

Instructions for using the Pro-Tessar M1:1 (2)

With the Pro-Tessar M 1:1, which should replace the front element of the convertible Zeiss Tessar f/2.8,50 mm, an image scale of 1:1 is automatically obtained so that it is possible to make transparencies from negatives, blackand-white negatives from colour transparencies, duplicates, etc. by optical printing. This is much easier than direct contact printing, which calls for a darkroom and a special printing device. The lens can also be used for taking





the right hand until it comes to a stop; a slight resistance has to be overcome. Then lift the front element from its mount. When re-inserting, the red dot of the Pro-Tessar M 1:1 or of the original front element must be opposite the red dot of the lock pawl. The lens component is inserted and pressed home with a right turn until an audible click indicates the correct position. In order to preserve the efficiency and high-quality performance of the right hand until it comes to a stop; a slight resistance has to be overcome. Then lift the front element from its mount. When re-inserting, the red dot of the Pro-Tessar M 1:1 or of the original front element must be opposite the red dot of the lock pawl. The lens component is inserted and pressed home with a right turn until an audible click indicates the correct position. In order to preserve the efficiency and high-quality performance of the precious lenses, their surfaces should never be touched. The denotations on the Pro-Tessar are engraved in **red** so that it cannot be mixed up with the original front element of the Tessar lens.

For taking a picture

the Pro-Tessar should be set to the "infinity" mark and the camera then moved towards the subject until one of the vertical lines of the subject appears unbroken in the split-image rangefinder or

the definition of small details in the fine-grain screen ring is ensured. Then the shutter can be released. It is advisable to stop down the lens to at least f/8. If the distance scale of the lens is set to 0.7 m $(27^{1/2} \text{ in.})$ the image scale will be 1.15:1, that is to say, that a slight magnification will be obtained. This can be used for the correction of the framing in transparencies or duplicates. For copying negatives orpositivesitisadvisabletousethe CONTAFLEX with the Pro-Tessar

M 1:1 in conjunction with a Zeiss Ikon copying unit. The original should then be placed on an illuminated-box, the illuminated area of which must be covered so that only the original is illuminated. The shutter should be released by means of a cable release. The Pro-Tessar can be used with filters and the lens hood. Filters in 27 mm screw-in mount are screwed into the lens mount: the lens hood must be slipped on. It is also possible to use the Contapol in conjunction with the Pro-Tessar M 1:1.

Depth of field

Since the taking distance is always very short, the depth of field is equally small. Measured from the image plane towards the front and the back, the depth of field is:

f/8 f/11 f/16 f/22

at stop 0,4 0,55 0,8 1,1 mm (circle of confusion 1/20 mm). Maintenance of the lenses

All lenses should only be cleaned

when really necessary. Gently wipe the lens with a soft, well-washed, dry piece of linen (but not chamois leather!), **after** removing any dust with a soft brush.

Serial numbers

Every Pro-Tessar M 1:1 lens bears a serial number. You are advised to make a careful note of the numbers of all lenses, as they may be of great help in establishing ownership in cases of loss or theft.

Advice in photography

If you have difficulties concerning photography, see your photo dealer for free information. Subject to changes in the interest of technical progress.



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