

inspec.x L 5.6/105 VIS-NIR 0.76x

for large format high-resolution sensors optimized for VIS and NIR sensitivity



The new VIS-NIR lens series from Excelitas sets standards in the field of visual and non-visual inspection. Developed for long line and large area sensors, it offers an incredibly good apochromatic design. Ultra-sharp and high-contrast images can be created at a wide range of different wavelengths from 400 to 1150nm without having to refocus. The diffraction-limited design impresses with extreme performance across the entire object field, so that optimal results can also be achieved at the edges.

Your Benefits

- VIS-NIR scan without refocus
- Apochromatically corrected lens from 400 to 1150nm
- Diffraction limited design
- Ultra high resolution for large area and line sensors
- Great price performance ratio

The new inspec.x VIS-NIR series comes with four different lenses that are optimized for different magnifications and are equipped with the established V-groove interface.

Every version of this new series matches the Excelitas Modular Focus System and scores with flexibility and modularity.

Applications

- PCB inspection
- Print inspection
- Surface inspection
- Waste inspection
- Battery inspection
- Food inspection

LINOS

Key Features

- No refocusing across VIS and NIR range (apochromatic correction for 400-1150nm)
- Perfect match with 5µm Pixel size
- Flexible mounting system for almost any image processing camera
- Full metal barrel with lockable aperture

Mechanical accessories, including helical focus mounts, adapters and extension tubes are described @ excelitas.com/product/linos-machine-vision-accessories

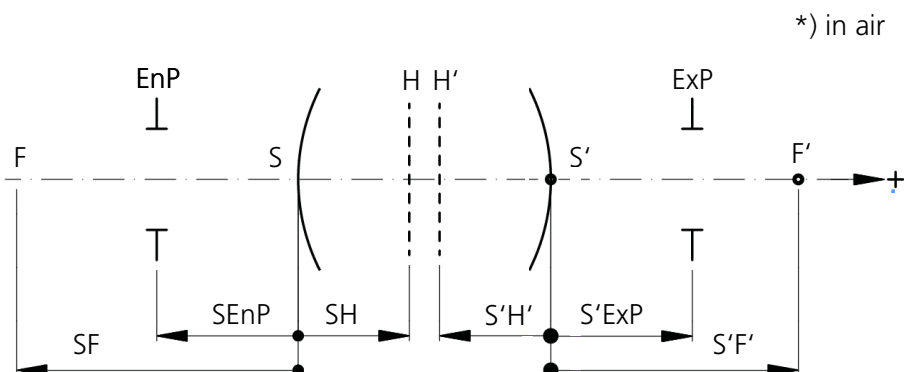


Specifications

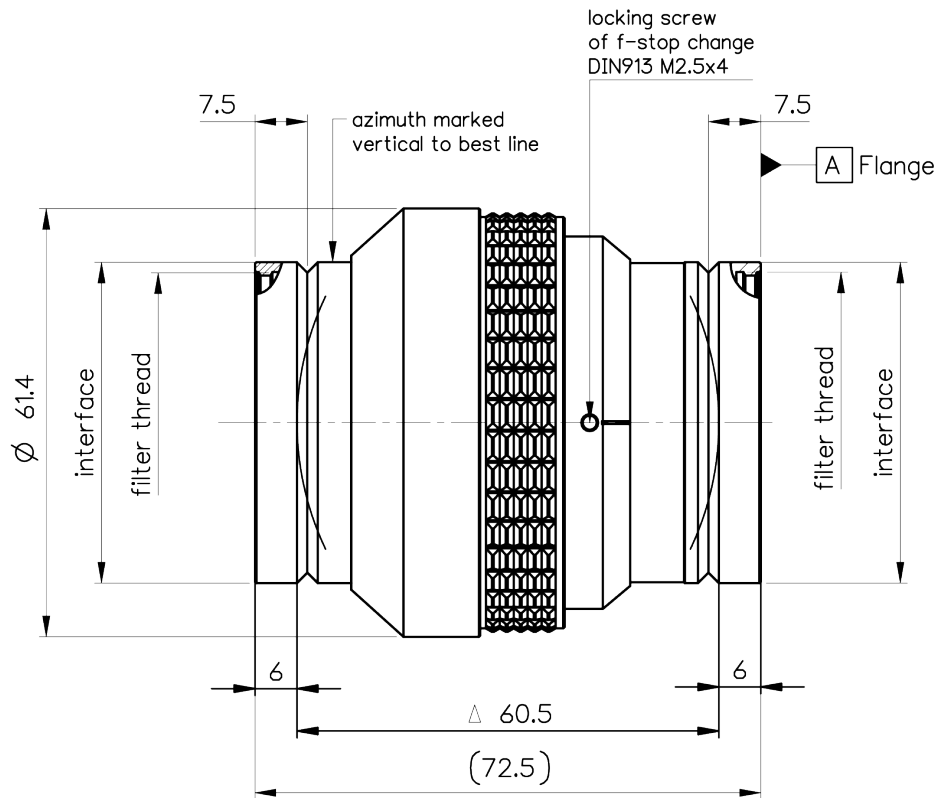
| Part No. | 0703-083-000-30 |
|-----------------------------------|--------------------|
| Focal length [mm] | 105.4 |
| f-stop | 5.6 |
| f-stop range | 5.6 ... 22 |
| f-stop lockable | yes, locking screw |
| Numerical aperture (object/image) | 0.08/0.10 |
| Image circle max. [mm] | 82 |
| Magnification optimized | 0.76 |
| Rec. magnification range | 0.6 ... 0.9 |
| Rec. working distance [mm] | 183 ... 241 |
| Spectral range [nm] | 400 - 1150 |
| Azimuth marked | yes |
| Interface | V-groove ø46h7 |
| Filter thread | M43 x 0.75 |
| Lenght [mm] | 72.5 |
| Diameter [mm] | 61.4 |
| Weight [g] | 370 |
| Storage temperature [°C] | -25 ... +70 |
| Working temperature [°C] | 0 ... +50 |
| Optical number | 7608-9021 |
| Sensor cover glass (included) | 0.76mm D263 |

Optical data

| Part No. | 0703-083-000-30 | |
|---------------|-----------------|-------|
| SF [mm] | -71.6 | |
| S'F' *) [mm] | 71.2 | |
| HH' *) [mm] | -7.5 | |
| SH *) [mm] | 33.8 | |
| S'H' [mm] | -34.2 | |
| SEnP [mm] | 33.9 | |
| S'Exp *) [mm] | -34.1 | |
| f-stop | ø EnP | ø ExP |
| 5.6 | 18.8 | 18.8 |
| 8 | 13.2 | 13.2 |
| 11 | 9.6 | 9.6 |
| 16 | 6.6 | 6.6 |
| 22 | 4.8 | 4.8 |



Dimensions

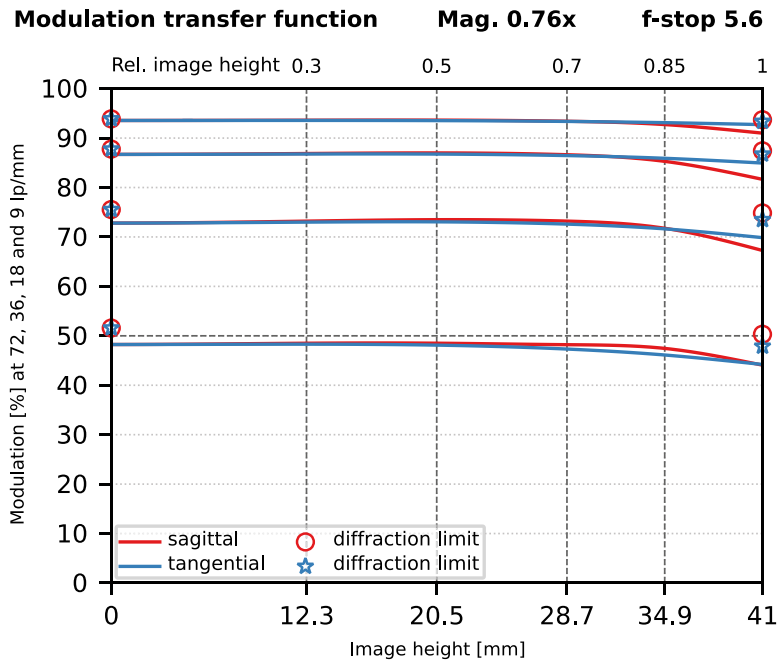


For further information about our Inspec.x L series, please scan or click the QR-Code.

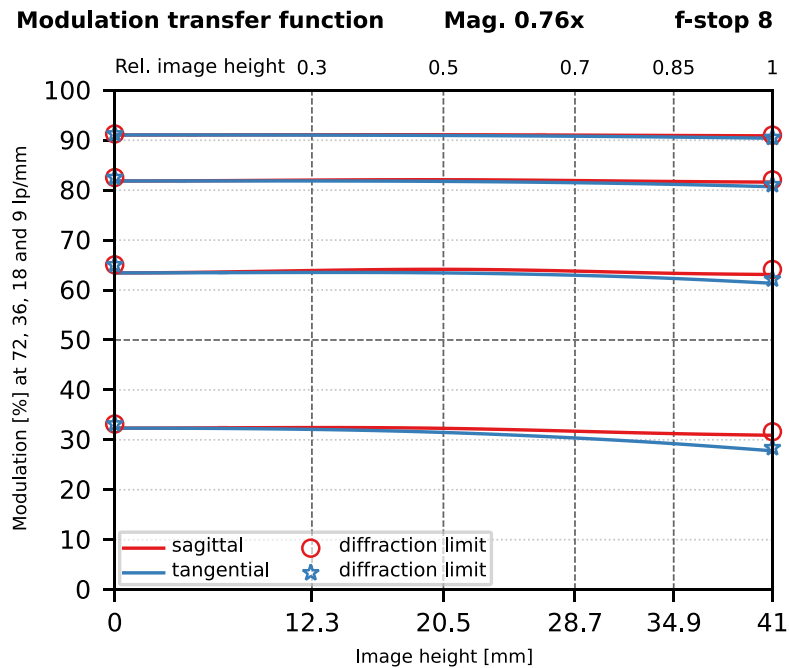


Optical Performance

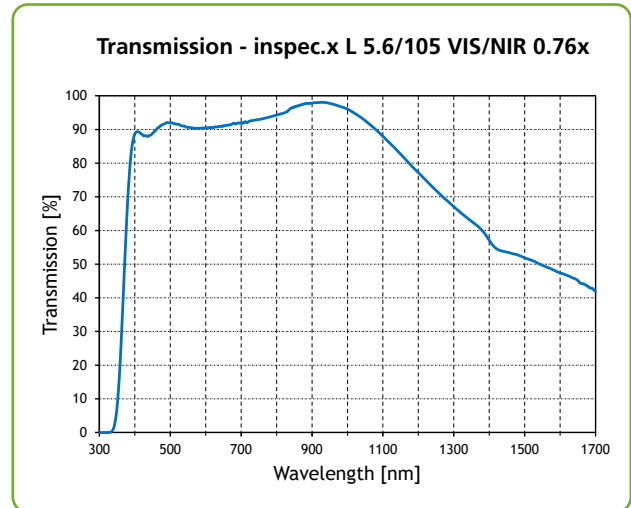
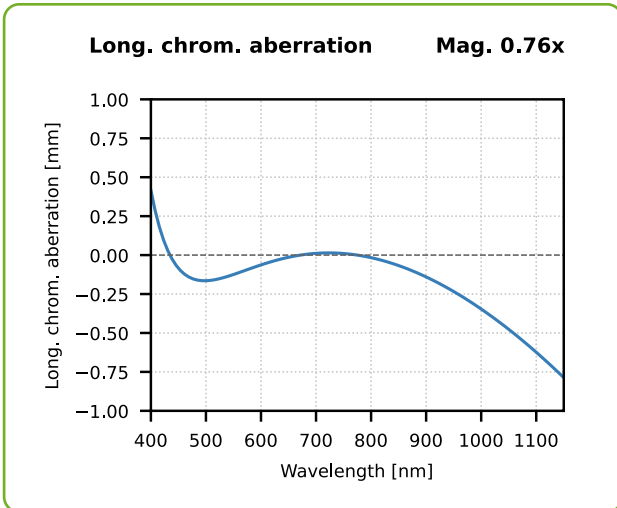
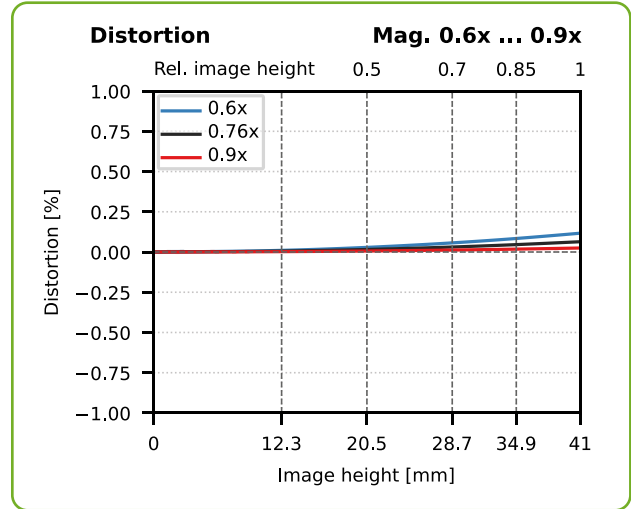
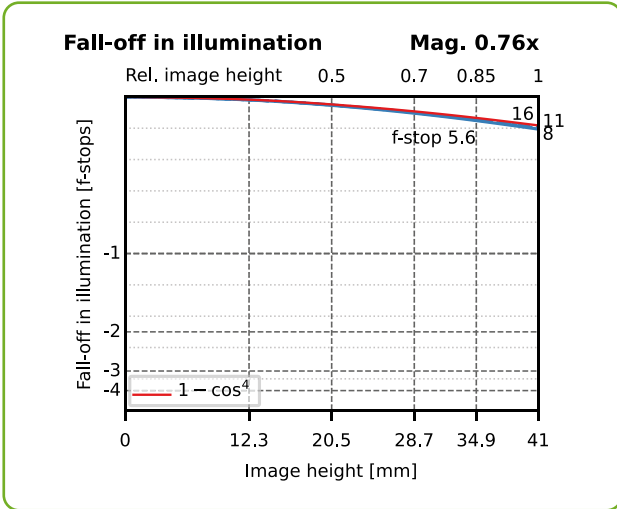
MTF at ratio 0.76x f/5.6



MTF at ratio 0.76x f/8.0



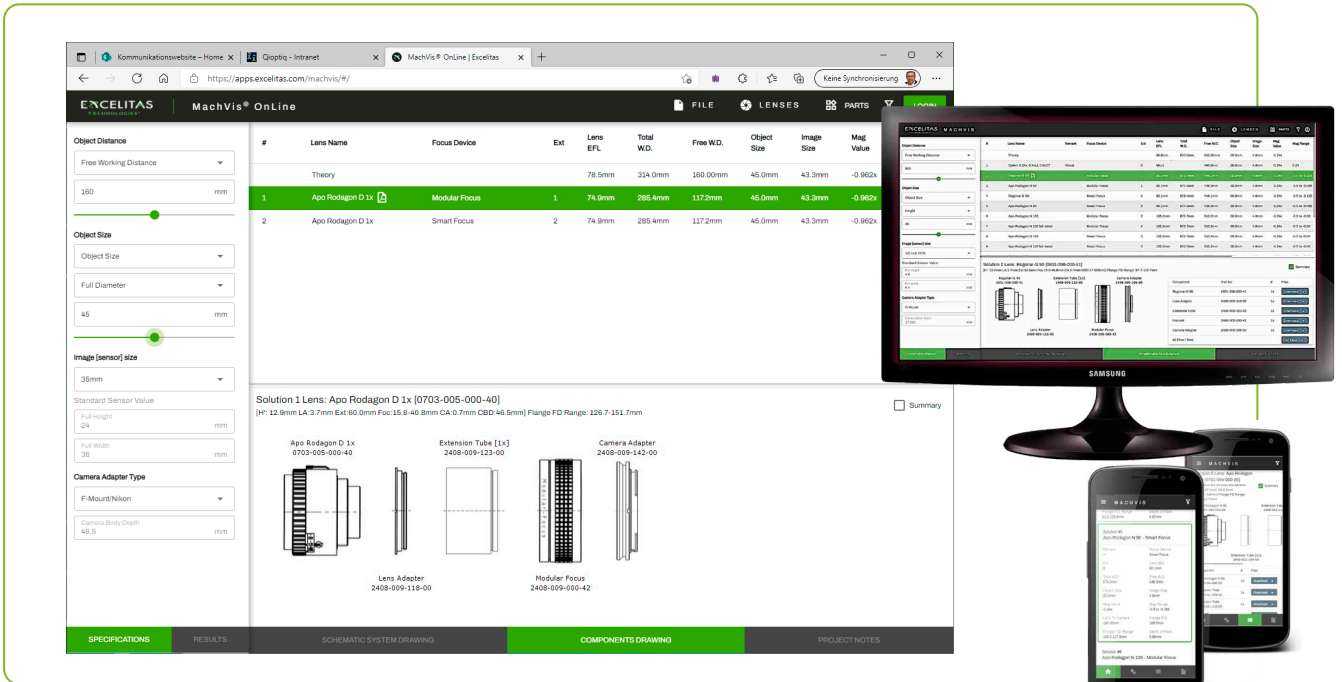
All spatial frequencies [lp/mm], image heights [mm] and magnifications are related to sensor side.



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MachVis

Lens Selection and Configurator Software



MachVis:
Access for FREE!



For further information about our Lens Selection Software MachVis, please scan or click the QR-Code.

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