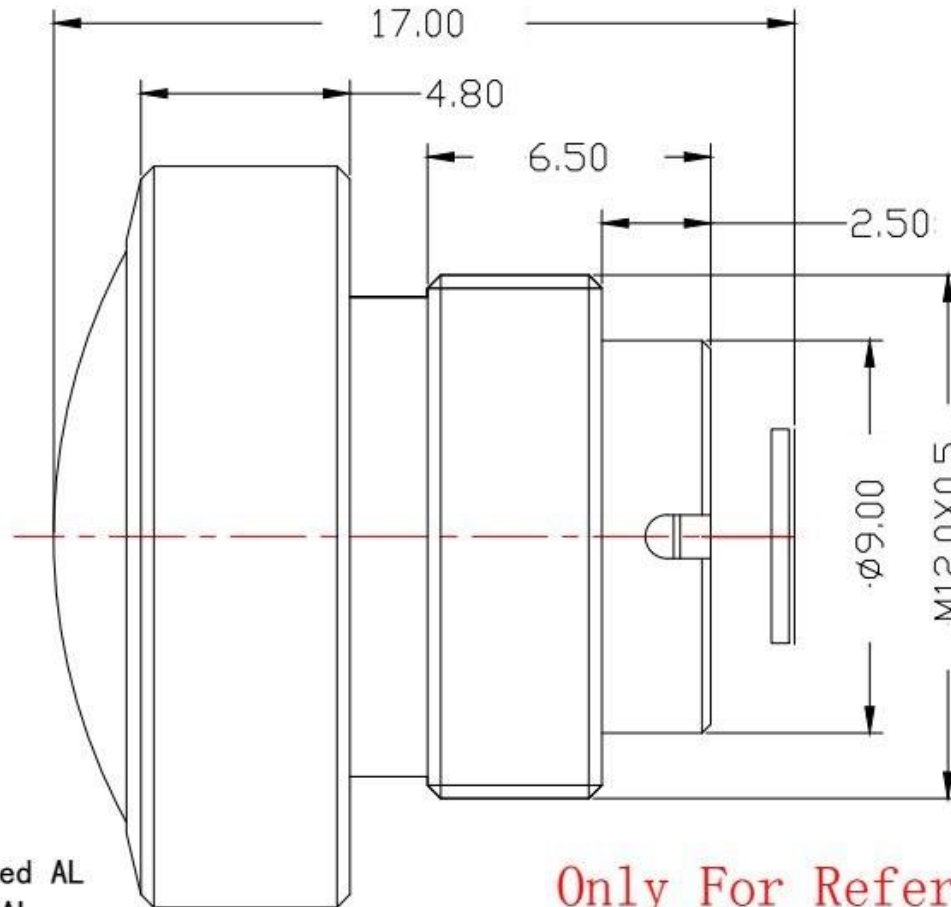
DSL183B-650-F2.2 and DSL183B-NIR-F2.2 Mechanical Dimensions [mm]:

Note: DSL183B is intended for use with Sunex CMT168 mount



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DSL183C-650-F2.2 Mechanical Dimensions [mm]:



Notes:

1. EFL=1.32
2. F#=2.3
3. Barrel Material: Black anodized AL
Cap Material: Black anodized AL;
4. IR cut coating: T=50%@650+/-20nm

Only For Reference