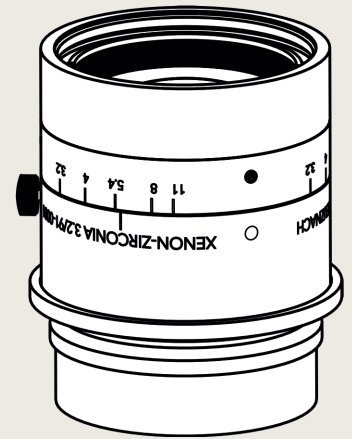


## Xenon-Zirconia 3.2/91

This lens with 0.5x magnification is optimized for the use with 12k (62.5 mm) line scan sensors with 5  $\mu\text{m}$  pixel, but can also be used with 16k (82 mm) lines. It is broadband coated and can be used in the spectral range of 400 - 1000 nm.

The V-Mount makes it easy to install and rotate into the desired azimuth position for a wide range of line scan applications. Performance is practically diffraction limited over the whole field. At F/#5.6 the lens is free of artificial vignetting. The Xenon-Zirconia lens is designed in a manner that even with fastest F-number, the full resolution, albeit with diminished contrast, is attained, needed for web and FPD inspection.

The Xenon-Zirconia lens series also contains lenses with magnification of 0.2x, 0.33x, 0.7x, 1.0x, 2.0x and 2.0x with beam splitter.



Xenon-Zirconia 3.2/91

### Key features

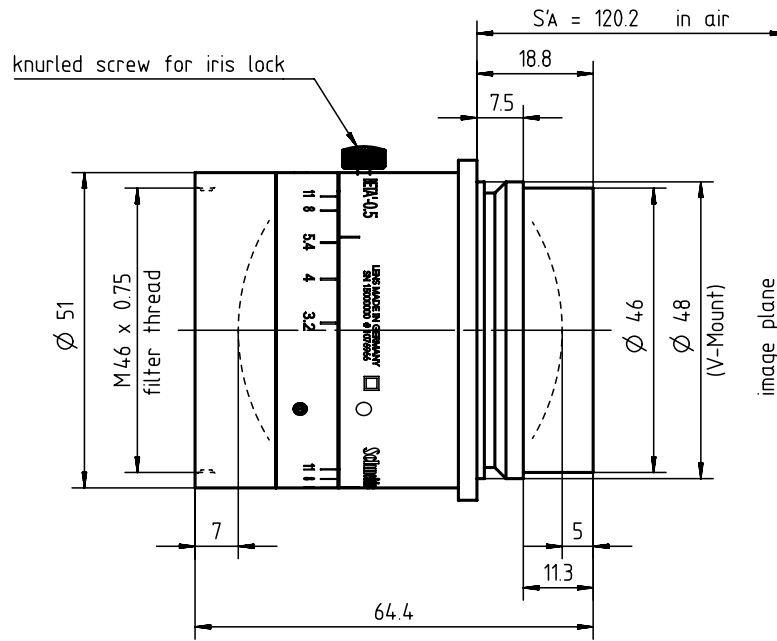
- For 12k line scan sensors with 5  $\mu\text{m}$  pixel sizes
- Vibration-insensitive for stable optical performance
- Best Azimuth marking
- 400 nm to 1000 nm broadband AR coating
- Lockable distance and aperture settings
- V-Mount connection

### Applications

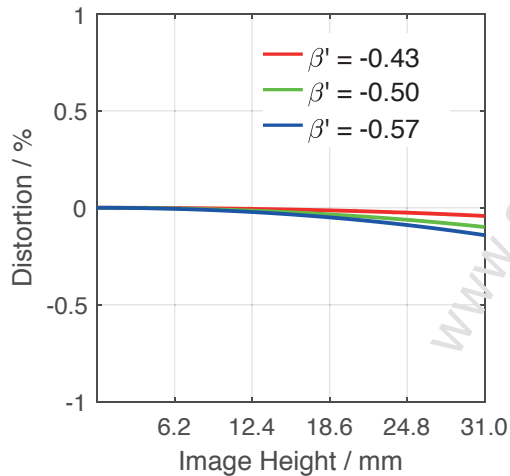
- Web and surface inspections
- Quality control
- FPD inspection
- PCB inspection
- OLED inspection
- Line scan applications

Name	Xenon-Zirconia 3.2/91
Type	-0001
Focal Length [mm]	91
Magnification	-0.5
Image circle [mm]	62
Resolution [ $\mu\text{m}$ ]	3.5
F/# range	3.2 ... 11
NA	0.16
Interface	V48-Mount
Working distance [mm]	235
AoV [°]	37
Focus control	manual
Transmission [nm]	400 - 1000
Filter thread [mm]	M46 x 0.75
Dimensions L x D [mm]	64.0 x 55.0

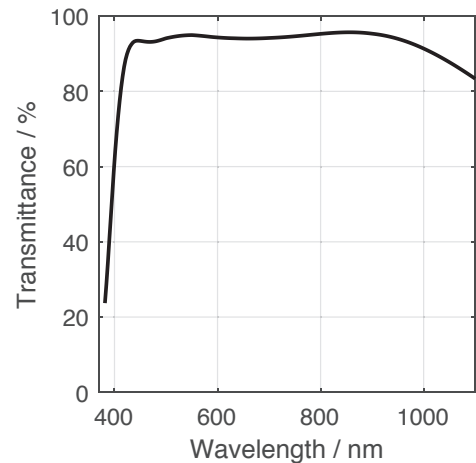
Name	Xenon-Zirconia 3.2/91
Weight [g]	250
Storage temperature [°C]	-25 ... +70
$f'_{\text{eff}}$ [mm]	91.44
$S_F$ [mm]	-52.11
$S'_F$ [mm]	60.25
HH' [mm]	-18.13
$\beta'_P$	1.020
$S_{EP}$ [mm]	37.51
$S'_{AP}$ [mm]	-33.12
$\Sigma d$ [mm]	52.40
ID	1076966



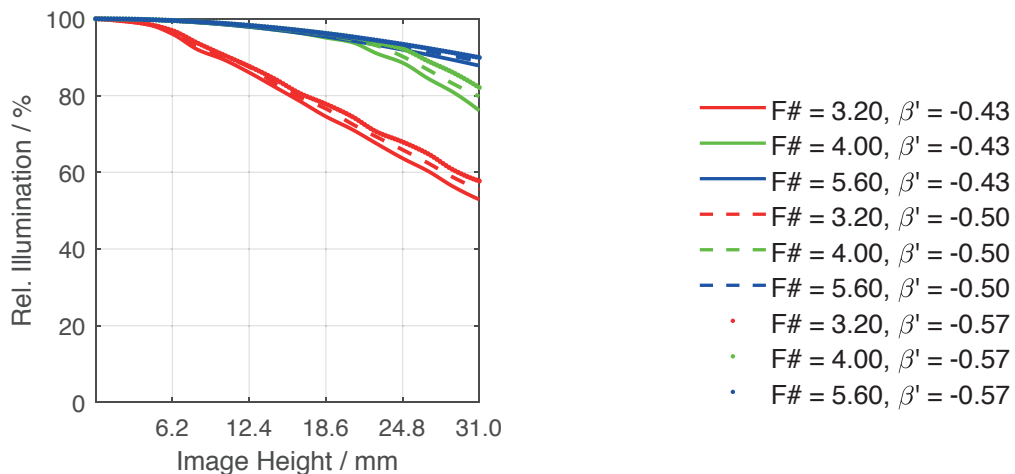
Distortion vs. Image Height



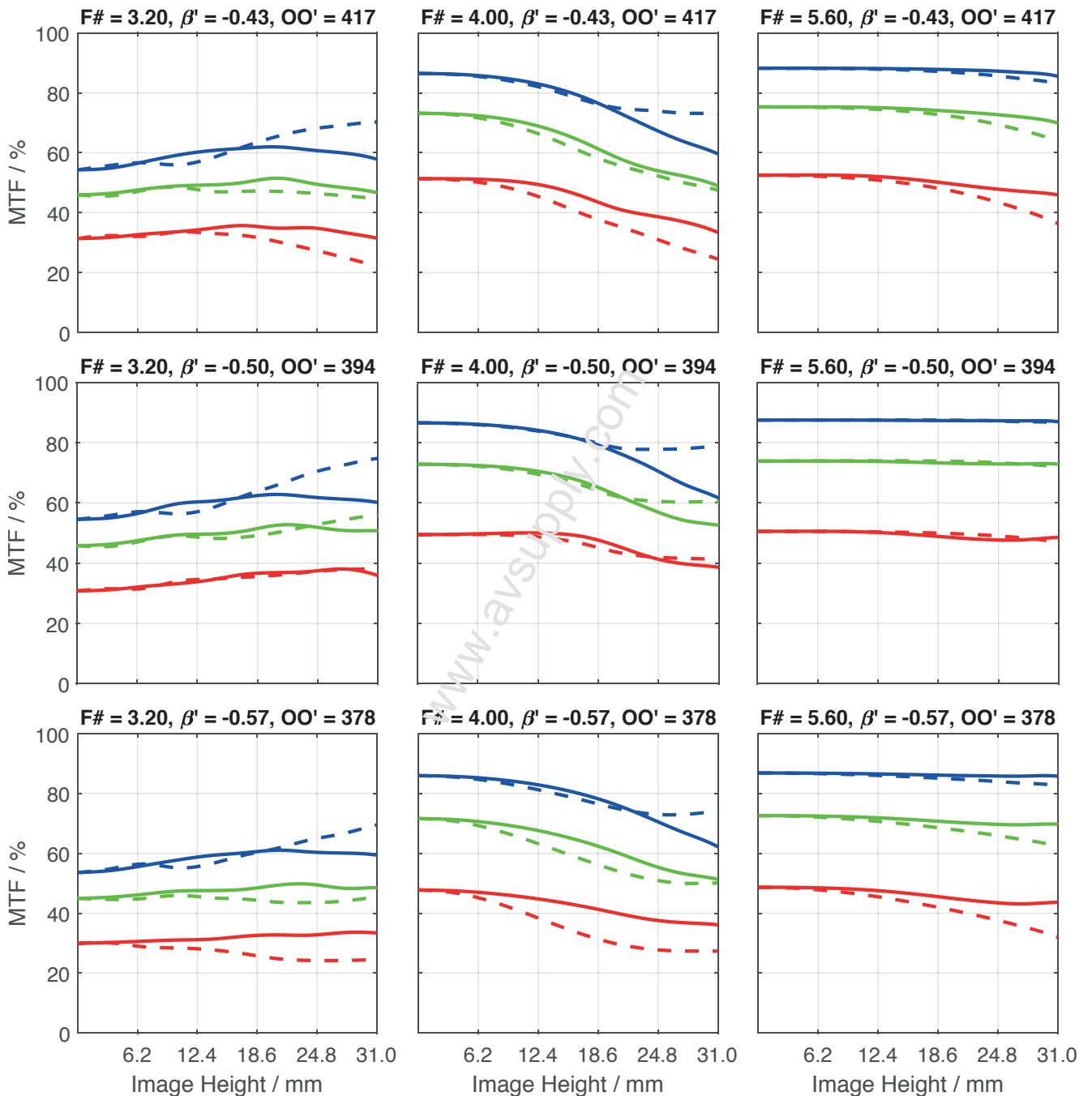
Transmittance vs. Wavelength



Relative Illumination vs. Image Height



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



- 18.0 lp/mm, tangential
- 36.0 lp/mm, tangential
- 72.0 lp/mm, tangential
- 18.0 lp/mm, radial
- 36.0 lp/mm, radial
- 72.0 lp/mm, radial

Accessories	Mount	Length	ID
Ext. Tube	V48	10 mm	1072661
	V48	25 mm	1072651
	V48	50 mm	1072662
	M72 x 0.75	5 mm	1072420
	M72 x 0.75	10 mm	1072421
	M72 x 0.75	25 mm	26406
	M72 x 0.75	50 mm	1054733
	M72 x 0.75	100 mm	1079483
	M90 x 1	10 mm	1084875
	M90 x 1	25 mm	1084876
	M90 x 1	50 mm	1084877
	M90 x 1	100 mm	1084878
	M95 x 1	10 mm	1077290
	M95 x 1	25 mm	1062892
	M95 x 1	50 mm	1062893
	M95 x 1	100 mm	1062894
	Adapter	V 48 / C-Mount	8.5 mm
V48 / V70 with focusing		10 mm	1075304
V70 / M72 x 0.75		-	1075304
M72 x 0.75 / M95 x 1		4 mm	1077013
M72 x 0.75 / M90 x 1		-	1084879
M95 x 1 / M90 x 1		-	1084889
V 48 / M 42 x 1		8.5 mm	1072660
V 48 / M 42 x 0.75		8.5 mm	1072652
V 48 / M 58 x 0.75		10 mm	1072659