# **PRODUCT INFORMATION**

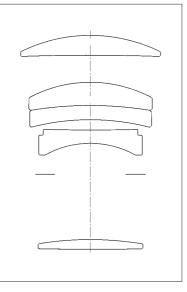


The focal length of 135 mm has a long tradition within the Leitz/ Leica range. The very first range of interchangeable lenses made by Leica included lenses with this focal length. Continuously improved over the years, this focal length has become established as the longest within the LEICA M-system. As a medium telephoto lens, the APO-TELYT-M f/3.4/135 mm covers longer distances, thus effectively complementing the versatility of the LEICA-M system.

The new APO-TELYT-M f/3.4/ 135mm is the first M lens with apochromatic correction. This is a milestone in the history of the M -lenses. With its excellent optical performance, it supersedes the previous LEICA TELE-ELMAR-M f/4/135mm and the ELMARIT-M f/2.8/135mm with viewfinder attachment, production of which was discontinued some time ago. Compared to the models which it replaces, the image quality of the new lens has been enhanced considerably. At the same time, its weight and dimensions have been significantly reduced. The combination of LEICA M6 and the new lens rests comfortably in the hand

as a compact, harmonious unit. The user can derive even greater benefit from the advantages of the new lens when using it on the LEICA M6 0.85 or LEICA M6 TTL 0.85 cameras, which offer a viewfinder magnification increased by some 20%.

Even at full aperture, the APO-TELYT-M f/3.4/135 mm excels through superb image quality, which cannot be increased any further by stopping down. In the close range, which extends down to 1.5 m with this lens, the exceptional performance is retained



## **APO-TELYT-M** f/3,4/135mm

## Compact tele lens with apochromatic correction

## to all LEICA M-models\*

\*(not for LEICA M2, modifications possible through the Technical Service of the Leica Camera AG)

almost in full. Stopping down by 1 to 2 stops produces a very slight improvement in performance.

Contrast and resolution are excellent on the optical axis and throughout the entire image field. The image quality with the lens focussed at infinity is distinguished by the virtual absence of aperture aberrations, coma, astigmatism and field curvature, and with the lens focussed close-up the tendency towards these phenomena is very low.

Great importance was attached to apochromatic correction in the







design of the APO-TELYT-M f/3.4/ 135mm, i.e. the image contains only negligible residual chromatic aberration. This is the case even at full aperture. The secondary spectrum is effectively suppressed by the use of several types of glass with anomalous partial dispersion, thus rendering the residual errors virtually indetectable.

Artificial vignetting is insignificant, and completely absent at apertures of 5.6 - 8 upwards. In addition, the level of distortion is extremely low and negligible under normal circumstances.

Thanks to an antireflection multicoating especially developed for

## **APO-TELYT-M** f/3,4/135mm in a soft leather case, with lens cap and rear cover black anodized finish Order no. 11889 Accessories: UVa filter E 49 Order no. 13 328 Universal polarizing filter M incl. adapter E39 and E46 Order no. 13 356 Additional adapter to APO-TELYT-M f/3.4/135 mm Order no. 14418 **Replacements:** Soft leather case Order no. 14710 Lens front cap Order no. 14001 Lens rear cover Order no. 14269

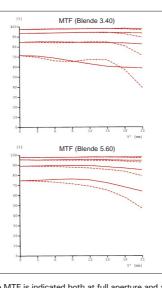


Trademark of The Leica Camera Group

Printed of paper bleached without chlorine (tcf).

the APO-TELYT-M f/3.4/135 mm, the new lens perfectly matches the superb colour characteristics of the current M lens range. Another remarkable feature of the lens is its insensitivity to reflections and stray light.

In short: the new APO-TELYT-M f/3.4/135 mm - the first APO lens for the LEICA M system - sets a new standard in this popular focal length range. With its superb optical performance, compact dimensions and low weight, it is ideally suited to travel photography, adding new value to the versatility of the LEICA M system.



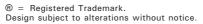
The MTF is indicated both at full aperture and at  $\ensuremath{\text{f/5.6}}$  at long taking distances (infinity). Shown is the contrast in percentage for 5, 10, 20 and 40 lp/mm accross the height of the 35 mm film format, for tangential (dotted line) and sagittal (solid line) structures, in white 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 fine and finest object structures.

### sagittal structures

---- tangential structures

Leica. Fascination and Precision.

Leica Camera AG, Oskar-Barnack-Strasse 11, D-35606 Solms, Germany Telephone +49 (0) 6442 208-0, Fax +49 (0) 6442 208-333 http://www.leica-camera.com cpr@leica-camera.com Order numbers German 920 482, English 920 483, French 920 484 Printed in Germany, VIII/98/HX/B.





APO-TELYT-M 1:3.4/135

## Technical Data

- Angle of view: 18°
- Number of elements: 5 (4 components)
- Filtersize: E49
- Internal thread: M49x0,75
- Smallest aperture: 22
- Combined meter/feet scale
- Focusing range: infinity to 1,5 m
- Smallest object field: 220x330mm, approx. 1:9
- Parallel guided focusing mount •
- Camera view finder
- LEICA M quick change bayonet
- Black anodized finish
- Built-in, telescopic lens hood
- Lens cap diameter: 56mm
- Length from bayonet flange: 105 mm
- Diameter: 58,5mm
- Weight: 0,465 kg