

9 MEGAPIXEL (1") 12 MEGAPIXEL (1.1") LENSES

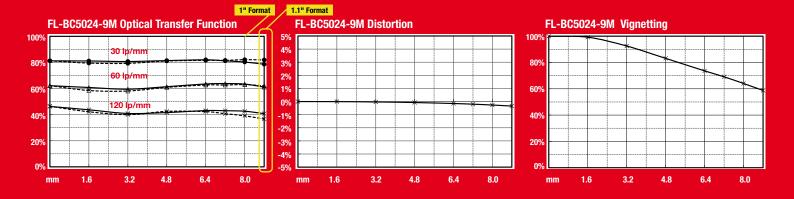
for Machine Vision Systems up to 1.1" Format

- Focal Length 12 mm, 16 mm, 25 mm,35 mm, 50 mm, 75 mm
- Pixel Pitch 3.45 μm
- 147 lp/mm from centre to corners of the image
- Distortion ~ 2% to minimal ~ 0.1%
- Even light distribution
- Locking Screws
- Suitable for Sony IMX253 sensor
- Compact design, robust and durable









Supports 1" format, 9 megapixel / 1.1" format 12 megapixel cameras. Achieves 147 lp/mm high resolution from centre to the periphery. The lenses are not only optimised for high image quality, but also for use in harsh environments and durable industrial systems.

These RICOH lenses are equipped with locking screws, to prevent unintended movement of focus and iris positions.

The lens's focusing uses a floating mechanism design, reducing aberrations from an infinite to close working distance. Therefore, the lenses can also be used at distance in intelligent traffic technology.

12 MP High resolution and high contrast

Supports 1.1" format, 12 megapixel cameras. Produces sharp high-clarity images with high-contrast and low resolution loss all the way to the periphery.



Extremely low distortion

The optical distortion of this series is generally \sim 2%, (wide angle lens FL-BC1220-9M) or less, partially even < 0.1 %. The resulting extremely low-distortion images are excellent for use in the image measurement field.



Compact design

To suit 44 mm housings used for most 12 megapixel cameras, these lenses have a 42 mm compact design ideal for installation with high performance equipment.



Bright and clear to the periphery

Despite the small diameter of 42 mm, the vignetting has been reduced to the minimum. Combined with the 12 megapixel resolution, bright, high contrast images are achieved all the way to the edges.

Part No.	Format size	Mount	Focal length (mm)	Iris range	Min. Pixel Pitch (µm)*	M. O. D. (m)	Horizontal angle of view	Filter size (mm)	Dimensions (mm)
HIGH-RESOLUTION, FOR STANDARD, IP AND MEGAPIXEL CAMERAS									
FL-BC1220-9M	1" (1.1")	С	12	2.0 - 16	3.45	0.08	57.0°/61.8°	40.5	Ø42.0 × 60.5
FL-BC1618-9M	1" (1.1")	С	16	1.8 - 16	3.45	0.08	43.8°/47.7°	40.5	\emptyset 42.0 × 64.0
FL-BC2518-9M	1" (1.1")	С	25	1.8 - 16	3.45	0.1	28.8°/31.5°	40.5	Ø42.0 × 57.5
FL-BC3518-9M	1" (1.1")	С	35	1.8 - 22	3.45	0.15	20.7°/22.7°	40.5	\emptyset 42.0 × 60.0
FL-BC5024-9M	1" (1.1")	С	50	2.4 - 22	3.45	0.2	14.6°/16.0°	40.5	Ø42.0 × 69.0
FL-BC7528-9M	1" (1.1")	С	75	2.8 - 32	3.45	0.25	9.8°/10.7°	40.5	Ø42.0 × 81.0

^{*} Min. Pixel Pitch at 30% contrast (measuring on the edge of the Optic)



RICOH International B. V. German Branch

Industrial Optical Systems Division

Oberrather Strasse 6 40472 Düsseldorf, Germany Tel.: +49 (0)211 6546 4500 Fax: +49 (0)211 6546 4501

Email: iosd@ricoh-europe.com

