



LEICA **SUPER-VARIO-ELMAR-TL** 11-23 mm f/3.5-4.5 ASPH.

Technical data.



Illustration 1:1

Lens	Leica Super-Vario-Elmar-TL 11-23 mm f/3.5-4.5 ASPH.
Order no.	11 082
Compatible cameras	All Leica cameras with Leica L bayonet.
Field angle (diagonal, horizontal, vertical)	At 11 mm: approx. 103°, 93°, 70°, at 23 mm: approx 65°, 56°, 39°, corresponding to around approx. 17-35 mm focal length in 35 mm format.
Optical design	Number of lenses/groups: 14/11. Aspherical surfaces 4. Position of entrance pupil at infinity: bei 11 mm: -70 mm, at 23 mm: -59.7 mm.
Distance setting	Setting/Function: Electronically controlled. Mode selectable using camera menu: Automatic (AF) or manual (M), in AF mode manual override possible at any times with setting dial. Focusing range: 0,2 m to ∞. Smallest object field/largest scale: at 11 mm: approx. 230 x 153 mm/f/9.7, at 23 mm: approx. 127 x 85 mm/f/5.4.
Aperture	Setting/Function: Electronically controlled, adjustment using dial on camera, third values also available. Lowest value: 16.
Bayonet fitting	Leica L bayonet.
Filter mount/ Lens hood	External bayonet fitting for lens hood (included), internal thread for E67 filters, filter mount does not rotate.
Finish	Black anodized.
Dimensions and Weight	Length to bayonet mount: approx. 77/97 mm (without/with lens hood). Largest diameter: approx. 73/86 mm (without/with lens hood). Weight: approx. 386/395 g (without/with lens hood).



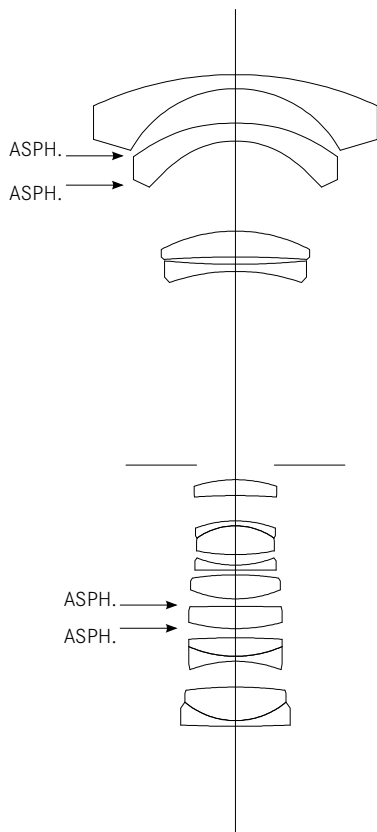
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ENGINEERING DRAWING

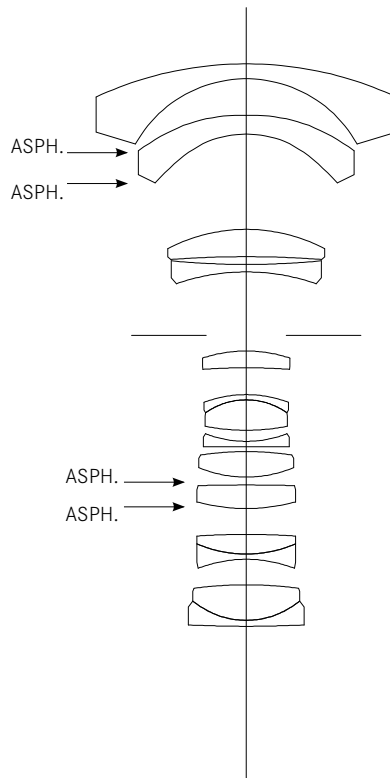


Illustration 1:1

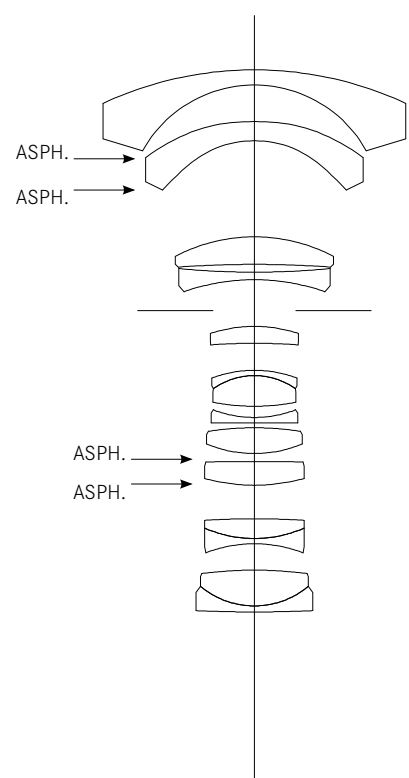
LENS SHAPE
Focal length 11 mm



LENS SHAPE
Focal length 19 mm



LENS SHAPE
Focal length 23 mm

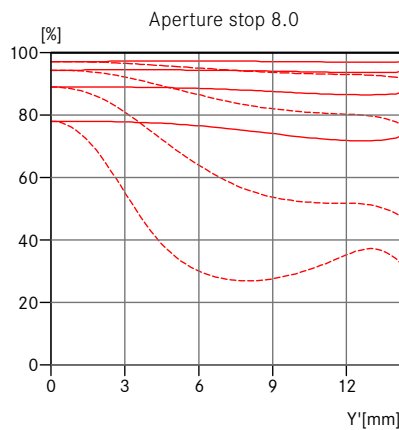
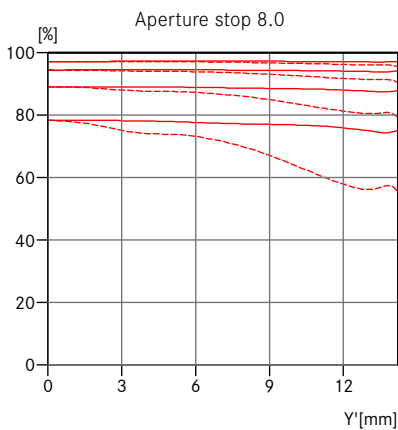
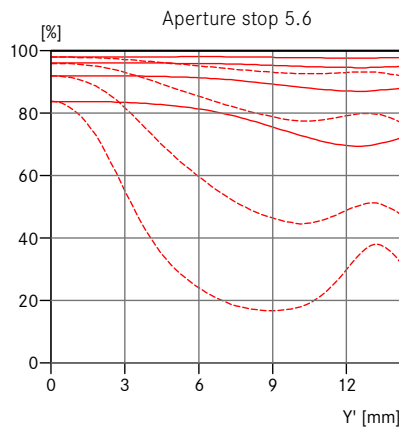
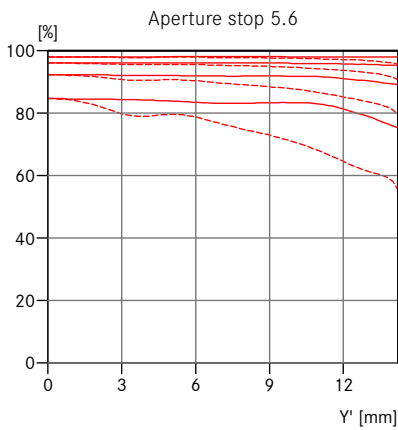
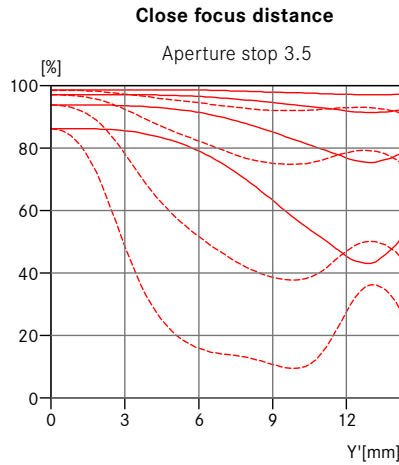
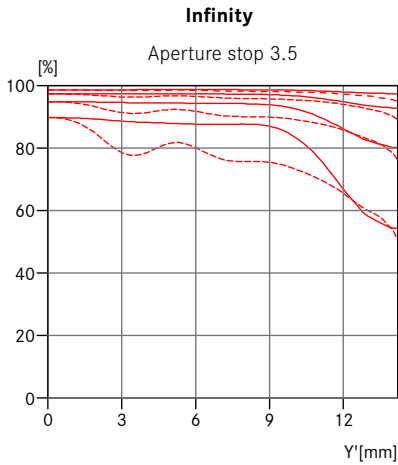




LEICA SUPER-VARIO-ELMAR-TL 11-23 mm f/3.5-4.5 ASPH.

MTF DIAGRAMS

Focal length 11 mm



— Sagittal structures
- - - Tangential structures

MTF GRAPHS

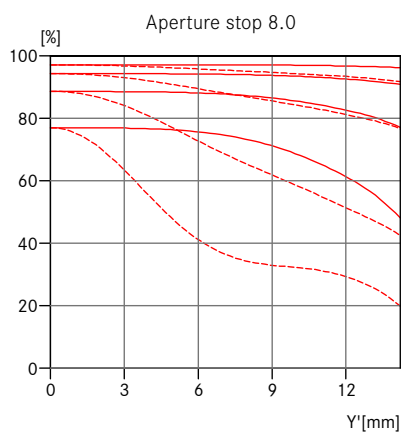
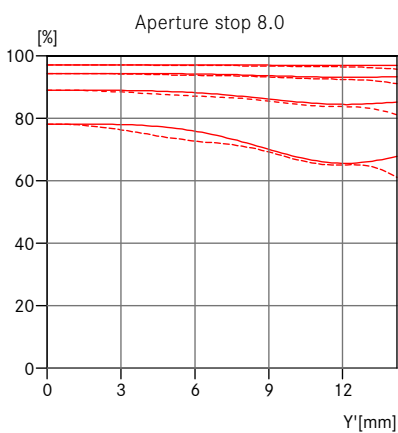
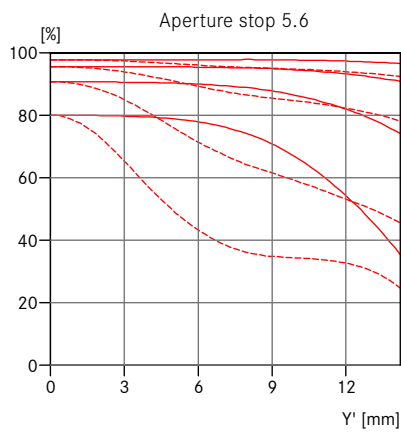
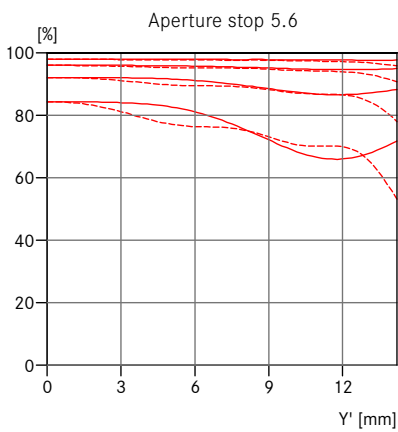
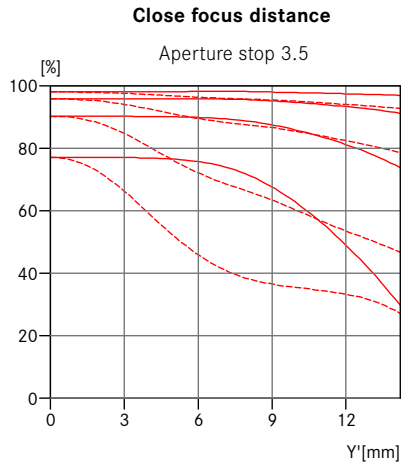
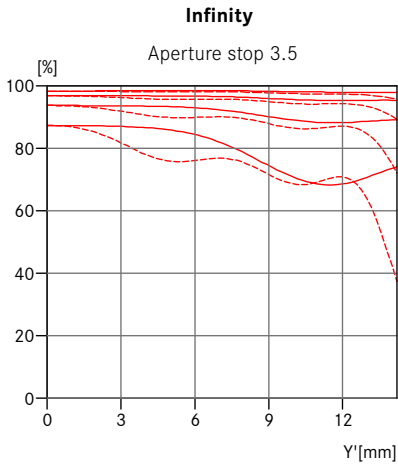
The MTF is indicated both at full aperture and at f/5.6 and f/8.0 for long distances (infinity) and close focussing distance. Shown is the contrast in percentage for 5, 10, 20 and 40 lp/mm across the height of the 35 mm film format, for tangential (dotted line) and sagittal (solid line) structures, in white light. The 5 and 10 lp/mm will give an indication regarding the contrast ratio for large object structures. The 20 and 40 lp/mm records the resolution of finer and finest object structures.



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MTF DIAGRAMS

Focal length 19 mm



— Sagittal structures
- - - Tangential structures

MTF GRAPHS

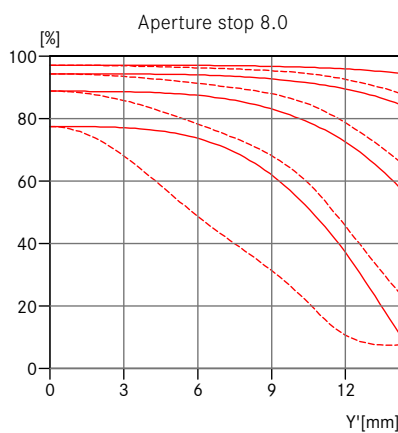
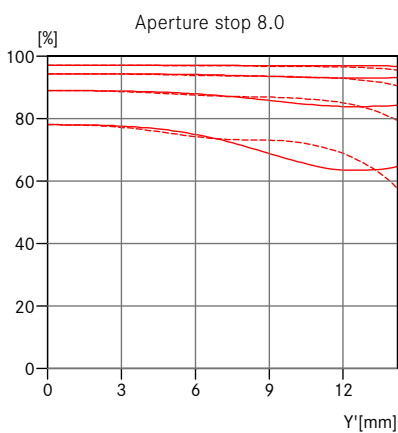
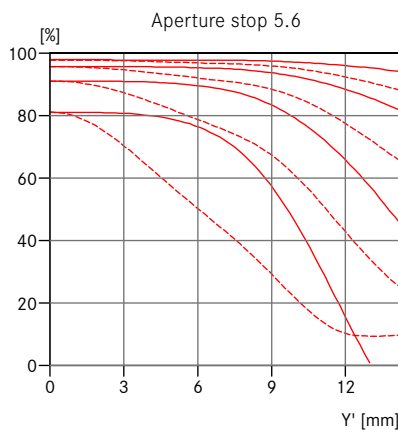
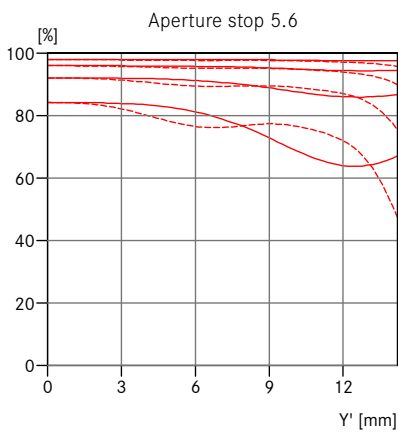
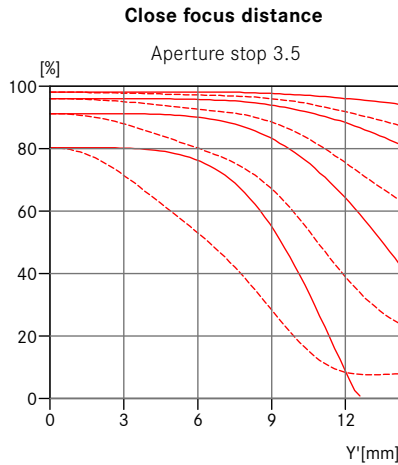
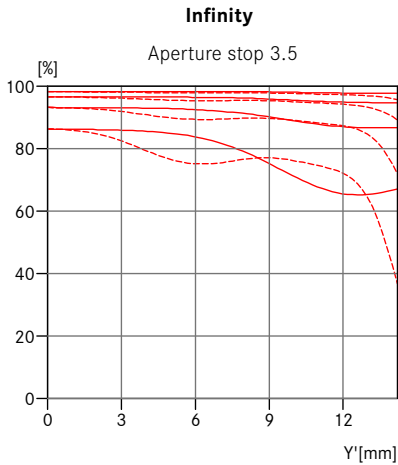
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LEICA SUPER-VARIO-ELMAR-TL 11-23 mm f/3.5-4.5 ASPH.

MTF DIAGRAMS

Focal length 23 mm



— Sagittal structures
- - - Tangential structures

MTF GRAPHS

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