



360° Camera Lens - Theia SY185F 185° fisheye for 16 megapixel resolution

- ❖ **Ultra high resolution for 5 - 16 megapixel 360-Degree Cameras**
- ❖ Greater than **400 lp/mm** center resolution.
- ❖ Greater than **200 lp/mm** at **85°** off-axis field angle. Right where you need the best resolution possible.
- ❖ Supports **1/2.5", 1/2.3", and 1/2"** sensors

SY185F Performance Data

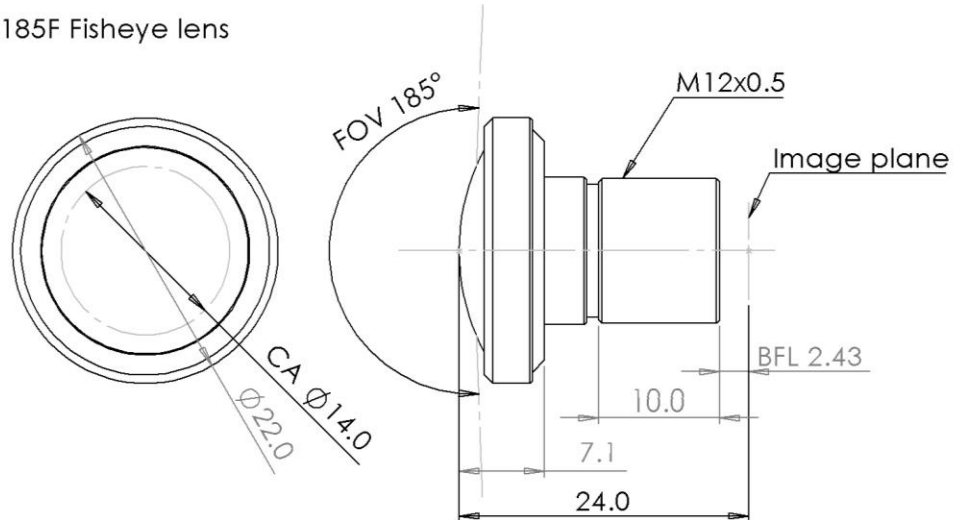
	SY185F
Lens	185 degrees
Field of View	1.76mm
Focal length	4.64mm
Image Circle	100% Fisheye
Distortion	16 megapixel
Resolution	400 lp/mm center, > 200 lp/mm at 85° off-axis field angle
F/#	F/2.0
Relative illumination	>90% at edge
CRA	< 5 degrees
Focus Range	0.5m to infinity
Back Focus Length	2.85mm (in air)
Iris	Fixed
IR Cutoff	IR cutoff filter (50% at 670nm)
Lens transmission	>90%
Mount	M12x0.5
Weight	~20g
Dimensions	22.0 x 21.6mm (24mm total track, see image below)
OperatingTemp	-20C – 70C
Storage Temp.	-40C – 85C

Field of View with sensor size

	Image circle	1/2.5" sensor	1/2.3" sensor	1/2" sensor
SY185F	4.64mm	185° x162°*	185° x185°	185° x185°

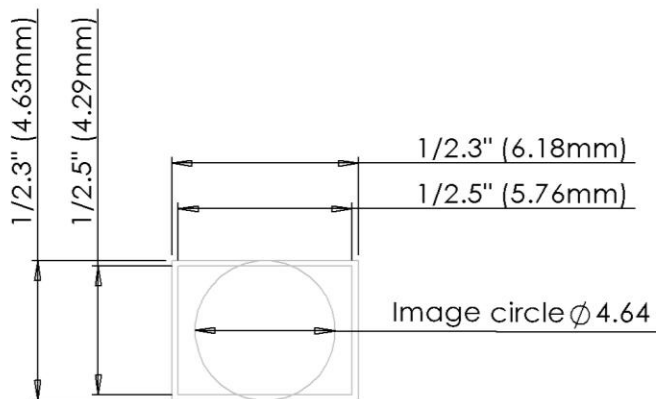
*When using the lens with a sensor of smaller than 1/2.3", the field of view will be less than 185 degrees in the short axis of the sensor.

SY185F Fisheye lens



Theia Technologies proprietary
Preliminary 2/19/2014

Image circle on 1/2.5" and 1/2.3" sensors



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Tolerance
(0.000) ± 0.010
(0.00) ± 0.02
(0.0) ± 0.1
Angle $\pm 2^\circ$
unless specified

Notes:

PROPRIETARY AND CONFIDENTIAL <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF THEIA TECHNOLOGIES.</small>	TITLE SY185F Fisheye		DWG. NO. SY185F Fisheye	
	Material		Finish	
	SCALE 2:1	UNITS mm	DATE 2/20/2014	REV. A
	SIZE A	DRAWN MP	SHEET 1 OF 1	