RICOH
imagine. change.

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

- Rugged, metal and glass construction with locking screws provides high vibration and shock resistance
- Ø17.6mm Image Circle suitable for larger sensors
- Compact Ø42mm durable design
- Floating focusing mechanism produces high resolution images at all work distances
- Distortion ~ 2% to minimal < 0.1%
- Even light distribution across entire sensor
- High quality assurance, precision parts production and assembly ensure specification uniformity
- Suitable for a variety of applications including 3D, robotics, ITS, pharma and food sorting

Suitable for IMX253 & IMX255 etc.

3.45µm Pixel Pitch[1]

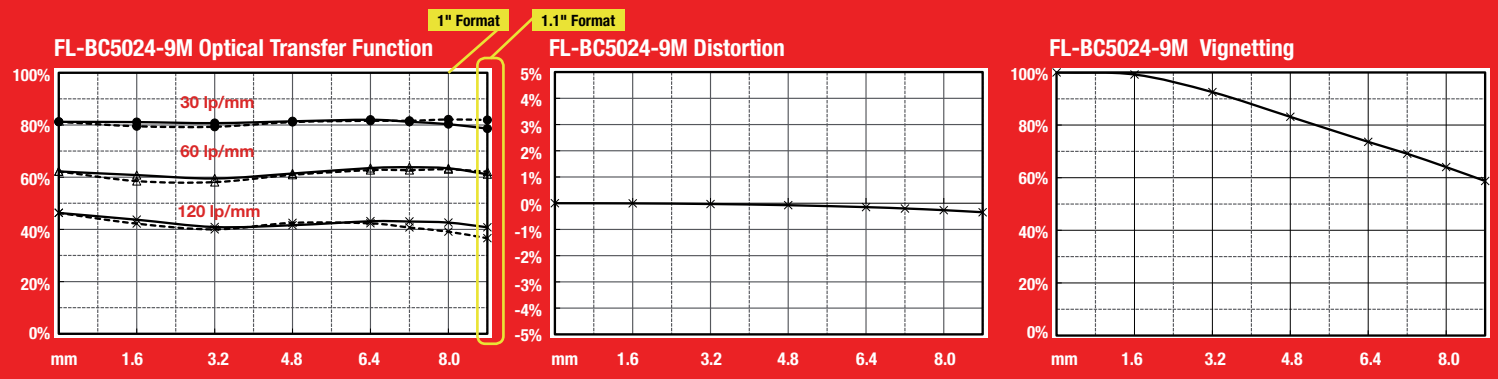
[1]Centre Pixel Pitch 2.4µm

147 lp/mm in the corners of the image

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")	C	12	2.0 - 16	3.45	0.08	57.0°/61.8°	40.5	Ø42.0 × 60.5
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
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
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
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
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

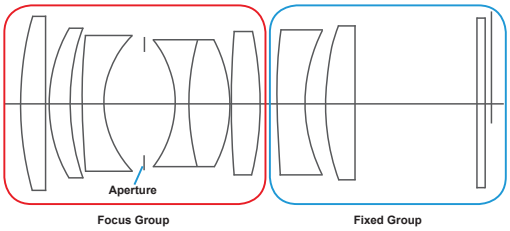
* Min. Pixel Pitch at 30% contrast (measuring on the edge of the Optic)

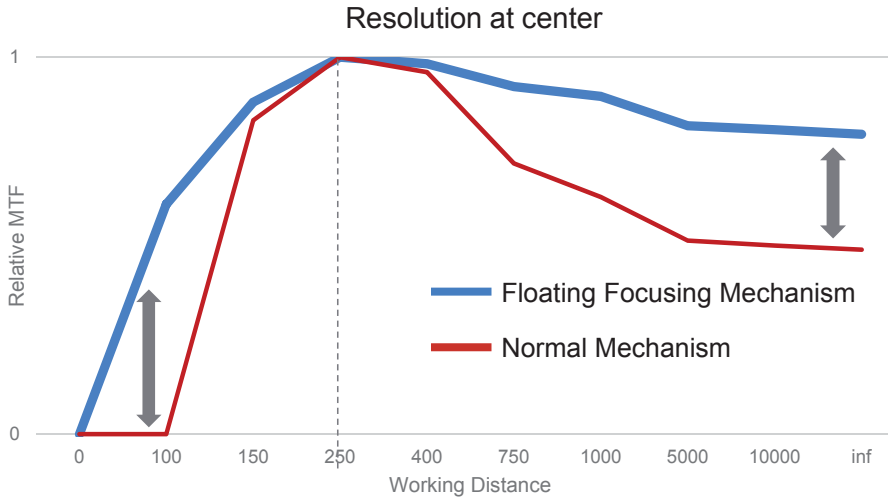
FL-BC5024-9M Technical Data



Floating Focusing Technology

Ricoh's unique algorithms and ghost analysis helped design our floating focusing mechanism which changes the spacing of some of its optical system to minimise changes in aberrations due to different object distances.

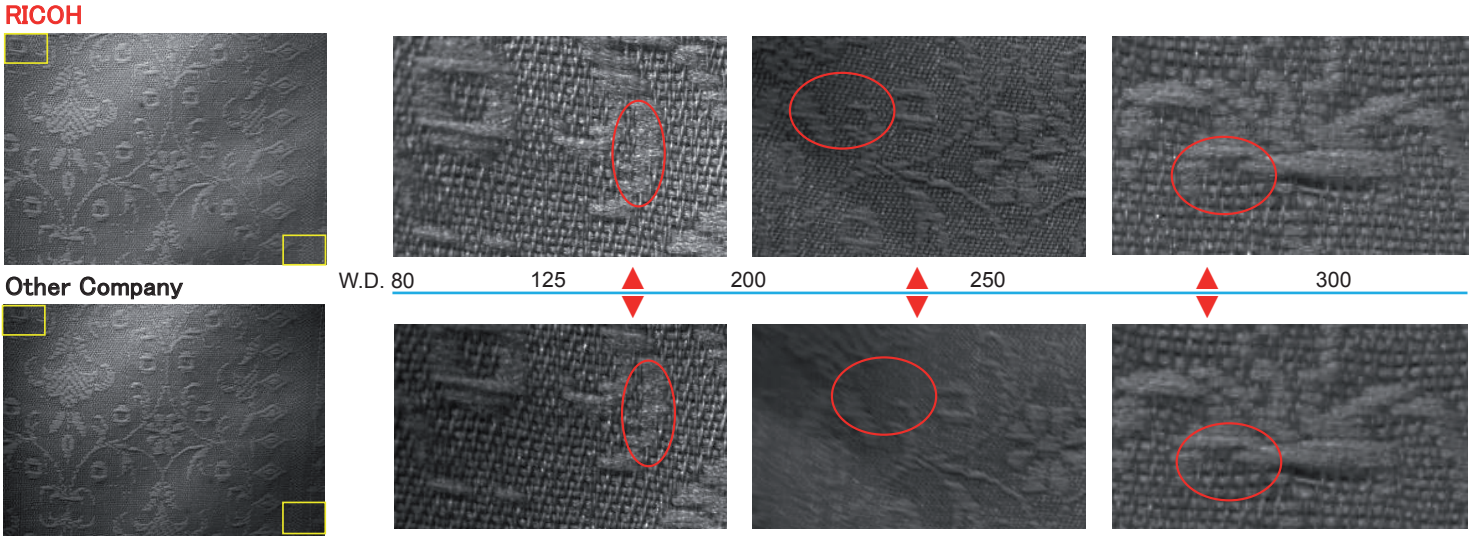




MTF is significantly increased at not only shorter working distances for machine vision applications but also at distance for intelligent transportation systems, making the lenses suitable for use at all working distances.

High resolution even in the corners

A cotton scarf imaged at different distances and observed in the corners.



Ricoh lens is not only superior for close up imaging but also captures high resolution, low distortion images at all distances.

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