**Basler Lens C125-1218-5M-P**

Basler Premium C-mount lens with a fixed focal length of 12 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**

|  | C125-1218-5M-P |
| --- | --- |
| Order Number | 2000034833 |
| Focal Length *f'* | 12.05 mm ± 5 % |
| Aperture Range | F1.8–F22 |
| Image Circle | 7.3 mm (1/2.5" format) |
| Focus Range | 0.2 m to infinity |
| Optimum Working Distance | 0.5 m |
| Optimum Magnification | 0.023 |
| 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 -2.2 % (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: 26.3° (@ MOD) to 27.0° Vertical: 19.8° (@ MOD) to 20.3° |
| Angle of View, 1/3" Format (using a Basler acA1300-30gm/c camera or a Basler acA1300-30um/c camera) | Horizontal: 22.4° (@ MOD) to 23.1° Vertical: 16.8° (@ MOD) to 17.2° |
| Wavelength Range | Visible (400–700 nm, see Transmittance) |
| Pupil Magnification, *ß'*P | 2.15 |
| Chief Ray Angle, CRA | 8.0° |
| Front Focal Length, *s*F | 10.72 mm |
| Back Focal Length, *s'*F | 12.10 mm |
| Principal Point Separation, HH*'* | 13.21 mm |
| Entrance Pupil Position, *s*EP | 16.32 mm |
| Exit Pupil Position, *s'*AP | -13.84 mm |
| Overall Optical Length, *d* | 35.93 mm |

