

NEW GENERATION LENS

V-SWIR

from 400 to 1700 nm

Apochromatic Lens OB V-SWIR F16/4 – P/N C1038

General Description

A new high resolution V-SWIR apochromatic lenses image from 0.4 – 1.7 μm making them especially well-suited for PCB inspection, special laser applications, surveillance & defense, alignment and tracking.

A high F/N and excellent transmission characteristics allow superior imaging in these wavelengths of interest.



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Optical and mechanical parameters

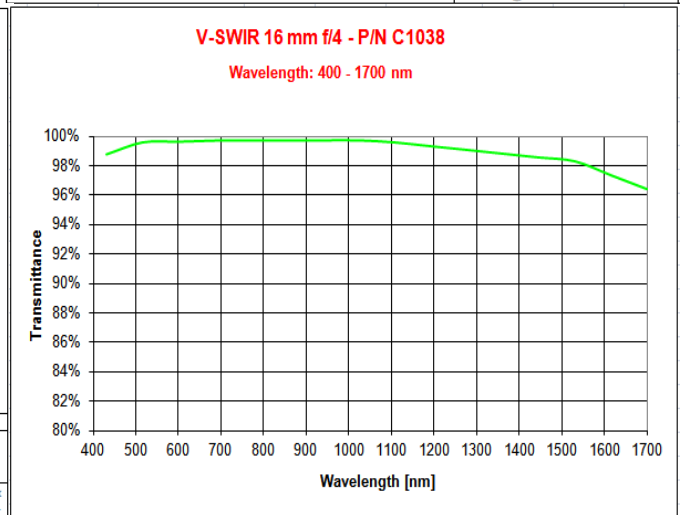
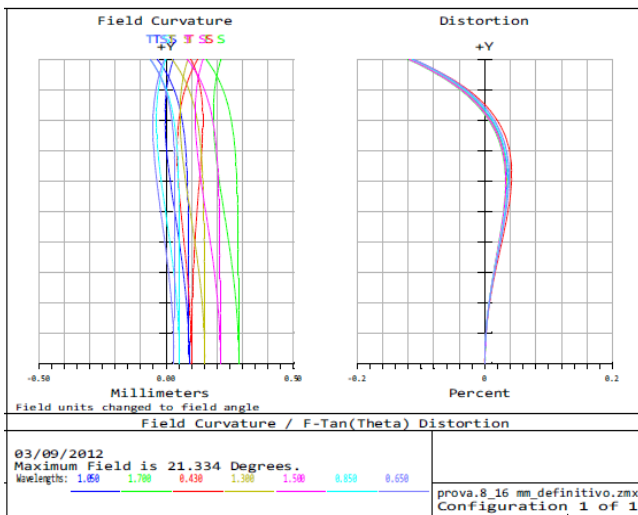
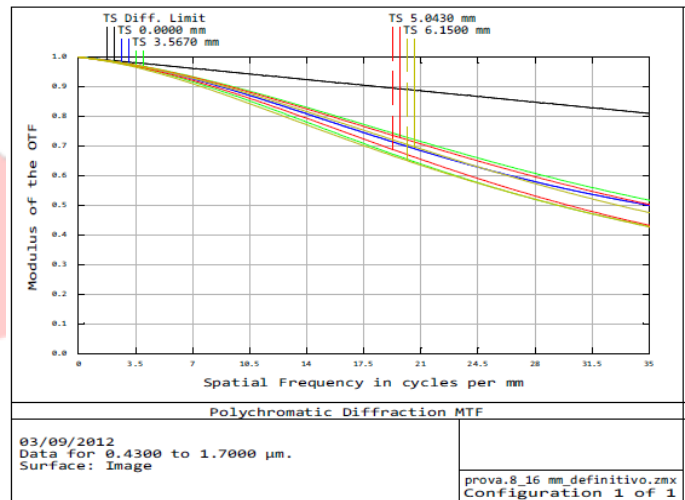
Focal length	16 mm
Image format (diagonal)	12.3 mm
F.O.V. (diagonal)	42 degrees
Max aperture	F/N = 4
Object format	N.A.
Min working distance	5000 mm (without refocus) 250 mm (with focus)
Zoom value	N.A.
Focus	Manual
Iris	Fixed

N. of elements	6
Dimensions	Dia 19x17.6 mm
Weight	10 gr.
Options	
Motorized focus	Upon request
Motorized iris	Upon request
Motorized zoom	N.A.
Other mount type	Upon request
Customization	Upon request

P/N	wavelength range	mount type	note
C1038.001	400-1700 nm	M14 Screw	-

MTF, Field Curvature, Distortion and Transmission from 400 to 1700 nm

The calculated MTF values are displayed below and are verified at the maximum F/N and the best focus plane. The colored lines represent the F.O.V. starting from the center (0%) to the corner (100%).



Optical parameters for wavelength range 0.4 – 1.7 μm

Resolution	MTF > 40% @35lp/mm
Distortion	< 0.2%
Average axial chromatic aberration	0.018 mm

Glass Transmission without coating	> 95%
Antireflection Coating	R ≤ 1%
Vignetting	< 1%

Outline Dimensions & Technical Notes

All the dimensions are reported to help the customer, mainly to define the interface with the cameras. More details are available upon request and technical drawings are open for the customers and their needs. The main parameters are reported in the front table and here below.

(1:1)

Le tolleranze si intendono applicate a trattamento eseguito
Tolerances must be applicable after coating

MATERIAL / MATERIALE	SCALE / SCALARE 5:1	PROJECT / SISTEMA OB - V-SWIR APO F16/4	PROJECT DESCRIPTION Assieme Generale/Assembly
TREATMENT - COATING / TRATTAMENTO	GEN. TOLERANCES / TOL. GEN. ±0.1	DRAWN BY / REL. S. BOSCHI	DOCUMENT / DOCUMENTO DS C1038_001_000
	DATE / DATA 29/05/2012		VERIS A

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