

# Apo-Xenoplan 1.4/23

Compact 23 mm focal length C-Mount lens for 5 megapixel 2/3" sensors designed with low chromatic apparition ideal for quality assurance solutions.

With the 400 nm - 1000 nm broadband AR coating, this lens is perfect match for surface inspection systems working in the visible range and in NIR. Fast lens with high imaging performance over the entire field, makes this lens suitable for metrology systems. When a special locking of the mechanics is needed to compensate industrial environment, such as machine vibration for instants, a ruggedized version to keep a stable image quality can be ordered.

And a motorized p-iris version for use in automated inspection systems is available as well. Additional focal length 35 mm named Apo-Xenoplan 1.8/35.



Apo-Xenoplan 1.4/23

## Key features

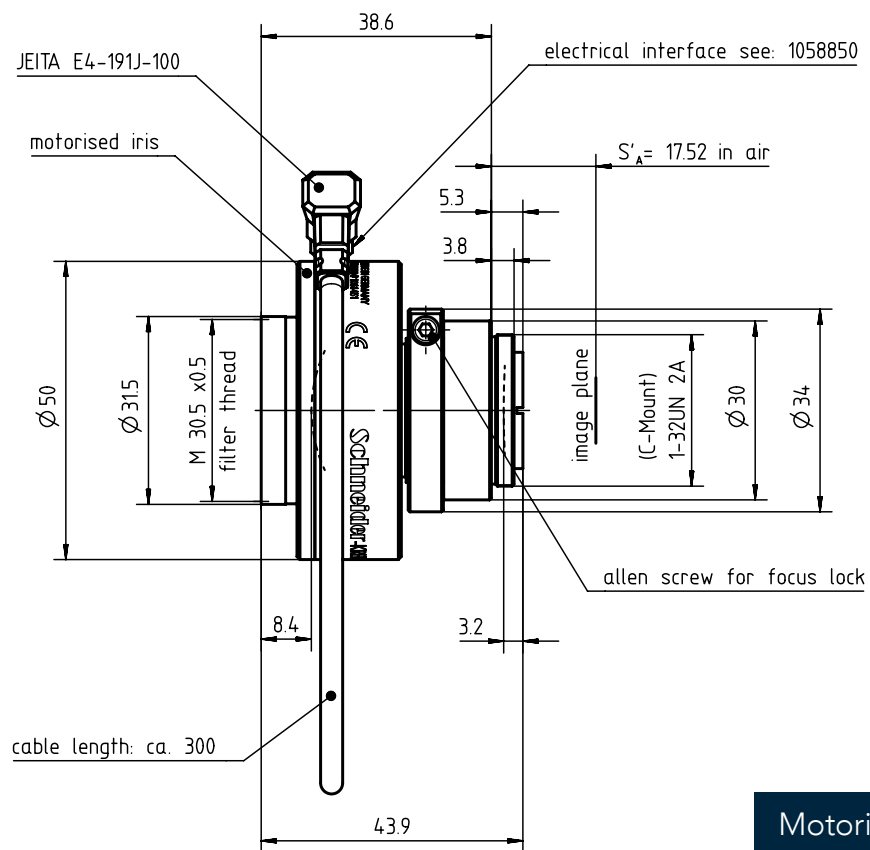
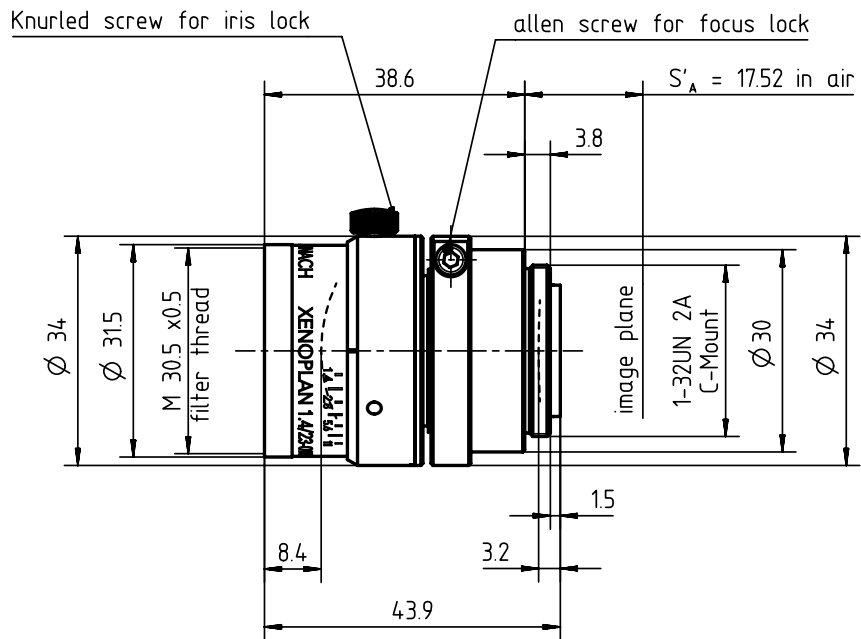
- For 2/3" 5 megapixel sensors
- Low chromatic apparition
- 400 nm to 1000 nm Broadband AR coating
- Ruggedized version available
- Motorized p-iris available

## Applications

- Surface inspection
- Quality assurance
- Metrology

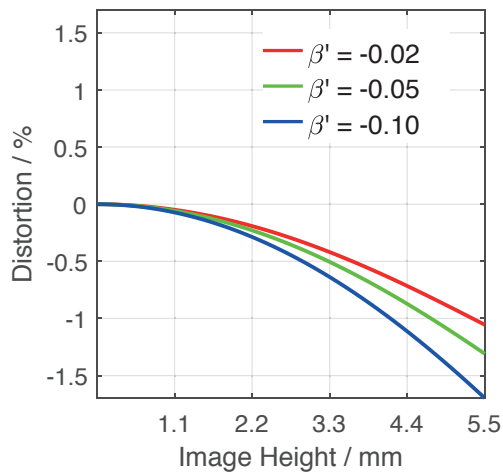
Name	Apo-Xenoplan 1.4/23
Type	-0903   -0913   -1903
Focal Length [mm]	23
Magnification	-0.1
Image circle [mm]	11
Resolution [ $\mu$ m]	3.65
F/# range	1.40 ... 11
NA	0.36
Interface	C-Mount
Working distance [mm]	$\infty$ - 215
AoV [°]	27
Focus control	manual
Transmission [nm]	400 - 1000
Filter thread [mm]	M30.5 x 0.5
Dimensions L x D [mm]	44.2 x 34.0

Name	Apo-Xenoplan 1.4/23
Weight [g]	115
Storage temperature [°C]	-25 ... +70
$f'_{\text{eff}}$ [mm]	22.91
$S_F$ [mm]	9.56
$S'_F$ [mm]	15.46
HH' [mm]	-7.67
$\beta'_p$	3.446
$S_{EP}$ [mm]	26.21
$S'_{AP}$ [mm]	-63.51
$\Sigma d$ [mm]	32.25
ID	1012344
ID Ruggedized	1062875
ID Motorized p-iris	1061454

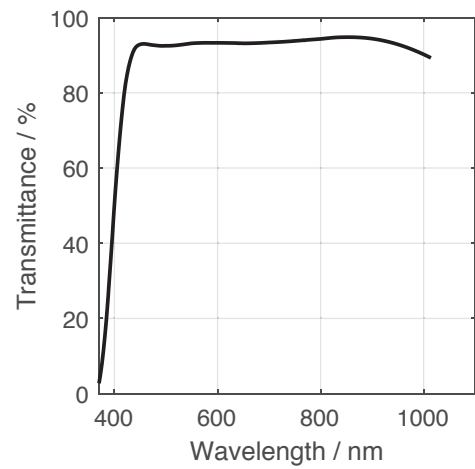


Motorized p-iris

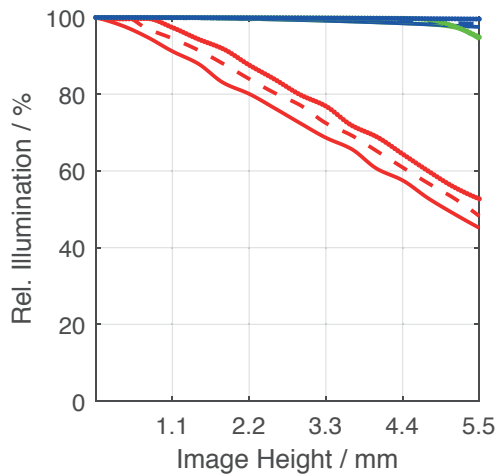
## Distortion vs. Image Height



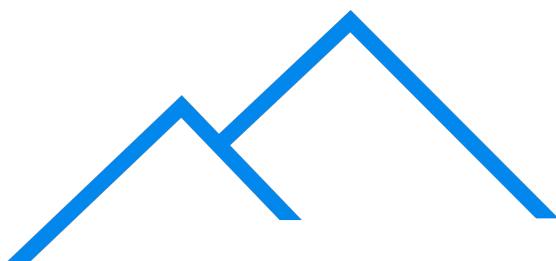
## Transmittance vs. Wavelength



## Relative Illumination vs. Image Height

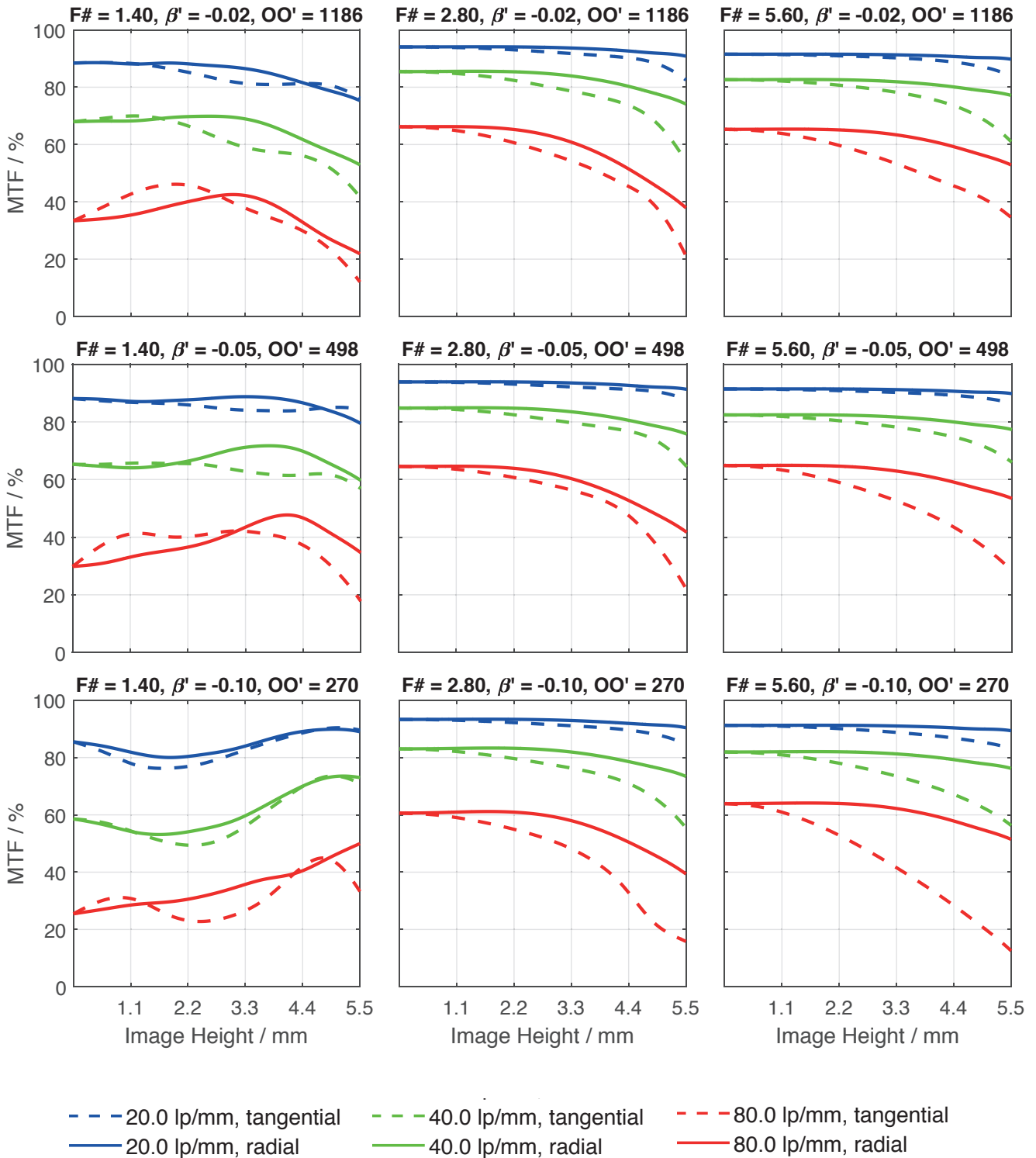


- F# = 1.40,  $\beta' = -0.02$
- F# = 2.80,  $\beta' = -0.02$
- F# = 5.60,  $\beta' = -0.02$
- - F# = 1.40,  $\beta' = -0.05$
- - F# = 2.80,  $\beta' = -0.05$
- - F# = 5.60,  $\beta' = -0.05$
- F# = 1.40,  $\beta' = -0.10$
- F# = 2.80,  $\beta' = -0.10$
- F# = 5.60,  $\beta' = -0.10$

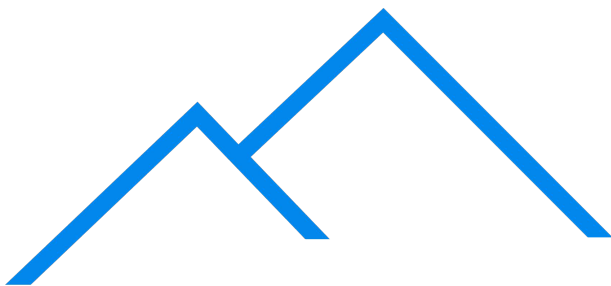


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Spectrum Name	VIS					
Wavelengths [nm]	425	475	525	575	625	675
Weights	8	16	23	22	19	13



Accessories	Mount	Length	ID
Adapter	CS-Mount Adapter	5 mm	25081
	C-Mount / M42 x 1 Adapter	-	1075817
Ext. Tube	C-Mount	5 mm	39316
	C-Mount	8 mm	39315
	C-Mount	10 mm	39312



Pyramid Imaging

# Get more information

Contact our local offices



## Headquarter Germany

Jos. Schneider Optische Werke GmbH  
Ringstraße 132  
55543 Bad Kreuznach  
☎ +49 671 601 205  
✉ [cs@schneiderkreuznach.com](mailto:cs@schneiderkreuznach.com)  
[www.schneiderkreuznach.com](http://www.schneiderkreuznach.com)

## Offices Worldwide

### China

☎ +86 755 8832 1170  
✉ [shawn.liu@schneider-asiapacific.com](mailto:shawn.liu@schneider-asiapacific.com)

### North America

☎ +1 800 645 7239 (East Coast)  
☎ +1 800 228 1254 (West Coast)  
✉ [info@schneideroptics.com](mailto:info@schneideroptics.com)

### Singapore

☎ +65 9488 0062  
✉ [thongv@schneiderkreuznach.com](mailto:thongv@schneiderkreuznach.com)



Pyramid Imaging Inc.  
945 East 11th Avenue  
Tampa, FL 33605  
<https://pyramidimaging.com>  
[Sales@pyramidimaging.com](mailto:Sales@pyramidimaging.com)  
(813) 984-0125