

# Lens specifications

## Optics

Image sensor	1/2.8" Effective image area > 6.4mm
Focal distance	5±5% ~ 100±5%mm
Aperture	f/1.6~f/3.7
Focus range	<ul style="list-style-type: none"><li>• WIDE: 1.0m - infinity</li><li>• TELE: 1.0m - infinity</li></ul>
Field of view (D=6.0mm)	<ul style="list-style-type: none"><li>• WIDE: 66.5°</li><li>• TELE: 3.38°</li></ul>
Relative contrast	<ul style="list-style-type: none"><li>• WIDE: &gt;35%</li><li>• TELE: &gt;63%</li></ul>
Distortion	<ul style="list-style-type: none"><li>• WIDE: -9.7%</li><li>• TELE: 2.1%</li></ul>

## Mechanics

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: 79.9mm</li><li>• Width: 46mm</li><li>• Height: 46mm</li><li>• Front end diameter: 41.8mm</li></ul>

## Motor specifications

Screw pitch	0.4mm
Spiral rotation direction	Right
Rated voltage	4.5-5.0 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

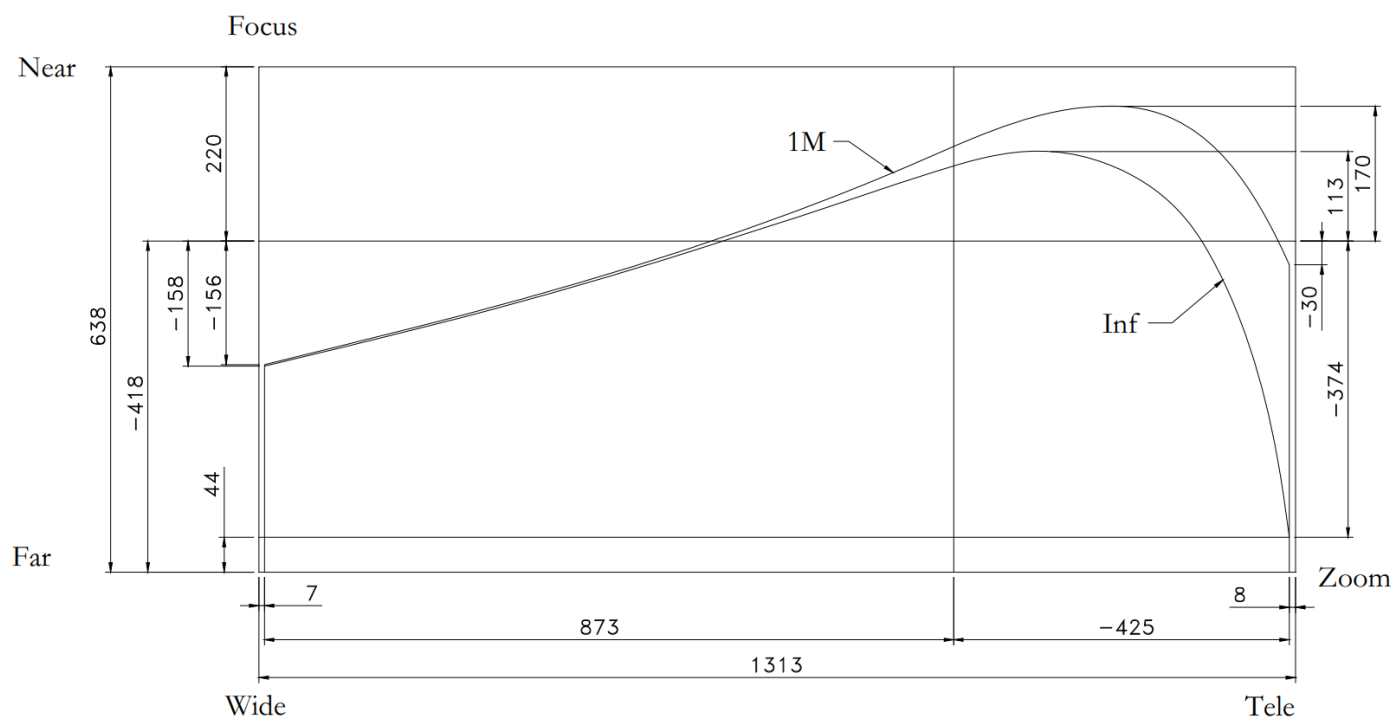
## Position alignment sensor PI

Model number	RPI-222 / ROHM
--------------	----------------

## 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



Revision #4

Created 1 November 2020 17:15:16 by Saulius

Updated 7 February 2021 19:22:42 by Saulius