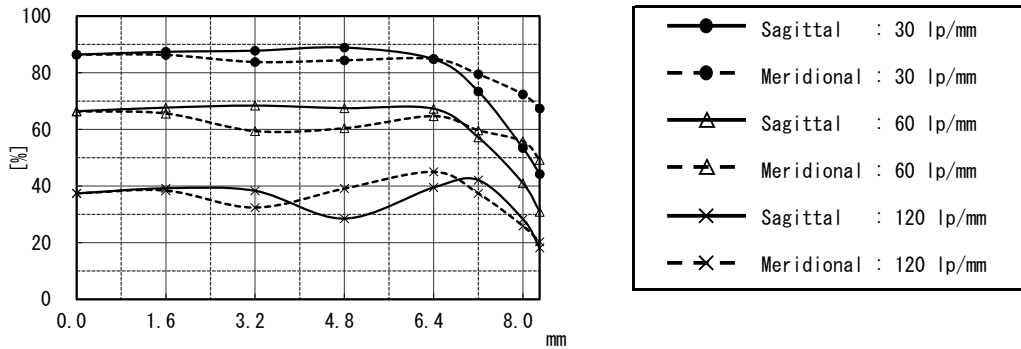
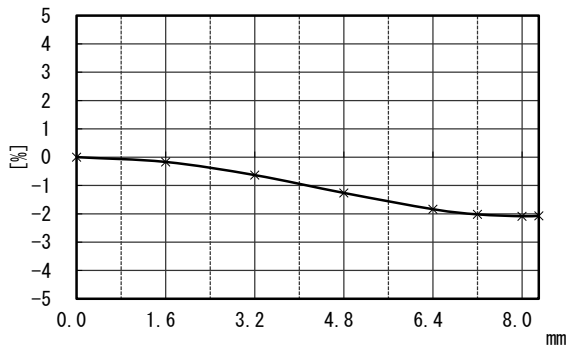


● Modulation Transfer Function (MTF)

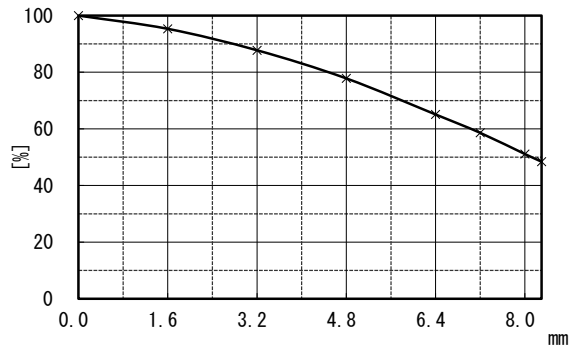
W.D. = 250mm



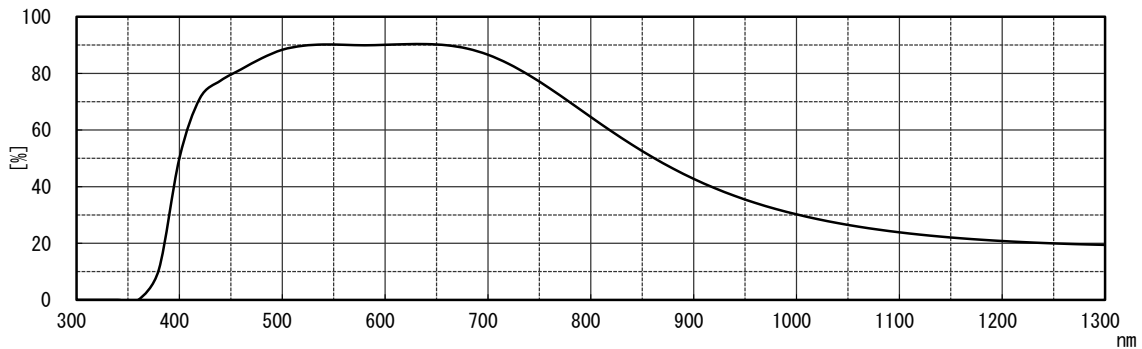
● Distortion (歪曲収差)



● Vignetting (周辺光量)



● Spectral Transmittance (分光透過率)



- Entrance Pupil Position (入射瞳位置) -59.45 [mm]\*
- Exit Pupil Position (射出瞳位置) -61.52 [mm]\*
- 1st Principal Point (第一主点) -49.78 [mm]\*
- 2nd Principal Point (第二主点) -12.03 [mm]\*

(\*:From Image Plane , W.D.=∞)

<b>SPEC. INFO</b>	<b>FL-BC1220-9M</b>	K66084-S001-B13
		Jun. 16. 2016

1. Model FL-BC1220-9M
2. Application For 1 Format Camera

3. Specification

3-1. Physical (As per the attached drawing)

- (1) Dimensions  $\phi 42.0 \text{ mm} \times 60.5 \text{ mm}$
- (2) Weight 156 g
- (3) Mount C-Mount (1 – 32 UN – 2A)
- (4) Filter Screw Size M40.5 mm , P = 0.5 mm

3-2. Optical

- (1) Focal Length 12 mm  $\pm 5\%$
- (2) Max. Aperture Ratio 1: 2
- (3) Iris Range F / 2 to F /16
- (4) Angle of View  
 Diagonal 68.5°  
 Horizontal 57.0°  
 Vertical 44.0°
- (5) Picture format 12.8 mm  $\times$  9.6 mm
- (6) Focusing Range Inf. to 0.08 m
- (7) Back Focal Length 14.5 mm (in air)
- (8) Flange Back Length 17.526 mm  $\pm$  0.05 mm (in air)

3-3. Mechanical

- (1) Focusing Mechanism  
 Rotation Angle 75°  
 Rotation Torque 0.2N·cm to 10.0 N·cm  
 Focus Ring can be fixed at any positions by 3 fixing screws (A) or 1 thumb screw (refer to external view)
- (2) Iris Mechanism  
 Non-click  
 Rotation Angle 66°  
 Rotation Torque 0.01N·cm to 3.0 N·cm  
 Iris Ring can be fixed at any positions by 3 fixing screws (B) or 1 thumb screw (refer to external view)

3-4. Vibration & Shock Test Standard

(1) Vibration Conditions

Wave	Sine Wave
Acceleration	1.96 m/s <sup>2</sup> to 59.78 m/s <sup>2</sup>
Cycle Range	10 Hz to 55 Hz
Cycle Period	3 Minutes
Duration of Vibration	120 Minutes Respectively in Three Dimensional Directions

(2) Shock Conditions

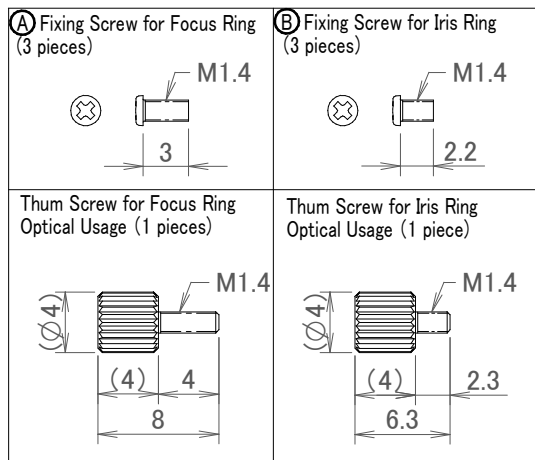
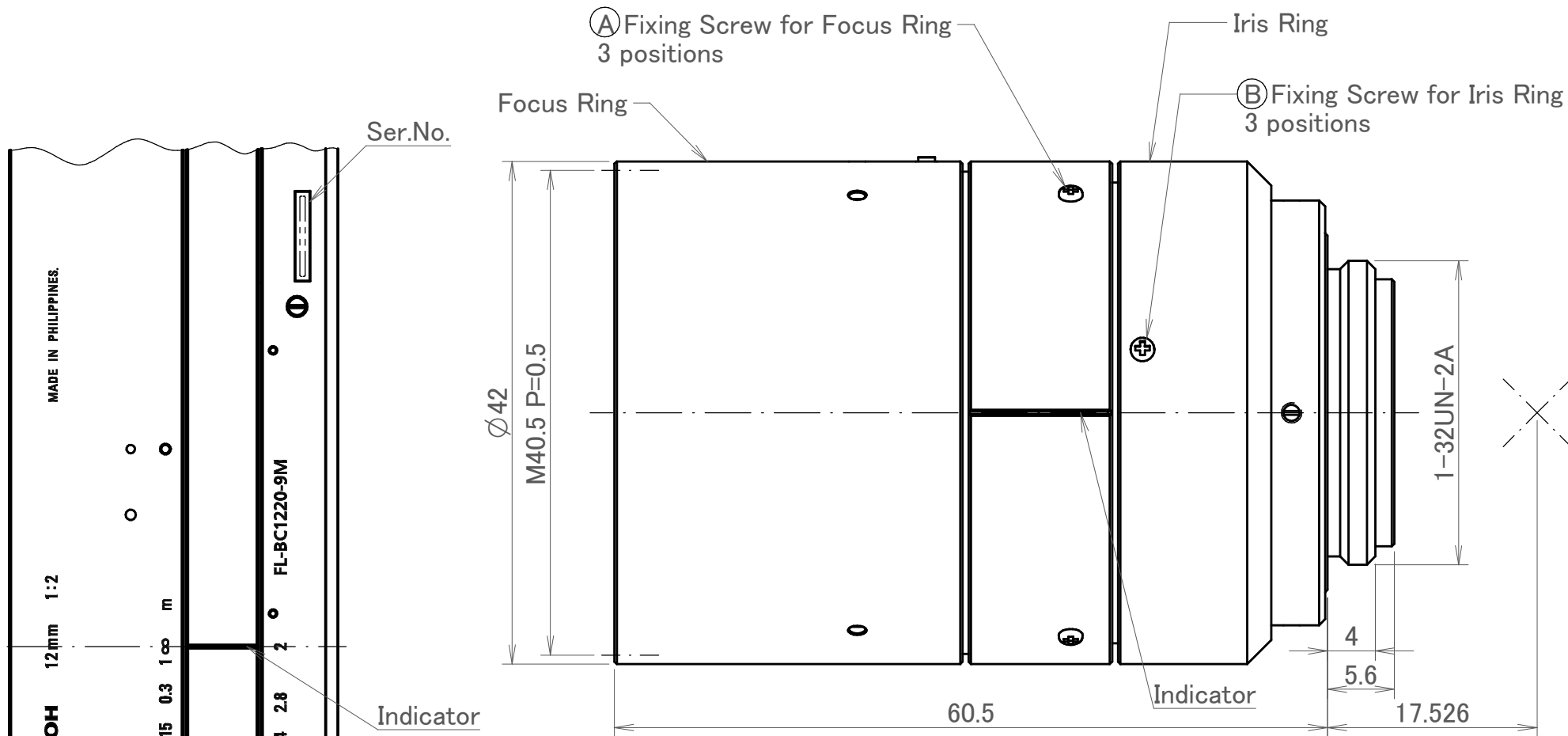
Tester	Shock Testing Machine by Dropping
Impact Force	588 m/s <sup>2</sup>
Duration of Shock	3.5 ms
Directions & Number of Times	1 Time Respectively in Three Dimensional Directions

<b>SPEC. INFO</b>	<b>FL-BC1220-9M</b>	K66084-S001-B23
		Jun. 16. 2016

3-5. Environmental Temperature Range       $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$

4. Accessories

- |                                   |          |                      |
|-----------------------------------|----------|----------------------|
| (1) Front Lens Cap                | 1 piece  |                      |
| (2) Rear Lens Cap                 | 1 piece  |                      |
| (3) Fixing Screw ① for Focus Ring | 3 pieces |                      |
| (4) Fixing Screw ② for Iris Ring  | 3 pieces |                      |
| (5) Thumbscrew for Focus Ring     | 1 pieces | (for Optional Usage) |
| (6) Thumbscrew for Iris Ring      | 1 pieces | (for Optional Usage) |
| (7) Packing Box                   | 1 piece  |                      |



<b>SPEC.INFO</b>	FL-BC1220-9M
	K66084-S001-A33
RICOH Industrial Solutions Inc. Jun.16.2016	



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