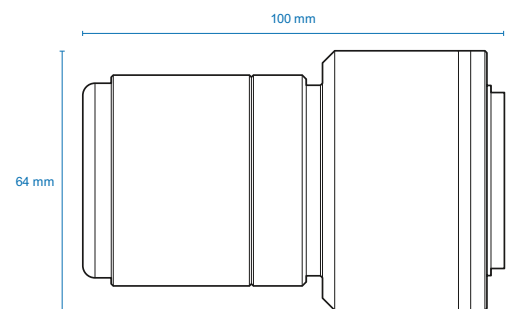


# MC4K050X-F

Macro lens for 4k linescan cameras, magnification 0.50x, F-mount

## SPECIFICATIONS

Focusing (1)		near	nominal	far
Magnification	(x)	0.545	0.500	0.455
Object field of view (mm x mm)				
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6		23.5 x 17.6	25.6 x 19.2	28.1 x 21.1
with 2k x 10 µm detector 20.48		37.6	41.0	45.0
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2		27.9 x 27.9	30.4 x 30.4	33.4 x 33.4
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6		33.2 x 25.0	36.2 x 27.2	39.8 x 29.9
with 4k x 7 µm detector 28.67		52.6	57.3	63.0
Optical specifications				
Working distance	(mm)	177.0	189.9	205.2
f/# (wF/#) (2)		6.7 (10)	...	...
Distortion typical (max) (3)	(%)	< 0.04 (0.08)	...	...
Field depth (4)	(mm)	2.5	...	...
CTF @ 50 lp/mm	(%)	> 50	...	...
Image side numerical aperture		0.050	...	...
Object side numerical aperture		0.027	...	...
Mechanical specifications				
Length (5)	(mm)	99.5	...	...
Diameter	(mm)	64.0	...	...
Mass	(g)	542	...	...
Mount (6)		F	...	...



## NOTES

- Maximum and minimum magnification changes when focusing.
- 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.
- 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.
- 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.

## COMPATIBLE PRODUCTS



LTDM series  
Diffusive strobed dome illuminators

LTDMC1-W	Diffusive strobed dome illuminator - large size medium power white
LTDMC2-R	Diffusive strobed dome illuminator - large size high power red
LTDMC2-G	Diffusive strobed dome illuminator - large size high power green
LTDMC2-W	Diffusive strobed dome illuminator - large size high power white



LTDMLA series  
Dome + low angle illumination system

LTDMLAC1-WW	Diffusive strobed dome + low angle illumination system - large size medium power white
LTDMLAC2-WW	Diffusive strobed dome + low angle illumination system - large size high power white