

Basler Lens C23-0824-5M-P

Basler Premium **C-mount lens** with a fixed focal length of 8 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"
- 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

	C23-0824-5M-P
Order Number	2200000568
Focal Length f'	8.06 mm $\pm$ 5 %
Aperture Range	F2.4–F16
Aperture with Highest Resolution	F2.7
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	60 %

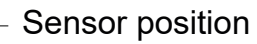
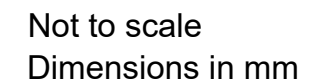
	C23-0824-5M-P
Resolution	Designed for 147 LP/mm (3.40 μ m pixel size, see Resolution versus Image Height)
MTF Measured in the Center at 90 LP/mm / 140 LP/mm (conditions: F2.4, polychromatic, 0.45 m working distance)	0.77 / 0.53
MTF Measured in the Corner at 90 LP/mm / 140 LP/mm (conditions: F2.4, polychromatic, 0.45 m working distance)	0.38 / 0.24
Optical Distortion	Typical 1.87 %
Angle of View, 1/1.8" Format	Horizontal: 48.3° Vertical: 36.8°
Angle of View, 2/3" Format	Horizontal: 57.6° Vertical: 44.8°
Wavelength Range	Visible (400–700 nm)
Back Focal Length, s'_F	12.48 mm

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

Mechanical Specifications

	C23-0824-5M-P
Flange Back	17.526 mm
Mount	C-mount
Weight	Approx. 89.5 g
Focus/Iris Operation	Manual

Lens Dimensions



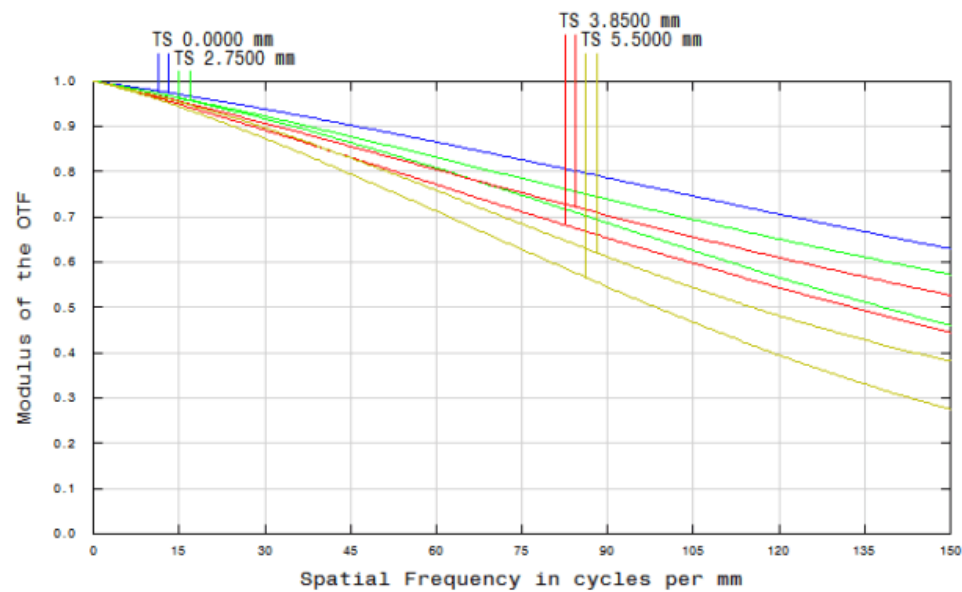
Environmental Requirements

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



Precautions, Mounting, and Cleaning (Basler Lenses)

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