Lenses for Enlarging, CCD Photos and Video

Rodagon

The lens type Rodagon, with brilliant reproduction over the whole scale range of conventional enlargers, has become the universal workhorse of both demanding amateurs and professionals in practical use. Furthermore, the models with focal lengths up to 135 mm have proven to be excellent macro lenses for SLR cameras and to be high-resolution taking lenses for CCD cameras in combination with the Rodenstock focusing device Modular-Focus.

The 6 elements design guarantees the resolution of the finest details while maintaining a uniformly high contrast from the picture center to the edges. As the lens is nearly independent with regard to magnification scale, top quality is ensured from mini-prints right up to high enlargements. The recommended working aperture is reached by stopping down by only 2 stops from open aperture.

All Rodagon lenses are equipped with an illuminated f-stop display, a practical pre-set aperture und a click-stop diaphragm which can be switched to stepless control for focal lengths up to 135 mm. The Rodagon 28 mm is also available in a smaller barrel with a 32.5 mm thread mount, without pre-set aperture, without illumination of the f-stop scale and with a click-stop aperture ring that cannot be disabled.

Data sheets

▸ Formats, dimensions, recommended scales, features

▸ Performance data Rodagon 50 mm f/2.8

Rodagon	Recommended scale range	Maximum film format
28 mm f/4	5× - 30×	18×24 mm
35 mm f/4	5× - 30×	24×24 mm
50 mm f/2.8	2× - 15×	24×36 mm
60 mm f/4	2× - 10×	40×40 mm
80 mm f/4	2× - 10×	6×7 cm
105 mm f/5.6	2× - 10×	6×9 cm
135 mm f/5.6	2× - 10×	4×5 inch
150 mm f/5.6	2× - 10×	4×5 inch

Rodagon: the all-round lens for professional quality in the lab as well as for macro and CCD/CMOS shots
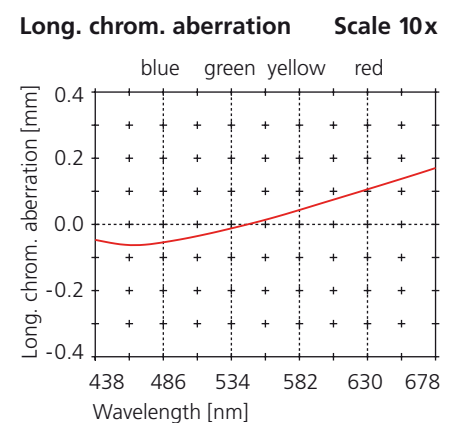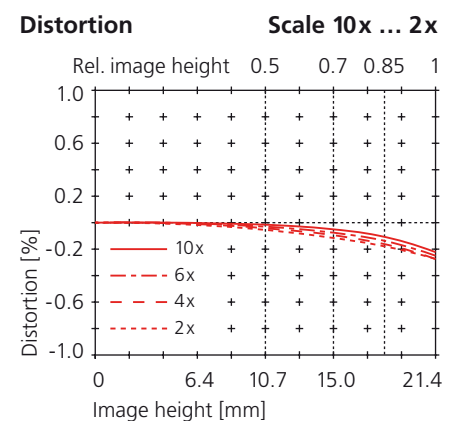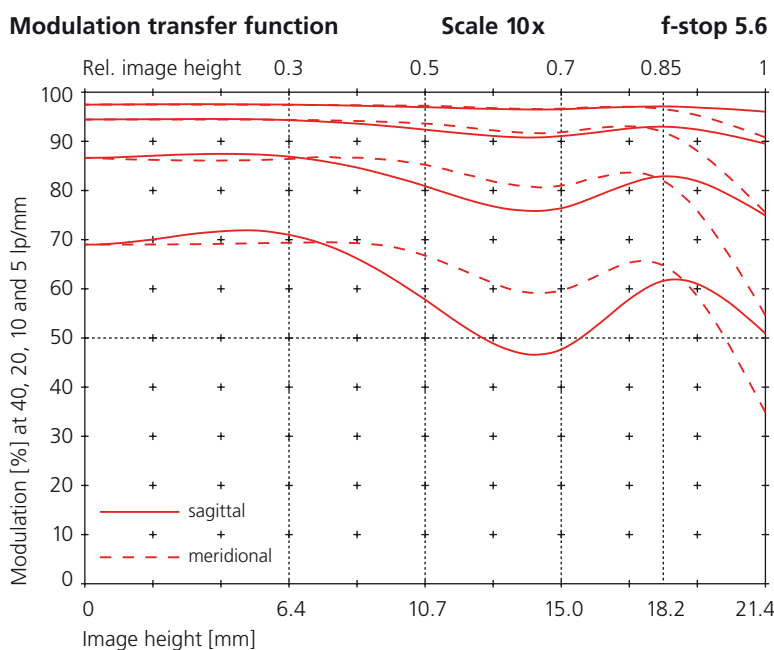
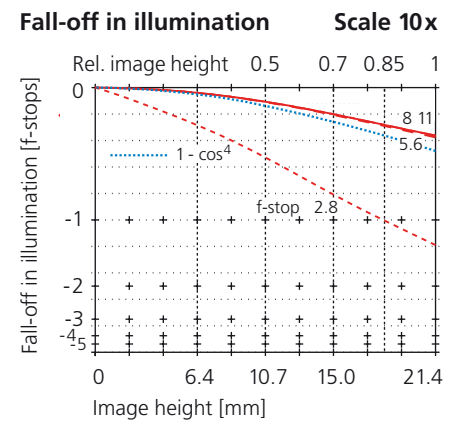**Rodagon**

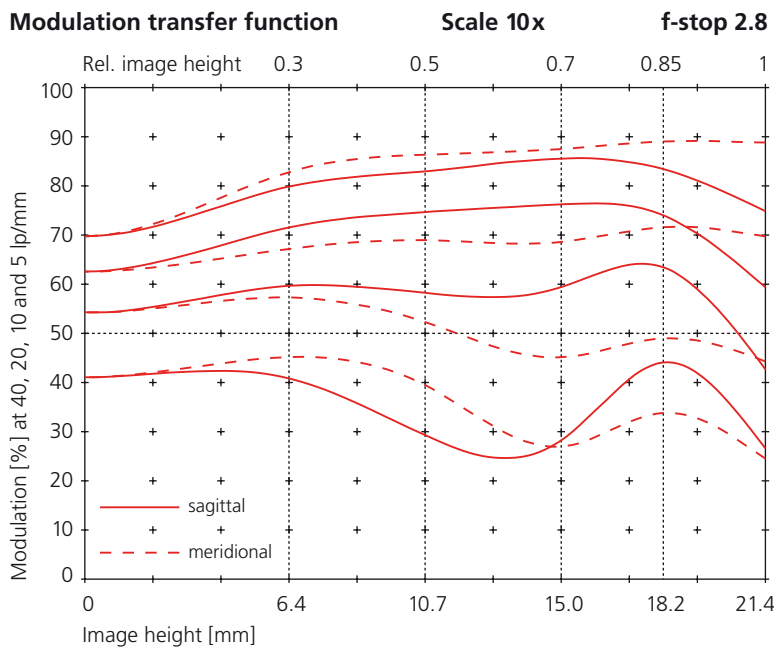◀ Back to lens description

Technical data

Lens	Maximum film format	Scale range	Smallest aperture	Pre-selection aperture	Click-stop disable	Illuminated f-stop display	Filter thread	Flange focal length [1]	Overall length	Max. diameter	Screw thread	Flange to rear edge
28 mm f/4	18×24 mm	5‑30×	16				M 30.5×0.5	27.7 mm	30.0 mm	40.5 mm	M 32.5×0.5 [2]	6.7 mm
28 mm f/4	18×24 mm	5‑30×	16	•	•	•	M 40.5×0.5	23.0 mm	37.2 mm	50.0 mm	M 39×$^1/_{26}$"	6.5 mm
35 mm f/4	24×24 mm	5‑30×	16	•	•	•	M 40.5×0.5	31.2 mm	37.2 mm	50.0 mm	M 39×$^1/_{26}$"	6.5 mm
50 mm f/2.8	24×36 mm	2‑15×	16	•	•	•	M 40.5×0.5	43.5 mm	43.5 mm	50.0 mm	M 39×$^1/_{26}$"	13.0 mm
60 mm f/4	40×40 mm	2‑10×	22	•	•	•	M 40.5×0.5	56.0 mm	41.8 mm	50.0 mm	M 39×$^1/_{26}$"	10.2 mm
80 mm f/4	6×7 cm	2‑10×	22	•	•	•	M 40.5×0.5	74.5 mm	44.5 mm	50.0 mm	M 39×$^1/_{26}$"	13.7 mm
105 mm f/5.6	6×9 cm	2‑10×	32	•	•	•	M 40.5×0.5	101.5 mm	42.3 mm	50.0 mm	M 39×$^1/_{26}$"	11.6 mm
135 mm f/5.6	4×5 inch	2‑10×	32	•	•	•	M 40.5×0.5	128.0 mm	45.5 mm	50.0 mm	M 39×$^1/_{26}$"	14.5 mm
150 mm f/5.6	4×5 inch	2‑10×	45			•	M 52×0.75	146.0 mm	49.8 mm	60.0 mm	M 50×0,75	20.1 mm

[1]) Flange focal length at scale ∞, [2]) Adapter for M 39×$^1/_{26}$" supplied

Rogonar-S 50 mm f/2.8

Modulation transfer function   Scale 10x   **f-stop 2.8**

Rel. image height 0.3 0.5 0.7 0.85 1

Modulation [%] at 40, 20, 10 and 5 lp/mm

— sagittal
-- meridional

Image height [mm]

Modulation transfer function   Scale 10x   **f-stop 5.6**

Rel. image height 0.3 0.5 0.7 0.85 1

Modulation [%] at 40, 20, 10 and 5 lp/mm

— sagittal
-- meridional

Image height [mm]

Fall-off in illumination   Scale 10x

Rel. image height 0.5 0.7 0.85 1

Fall-off in illumination [f-stops]

8 11
$1 - \cos^4$
5.6
f-stop 2.8

Image height [mm]

Distortion   Scale 10x ... 2x

Rel. image height 0.5 0.7 0.85 1

Distortion [%]

— 10x
-·- 6x
-- 4x
···· 2x

Image height [mm]

Long. chrom. aberration   Scale 10x

blue green yellow red

Long. chrom. aberration [mm]

Wavelength [nm]

**All spatial frequencies [line pairs/mm] and
image heights [mm] are related to the film side,
all scales are related to the print side**