



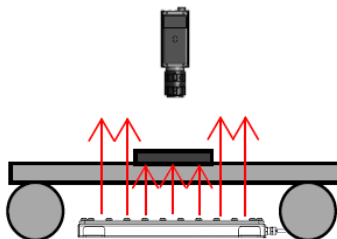
Dimming
Control



Intense and homogeneous (>90%) illumination
Available from 100mm x 100mm to 600mm x 600mm
Long lifetime and minimal maintenance

| | | |
|--------------------|---------------------|---|
| Electronics | Power supply | 24V DC |
| | Illumination mode | Continuous with a DIM process [0-24V] – Analog voltage or Strobe mode |
| | Power consumption | Vary depends on the dimensions (refer to page 3) |
| | Cable | Bare cable (5 or 10 meters) - 5 contacts |
| Optics | Wavelength | Single wavelength (Blue, Green, Red, IR) or White |
| Mechanics | Weight | Vary depends on the dimensions |
| | Thickness | 35.6mm |
| | Dimensions | From 100mm x 100mm to 600mm x 600mm |
| | Fastener | 4 holes (Ø 4.4mm / 20mm length) |
| | Material | Device body: 316L Stainless Steel; Window: PMMA |
| Environment | Working temperature | 0°C to 40°C |
| | IP code | IP68 & IP69K |

Applications



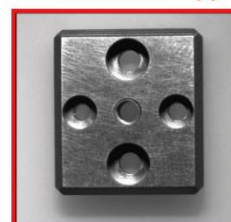
Inspection:

Edge measurements,
absence/presence, size
control, and more.

Robotics:

Object localization for pick
and place

Direct illumination ✘



EFFI-BL-IP69K illumination ✔



Part Number



| | | | | | |
|--|------------------------------------|----------------|--------------------------|---------------------------------|-----------------------------------|
| <p><i>Reference:</i> EFFI-BL-IP69K-XXX-YYY-ZZZ-V-AA</p> | | | | | |
| <p>XXX: Optical width (mm) & YYY: Optical length (mm) (XXX ≤ YYY)</p> | | | | | |
| <p>From 100mm x 100mm up to 600mm x 600mm</p> | | | | | |
| <p>ZZZ: Color / Wavelength (nm) (<i>other wavelengths available upon request</i>)</p> | | | | | |
| ● Bue 465±10nm | ● Green (upon request) 525±10nm | ● Red 625±10nm | ● IR 850±10nm | ● IR (upon request) 940±10nm | ○ White 000 (T°= 5700K ± 700K) |
| <p>AA: Cable length (<i>If not specified, 10 meters length by default</i>) (<i>Other lengths available upon request</i>)</p> | | | | | |
| - L5 : 5 meters | | | - L10 : 10 meters | | |
| <p>V: Vent</p> | | | | | |
| <p>The vent on our IP69K products equalizes pressures, minimize the condensation while blocking water.</p> | | | | | |
| <p>Option : Food processing</p> | | | | | |
| <p>For food processing environment, the nickel-plated brass gland can be replaced with stainless steel type and the cable with a certified food & beverage convenient one. For this option, please add -FOOD in the part number. Please note that the maximum cable length for this option is 10 meter.</p> | | | | | |
| <p>Part number : EFFI-BL-IP69K-FOOD-XXX-YYY-ZZZ</p> | | | | | |

Electronical considerations



Contact arrangement

The EFFI-BL-IP69K is supplied with a 24V constant voltage. Please make sure that the flying leads output of the cable is in a sealed area. The AIC contact needs to be connected.

| Weather, bio oil, detergent and hot water resistant cable | |
|---|--|
| Core insulation made of modified PP / Outer sheath made of special TPE / Sheath colour: black | |
| Conductor N° | EFFI-BL-IP69K |
| 1 | +24V |
| 2 | n.c. |
| 3 | GND |
| 4 | <p>AIC: Analog Intensity Control for Dimming Control Consumption varies depending on size (from 0.3mA to 10mA) Max 24V DC – Analog Voltage</p> |
| 5 | n.c. |

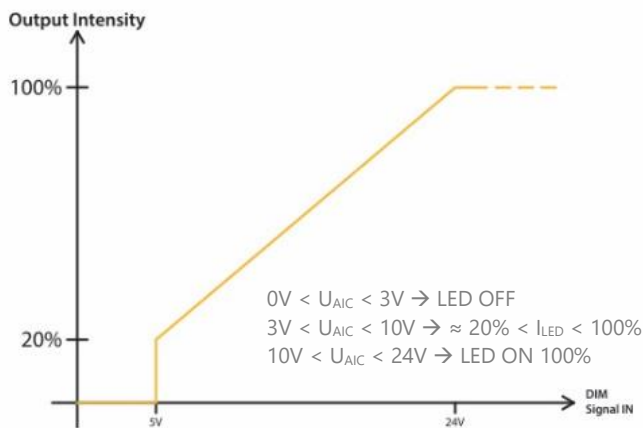
Power supply

Please refer to below electrical power consumption table for the power of each product according to different dimensions. EFFI-BL-IP69K is supplied with a ÖLFLEX® ROBUST 210 cable. For specific configurations, please contact EFFILUX for more information.

| | | Maximum electrical power consumption @24V (W) of standard white EFFI-BL-IP69K | | | | | | |
|--------------------|-----|--|-----|-----|-----|-----|-----|-----|
| | | Optical length (mm) | | | | | | |
| | | 100 | 150 | 200 | 300 | 400 | 500 | 600 |
| Optical width (mm) | 100 | 5 | 8 | 8 | 13 | 15 | 18 | 23 |
| | 150 | | 10 | 13 | 18 | 23 | 28 | 33 |
| | 200 | | | 15 | 23 | 28 | 35 | 43 |
| | 300 | | | | 33 | 43 | 53 | 63 |
| | 400 | | | | | 55 | 70 | 85 |
| | 500 | | | | | | 88 | 110 |
| | 600 | | | | | | | 125 |

Please note that for the FOOD option above 500mm x 500mm the EFFI-BL-IP69K must be supplied with 2 cables

Dimming control

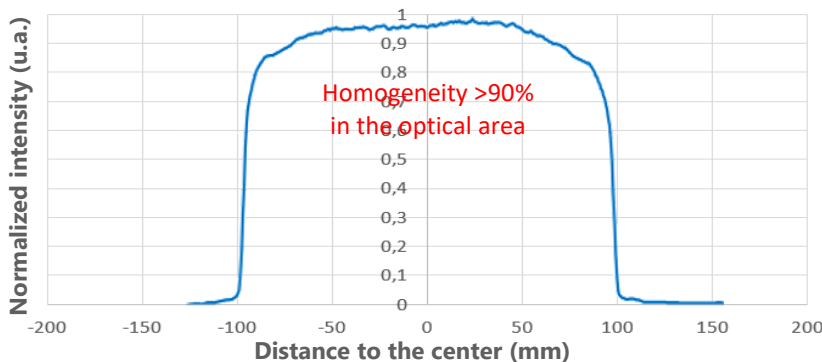


| | | DIM consumption @24V (mA) for standard white EFFI-BL-IP69K | | | | | | |
|--------------------|-----|---|-----|-----|-----|-----|-----|------|
| | | Optical length (mm) | | | | | | |
| | | 100 | 150 | 200 | 300 | 400 | 500 | 600 |
| Optical width (mm) | 100 | 0.3 | 0.9 | 0.6 | 0.9 | 1.2 | 1.5 | 1.8 |
| | 150 | | 1.8 | 1.8 | 2.7 | 3.6 | 4.5 | 5.4 |
| | 200 | | | 1.2 | 1.8 | 2.4 | 3 | 3.6 |
| | 300 | | | | 2.7 | 3.6 | 4.5 | 5.4 |
| | 400 | | | | | 4.8 | 6 | 7.2 |
| | 500 | | | | | | 7.5 | 9.0 |
| | 600 | | | | | | | 10.8 |

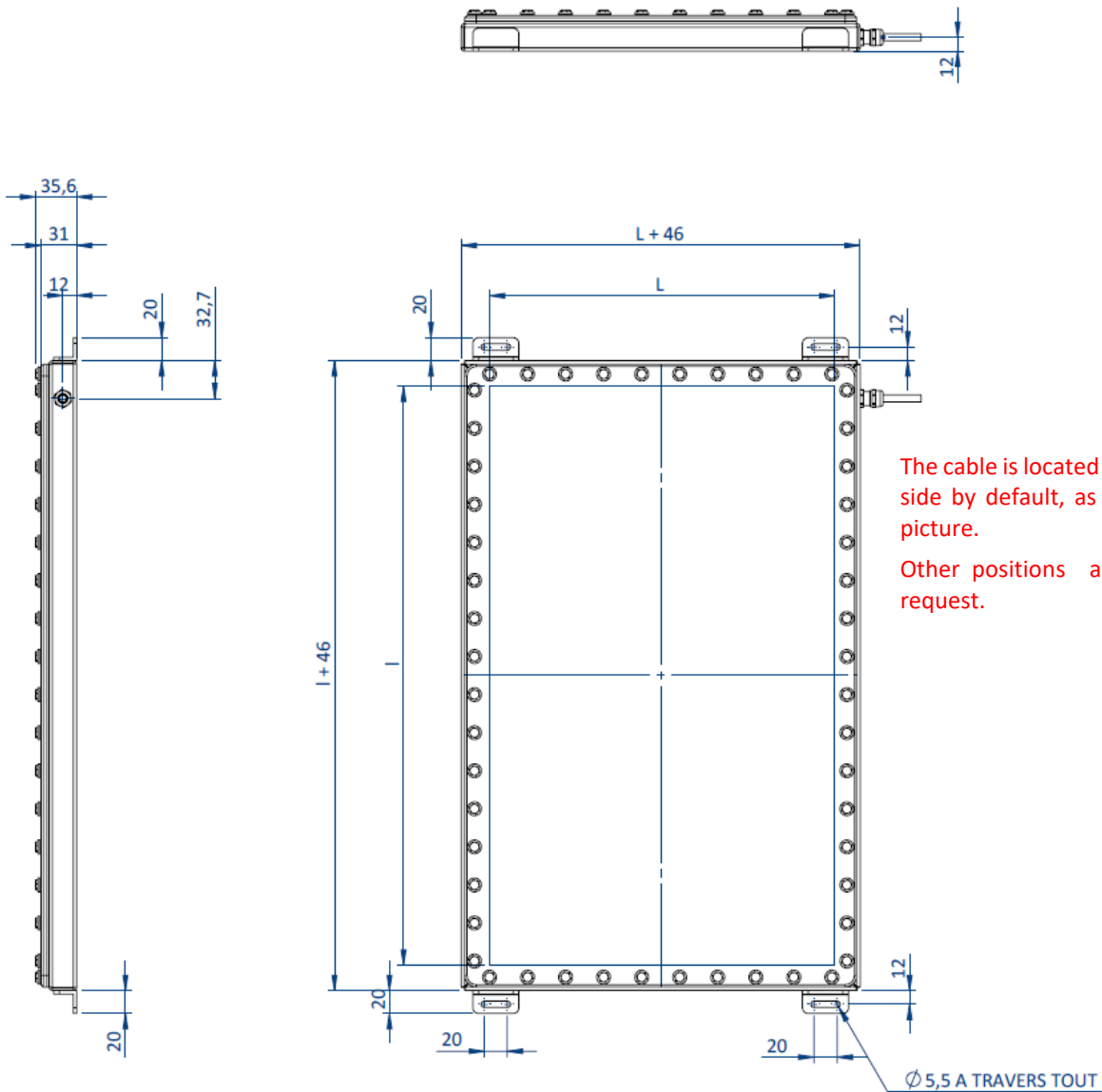
Optical considerations



Evaluation of the homogeneity
EFFI-BL-IP69K-200-200-000



Mechanical considerations (Dimensions in mm)



The cable is located on the longer side by default, as shown in the picture.

Other positions available upon request.

Mechanical length (L_{mecha}) = Optical length (L_{op}) + 46mm

Mechanical width (l_{mecha}) = Optical width (l_{op}) + 46mm

Example: For EFFI-BL-IP69K-200-200, L_{mecha} = 246 mm and l_{mecha} = 246mm