

CARL ZEISS
JENA



**Photolenses
with Automatic Diaphragm
for Exakta and Exa**

Outstanding features of the lenses listed in this pamphlet are their excellent design and appearance which in addition to their optical performance and first-class workmanship keeps abreast with most modern requirements. Any of the lenses described herein, be it the 82° superwide-angle lens to begin with, up to the high-speed 120 mm f/2.8 lens, has a perfect imaging performance, thus meeting all demands to be placed on its type. Going into further details on the world-renowned efficiency of the Jena lenses can be dispensed with, since the great number of different lens types produced in our works in evenly high quality gives evidence of the high standard of accomplishment of our scientists and specialists.

Uniform Colour Rendition

Some time ago we succeeded in our endeavours that all our lenses for 35 mm cameras have a uniform neutral colour rendition. This puts an end to the formerly experienced differing colour rendition, eliminating the variable quality of the colour photograph. The correction has been achieved by correspondingly varying the thickness of the hard anti-reflexion coating with which all glass-to-air surfaces of our lenses are provided. This procedure eliminates f. i. the yellowish tint occurring especially in high-grade optical glass. Colour photographs taken with our lenses for 35 mm cameras distinguish themselves therefore by a uniform natural colour rendition, provided that other factors such as illumination, development etc. do not impair the colour fidelity.

Flektogon 25 mm f/4

Seven-lens optical system

Angular field of the lens: 82°

Distance scale: 0.2 m to infinite

Click-stop diaphragm:

Adjustable from f/4 to f/22

Depth of focus scale

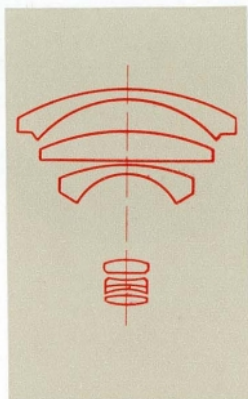
Thread of filter: M 77 \times 0.75*)

Total length of the lens: 62.3 mm

Maximum diameter: 82 mm

Weight: abt. 300 g

*) For 25 mm f/4 Flektogon-lenses special-type filter M 77 W should be used, since standard filter M 77 will cause a vignetting effect on the photograph.



Flektogon 35 mm f/2.8

Six-lens optical system

Angular field of the lens: 62°

Distance scale: 0.36 m to infinite

Click-stop diaphragm: Adjustable from f/2.8 to f/22

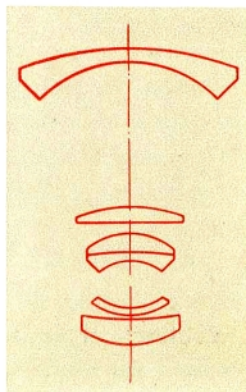
Depth of focus scale

Thread of filter: M 49 × 0.75*)

Total length of the lens: 57.3 mm

Maximum diameter: 62.5 mm

Weight: abt. 175 g



- *) For 35 mm f/2.8 Flektogon-lenses, filter 51 W (slip-on type) or M 58 (screw-in type) may be used; the latter in conjunction with the adapter rings M 49/M 58 or 51 M 58. In addition, a special-type lens hood M 58 W (slip-on or screw-in type) is available. Other filters or lens hoods will cause a vignetting effect on the photograph.



Tessar 50 mm f/2.8

Four-lens optical system

Pancolar 50 mm f/2

Six-lens optical system

Angular field of the lens: 45°

Distance scale: 0.5 m to infinite

Click-stop diaphragm: Adjustable from f/2.8 (f2) to f/22

Depth of focus scale

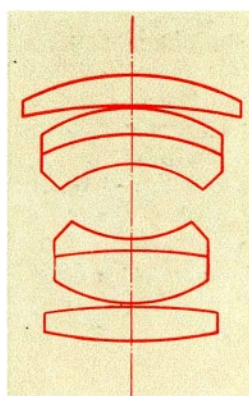
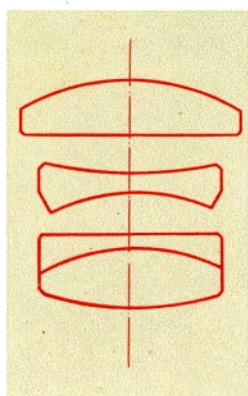
Thread of filter: M 49 × 0.75

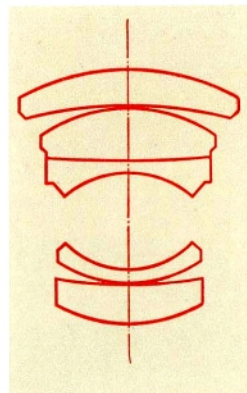
Total length: 43.8 mm

Maximum diameter: 62.5 mm

Weight: abt. 150 g

Weight: abt. 175 g





Biometer 80 mm f/2.8

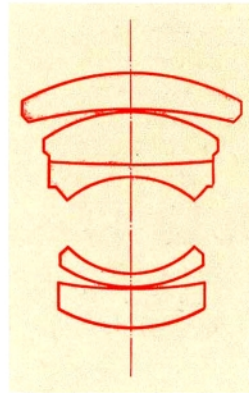
Five-lens optical system
Angular field of the lens: 30°
Distance scale: 0.8 m to infinite
Click-stop diaphragm:
Adjustable from f/2.8 to f/22
Depth of focus scale
Imaging factor compared with
F = 50 mm lens: 1.6 ×
Thread of filter: M 49 × 0.75
Total length of the lens: 63.7 mm
Maximum diameter: 65.5 mm
Weight: abt. 260 g



Biometar 120 mm f/2.8*)

Five-lens optical system
Angular field of the lens: 21.5°
Distance scale: 1.3 m to infinite
Click-stop diaphragm:
Adjustable from f/2.8 to f/22
Depth of focus scale
Imaging factor compared with
F = 50 mm lens: 2.4 ×
Thread of filter: M 67 × 0.75
Total length of the lens: 114 mm
Maximum diameter: 79.5 mm
Weight: abt. 530 g

*) When using the Biometar 120 mm f/2.8 with the Exa I, the shutter will cause a vignetting effect on the photograph.



The automatic diaphragm (ASB), with which the lenses listed herein are equipped, gives users of Exakta or Exa cameras an opportunity to take photographs just as quickly as when using a camera fitted with a rangefinder. Same as with the latter type of camera the only thing to be done prior to taking the photograph is to set the diaphragm to the required value. The diaphragm is designed as click-stop diaphragm and engages also in intermediate positions, an advantage which is important in colour photography. Contrary to the semi-automatic diaphragm, cocking of the automatic diaphragm is not necessary. Irrespective of the value set, the diaphragm of these lenses is permanently fully opened. When pressing the release button (1), which itself actuates the camera shutter release, the diaphragm stops down automatically to the preset value, fractions of a second before the shutter opens. In contrast with the automatic pressure diaphragm which closes down gradually, this is of particular advantage, since the bright image of the focusing screen is retained up to the last moment. As soon as the press button (1) is released, the diaphragm opens up again.

If it is intended, to have the diaphragm stopped down to the respective value before actuating the release button – for checking the depth of focus f. i. – the resilient knurled knob (2) which embraces the release button must be pushed in the direction of the camera and arrested by turning it counterclockwise. In this position the automatic mechanism is disconnected and the photographic lens may be used as a lens with ordinary diaphragm. Turning the knurled knob in clockwise direction and allowing it to spring back to its former position makes the automatic diaphragm mechanism to operate as usually. Attached to the lower side of the release button is a small adjustment screw, with the aid of which the correct distance between the release buttons of lens and camera is fixed.



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