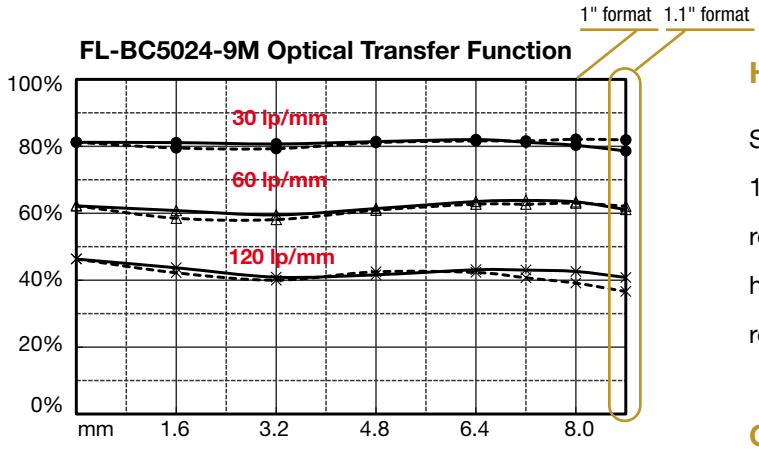
9 MEGAPIXEL LENSES (1") / 12 MEGAPIXEL LENSES (1.1")

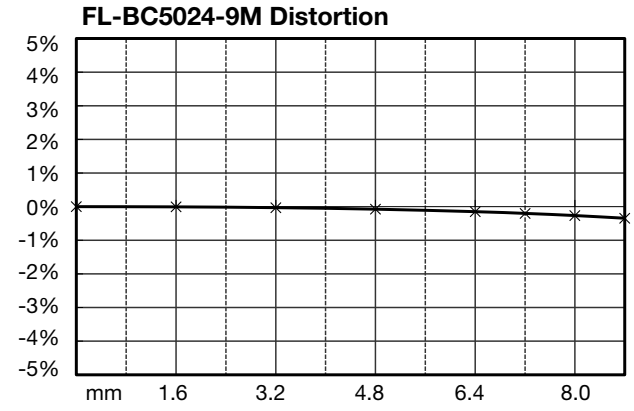
This series of high resolution lenses are developed to be installed in machine vision systems with cameras with sensors up to 9 megapixels for 1" format / 12 megapixels for 1.1" format. The lenses are not only optimised for high image quality, but also for use in harsh environments and durable industrial systems.

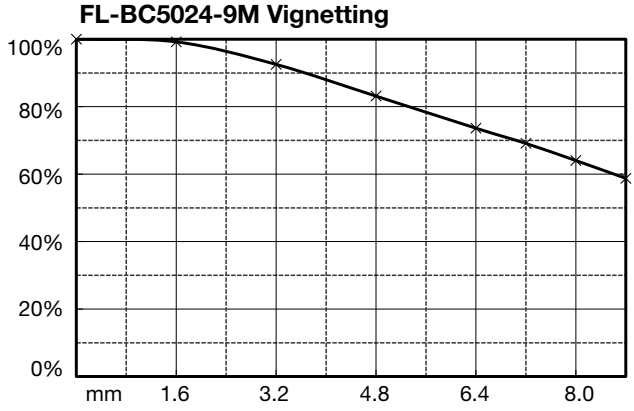
These RICOH lenses are equipped with locking screws, to prevent unintended movement of focus and iris positions.

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.

- Focal Lengths 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
- Extremely low distortion, suitable for image measurement
- Even light distribution
- Locking Screws
- Ideal for integration in systems with large sensors (Suitable for Sony IMX253 sensor)
- Compact design, robust and durable







High resolution and high contrast

Supports 1" format, 9 megapixel / 1.1" format, 12 megapixel cameras. Achieves 147 lp/mm high resolution from centre to periphery. Produces sharp, high-clarity images with high-contrast and low resolution loss all the way to the periphery.

Compact design, Ø 42 mm

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.

Extremely low distortion

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.

Bright and clear to the periphery

Despite the small diameter of 42 mm, 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.

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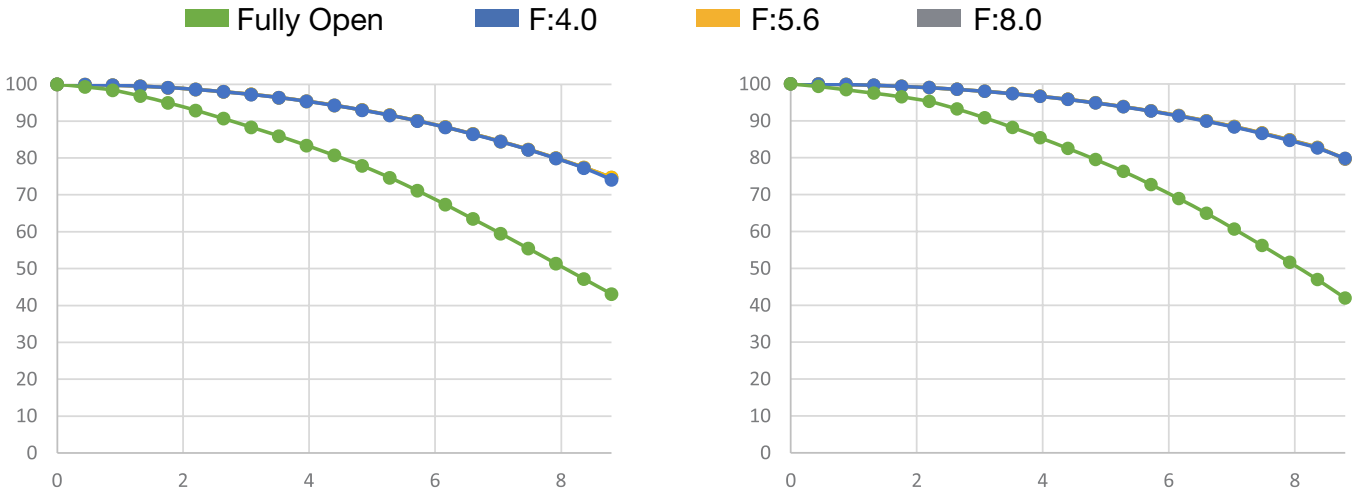
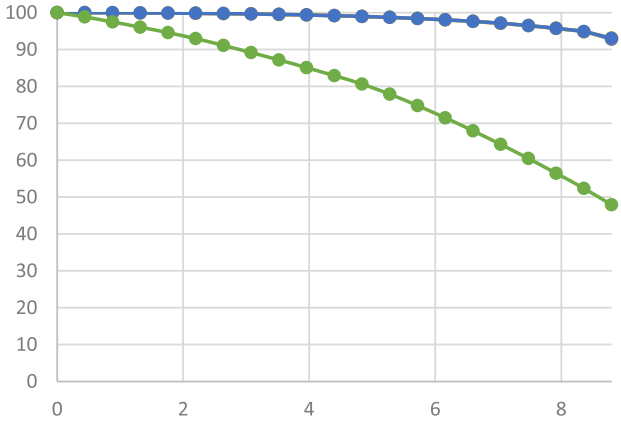
Lens vignetting (1.1" Sensor) at Fully Open vs F:4.0, F:5.6 and F:8.0

Despite the Ø 42mm compact design, vignetting has been reduced to the minimum.
F:5.6 and F:8.0 only shown when deviating from F:4.0

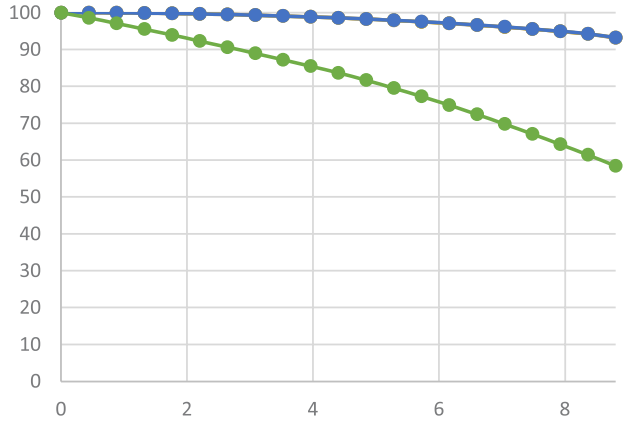


FL-BC1220-9M **W.D. = 250mm**

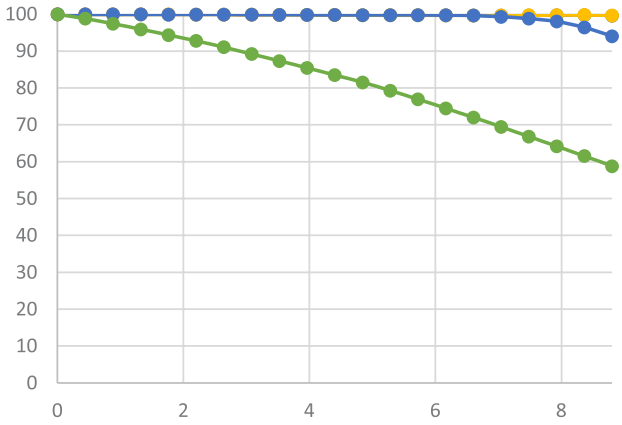
FL-BC1618-9M **W.D. = 250mm**



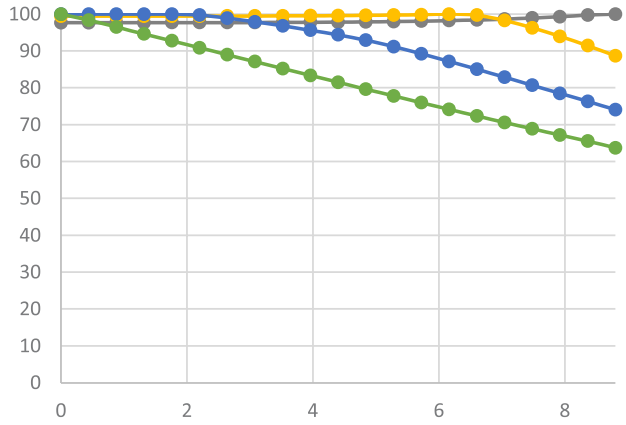
FL-BC2518-9M **W.D. = 250mm**



FL-BC3518-9M **W.D. = 250mm**



FL-BC5024-9M **W.D. = 300mm**



FL-BC7528-9M **W.D. = 500mm**

W.D. = Working Distance

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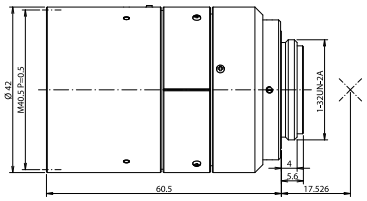
9 MEGAPIXEL (12 MEGAPIXEL 1.1") LENSES, FIXED FOCAL LENGTH

Manual Iris, with Locking Screws

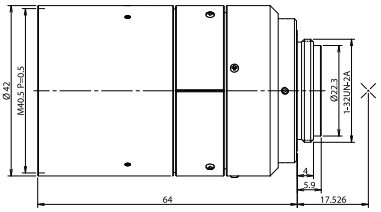
Part No.	Format size	Mount	Focal length mm)	Iris range	Min. Pixel Pitch (µm)*	M. O. D. (m)	Horizontal angle of view	Filter size (mm)	Dimensions (mm)	Price (Euro)
HIGH-RESOLUTION, FOR STANDARD, IP AND MEGAPIXEL CAMERAS										
FL-BC1220-9M	1" (1.1")	C	12	2.0 - 16	3.45	0.08	57.0°/61.8°	40.5	Ø42.0 × 60.5	549.00
FL-BC1618-9M	1" (1.1")	C	16	1.8 - 16	3.45	0.08	43.8°/47.7°	40.5	Ø42.0 × 64.0	549.00
FL-BC2518-9M	1" (1.1")	C	25	1.8 - 16	3.45	0.1	28.8°/31.5°	40.5	Ø42.0 × 57.5	519.00
FL-BC3518-9M	1" (1.1")	C	35	1.8 - 22	3.45	0.15	20.7°/22.7°	40.5	Ø42.0 × 60.5	519.00
FL-BC5024-9M	1" (1.1")	C	50	2.4 - 22	3.45	0.2	14.6°/16.0°	40.5	Ø42.0 × 69.0	559.00
FL-BC7528-9M	1" (1.1")	C	75	2.8 - 32	3.45	0.25	9.8°/10.7°	40.5	Ø42.0 × 81.0	559.00

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

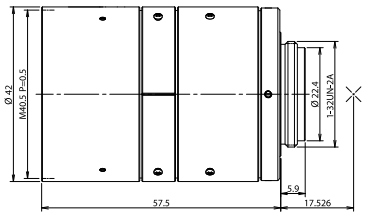
Unit: mm



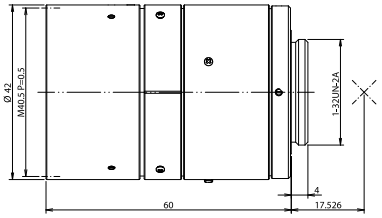
FL-BC1220-9M



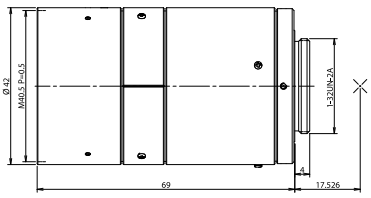
FL-BC1618-9M



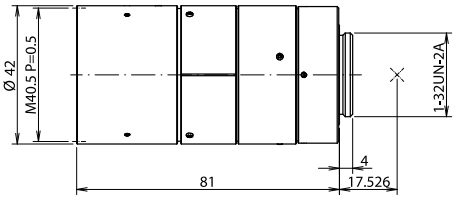
FL-BC2518-9M



FL-BC3518-9M



FL-BC5024-9M



FL-BC7528-9M