



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

- Focal Lengths 12, 16, 25, 35, 50 and 75mm
- Pixel Pitch 3.45µm
- 147 lp/mm from centre to corners of the image
- Distortion ~ 2% to minimal < 0.1%
- Large Image Circle Ø17.6mm
- Even light distribution
- Compact Ø42mm robust, durable construction
- Suitable for machine vision applications as well as 3D, robotics, ITS, pharma and food sorting

**3.45µm  
Pixel Pitch<sup>1</sup>**

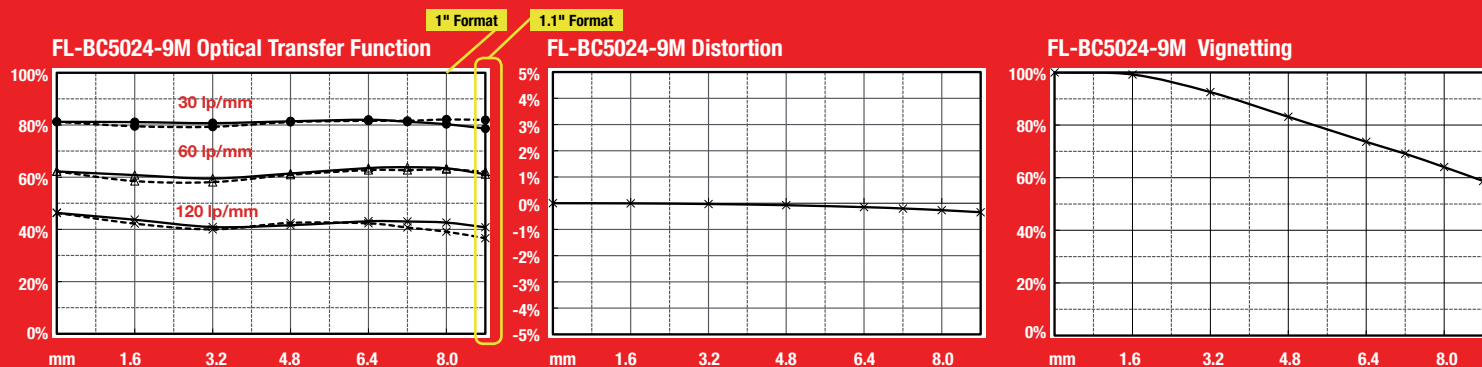
<sup>1</sup>Centre Pixel Pitch 2.4µm

**Suitable for  
IMX253 &  
IMX255 etc.**

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)
<b>HIGH-RESOLUTION, FOR STANDARD, IP AND MEGAPIXEL CAMERAS</b>									
<b>FL-BC1220-9M</b>	1" (1.1")	C	12	2.0 - 16	3.45	0.08	57.0°/61.8°	40.5	Ø42.0 × 60.5
<b>FL-BC1618-9M</b>	1" (1.1")	C	16	1.8 - 16	3.45	0.08	43.8°/47.7°	40.5	Ø42.0 × 64.0
<b>FL-BC2518-9M</b>	1" (1.1")	C	25	1.8 - 16	3.45	0.1	28.8°/31.5°	40.5	Ø42.0 × 57.5
<b>FL-BC3518-9M</b>	1" (1.1")	C	35	1.8 - 22	3.45	0.15	20.7°/22.7°	40.5	Ø42.0 × 60.5
<b>FL-BC5024-9M</b>	1" (1.1")	C	50	2.4 - 22	3.45	0.2	14.6°/16.0°	40.5	Ø42.0 × 69.0
<b>FL-BC7528-9M</b>	1" (1.1")	C	75	2.8 - 32	3.45	0.25	9.8°/10.7°	40.5	Ø42.0 × 81.0

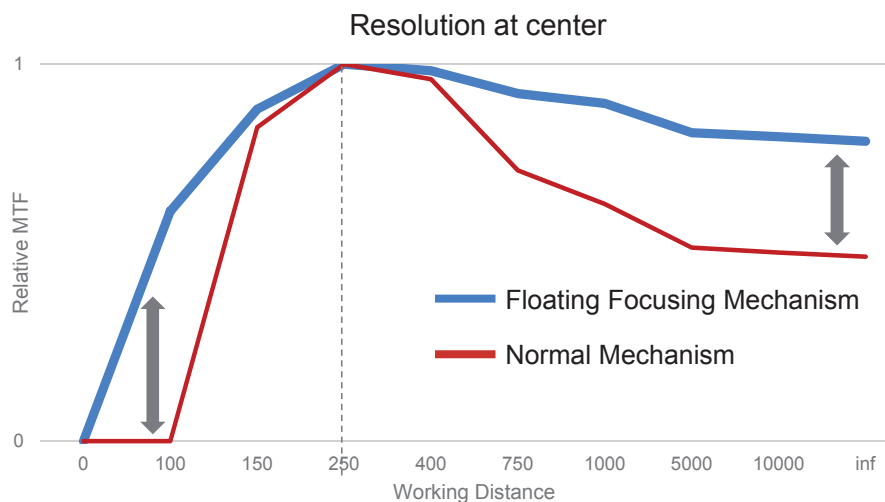
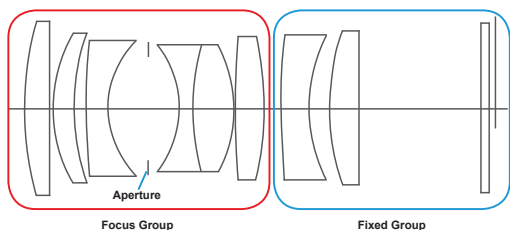
\* Min. Pixel Pitch at 30% contrast (measuring on the edge of the Optic)

# FL-BC5024-9M Technical Data



## Floating Focusing Technology

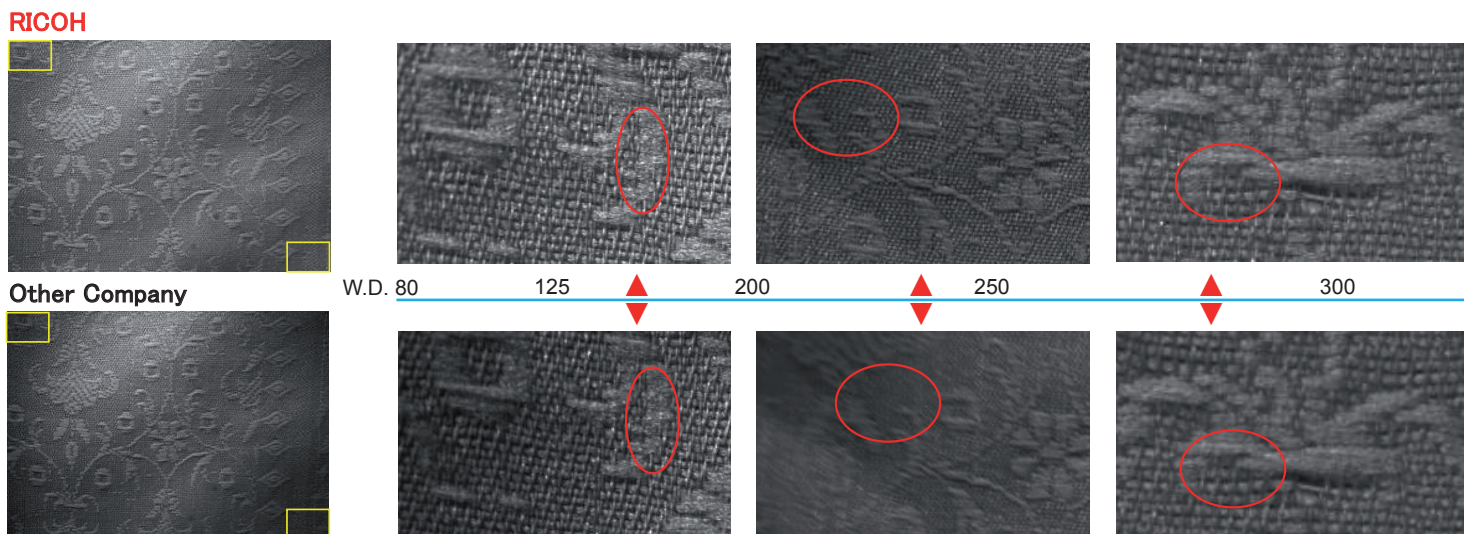
Ricoh's unique algorithms and ghost analysis helped design our floating focusing mechanism which changes the spacing of some of its optical system to minimise changes in aberrations due to different object distances.



MTF is significantly increased at not only shorter working distances for machine vision applications but also at distance for intelligent traffic 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.

