

Basler Lens C23-5028-5M-P

Basler Premium **C-mount lens** with a fixed focal length of 50 mm, aperture range from F2.8–F16, and a resolution of 5 MP.



Key Features

- Fits all Basler cameras with a sensor size of up to 2/3"
- Basler Premium Lens
- Metal housing
- C-mount
- Locking screws for iris and focus
- High contrast

 **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

	C23-5028-5M-P
Order Number	2200000573
Focal Length f'	48 mm \pm 5 %
Aperture Range	F2.8–F16
Aperture with Highest Resolution	F3.1
Image Circle	11 mm (2/3" format)
Focus Range	0.4 m to infinity
Optimum Working Distance	0.4 m
Relative Illumination at Full Aperture	72 %

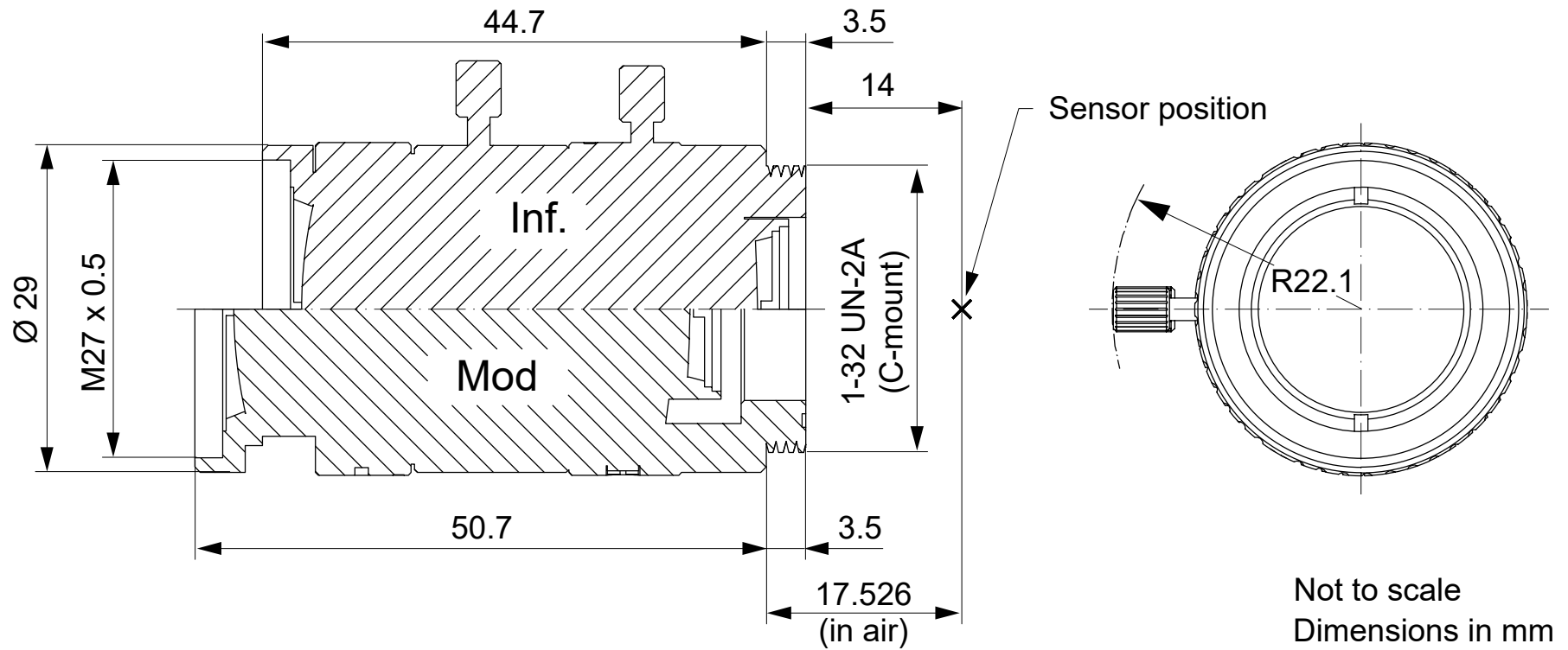
	C23-5028-5M-P
Resolution	Designed for 147 LP/mm (3.40 μ m pixel size, see Resolution versus Image Height)
MTF Measured in the Center at 90 LP/mm / 140 LP/mm (conditions: F2.8, polychromatic, 0.45 m working distance)	0.63 / 0.5
MTF Measured in the Corner at 90 LP/mm / 140 LP/mm (conditions: F2.8, polychromatic, 0.45 m working distance)	0.55 / 0.41
Optical Distortion	Typical -0.12 %
Angle of View, 1/1.8" Format	Horizontal: 8.2° Vertical: 6.1°
Angle of View, 2/3" Format	Horizontal: 10.1° Vertical: 7.6°
Wavelength Range	Visible (400–700 nm)
Back Focal Length, s'_F	22.88 mm

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

Mechanical Specifications

	C23-5028-5M-P
Flange Back	17.526 mm
Mount	C-mount
Weight	Approx. 83.7 g
Focus/Iris Operation	Manual

Lens Dimensions



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

Environmental Requirements

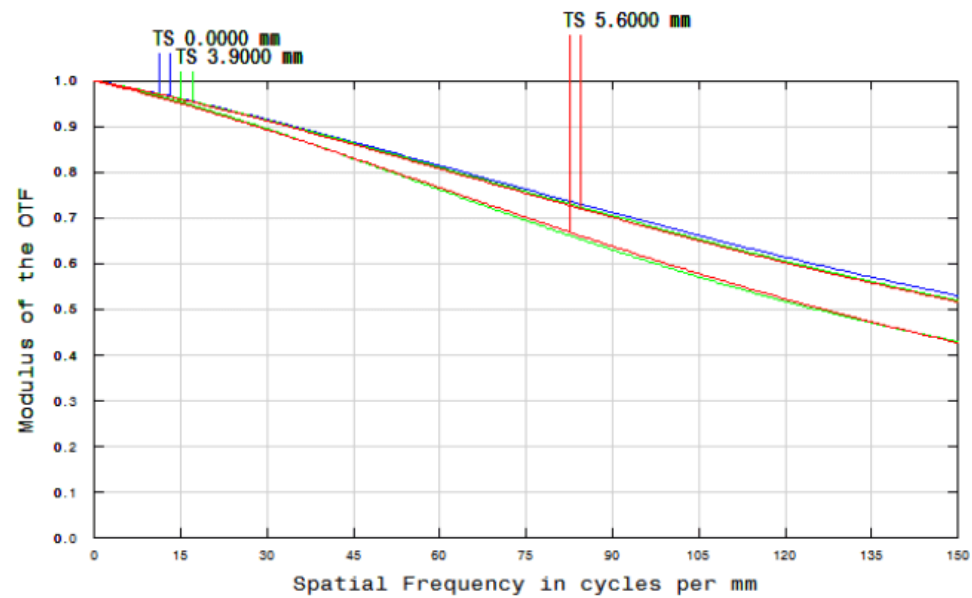
Temperature During Operation	-10–50 °C (14–122 °F) (For best results, adjust the focus when a steady operating temperature has been reached.)
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Humidity During Operation	10–90 % relative humidity, non-condensing
Temperature During Storage	-20–60 °C (-4–140 °F)

Performance Chart

Resolution versus Image Height

Conditions: $f/2.8$, polychromatic, 0.45 m working distance



Precautions, Mounting, and Cleaning (Basler Lenses)

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