

MC12K100X-R

Linescan macro lens, magnification 1.00x, M72 x 0.75 mount

SPECIFICATIONS

Focusing (1)		near	nominal	far
Magnification	(x)	1.018	1.000	0.984

Object field of view (mm x mm)

with line - 12k detector 12k x 5.2 μm	62.40	61.0	62.4	63.1
with line - 12k detector 12k x 5 μm	61.44	60.4	61.4	62.5
with line - 16k detector 16k x 3.5 μm	57.34	56.9	57.3	58.9
with 35 mm detector 36 x 24 (mm x mm)		35.4 x 23.6	36.0 x 24.0	36.6 x 24.4

Optical specifications

Working distance	(mm)	134.0	135.5	137.0
F/# (wF/#) (2)		6.0 (12)
Distortion typical (max) (3)	(%)	< 0.01 (0.02)		
Field depth (4)	(mm)	0.3		
CTF 50 lp/mm	(%)	> 50		
Image side numerical aperture		0.042		
Object side numerical aperture		0.042		

Mechanical specifications

Length (5)	(mm)	195.0		
Diameter	(mm)	76		
Mass	(g)	991		
Mount (6)		M72 x 0.75 FD 6.56		

NOTES

1. Maximum and minimum acceptable focusing change
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 very 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 focusing mechanism
6. FD stands for Flange Distance (in mm), defined as the distance from the mounting flange (the "metal ring" in rear part of the lens) to the camera detector plane.
F Mount (-F) may cause vignetting with sensor diagonal > 50 mm.
For such sensor size we suggest mount M72x0.75, FD 6.56 (-R).
Mount M58x0.75 (-I) may cause vignetting with sensor diagonal > 52 mm.
For such sensor size we suggest mount M72x0.75, FD 6.56 (-R).

