

# Basler Lens C23-1224-5M-P

Basler Premium C-mount lens with a fixed focal length of 12 mm, aperture range from F2.4–F16, and a resolution of 5 MP.



## Key Features

- Fits all Basler cameras with a sensor size of up to 2/3"
- Metal housing
- C-mount
- Locking screws for iris and focus
- Aperture indicators on iris ring and lens barrel
- 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

	C23-1224-5M-P
Order Number	2200000569
Focal Length $f'$	12.01 mm $\pm$ 5 %
Aperture Range	F2.4–F16
Aperture with Highest Resolution	F3.0
Image Circle	11 mm (2/3" format)
Focus Range	0.1 m to infinity
Optimum Working Distance	0.3 m
Relative Illumination at Full Aperture	66 %
Resolution	Designed for 147 LP/mm (3.40 $\mu$ m pixel size, see <a href="#">Resolution versus Image Height</a> )
MTF Measured in the Center at 90 LP/mm / 140 LP/mm (conditions: F2.4, polychromatic, 0.45 m working distance)	0.65 / 0.51
MTF Measured in the Corner at 90 LP/mm / 140 LP/mm (conditions: F2.4, polychromatic, 0.45 m working distance)	0.41 / 0.2
Optical Distortion	Typical -0.25 %
Angle of View, 1/1.8" Format	Horizontal: 33.3° Vertical: 25.0°

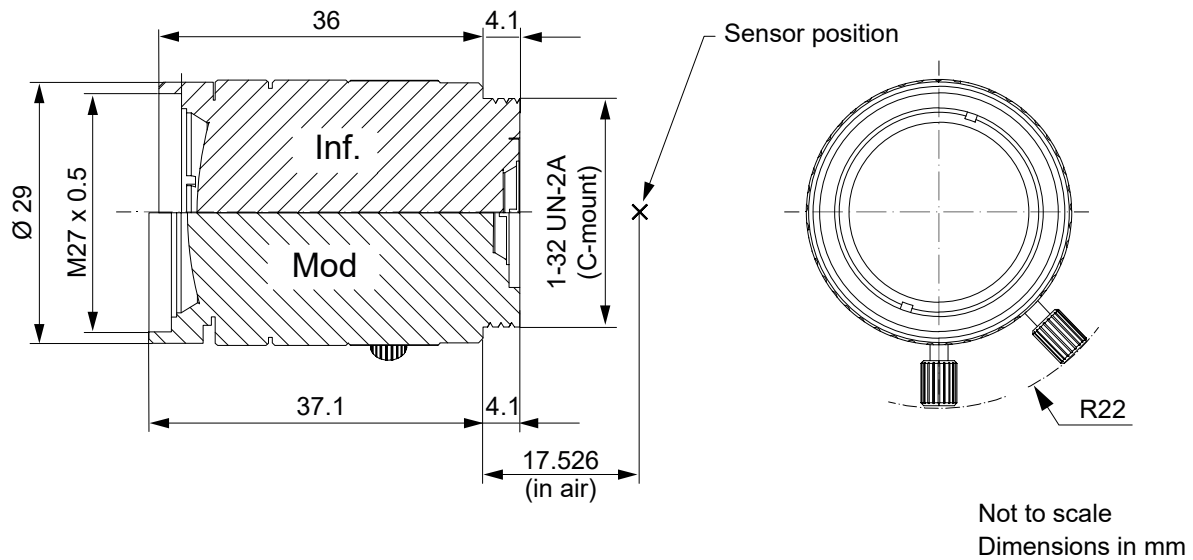
	C23-1224-5M-P
Angle of View, 2/3" Format	Horizontal: 40.3° Vertical: 30.8°
Wavelength Range	Visible (400–700 nm)
Back Focal Length, s'F	15.56 mm

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

## Mechanical Specifications

	C23-1224-5M-P
Flange Back	17.526 mm
Mount	C-mount
Weight	Approx. 71.1 g
Focus/Iris Operation	Manual

## Lens Dimensions



→ 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	10–90 % relative humidity, non-condensing
Temperature During Storage	-20–60 °C (-4–140 °F)

# Performance Chart

## Resolution versus Image Height

Conditions:  $f/2.4$ , polychromatic, 0.45 m working distance

