MC4K125X-F

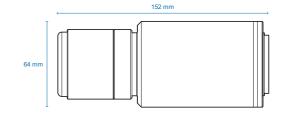
OPTO ENGINEERING

Macro lens for 4k linescan cameras, magnification 1.25x, F-mount

SPECIFICATIONS

Focusing (1)		near	nominal	far
Magnification	(x)	1.295	1.250	1.204
Object field of view (mm x mm)				
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6		9.9 x 7.4	10.2 x 7.7	10.6 x 8.0
with $2k \times 10 \ \mu m$ detector 20.48		15.8	16.4	17.0
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2		11.7 x 11.7	12.2 x 12.2	12.6 x 12.6
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6		14.0 x 10.5	14.5 x 10.9	15.0 x 11.3
with 4k x 7 μm detector 28.67		22.1	22.9	23.8
Optical specifications				
Working distance	(mm)	94.0	96.1	98.5
f/# (wF/#) (2)		6.7 (15)		
Distortion typical (max) (3)	(%)	< 0.01 (0.03)		
Field depth (4)	(mm)	0.7		***
CTF @ 50 lp/mm	(%)	> 40		
Image side numerical aperture		0.033		
Object side numerical aperture		0.043		
Mechanical specifications				
Length (5)	(mm)	152.2		
Diameter	(mm)	64.0		
Mass	(g)	636		
Mount (6)		F		









NOTES

- 1. Maximum and minimum magnification changes when focusing.
- 2. F/# = F-number, wF/# = working F-number, the real F-number of a lens when used as a macro. Lenses with smaller apertures can be supplied on request.
- 3. Percent deviation of the real image compared to an ideal, undistorted image: typical (average production) values and maximum (guaranteed) values are listed.
- 4. At the borders of the field depth the image can be still used for measurement but to get a perfectly sharp image only half of the nominal field depth should be taken into account.
- 5. Measured from the front end of the mechanics to the camera flange; take into account a +/- 2.5 mm tolerance due to the focussing mechanism.