

LABKIT-B60

Accessory Kit for B60 Auto-Focus

wenglor is a leading company in industrial machine vision. Its sensor and image processing systems ensure the highest quality and efficiency in automation.

The LABKIT-B60 is equipped with illumination modules and associated filters that provide excellent image quality and therefore repeatable results for robust applications.

Which Setup Suits My Application?

Auto-focus wide:

- B60xx01 (mono)
- B60xx11 (color)

Use the Z60F001, Z60F002 (with attached angle changer) or Z60F003 illumination modules. In order to reduce glare, please use the Z60G003 polarization filter set.

Auto-focus narrow:

- B60xx02 (mono)
- B60xx12 (color)

Use the Z60F004, Z60F005 (or Z60F001, Z60F002 and remove the angle changer) or Z60F003 illumination modules. In order to reduce glare, please use the Z60G004 polarization filter set. To obtain a homogeneously illuminated image at larger working distances (approx. > 250 mm), the use of an angle changer (Z60E002) or the Z60G003 polarization filter set is recommended.

NOTE!



- Z60G001 is typically used with Z60F001, Z60F003 and Z60F004.
- Z60G002 is typically used with Z60F002 and Z60F005.
- For color cameras, always use white light illumination.

How to Improve Image Quality?

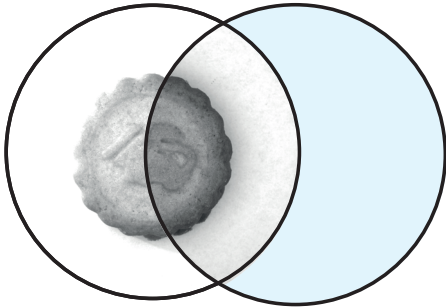
Choosing the appropriate lighting is crucial for a vision system – choosing the proper wavelength even more. Test before investing in illumination and accessories and take advantage of the B60's high modularity. Using optical filters in conjunction with white light allows you to determine the specific wavelength that will maximize the contrast of the feature you want to highlight. Once this detail is clear, investment can be made in the appropriate hardware.

- 1 Use one of the illumination modules.
- 2 Place a filter on the module (it is securely mounted thanks to magnets).
- 3 Pass or block the desired wavelength (light color) to highlight the feature you want to isolate.
- 4 Adjust the parameters to find the perfect focus and exposure settings.

Pick the Best Wavelength to Suit Your Application

Visible Imaging

Block unwanted wavelengths (e.g. from extraneous light) down to a certain part of the visible spectrum. These are usually matched to the wavelength of the light.



Infrared Imaging

Using IR illumination can improve contrast significantly. As IR radiation is invisible to the human eye, it is particularly suitable for use in workplaces where normal light would be especially disturbing.



Polarization – Glare Reduction

Reflections often occur when the illumination is not perfectly diffuse. They can appear like completely white image areas even on the darkest and shiniest materials, which then obscure inspection features and thus prevent successful inspection. To minimize this influence, it is usually necessary to place a polarization filter in front of the camera lens AND a polarization film in front of the illumination.

