

LC6B Benchtop Conveyor

The LC6B Benchtop Conveyor is a production UV curing unit that is suitable for laboratory and R&D applications. It can also be used in testing of adhesives, inks and coatings for qualification, cure response testing, or performance evaluation.

It can handle a variety of substrates up to 7-1/2 inches wide with an effective curing width up to 6 inches. The lamp and housing are adjustable to accommodate parts up to 3 inches high.

With the compact Fusion UV model F300S or Light Hammer® 6 lamp system, the LC6B offers an ideal curing system for small production parts. A unique and simple mechanism allows the lamp to be rotated and set to any angle to part travel, or raised and lowered to vary its distance from the part.

The LC6B uses air flowing through the belt to provide cooling and to help keep small sheets or parts in place throughout the curing process. An internal exhaust blower assists with cooling. The one-piece molded housing provides easy access to internal components.

The specially designed open-weave Kevlar® belt is Teflon® coated for smooth performance, and treated to eliminate static charges. The unique seam design provides an essentially uninterrupted belt surface.

There is a choice of 4 models and speed ranges from 2.0 to 250 feet per minute (0.6 to 76 m/min). Speed is displayed by a digital speed indicator on the front panel.

A convenient lamp control switch is also located on the front panel, with a zero-speed sensor incorporated, to provide lamp control and protection for the belt.



Shown above with F300S lamp system installed.

Specifications: LC6B

Nominal Width: 6" (152 mm).

Lamp Position: Rotatable, 360°; vertical adjustment from focus at belt surface to 4" (100 mm) beyond focus.

Overall Length: 42" (1070 mm).

Overall Width: 20" (510 mm).

Overall Height: Without lamp: 12.2" (310 mm); with lamp: 27.4" (695 mm).

Weight: Without lamp: 55 lbs. (25 kg).

Belt: .25" weave Teflon®-coated Kevlar® fiber, carbon-impregnated, with unique fold-back loop seam.

Direction of Belt Travel: Right-to-left, standard.

Speed Indicator: Digital, in ft/min or m/min.

Speed Ranges: Four options available. See Table 1 on the reverse side.

Drive: PMDC gearmotor; Synchronous belt drive; interchangeable pulleys provide two ranges for each model, low speed and standard speed.

Controls: Power on/off, speed adjust, lamp on/off.

Interconnections: Lamp on/off (incorporates zero-speed switch).

Exhaust Blower: Included -internal.

Fasteners: Metric.

Power: 117/230 VAC, single phase, 50/60 Hz, internally selected. IEC style power connection, with power switch.

Options Available

Recommended: Snap-on end light shields.

Choose from top-access or end-access styles.

Exhaust duct transition.

Quartz plate air deflectors.

External end reflectors.

Left-to-right belt travel (opposite direction).

Special belts for small parts.

Stainless steel mesh belt.

Adaptable to hold 2 lamps (without rotatable feature).

For more information about the lamp systems, refer to the F300S and Light Hammer® 6 Sales Bulletins.

Lamp requires: 200-240 V.

Lamp system sold separately.

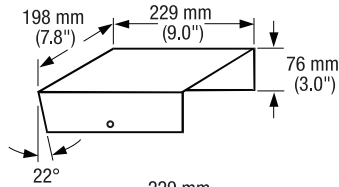
Accessories for LC6B

SNAP-IN LIGHTSHIELDS

These grey tinted, polycarbonate lightshields require no tools to install - simply snap into place on either end of the conveyor. Available in either tunnel (end access) or box end (top access) styles, these lightshields improve worker safety in situations where there is prolonged use at eye-level or when taller parts are being cured, which requires the internal adjustable shields to be lifted, increasing the amount of UV escaping into the work area.

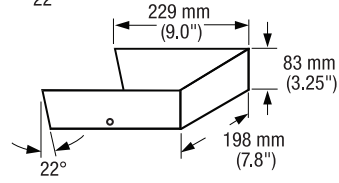
Tunnel Style Shield:

Material: GE #713 'grey' tint polycarbonate, .125" (3 mm) thick.



'Box End' Style Shield:

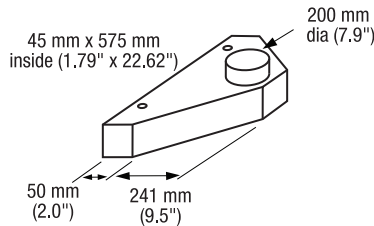
Material: GE #713 'grey' tint polycarbonate, .125" (3 mm) thick.



EXHAUST DUCT TRANSITION

- Connects rear exhaust to 200 mm or 8.0" diameter duct (not included).
- Can be installed upward or downward.
- Material: 0.060" aluminum.

This aluminum duct transition can be screwed to the rear of the conveyor housing to exhaust the cooling air up or down and away from the immediate work vicinity. This is especially helpful when the conveyor is used for production because it prevents cooling air from blowing directly onto other workers, thus improving the work environment. Designed to connect in either an upward or downward position, an 8" diameter duct (not included) can be connected.



REPLACEMENT BELTS

- Teflon®-coated .25" weave Kevlar®, with conductive (anti-static) coating; fold-back loop seam. (Original replacement).
- Teflon®-coated .25" weave Kevlar®, with conductive (anti-static) coating, and 3" wide tight-weave center strip for small parts; fold-back loop seam.
- Flexible stainless steel belt, Teflon® slider guides, and roller modifications. Available as a retrofit kit.
- Stainless steel; (Not for use with standard slider bed. NOTE: Conveyor must be modified to use this belt).

OTHER ACCESSORIES

Air Deflector: Quartz plate holder with 6" x 6" high grade (very short wavelength transmission) quartz plate. For diverting air flow from lightweight parts (not for heat control). Fits into lamp holder.

Outfeed Catch Tray: A 6" x 8" platform which clips to infeed or outfeed end to facilitate loading or unloading of parts. Material: stainless steel.

Part Removal Tool: Floats at LC6B outfeed to remove small parts or sheets from conveyor belt. Machined from black Delrin®.

External End Reflectors: Improve the uniformity across the width of the conveyor from 4" to 6" (80% uniformity) with these special reflectors made of highly polished aluminum. These reflectors act as an extension of the internal end reflector capturing UV that would be lost and directing it to the work surface. No need for screws, they simply rest on the lamp holder and the lamp holds them in place.

Table 1

Speed ranges available on the LC6B are as follows:

2.0 – 7.2 ft/min (0.6 – 2.2 m/min)
3.3 – 23 ft/min (1 – 7 m/min)
16 – 75 ft/min (5 – 23 m/min)
50 – 250 ft/min (15 – 76 m/min)

Contact your local Fusion UV office for an engineered solution for your specific requirements.



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