MC4K175X-F

Macro lens for 4k linescan cameras, magnification 1.75x, F-mount

SPECIFICATIONS

Focusing (1)		near	nominal	far
Magnification	(×)	1.793	1.750	1.705
Object field of view (mm x mm)				
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6		7.1 x 5.4	7.3 x 5.5	7.5 x 5.6
with 2k x 10 µm detector 20.48		11.4	11.7	12.0
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2		8.5 x 8.5	8.7 x 8.7	8.9 x 8.9
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6		10.1 x 7.6	10.3 x 7.8	10.6 x 8.0
with 4k x 7 µm detector 28.67		16.0	16.4	16.8

82.7

6.5 (18) ...

0.4

> 35

0.028

(mm)

(%)

(mm)

(%)

83.8

85.0







Object side numerical aperture

Image side numerical aperture

Optical specifications
Working distance

Distortion typical (max) (3)

f/# (wF/#) (2)

Field depth (4)

CTF @ 50 lp/mm

Mechanical specifications		
Length (5)	(mm)	198.5
Diameter	(mm)	64.0
Mass	(g)	720
Mount (6)		F

NOTES

- 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.
- 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.



^{1.} Maximum and minimum magnification changes when focusing.