## MC4K175X-N

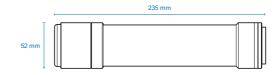


Macro lens for 4k linescan cameras, magnification 1.75x, mount M42X1 FD = 10.56

## SPECIFICATIONS

Focusing (1)		near	nominal	far	
Magnification	(x)	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	
Optical specifications					
Working distance	(mm)	82.7	83.8	85.0	
f/# (wF/#) (2)		6.5 (18)		•••	
Distortion typical (max) (3)	(%)	< 0.01 (0	0.03)		
Field depth (4)	(mm)	0.4			
CTF @ 50 lp/mm	(%)	> 35			
Image side numerical aperture		0.028			
Object side numerical aperture		0.050			
Mechanical specifications					
Length (5)	(mm)	234.5			
Diameter	(mm)	52.0			
Mass	(g)	658			
Mount (6)		M42X1			









## 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.