

GASIR® Infrared Lens
FL 100 mm f/1.0 MFX
Manual focus
P/N: 18074_100



Introduction



Umicore's GASIR® infrared lenses have been developed for an easy fit with a wide range of camera cores. Our catalog lenses provide a cost-effective solution for high-resolution thermal imaging and sensing applications.

This **manual focus lens** offers superior performance from 8 m out to infinity. Its **lightweight and intuitive design** make it a prime choice for your application. This lens is compatible with **17 µm VGA** detectors and smaller.

Optical Specifications

Focal length	100.0 mm
Aperture-based f-number	f/1.00
Waveband	8-12 µm
Transmission	> 87% average over waveband
Focus range	8 m to infinity over 270° focus movement
Lateral magnification at 8 m	1:78
Assembly weight	678 g

Field of view

640 x 480	17 µm	VGA	6.2° (H) x 4.7° (V) - 7.7° (diagonal)
640 x 480	12 µm	VGA	4.4° (H) x 3.3° (V) - 5.5° (diagonal)
384 x 288	17 µm	qVGA+	3.7° (H) x 2.8° (V) - 4.7° (diagonal)
320 x 240	17 µm	qVGA	3.1° (H) x 2.3° (V) - 3.9° (diagonal)
384 x 288	12 µm	qVGA+	2.6° (H) x 2.0° (V) - 3.3° (diagonal)
320 x 240	12 µm	qVGA	2.2° (H) x 1.6° (V) - 2.7° (diagonal)

Environmental Specifications

Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Sealing	IP67

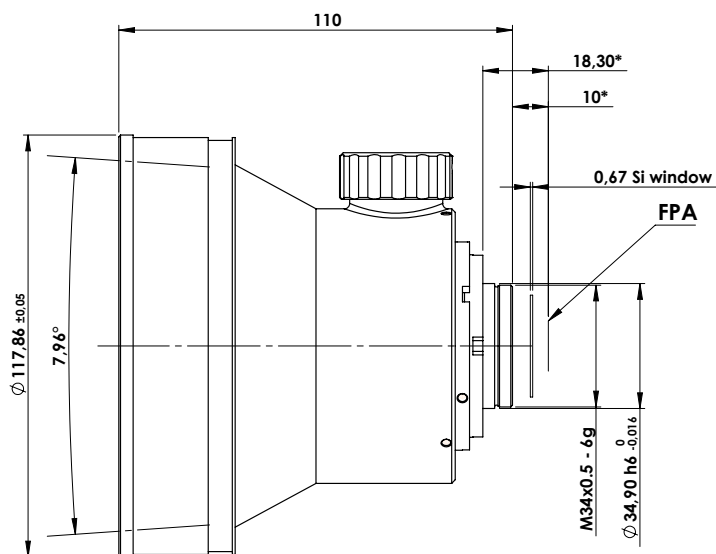
Coating

Front surface
 One internal surface
 All other surfaces

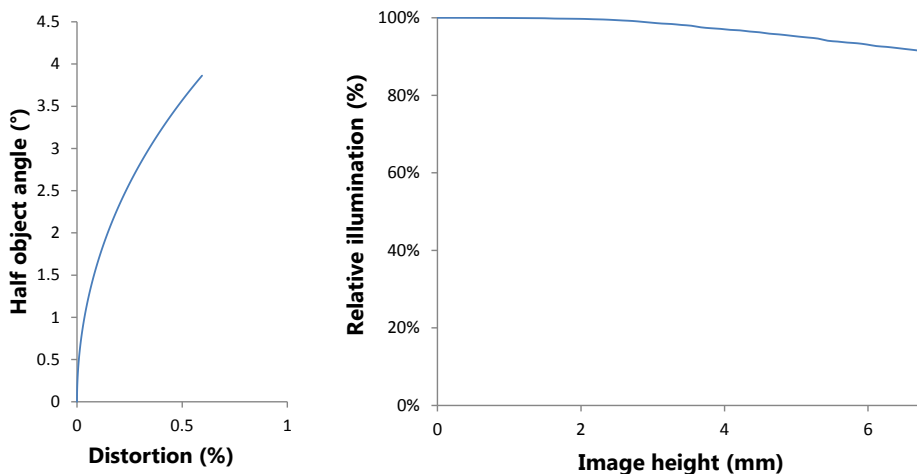
High durability anti-reflective coating @ 8-12 μm
 Long Wave Pass coating @ 8-12 μm
 High efficiency anti-reflective coating @ 8-12 μm

Assembly & Interface Specifications

Black anodized aluminium
 Image plane-related dimensions valid with 0.67 mm Si window (not included)



Distortion and Relative Illumination



Electro-Optic Materials is ISO certified: ISO 9001 & ISO 14001
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