

Lenses Fixed Focal Lenses Basler Lenses C-Mount Lenses

## Basler Lens C10-2514-3M-S

Basler Standard **C-mount lens** with a fixed focal length of 25 mm, aperture range from F1.4–F16, and a resolution of 3 MP.



### Key Features

- Fits all Basler cameras with a sensor size of up to 1"
- Metal housing
- C-mount
- Locking screws for iris and focus

#### **i** Info

The technical data shown in the following sections are nominal design values. The real values of the delivered products can deviate from the nominal design values.

### General Specifications

	C10-2514-3M-S
Order Number	2200000101
Focal Length $f'$	25 mm $\pm$ 5 %

	C10-2514-3M-S
Aperture Range	F1.4–F16
Image Circle	16 mm (1" format)
Focus Range	0.3 m to infinity
Optimum Working Distance	1.0 m
Relative Illumination at Full Aperture	55 % (see <a href="#">Simulated Relative Illumination versus Image Height</a> )
Resolution (25 % MTF, Full Aperture)	Designed for 100 LP/mm (5.0 $\mu\text{m}$ pixel size, see <a href="#">Measured Resolution versus Image Height</a> )
Optical Distortion	Typical -3.14 % (see <a href="#">Simulated Distortion versus Image Height</a> )
Angle of View, 1" Format	Horizontal: 29.29° Vertical: 21.98°
Angle of View, 1/1.2" Format	Horizontal: 25.87° Vertical: 16.27°
Wavelength Range	Visible (400–700 nm)
Pupil Magnification, $\beta'_p$	42.25
Chief Ray Angle, CRA	5.7°
Front Focal Length, $s_F$	5.88 mm
Back Focal Length, $s'_F$	15.71 mm
Principal Point Separation, HH'	-6.67 mm
Entrance Pupil Position,	18.26 mm

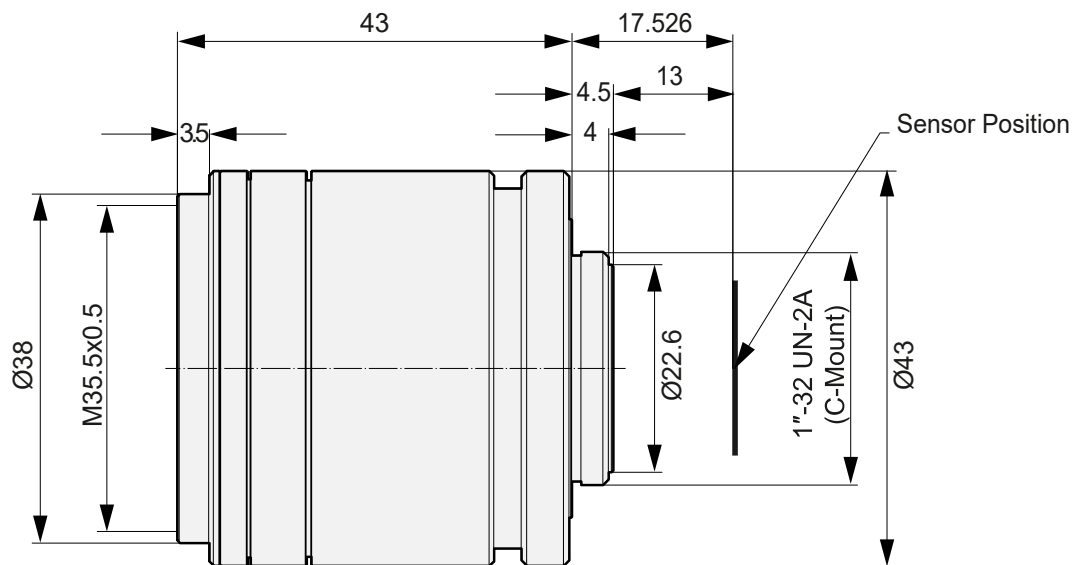
C10-2514-3M-S	
$s_{EP}$	
Overall Optical Length, $d$	49.22 mm

→ See [Terminology \(Basler Lenses\)](#).

## Mechanical Specifications

C10-2514-3M-S	
Flange Back	17.526 mm
Mount	C-mount
Weight	Approx. 150 g
Focus/Iris Operation	Manual Operating angle: 147.024°

## Lens Dimensions



Not to scale  
Dimensions in mm

→ Download the [CAD/technical drawing for your Basler Lens](#) .

## Precautions, Mounting, and Cleaning (Basler Lenses)

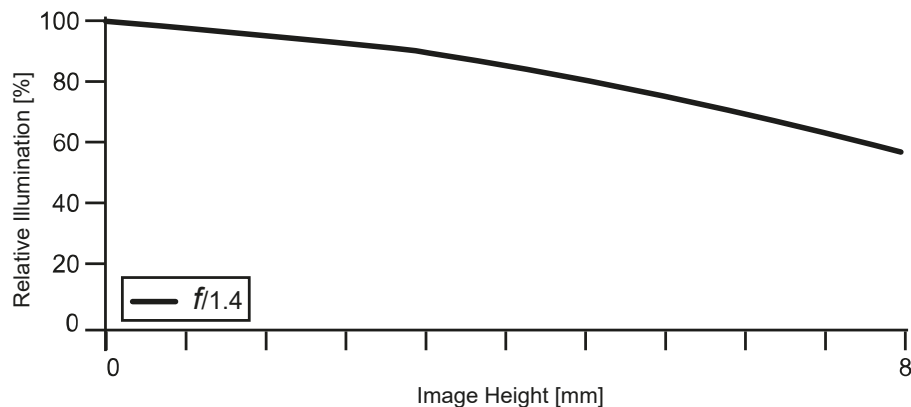
→ See [Precautions, Mounting, and Cleaning \(Basler Lenses\)](#).

## Environmental Requirements

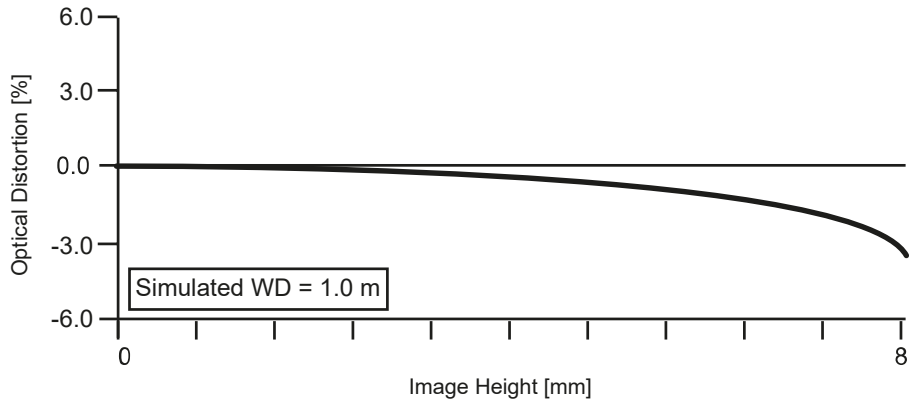
Temperature During Operation	-10–50 °C (14–122 °F) (For best results, adjust the focus when a steady operating temperature has been reached.)
Humidity During Operation	20–80 % relative humidity, non-condensing
Temperature During Storage	-20–60 °C (-4–140 °F)
Humidity During Storage	20–70 % relative humidity, non-condensing

## Performance Charts

### Simulated Relative Illumination versus Image Height

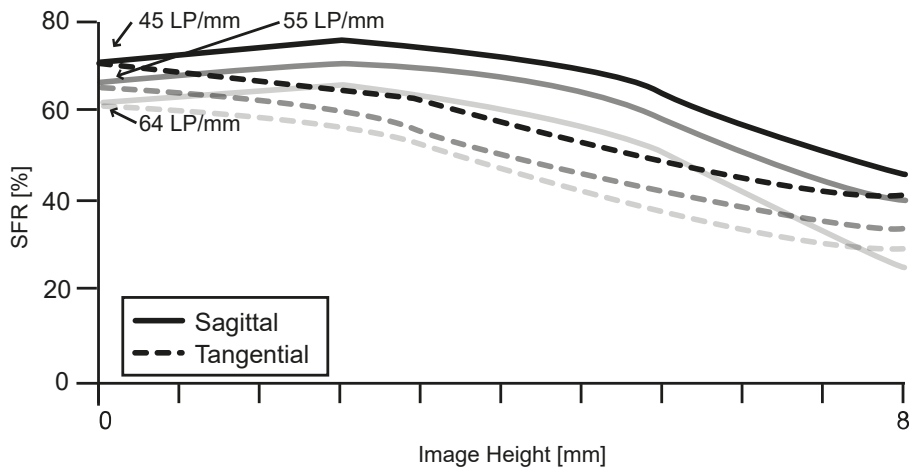


### Simulated Distortion versus Image Height



### Measured Resolution versus Image Height

Conditions:  $f/1.4$ , polychromatic, 1.0 m working distance, average result based on 10 samples



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