**Basler Lens C125-0418-5M-P**

Basler Premium C-mount lens with a fixed focal length of 4 mm, aperture range from F1.8–F22, and a resolution of 5 MP.



**Key Features**

* Fits all Basler cameras with a sensor size of up to 1/2"
* Metal housing
* C-mount
* Low ghosting and veiling glare
* High contrast
* Locking screws for iris and focus
* Aperture indicators on iris ring and lens barrel
* Accurate focusing mechanism

**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**

|  | C125-0418-5M-P |
| --- | --- |
| Order Number | 2000034830 |
| Focal Length *f'* | 4.09 mm ± 5 % |
| Aperture Range | F1.8–F22 |
| Image Circle | 7.3 mm (1/2.5" format) |
| Focus Range | 0.1 m to infinity |
| Optimum Working Distance | 0.5 m |
| Optimum Magnification | 0.008 |
| Relative Illumination at Full Aperture | At least 55 % (see Relative Illumination versus Image Height) |
| Resolution (25 % MTF, Center, Full Aperture) | Designed for 230 LP/mm (2.2 µm pixel size, see Resolution versus Image Height) |
| Resolution at 5.8 mm Image Diagonal (80 % of a Basler acA2500-14gm/c camera or a Basler acA2500-14um/c camera) | At least 50 % of resolution in image center |
| Optical Distortion | Typical -18 % (barrel distortion, see Distortion versus Image Height) |
| Angle of View, 1/2.5" Format (using a Basler acA2500-14gm/c camera or a Basler acA2500-14um/c camera) | Horizontal: 76.0° (@ MOD) to 76.4° Vertical: 58.2° (@ MOD) to 58.5° |
| Angle of View, 1/3" Format (using a Basler acA1300-30gm/c camera or a Basler acA1300-30um/c camera) | Horizontal: 65.6° (@ MOD) to 66.0° Vertical: 49.6° (@ MOD) to 49.9° |
| Wavelength Range | Visible (400–700 nm, see Transmittance) |
| Pupil Magnification, *ß'*P | 4.84 |
| Chief Ray Angle, CRA | 8.6° |
| Front Focal Length, *s*F | 9.95 mm |
| Back Focal Length, *s'*F | 8.09 mm |
| Principal Point Separation, HH*'* | 29.71 mm |
| Entrance Pupil Position, *s*EP | 10.66 mm |
| Exit Pupil Position, *s'*AP | -15.24 mm |
| Overall Optical Length, *d* | 39.74 mm |

A blueprint of a mechanical design

Description automatically generated