

MC SERIES

Zero distortion macro lenses

MC Series is a family of macro lenses designed to capture images of small objects when both very good resolution and nearly zero distortion are needed. Small object fields of view are often observed by means of long focal length lenses equipped with an additional spacer, used to adjust the working distance.

Unfortunately, this approach leads to several problems like high image distortion, resolution loss (especially at the corners), poor depth of field and chromatic effects, thus making this method not suitable for good imaging neither compatible with accurate measurement requirements.

All of these problems can be overcome by using **MC Series**, specifically designed for MACRO imaging. **MC Series** lenses are compact and cost-effective optics providing very high image resolution. A very low optical distortion makes these lenses perfectly suitable for precise dimensional measurement applications.



KEY ADVANTAGES

- 1 Zero distortion:** MC Series are suitable for any measurement application where telecentricity is not required
- 2 High resolution:** MC Series has been specifically designed to work in "macro" configuration.
- 3 Compactness:** MC Series small outer diameter (15 mm) fits those applications where only small room for optical components is available.

part number	magnification	field of view					optical specs			mechanical specs				
		1/4"	1/3"	1/2"	1/1.8"	2/3"	w.d.	distortion	F-number	field depth	length	diameter	height	mount
		(mm) x (mm)	(mm) x (mm)	(mm) x (mm)	(mm) x (mm)	(mm) x (mm)	(mm)	(%)		(mm)	(mm)	(mm)		
MC3.00X	3	1,2 x 0,9	1,6 x 1,2	2,1 x 1,6	2,3 x 1,8	2,9 x 2,2	29	<0,01	20	0,15	106,5	15,0	30	C-mount
MC2.00X	2	1,8 x 1,4	2,4 x 1,8	3,2 x 2,4	3,5 x 2,6	4,4 x 3,3	33	<0,01	16	0,25	78,1	15,0	30	C-mount
MC1.50X	1,5	2,4 x 1,8	3,2 x 2,4	4,3 x 3,2	4,7 x 3,5	5,9 x 4,4	38	<0,01	13	0,35	63,9	15,0	30	C-mount
MC1.00X	1	3,6 x 2,7	4,8 x 3,6	6,4 x 4,8	7,0 x 5,3	8,8 x 6,6	47	<0,01	10	0,6	49,9	15,0	30	C-mount
MC0.75X	0,75	4,8 x 3,6	6,4 x 4,8	8,5 x 6,4	9,4 x 7,0	11,7 x 8,8	58	<0,02	9	1,1	42,8	15,0	30	C-mount
MC0.50X	0,50	7,2 x 5,4	9,6 x 7,2	12,8 x 9,6	14,1 x 10,6	17,6 x 13,2	75	<0,02	8	2,1	35,7	15,0	30	C-mount
MC0.33X	0,33	10,8 x 8,1	14,4 x 10,8	19,2 x 14,4	21,1 x 15,9	26,4 x 19,8	102	<0,05	7	3,7	31,0	15,0	30	C-mount

