

# Lens specifications

## Optics

Lens SKU	L087-MZFD-5.35Z96.3-DIRECT
Image sensor	1/2.7" Effective image area > 6.8mm
Focal distance	5.85±5% ~ 93.6±5%mm
Aperture	f/1.8~f/3.9
Focus range	<ul style="list-style-type: none"><li>• WIDE: 0.2m - infinity</li><li>• TELE: 1.0m - infinity</li></ul>
Field of view (D=6.71mm)	<ul style="list-style-type: none"><li>• WIDE: 62.6°</li><li>• TELE: 4.05°</li></ul>
Distortion	<ul style="list-style-type: none"><li>• WIDE: -6.40%</li><li>• TELE: 2.92%</li></ul>

## Mechanics

Lens length (image surface-top lens barrel)	79.74mm (in glass)
Mechanical back focus	-0.92 (in glass t=0.5 BK7)
Lens zoom structure	The stepper motor is directly connected to the screw
Lens focusing structure	The stepper motor is directly connected to the screw
Lens size	<ul style="list-style-type: none"><li>• Length: 80.7mm</li><li>• Width: 39.7mm</li><li>• Height: 42.2mm</li><li>• Front end diameter: 32.1mm</li></ul>

## Motor specifications

Screw pitch	0.4mm
Spiral rotation direction	Right
Rated voltage	5.0 VDC
Coil resistance	55Ω ± 10%
Phase count	2

Step angle	18° / step
Max start frequency	800 PPS/min @ at 5.0 VDC
Max operating frequency	1200 PPS/min @ 5.0 VDC
Pull torque	2.8 gf-cm min (at 480 PPS @ 5.0 VDC)
Push torque	3.8 gf-cm min (at 480 PPS @ 5.0 VDC)
Operating temperature range	-20°C ~ +70°C

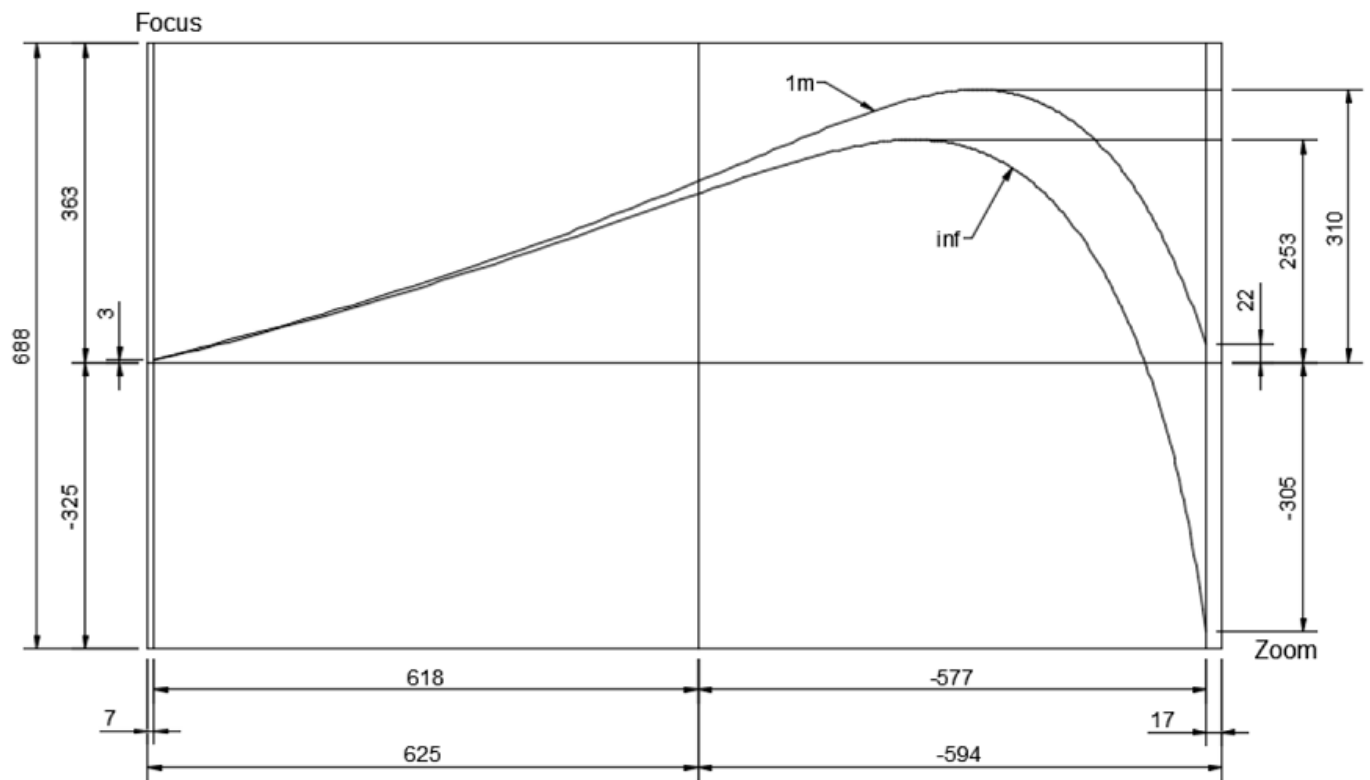
Position alignment sensor PI

Model number	RPI-222 / ROHM
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IR switch

Coil resistance	25 ± 5Ω
Operation voltage	4.5V
Current consumption	144~200mA
Switching time	200-500ms
Filters	<ul style="list-style-type: none"><li>• Clear glass</li><li>• 420 ~600nm Tavg &gt;95%</li></ul>

Zoom-Focus curve diagram



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