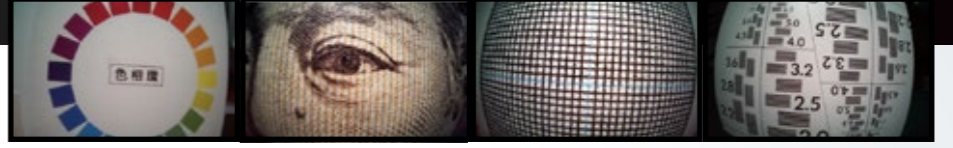


Endoscope Lens



A module incorporating a CMOS sensor is also available.
Please feel free to contact us.

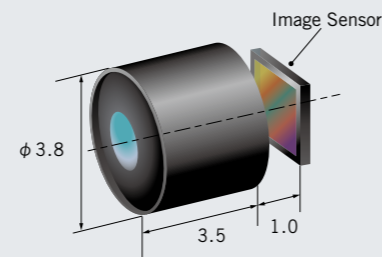


Sumita Endoscope Lens

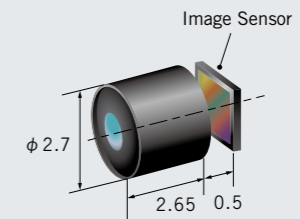
Objective lens units for 1/6", 1/9" CMOS Sensors

An aspheric lens is adopted for all lens units to achieve brightness and great depth-of-field.

1/6 SEL140-038



1/9 SEL140-027



1/6 Series

Model	1/6 SEL140-038
CMOS size	1/6 inch
Image circle	3.1 mm

Object distance	8 mm
Depth of field	5 mm - 100 mm
Angle of view	140°
F-number*2	4.5
Back focus*3	1.0 mm
Distortion	<50%
Relative illumination	>45%
Chief ray angle	<35°

Outer diameter	φ 3.8 mm
Total length	3.5 mm

IR cut filter	Included
Lens Unit Cover Glass	Included

*1 Suitable for OmniVision's OH02A1S and OV2740 *2 F-number is adjustable upon request. *3 The measured distance between an image sensor plane and the rearmost glass element in the attached lens. *4 Above are only our standard specifications. Custom specifications are available upon request. *4 Specifications may change without notice.

1/9 Series

Model	1/9 SEL140-027
CMOS size	1/9 inch
Image circle	2.05 mm

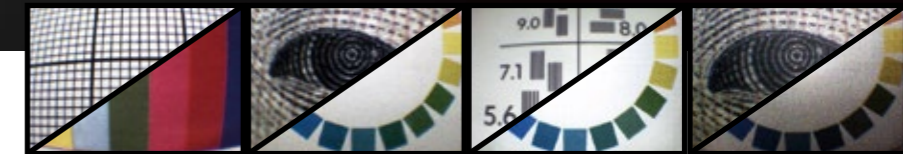
Object distance	8 mm
Depth of field	4 mm - 100 mm
Angle of view	140°
F-number*2	4.5
Back focus*3	0.5 mm
Distortion	<50%
Relative illumination	>45%
Chief ray angle	<35°

Outer diameter	φ 2.7 mm
Total length	2.65 mm

IR cut filter	Included
Lens Unit Cover Glass	Included

*1 Suitable for OmniVision's OV9734 *2 F-number is adjustable upon request. *3 The measured distance between an image sensor plane and the rearmost glass element in the attached lens. *4 Above are only our standard specifications. Custom specifications are available upon request. *4 Specifications may change without notice.

Endoscope Lens

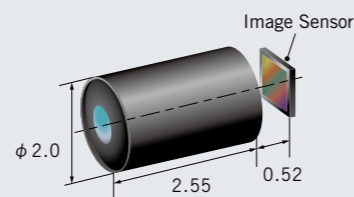


Sumita Endoscope Lens

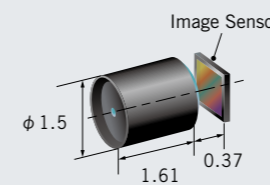
Objective lens units for 1/11", 1/18" CMOS Sensors

1/11 and 1/18 are most suitable for medical and industrial small-diameter endoscopes.

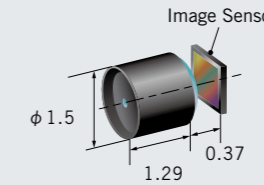
1/11 SEL140-020L



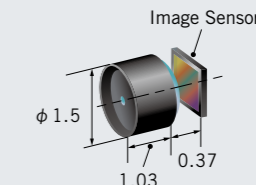
1/18 SEL080-015D



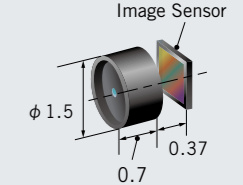
1/18 SEL100-015D



1/18 SEL120-015D



1/18 SEL100-015S



1/11 Series

Model	1/11 SEL140-020L
CMOS size	1/11 inch
Image circle	1.49 mm

Object distance	8 mm
Depth of field	3 mm - 100 mm
Angle of view	140°
F-number*2	4 to 6
Back focus*3	0.52 mm
Distortion	<50%
Relative illumination	>50%
Chief ray angle	<33°

Outer diameter	φ 2.0 mm (Changeable)
Total length	2.55 mm

IR cut filter	Included
Lens Unit Cover Glass	Included

*1 Suitable for OmniVision's OH01A10 *2 F-number is adjustable upon request. *3 The measured distance between an image sensor plane and the rearmost glass element in the attached lens. *4 Above are only our standard specifications. Custom specifications are available upon request. *5 Specifications may change without notice.

1/18 Series

Model	1/18 SEL080-015D	1/18 SEL100-015D	1/18 SEL120-015D	1/18 SEL100-015S
CMOS size	1/18 inch			
Image circle	1.0 mm			

Object distance	8 mm			
Depth of field	3 mm - 100 mm			
Angle of view	80°	100°	120°	100°
F-number*2	4.5 / 5 / 5.5 / 6			
Back focus*3	0.37 mm			
Distortion	<20%	<32%	<46%	<24%
Relative illumination	>80%	>70%	>60%	>50%
Chief ray angle	<25°			

Outer diameter	φ 1.5 mm			
Total length	1.61 mm	1.29 mm	1.03 mm	0.7 mm

IR cut filter	Not included			
Lens Unit Cover Glass	Included			

*1 Suitable for OmniVision's OV6946 *2 F-number is adjustable upon request. *3 The measured distance between an image sensor plane and the rearmost glass element in the attached lens. *4 Above are only our standard specifications. Custom specifications are available upon request. *5 Specifications may change without notice.