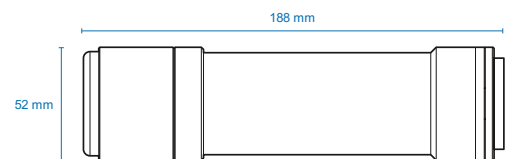


# MC4K125X-N

Macro lens for 4k linescan cameras, magnification 1.25x, mount M42X1 FD = 10.56

## 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 x 10 µm 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) | 188.1         | ...         | ...         |
| Diameter  | (mm) | 52.0          | ...         | ...         |
| Mass  | (g)  | 590           | ...         | ...         |
| 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.