

# MC12K067X-R

Linescan macro lens, magnification 0.67x, M72 x 0.75 mount

## SPECIFICATIONS

Focusing (1)		near	nominal	far
Magnification	(x)	0.684	0.667	0.667

### Object field of view (mm x mm)

with line - 12k detector 12k x 5.2 $\mu$ m	62.40	90.7	93.6	93.0
with line - 12k detector 12k x 5 $\mu$ m	61.44	89.9	92.2	92.2
with line - 16k detector 16k x 3.5 $\mu$ m	57.34	84.7	86.0	86.8
with 35 mm detector 36 x 24 (mm x mm)		52.7 x 35.1	54.0 x 36.0	55.4 x 36.9

### Optical specifications

Working distance	(mm)	179.7	183.0	186.4
F/# (wF/#) (2)		6.0 (10)	...	...
Distortion typical (max) (3)	(%)		< 0.01 (0.02)	
Field depth (4)	(mm)		0.6	
CTF 50 lp/mm	(%)		> 60	
Image side numerical aperture			0.050	
Object side numerical aperture			0.033	

### Mechanical specifications

Length (5)	(mm)		169.6	
Diameter	(mm)		76	
Mass	(g)		859	
Mount (6)			M72 x 0.75	FD 6.56

## NOTES

- Maximum and minimum acceptable focusing change
- 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 very 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 focusing mechanism
- 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).

