

MeVis-C/CF Traffic

High Resolution Inspection Lens with optimal VIS and NIR Performance





MeVis-C/CF Traffic

The new MeVis-C traffic lenses feature optimized color correction to eliminate focus-shift between daylight and NIR illumination around 850 nm. This optimized optical design removes the need for refocusing when switching between wavelengths as the focal plane for both illumination cases is identical. The field-proven and well known mechanics of the MeVis-C and MeVis-CF lenses remain unchanged to ensure a robust lens ready for the most demanding industrial use cases.

Features

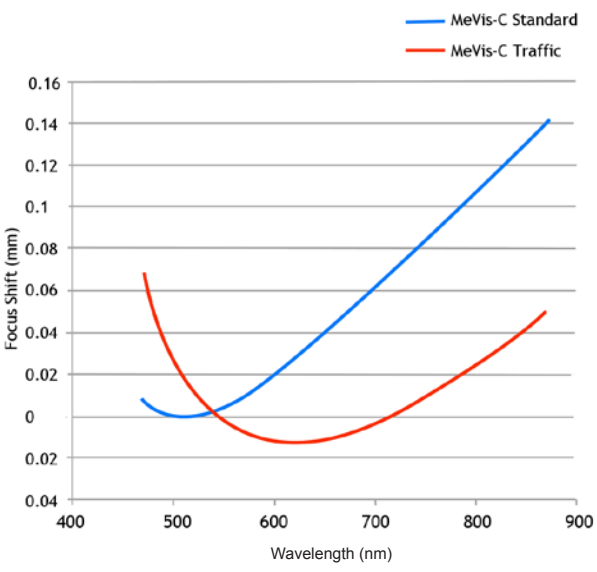
- Optimized for visual spectrum and NIR with identical focus plane over broad wavelength range
- Highest optical performance
- Large image circle up to 1 inch
- For pixel size even below 2 μm
- High numerical aperture

Technical Data

- Spectral range: 450-900 nm
- Focusing: manual, lockable
- Iris diaphragm: manual, lockable
- Filter thread: M35.5x0.5
- Lens diameter: 42 mm

02

Longitudinal Color Abberation Comparison



Ideal Areas

- License plate reading (ANPR)
- Tolling
- High-resolution surveillance and recognition
- Multispectral/Hyperspectral imaging
- Document verification

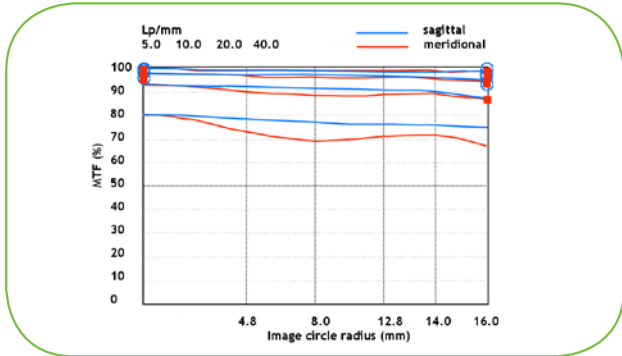
Solution MeVis-C/CF Traffic:
Adapted longitudinal color abberation curve for zero focus shift at 540 nm and 710 nm

MeVis-C/CF Traffic

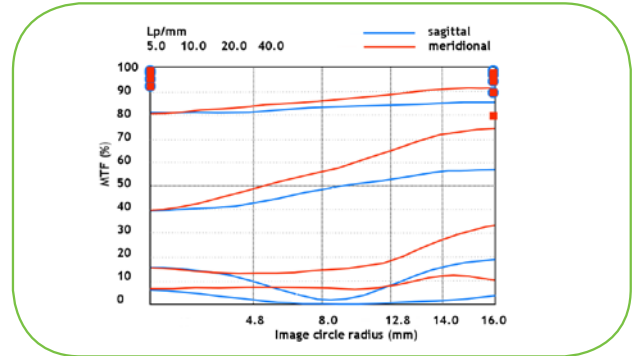
Product	Focal length (mm)	F-number	Magnification range	Image circle (mm)	Interface	Part No.
MeVis-C traffic 1.6/25	25	1.6	-0.1 ... 0	16	C-Mount	0020-002-000-45
MeVis-CF traffic 1.6/25	25	1.6	-0.1 ... 0	16	C-Mount	0020-007-000-30

Subject to technical changes

Comparison MeVis-C Standard in VIS and NIR



MTF wavelength 550 nm of MeVis-C 1.6/25



MTF wavelength 850 nm of MeVis-C 1.6/25

Standard MeVis-C lenses are optimized for a wavelength range from 400 nm to 700 nm minimizing longitudinal color aberration. Excellent image performance can be achieved within this wavelength range.

Standard MeVis-C lenses achieve high IR transmission values at 850 nm, however longitudinal color aberrations lead to a blurred image at 850 nm. Refocusing is needed.

03

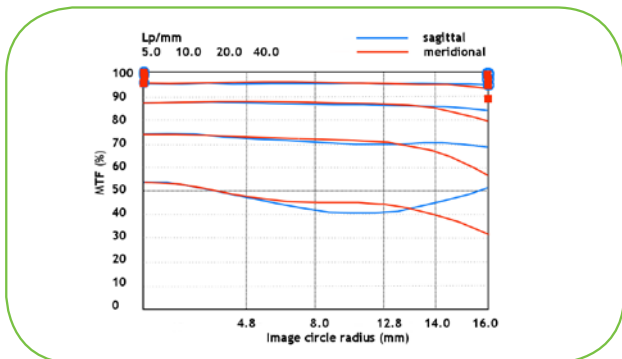


MeVis-C standard in VIS light, distance 10 m

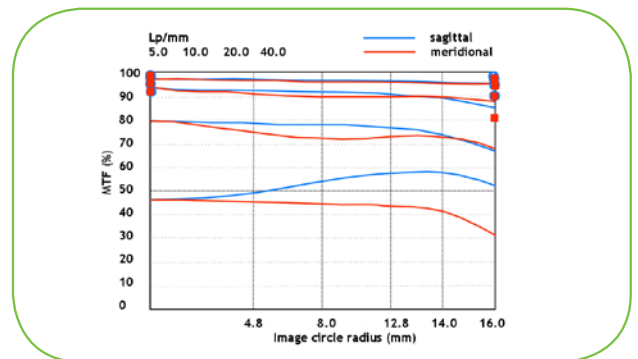


MeVis-C standard in NIR light, distance 10 m

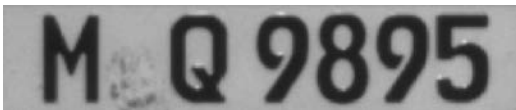
Comparison MeVis-C Traffic: Your Solution for Day and Night



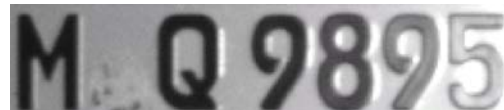
MTF wavelength 550 nm of MeVis-C traffic 1.6/25



MTF wavelength 850 nm of MeVis-C traffic 1.6/25



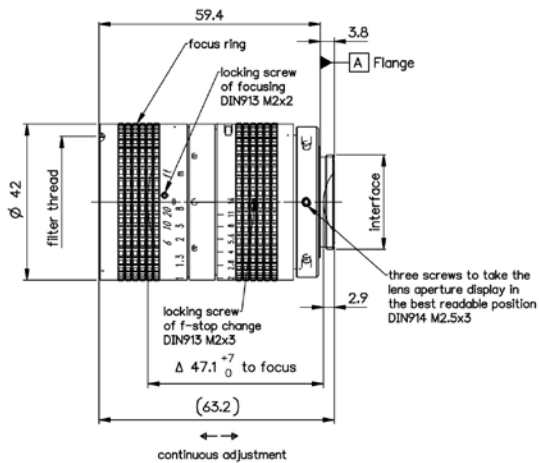
MeVis-C traffic in VIS light, distance 10 m



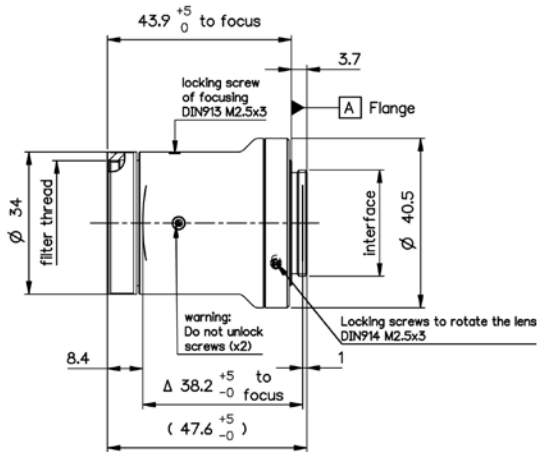
MeVis-C traffic in NIR light, distance 10 m

Both images taken with our MeVis-C traffic lens and open aperture without refocusing: no change in image

sharpness visible. Perfectly sharp images for further processing with very different illumination wavelengths.



MeVis-C traffic 1.6/25



MeVis-CF traffic 1.6/25



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North America

Phone, toll free: +1 800 724 4274

Asia / Pacific

Phone: +65 6499 7766