

Schneider Optics Object-Sided Telecentric Lenses

The new Schneider Optics
Telecentric Lenses are based on
Schneider's prime lenses and
provide object-sided
telecentricity. Their optical
performance is optimized for
high accuracy in metrology
applications.

The lenses are available in four different magnifications: 0.27X, 0.39X, 0.62X and 0.79X. They are designed to work with 2/3" format cameras, while the 0.79X lens can also accommodate 1" format sensors. This Telecentric family provides an excellent price/performance ratio.

One benefit of using a Schneider Telecentric lens as opposed to our standard Macro series is ultra-low geometric distortion. Another benefit is the telecentric lens will maintain a constant magnification within the specified depth of field and will image features that are only orthogonal to the lens, giving better overall measurement performance particularly at the extremes of the field of view.



Part Number	Description	Magnification (Image/Object)	Image Circle	Object Dia.	Numerical Aperture	Working Distance ¹	Telecentric Depth ²	Telecentricity	Weight
21-025915	0.27X	0.27X (3.7X Reduction)	11mm	40.7mm	0.1	100mm +/-3mm	8mm	<0.1deg	618g
21-025943	0.39X	0.39X (2.6X Reduction)	11mm	28.6mm	0.1	104mm +/-2mm	4mm	<0.1deg	638g
21-025953	0.62X	0.62X (1.6X Reduction)	11mm	17.6mm	0.1	111mm +/-2mm	1.6mm	<0.1deg	706g
21-025963	0.79X	0.79X (1.3X Reduction)	16mm	20.8mm	0.09	106mm +/-2mm	1mm	<0.1deg	808g
21-025971	Telecentric Lens Clamp								213g

1) Distance from the front metal work of the lens to the object. 2) Measured at 15lp/mm.

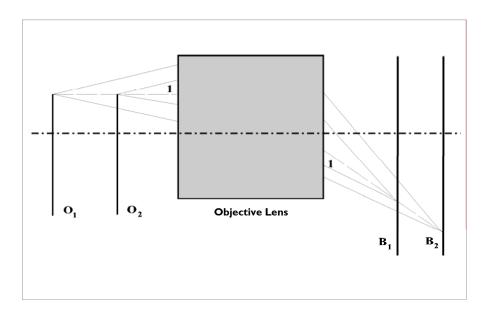


Figure 1 - Object-Sided Telecentric Lens

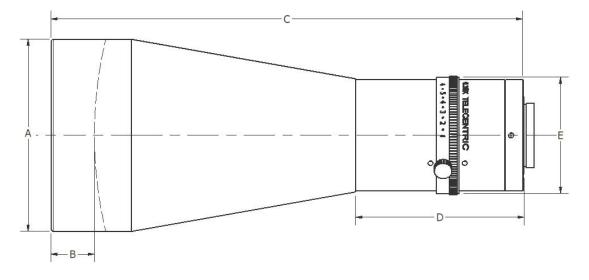


Table											
STOCK NUMBER	MAGNIFICATION	Α	В	С	D	E					
21-025915	0.27X	76.0 MM	9.2 MM	178.2 MM	55.6 MM	46.8 MM					
21-025943	0.39X	76.0 MM	8.9 MM	189.5 MM	66.9 MM	46.8 MM					
21-025953	0.62X	76.0 MM	8.4 MM	222.9 MM	100.3 MM	46.8 MM					
21-025963	0.79X	76.0 MM	8.0 MM	243.3 MM	120.8 MM	46.8 MM					

Figure 3 - Schneider Telecentric Lens Dimensions

Schneider Optics Object-Sided Telecentric Lenses Feature:

- 4 Magnifications available: 0.27X, 0.39X, 0.62X, & 0.79X
- Designed to work with all standard 2/3 inch CCD cameras. The 0.79X will also work with 1 inch CCD cameras.
- Full iris control
- Front filter accessory threads: M72 x 0.75 thread
- Telecentric lens clamp increases system stability

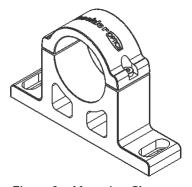


Figure 2 - Mounting Clamp

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