

The Componon S 4.0/80 (Version -0022) is an 80 mm focal length macro lens with 80.6 mm image circle for large format sensors and short working distance. This macro lens is developed and corrected for the close-up range of 1:20 to 1:1 and can also be used in reverse position, depending on the field of vision and pixel size with the symmetrical V-Mount interface without additional accessories.

The modular system with wide-ranging accessories such as helical focus barrel (Unifoc 7 and 12), extension tubes, and adapters for various cameras, can be used for all kind of sophisticated applications from OLED inspection to food processing control. This, the fast F/# of 4.0 and low longitudinal and lateral chromatic aberration, as well as extremely low distortion all combined make these lens unique. Vibration insensitivity for stable imaging performance even when the lens used in harsh industrial environmental, as common in food processing control and web inspection systems.

The Unifoc Series offers more macro lenses with 35 mm, 40 mm, 45 mm, 50 mm, 60 mm, 80 mm, 90 mm, 100 mm focal length and a line scan lens series plus a enlarging lens series for Unifoc 58 and 76 helicoid focus barrels.



Componon S 4.0/80

Key features

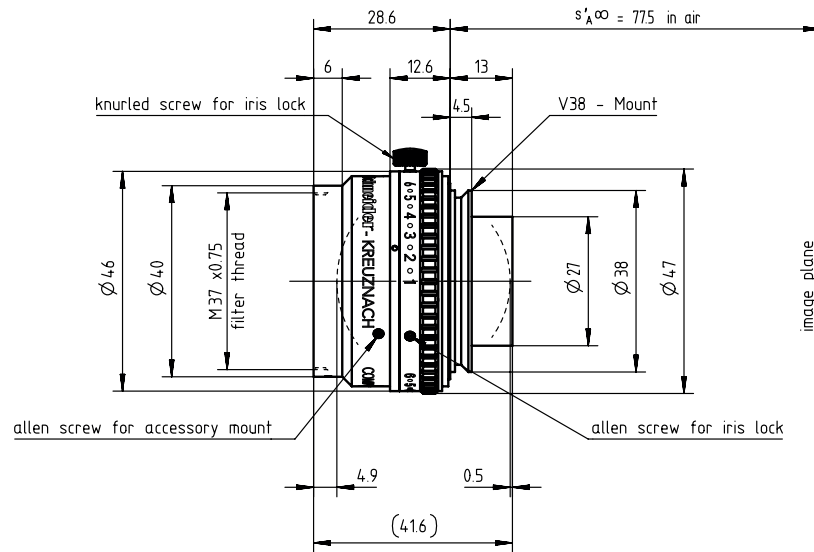
- Large Format
- Short working distance
- Modular: Unifoc 7 and 12 focus helical barrels, extension tubes, various camera adapters
- Possibility to be used in retro position
- Vibration insensitivity for stable imaging performance

Applications

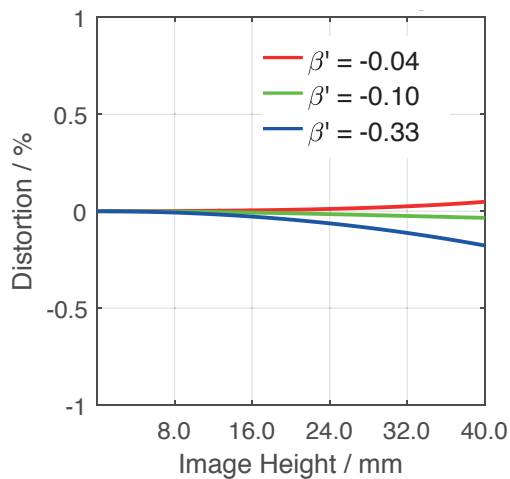
- OLED inspection
- Web inspection
- Medical applications
- Laser triangulation
- Quality control

| Name | Componon S 4.0/80 |
|------------------------------|-------------------|
| Type | -0022 |
| Focal Length [mm] | 80 |
| Magnification | -0.5 |
| Image circle [mm] | 80 |
| Resolution [μm] | 6.45 |
| F/# range | 4 ... 22 |
| NA | 0.12 |
| Interface | V38-Mount |
| Working distance [mm] | ∞ - 220 |
| AoV [$^\circ$] | 52 |
| Focus control | manual |
| Transmission [nm] | 400 - 1000 |
| Filter thread [mm] | M37 x 0,75 |

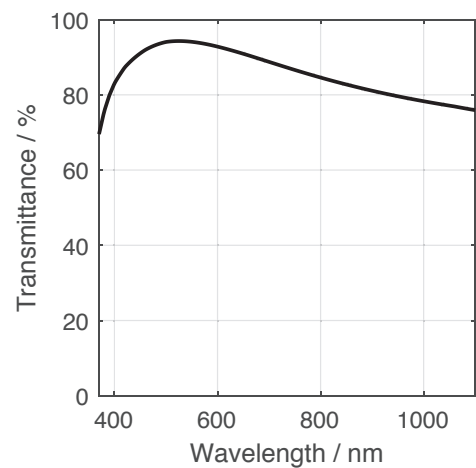
| Name | Componon S 4.0/80 |
|--|-------------------|
| Dimensions L x D [mm] | 41.6 x 47.0 |
| Weight [g] | 115 |
| Storage temperature [$^\circ\text{C}$] | -25 ... +70 |
| f'_{eff} [mm] | 80.34 |
| S_F [mm] | -57.92 |
| S'_F [mm] | 64.67 |
| HH' [mm] | -1.81 |
| β'_p | 1.027 |
| S_{EP} [mm] | 20.29 |
| S'_{AP} [mm] | -17.86 |
| Σd [mm] | 36.28 |
| ID | 14780 |



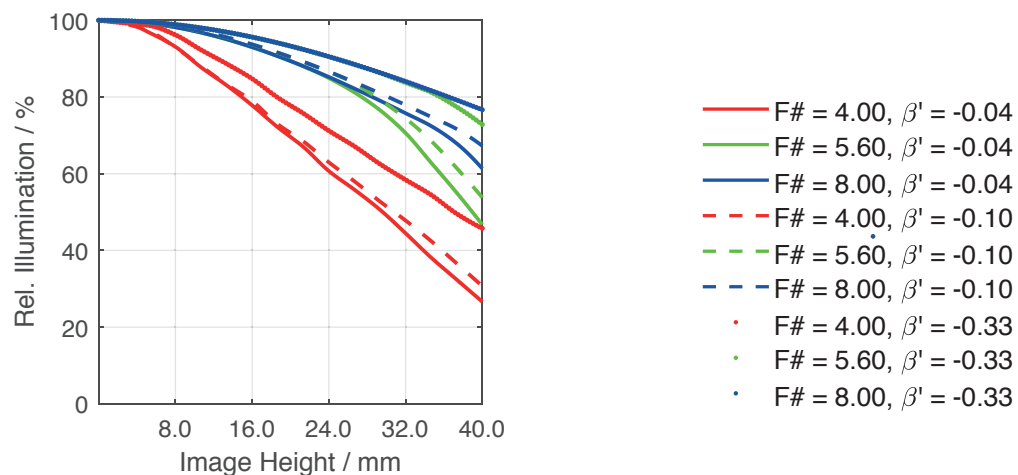
Distortion vs. Image Height



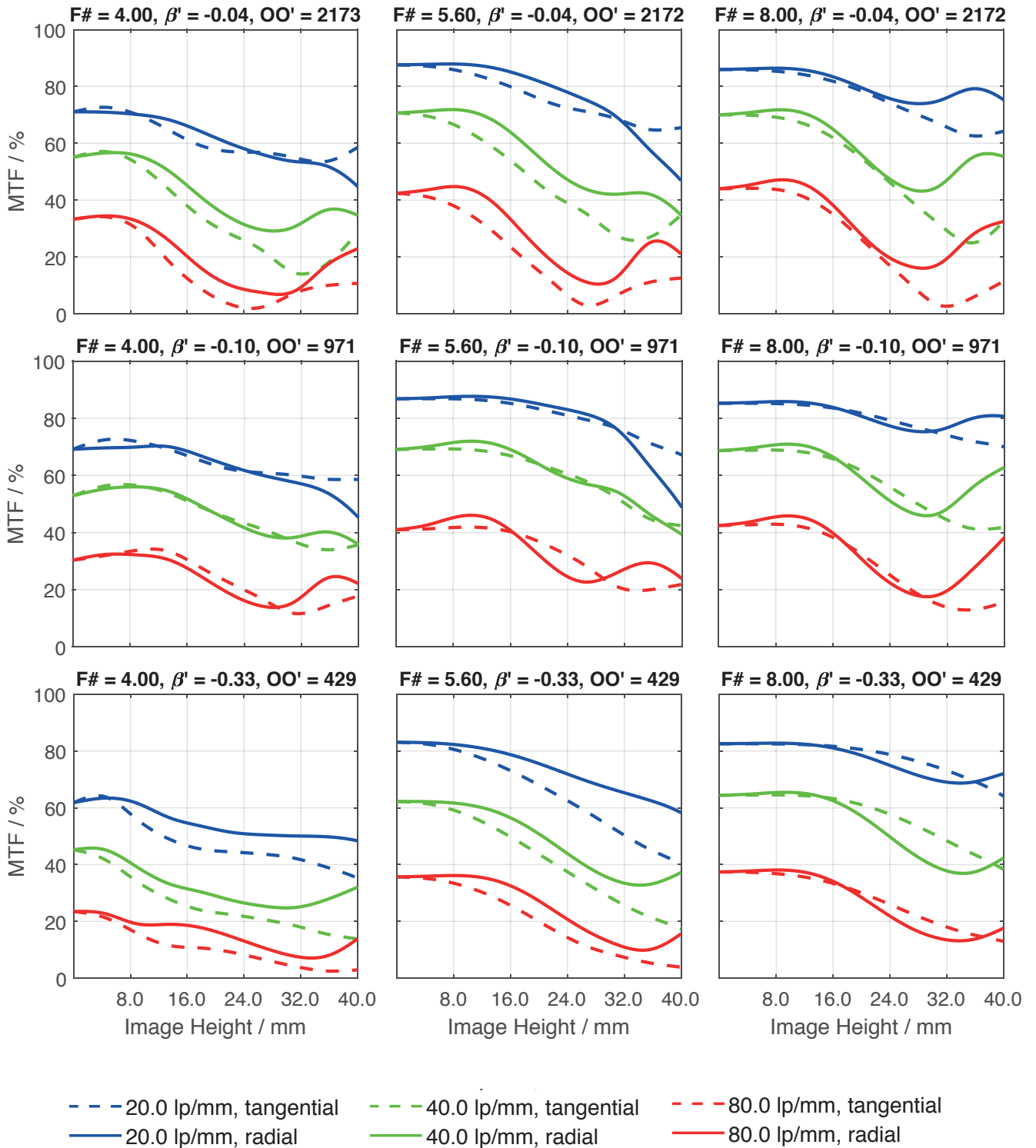
Transmittance vs. Wavelength



Relative Illumination vs. Image Height



| Spectrum Name | VIS | | | | | |
|------------------|-----|-----|-----|-----|-----|-----|
| Wavelengths [nm] | 425 | 475 | 525 | 575 | 625 | 675 |
| Weights | 8 | 16 | 23 | 22 | 19 | 13 |



| Accessories | Mount | Length | ID |
|--------------|----------------------------------|------------------|---------|
| Makro | UNIFOC 12 | V38/V38 | 11726 |
| | UNIFOC 7 | V38/V38 | 1001041 |
| | UNIFOC 7 (M58 x 0,75) | V38/M58 x 0,75 | 1054532 |
| Zwischenring | Ext. Tube 6 mm | V38 / V38 | 20176 |
| | Ext. Tube 8 mm | V38 / V38 | 20177 |
| | Ext. Tube 10 mm | V38 / V38 | 20178 |
| | Ext. Tube 25 mm | V38 / V38 | 20179 |
| | Ext. Tube 50 mm | V38 / V38 | 20154 |
| | Ext. Tube 75 mm | V38 / V38 | 20155 |
| Adapter | V38 / C-Mount | V38 / C-Mount | 20052 |
| | V38 / C-Mount Hub 19.2 - 24.2 mm | V38 / C-Mount | 1011634 |
| | V38 / Leica (M39 x 26 Gg.) | V38 / Leica | 20054 |
| | V38 / T2 (M42 x 0,75) | V38 / T2 | 20053 |
| | V38 / M42 x 1 | V38 / M42 x 1 | 20059 |
| | V38 / M42 x 1 - Length 35 mm | V38 / M42 x 1 | 1001692 |
| | V38 / M58 x 0,75 | V38 / M58 x 0,75 | 1018385 |
| | V38 / Nikon F-Mount | V38 / Nikon | 21610 |

Get more information

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