LED Light Sources

PFB3 Series

Renewed with increased brightness
**LED Light Sources PFB3 Series**

### Brightness

Nice for replacing 100 W-halogen lamps

**Illuminance comparison with a 100-W halogen lamp**

![Brightness Diagram](image)

* Actual measurement values with intensity of 100%, bundles of Ø8 mm, a straight light guide installed, and at positions of 50 mm illuminating distance away from the fiber output edge. Results may vary for individual units.

### Spectral Distribution

Comparison with a 100-W halogen lamp at the fiber output edge

![Spectral Distribution Diagram](image)

* Actual measurement values based on CCS’s in-house measurement conditions. Results may vary for individual units.

### Linearity

Good controllability of the light intensity

**Linearity comparison with a 100-W halogen lamp**

![Linearity Diagram](image)

* Actual measurement values with bundles of Ø8 mm, a straight light guide installed, and at the position of 50 mm away from the fiber output edge. Results may vary for individual units.

### Directional Characteristics

Comparison made at the fiber output edge

![Directional Characteristics Diagram](image)

* Actual measurement values with intensity of 100%, bundles of Ø8 mm, and a straight light guide installed. The same fiber is used for the comparison.

### Major Light Guide Manufacturers Support

The PFB3 Series supports major light guide manufacturers; 6 international companies and 5 Japanese companies.

**Light Guide Adapter Dimension Chart (mm)**

Be sure to check the dimensions of your light guide before selecting the light guide adapter (socket).

**PFB3-20SW-F-**

<table>
<thead>
<tr>
<th>Model name</th>
<th>Light guide adapter type</th>
<th>Light guide adapter (socket)</th>
</tr>
</thead>
</table>

* We can also help you select the best light guide. Please feel free to inquire.

Please contact CCS sales representative for information on the light guides other than the above sizes.
Advantages of Replacing 100-W Halogen Light Sources

1. Power consumption of 15 W max. greatly reduces running costs.
2. Long lifetime of 25,000 hours* to greatly reduce maintenance man-hours.
3. The compact design saves space.
4. Ambient temperatures around equipment are greatly reduced by the use of LEDs.

*Calculated values with an intensity of 100%, ambient temperature of 25°C, and a light output drop of up to 70%. Actual values may vary.

Select One from Four Types According to Your Operating Requirements

The lineup includes a model where intensity can only be manually adjusted, and models that allow for external control. There are three types of external control: serial, parallel, and analog.

Light intensity control and ON/OFF control are available for each control type.

<table>
<thead>
<tr>
<th>Standard Type</th>
<th>Serial Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFB3-20SW-F-JT Series</td>
<td>PFB3-20SW-F-SJT Series</td>
</tr>
</tbody>
</table>

Functions

- Manual light intensity control
- A 24 VDC power supply input (using a terminal block on the back panel)
- A 100 VAC power supply input (using an optional AC Adaptor, sold separately)
- Error detection (LED open failure, LED overheating, fan shutdown, and microcontroller oscillator shutdown detection)
- No error signal (flashing of error indicator lamp only)

Parallel Type

| PFB3-20SW-F-PJT Series |

Functions

- Manual light intensity control
- External control
- A 24 VDC power supply input (using a terminal block on the back panel)
- A 100 VAC power supply input (using an optional AC Adaptor, sold separately)
- Error detection (LED open failure, LED overheating, fan shutdown, and microcontroller oscillator shutdown detection)
- Error signal provided

Analog Type

| PFB3-20SW-F-AJT Series |

Functions

- Manual light intensity control
- External control
- Analog light intensity control (0 to 5 V)
- Light intensity control using external variable resistor (0 to 2.5 V)
- ON/OFF control
- Connection is possible to both sinking (NPN) and sourcing (PNP) inputs.
- A 24 VDC power supply input (using a terminal block on the back panel)
- A 100 VAC power supply input (using an optional AC Adaptor, sold separately)
- Error detection (LED open failure, LED overheating, fan shutdown, and microcontroller oscillator shutdown detection)
- Error signal provided

A Compact Size That Fits Almost Anywhere

The case is just as compact as the conventional series. This will help you save space.

Select the Power Supply According to the Operating Conditions

Use the terminal block on the back panel for a 24 VDC power supply. An AC Adaptor (optional, sold separately) can be used to supply power from an 100 to 240 VAC input source.

Optional Products (Sold Separately)

- AC Adaptor
- AC cord (3P)
- External Control Cable

Model: ADP2460-PFB-JTLV6 (U.S. DoE CEC Level VI External Power Supply Efficiency Standards compliant)
**Specifications**

### Common Specifications

<table>
<thead>
<tr>
<th>Series name</th>
<th>PFB3-20SWF-JT-Series (Standard Type) Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE marking</td>
<td>Safety standard: Conforms to EN62471, EMC standard: Conforms to EN61000-6-2, EN61000-6-4</td>
</tr>
<tr>
<td>Optional products</td>
<td>AC Adapter: ADP2460-PFB-JTLV6, External Control Cable: EXCB2-B3, or inquire with your CCS sales representative.</td>
</tr>
</tbody>
</table>

### PFB3-20SWF-SJT-Series (SJT-type) Specifications

<table>
<thead>
<tr>
<th>Model name</th>
<th>PFB3-20SWF-SJT-Series (SJT-type) Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light intensity control</td>
<td>Manual: Continuous control using the intensity control knob. Remote: Continuous intensity control with a 0 to 5 VDC input voltage. External variable resistor</td>
</tr>
<tr>
<td>CE marking</td>
<td>Safety standard: Conforms to EN62471, EMC standard: Conforms to EN61000-6-2, EN61000-6-4</td>
</tr>
<tr>
<td>Optional products</td>
<td>AC Adapter: ADP2460-PFB-JTLV6, External Control Cable: EXCB2-B3</td>
</tr>
</tbody>
</table>

### Dimensions (mm)

#### Front view for the JT series

- Power indicator lamp (Blue) 35
- Light Guide Adaptor (socket) 150
- Light intensity control knob 5.8 to 22.8
- Light intensity control knob 80

#### Front view for the SJT/PJT/AJT series

- AC Adapter: ADP2460-PFB-JTLV6 (The AC cord is included.)
- External Control Cable: EXCB2-B3-4-3-ST

### Optional Products (Sold Separately)

<table>
<thead>
<tr>
<th>Model (Adaptor): ADP2460-PFB-JTLV6</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC Adapter: ADP2460-PFB-JTLV6 (The AC cord is included.)</td>
</tr>
<tr>
<td>External Control Cable: EXCB2-B3-4-3-ST (For use with serial type units)</td>
</tr>
<tr>
<td>External Control Cable: EXCB2-B3 (For use with parallel and analog type units)</td>
</tr>
</tbody>
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**CAUTION**

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of this product are subject to change without notification for product improvement.

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https://www.ccs-grp.com/offices/

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