

HC MACRO 4/120-II

DATASHEET

The 120mm Macro has exceptionally high performance making it a very versatile lens not only for close-up work but general applications too where a slightly longer lens is required.

GENERAL LENS DATA

Focal length	118,7mm
Equivalent 35mm focal length ¹	80mm
Aperture range	4 - 45
Angle of view diag/hor/vert 53,4 x 40 format	32°/26°/20°
Angle of view diag/hor/vert 44 x 33 format	26°/21°/16°
Length/diameter	166 mm/96 mm
Weight	1410 g
Filter diameter	67 mm

¹ Horizontal coverage between 53,4 x 40 and 36 x 24 compared

CLOSE FOCUS RANGE DATA

Minimum distance object to film	0.39 m
Maximum image scale	1:1
Corresponding area of coverage	53 x 40 cm
Corresponding exposure reduction	1.3 f-stop



LENS DESIGN

9 elements in 9 groups

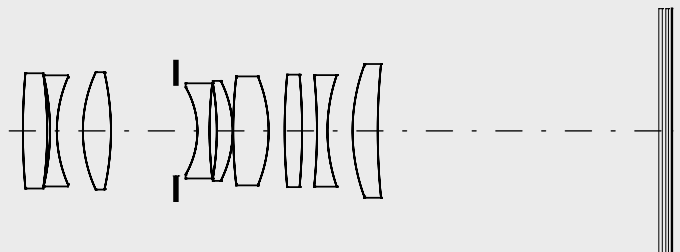
FOCUS TYPE

Front focusing

ENTRANCE PUPIL POSITION

68 mm in front of the film plane
(at infinite focus setting)

The entrance pupil position is the correct position of the axis of rotation when making a panorama image by combining individual images of a scene.



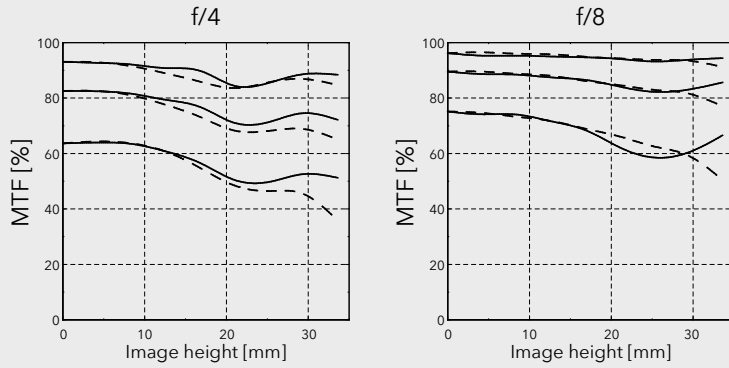
HC MACRO 4/120-II

MTF

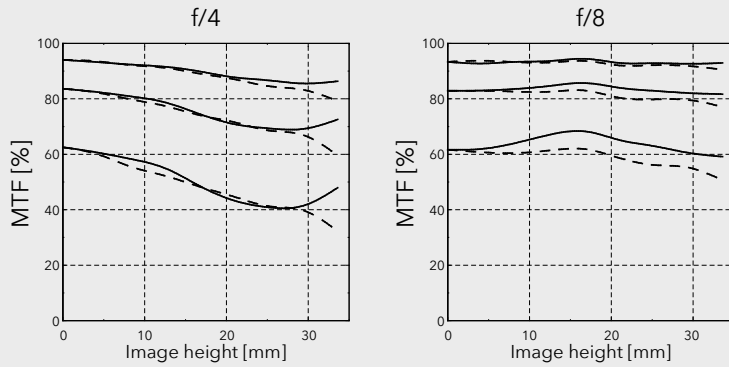
Modulation Transfer as a function of image height at infinite focus setting.

Sagittal slit orientation drawn with continuous line and tangential with dashed. White light. Spatial frequencies 10, 20 and 40 lp/mm

@ Infinity setting



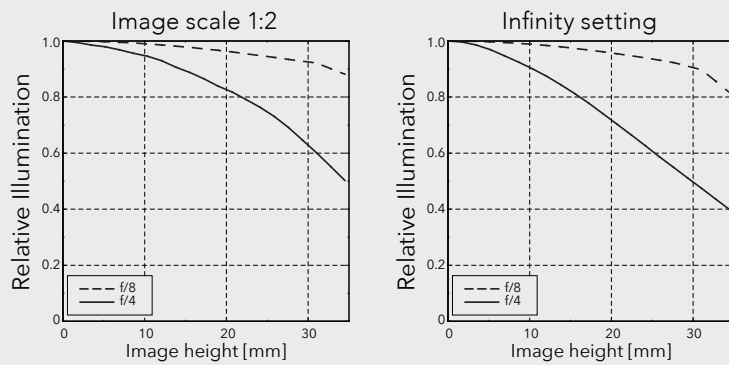
@ Image scale 1:2



RELATIVE ILLUMINATION

Infinity setting

When images are imported to Phocus, light fall-off is automatically removed.



DISTORTION

Infinity setting

When images are imported to Phocus, distortion is automatically removed.

