LINOS



inspec.x L 5.6/105 VIS-NIR 0.33x

for large format highresolution sensors optimized for VIS and NIR sensitivity



The new VIS-NIR lens series from Exceltias 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. 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.

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

Applications

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

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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 @ <u>excelitas.com/</u>

product/linos-machine-visionaccessories



Optical data

| Part No. | 0703-085-000-30 | | | | | | | | |
|---------------|-----------------|-------|--|--|--|--|--|--|--|
| SF [mm] | -72.0 | | | | | | | | |
| S'F' *) [mm] | 70.5 | | | | | | | | |
| HH' *) [mm] | -7.6 | | | | | | | | |
| SH *) [mm] | 33.4 | | | | | | | | |
| S'H' [mm] | -34.9 | | | | | | | | |
| SEnP [mm] | 41.9 | | | | | | | | |
| S'Exp *) [mm] | -27.0 | | | | | | | | |
| f-stop | ø EnP | ø ExP | | | | | | | |
| 5.6 | 19.2 | 17.8 | | | | | | | |
| 8 | 31.4 | 12.4 | | | | | | | |
| 11 | 9.8 | 9 | | | | | | | |
| 16 | 6.7 | 6.2 | | | | | | | |
| 22 | 4.9 | 4.5 | | | | | | | |

EnP

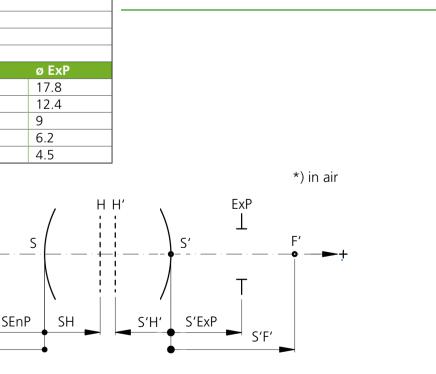
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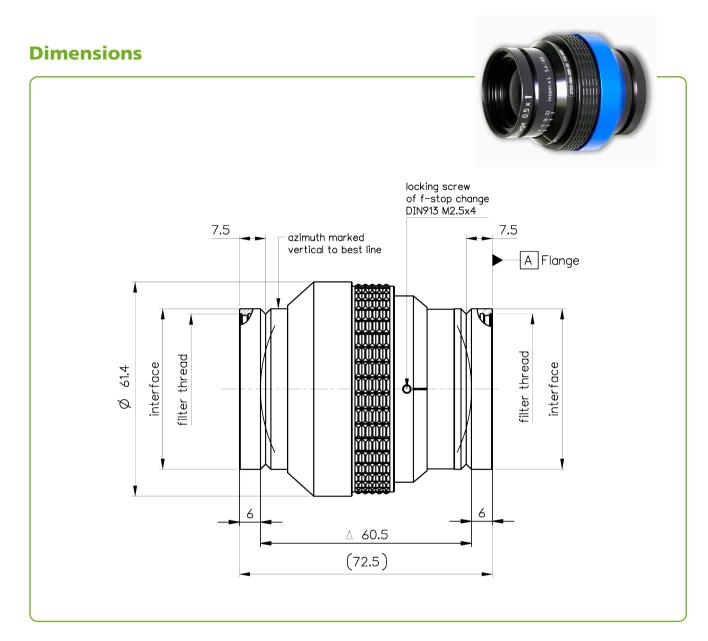
SF

Specifications

| Part No. | 0703-085-000-30 | | | | | | |
|-------------------------------|--------------------|--|--|--|--|--|--|
| Focal length [mm] | 105.4 | | | | | | |
| f-stop | 5.6 | | | | | | |
| f-stop range | 5.6 22 | | | | | | |
| f-stop lockable | yes, locking screw | | | | | | |
| Numerical aperture | 0.04/0.13 | | | | | | |
| (object/image) | | | | | | | |
| Image circle max. [mm] | 82 | | | | | | |
| Magnification optimized | 0.33 | | | | | | |
| Rec. magnification range | 0.25 0.45 | | | | | | |
| Rec. working distance [mm] | 300 488 | | | | | | |
| 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 | 7608-9045 | | | | | | |
| Sensor cover glass (included) | 0.76mm D263 | | | | | | |







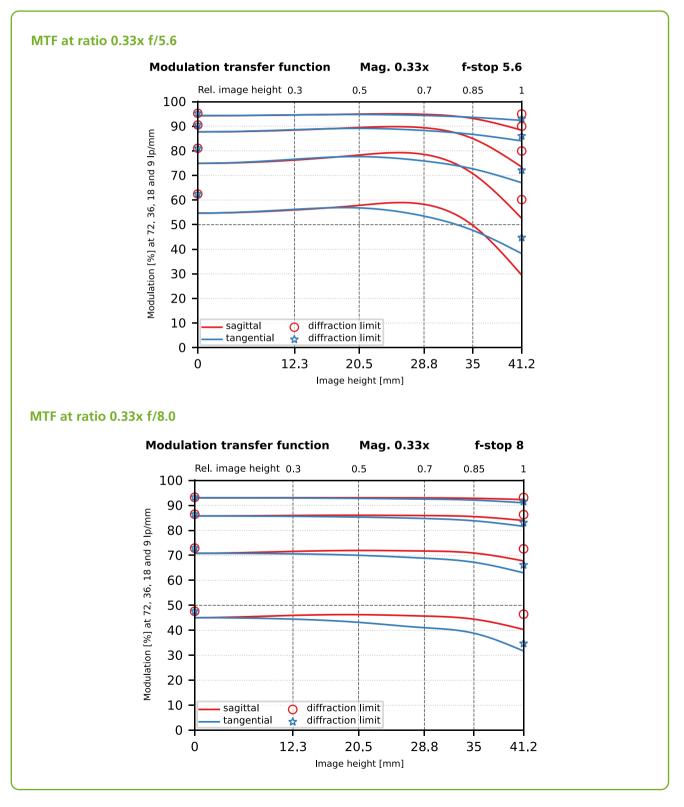


For futher information about our inspec.x L series, please scan or click the QR-Code.



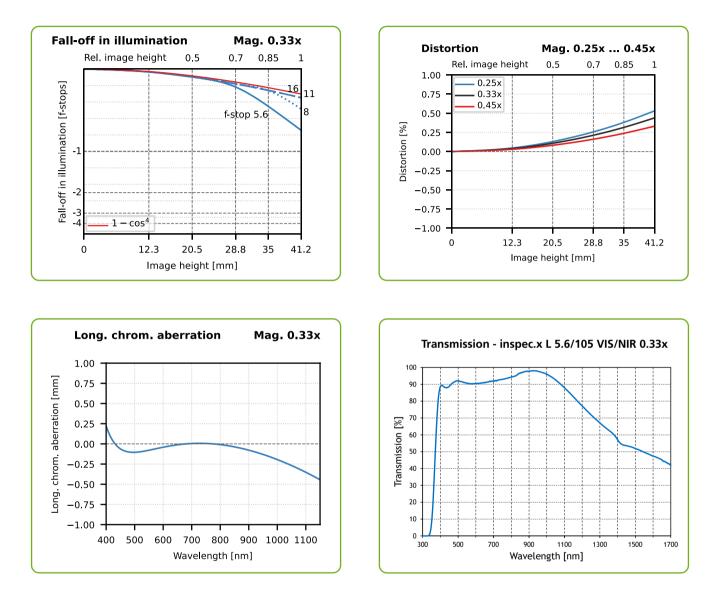
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Optical Performance



4





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



MachVis

Lens Selection and Configurator Software

| ← → C බ â https://apps.excelitas.com/machvis/#/ | | | | | | | | 3 \ ≦ | (Kein | e Synchronisier | ung 🕵 … | | | | | | |
|---|----------------|---|--|-----------------|-----------------|---------------------|-----------|----------------|---------------|-----------------|-----------------------------------|------------|--|-----------------------------------|--|--|-------|
| | achVis® OnLine | | | | | | FILE | LENS | es 😫 | PARTS | 7 10000 | | | | | | |
| Object Distance | | Lens Name | Focus Device | Ext | Lens EFL | Total W.D. | Free W.D. | Object Size | Image Size | Mag Value | | (CHVIS | Lancitume | Renalt FaceCode | 2 E | E rut O | 14110 |
| Free Working Distance | * | | | | 78.5mm | | 160.00mm | | | | Free Rolling Second | * 100 3 | Theory Cyleric Educ & Add. C & C ⁴ | itud | 10.000 ED | 0en 50.00m 80.00 90.000 80.00 | |
| 160 | mm | Theory Apo Rodagon D 1x 🔀 | Modular Focus | 1 | 78.5mm | 314.0mm 285.4mm | 160.00mm | 45.0mm | 43.3mm | -0.962x | Crownian Crownian | | April Magnet 10 | Endor Treas | 1 80.000 875 2 80.000 875 | den Giben dibre | |
| • | 2 | Apo Rodagon D 1x | Smart Focus | 2 | 74,9mm | 285.4mm | 117.2mm | 45.0mm | 43.3mm | -0.962x | Proglet | | Aper-Hostager-14 50 Aper-Hostager-14 500 | Smar Forus Biology Name | r 10,000 100 | inen vieldere allare Then Baldere Allare | |
| Object Size | - | App Hougon D 1A | amarrocus | | /4.61111 | 200.4000 | 111.2000 | 40.000 | 43.3000 | -0.8024 | - | | Aper-Parlagence 100 fail sector Aper-Parlagence 100 | Rober Taxa Sear Taxa | 7 (0.5m) 87 | 1944 96.500 98.900 | |
| Object Size | - | | | | | | | | | | St on COS | - 504 | Aperticipant 10 Mil and | 200.000.41 | | Nam Kit Joon 18 See | |
| Full Diameter | * | | | | | | | | | | AS AS AS AS | | National And Annual Contraction of the Annua | tenine Tube Facil | nge 16 A 100 fann A hanne A hanne A hanne | | |
| 45 | mm | | | | | | | | | | Control Alliptic Type Collocat | • | | | L tomAs | | |
| ~ | | | | | | | | | | | Constitution 32.005 | | in the particular | Rabbe From | Annual Conversion | | |
| Image [sensor] size | | | | | | | | | | | - | - | | | | | 100 |
| 35mm | • | | | | | | | | | | 199 | | | SAMSUNG | | | |
| Standard Sensor Value | | 1 Lens: Apo Rodagon D 1 | | | | | | | | | Summary | | | | | | |
| Full Height 24 | mm (H": 12.9mr | n LA:3.7mm Ext:60.0mm Foc:15.8 | 40.8mm CA10.7mm CBD:46.6mm) | Flange FD Rai | nge: 126.7-161. | /mm | | | | | | | | | | | _ |
| Full Width 36 | | Apo Rodagon D 1x 0703+005-000-40 | Extension Tube [1x] 2408-009-123-00 | | | Adapter 9-142-00 | | | | | | | | | | 27 | - |
| Camera Adapter Type | | աներին հերանականություններին հերանականություններին անհանականականություններին հերանականականություններ հերանականո | | | | h | | | | | | | | | | E MACHNER | dagos |
| F-Mount/Nikon | * | | | Modular - Focus | | μ – | | | | | | | | - | | Control of the second s | - |
| Camera Body Depth 48,5 | mm | | | r-Foc | | (| | | | | | | | Property All | o beninter Liber | - Ch | Ĩ. |
| | L | ll Yl 📲 | | - | | μ | | | | | | | | | n N 90 - Smart Focus | | 1 |
| | | Lens Ada | nter | Modular For | | u | | | | | | | | 1. 1. 1. | Level 1071 all Jones Franc (L.D. 400 Seen | | · /mi |
| | | 2408-009-1 | | 2408-009-00 | | | | | | | | | | Elajeen Uniori, hijk 20,566 | mage lide s green | ente filos de ente colorado ente colorado | |
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MachVis: Access for FREE! Access for FREE!

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