



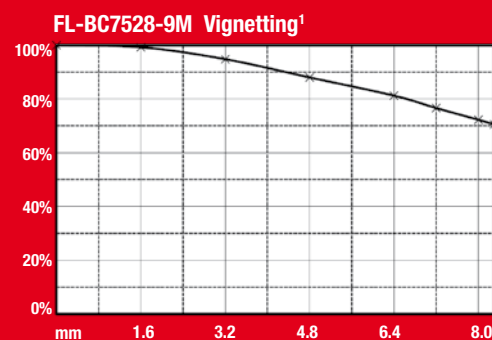
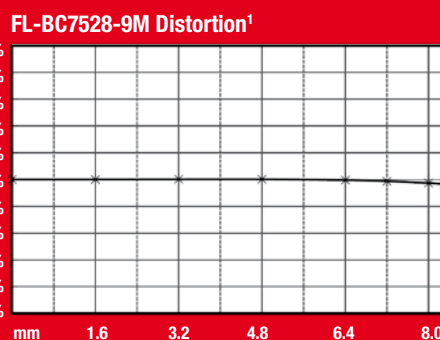
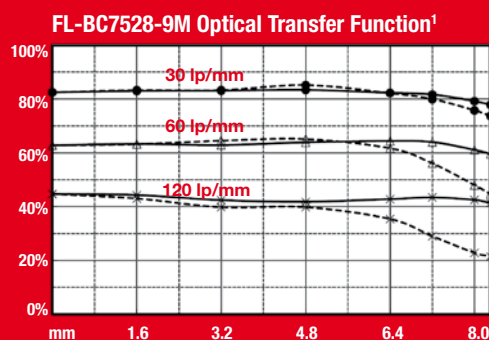
# 9 MEGAPIXEL LENSES

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 3.69  $\mu\text{m}$
- 135 lp/mm from centre to corners of the image<sup>1</sup>
- Distortion  $\sim 2\%$  to minimal  $\sim 0.1\%$ <sup>1</sup>
- Even light distribution
- Locking Screws
- Ideal for integration in systems with large sensors
- Compact design, robust and durable



**RICOH**  
imagine. change.



This series of 9 megapixel lenses are developed to be installed in machine vision systems with 1" format cameras, however, due to their large image circle they can also be used with 12 megapixel 1.1" sensors. 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.

## 9 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<sup>1</sup>

The optical distortion of this series is generally ~ 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.



42 mm

## 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 9 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) <sup>2</sup>	M. O. D. (m)	Horizontal angle of view	Filter size (mm)	Dimensions (mm)
<b>HIGH-RESOLUTION, FOR STANDARD, IP AND MEGAPIXEL CAMERAS</b>									
FL-BC1220-9M	1" (1.1")	C	12	2.0 - 16	3.69	0.08	57.0°	40.5	Ø42.0 × 60.5
FL-BC1618-9M	1" (1.1")	C	16	1.8 - 16	3.69	0.08	43.8°	40.5	Ø42.0 × 64.0
FL-BC2518-9M	1" (1.1")	C	25	1.8 - 16	3.69	0.1	28.8°	40.5	Ø42.0 × 57.5
FL-BC3518-9M	1" (1.1")	C	35	1.8 - 22	3.69	0.15	20.7°	40.5	Ø42.0 × 60.0
FL-BC5024-9M	1" (1.1")	C	50	2.4 - 22	3.69	0.2	14.6°	40.5	Ø42.0 × 69.0
FL-BC7528-9M	1" (1.1")	C	75	2.8 - 32	3.69	0.25	9.8°	40.5	Ø42.0 × 81.0

<sup>1</sup> 1" Format | <sup>2</sup> Min. Pixel Pitch at 30% contrast (measuring on the edge of the Optic)

