

Valtavallo G3+ LED tube

EXTREME DURABILITY



COST-EFFECTIVE

- EASY TO INSTALL
- ...
- LONG LIFESPAN
- ...
- SIGNIFICANT ENERGY SAVINGS

HIGH-QUALITY

- ULTRA DURABLE
- ...
- INSTANT FULL LIGHT
- ...
- CLEAN, NATURAL LIGHT

GREEN

- NON-HAZARDOUS WASTE
- ...
- RECYCLABLE
- ...
- NO TOXINS SUCH AS MERCURY

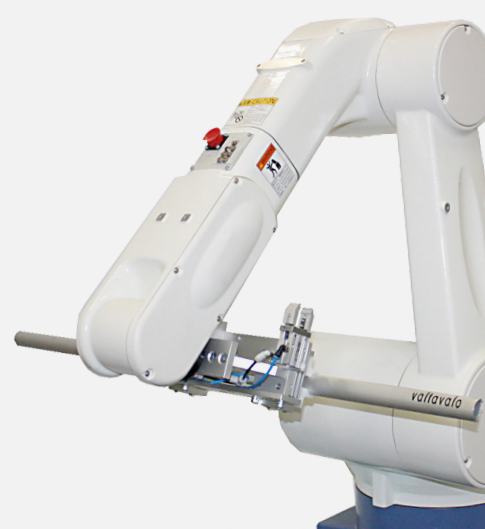
SAFE

- SHATTER-PROOF
- ...
- NO UV LIGHT
- ...
- LOW SURFACE TEMPERATURE

Valtavallo G3+ LED tubes are a result of company's own product development. They are manufactured in the company's Finnish production plant using the latest automation technology. Each LED tube goes through an automatic and multi-stage electric and light property test. Our clients can be assured of the excellent quality of the products. The Valtavallo G3+ LED tubes are also made according to the new standard EN 62776.



Made in Finland



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Why fluorescent lamps should be replaced with Valtavallo G3+ LED tubes

Significant cost savings



Valtavallo G3+ LED tubes use 50–90 percent less energy than other lamps, depending on the age and type of the lamp in question. The lifespan of an LED tube is many times that of a normal fluorescent lamp, thus reducing the upkeep costs of lighting significantly. Even the lamp body has a few extra years added to its life due to the fact that the inductor is not subjected to as much stress and the tube holders are subjected to a lower amount of heat. Moreover, there is no need to change the starters once they have been installed.

Better light



The G3+ LED tubes produce good-quality light with high colour rendering. The blue wavelength present in the LED light is essential for visibility and there is also an unbroken, full spectrum which helps us to distinguish colours, for the whole area of visible light. This pure, natural light is suitable for all environments where people have to be able to see well. The light is also available for your use without delay and without the flickering normally associated with the switching-on stage.

The environment thanks you



By choosing a G3+ LED tube, you will also have a positive impact on the environment. LED tubes do not contain mercury, lead or any other heavy metals. This is why LED tubes are not categorised as hazardous waste. The recyclability ratio of Valtavallo G3+ LED tubes is extremely high: over 95 %. Valtavallo has also invested in manufacturing and packaging processes: our packaging uses as much recycled or recyclable cardboard and paper pulp as possible. Also, because of the energy efficiency of G3+ LED tubes, the need for electricity produced from fossil fuels decreases.

Safer lighting



By replacing your fluorescent lights with G3+ LED tubes, you will eliminate many of the risks related to lighting, such as UV light that is harmful to people and many materials. In addition, the ends of fluorescent lamps that have come to the end of their lifespan and that remain incandescent are one of the most common causes of fire. LED lamps contain no dangerous substances, such as mercury, and the surfaces of the tubes are shatter-proof. This makes the G3+ LED tubes highly suitable for use in the food industry, too.



Install by simply replacing the tube and the starter in most T8 fluorescent tube luminaires

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Why the Valtavallo G3+ tubes are superior to competing LED tubes



Automated manufacturing guarantees quality

Valtavallo G3+ LED tubes are manufactured in Finland with a completely new automated production line. The automatic processing ensures a uniform quality and reliability that has not been met before in LED light sources. At the end of the manufacturing process each G3+ LED tube goes through a multiphase automated test process where the amount of light, the colour rendering index, the spectrum, light temperature, power, power ratio and harmonic distortion are measured.



Long lifespan

Due to its technical supremacy Valtavallo is able to offer an exceptionally long lifespan for its products. This enables realization of extensive and long-lasting lighting projects in parts by applying the same product.



Easy to install

It's possible to directly replace old T8 fluorescent tubes with Valtavallo G3+ LED tubes in the majority of existing luminaires. Valtavallo also delivers the luminaire stem collection for new installments.



Visibly better, non-dazzling light

The outstanding luminous efficacy (lm/W) is reached in collaboration with one of the biggest LED companies in business. The unique semi-opal plastic dome maximizes light production and minimizes unwanted dazzle that bright LEDs might cause.



Passive cooling taken to the max

The passive cooling of LED components ensures an extremely long lifespan. The relatively large cooling surface underneath the medium power LED components conveys the heat efficiently from the LED components to the full-aluminium circuit board. The heat is further conveyed from the circuit board to the aluminium frame which thus functions as a large cooling element.



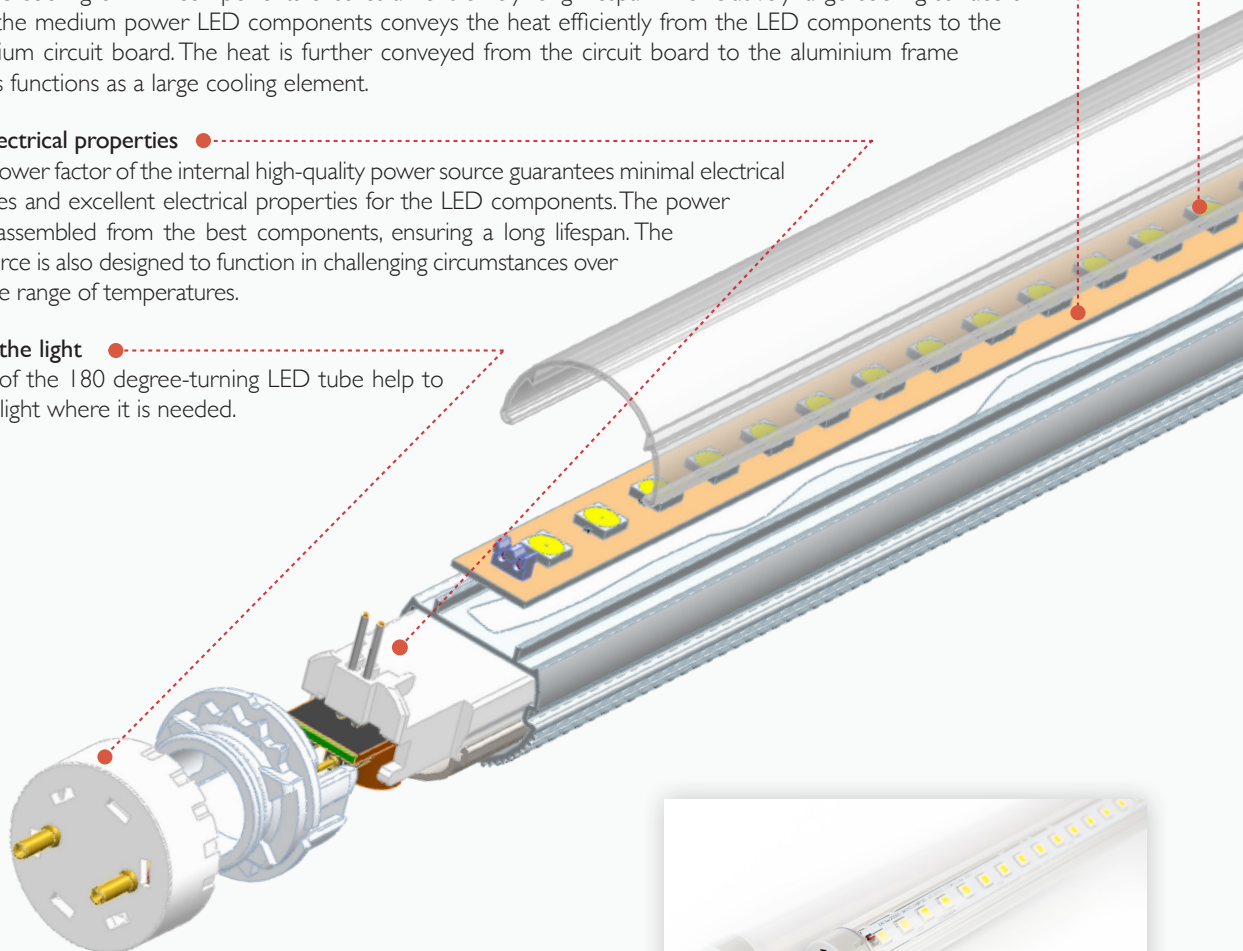
Brilliant electrical properties

The high power factor of the internal high-quality power source guarantees minimal electrical disturbances and excellent electrical properties for the LED components. The power source is assembled from the best components, ensuring a long lifespan. The power source is also designed to function in challenging circumstances over a very wide range of temperatures.



Directing the light

The ends of the 180 degree-turning LED tube help to direct the light where it is needed.



Available with semiopal diffuser to prevent glare effect and with clear cover for added luminosity

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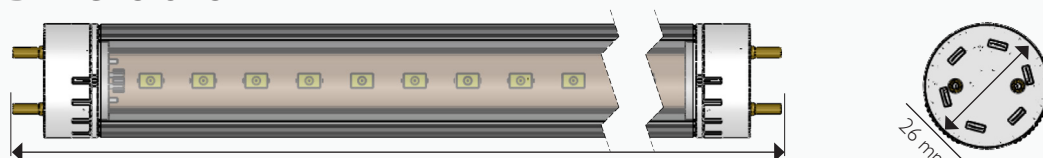
Technical specifications

Model	VV10E060P3-40	VV10C060P3-40	VV15E090P3-40	VV15C090P3-40	VV19E120P3-40	VV19C120P3-40	VV24E150P3-40	VV24C150P3-40
Length	60 cm (2 feet)		90 cm (3 feet)		120 cm (4 feet)		150 cm (5 feet)	
Power	10 W		15 W		19 W		24 W	
Weight	225 g		300 g		385 g		445 g	
Diffuser	Semiopal	Clear	Semiopal	Clear	Semiopal	Clear	Semiopal	Clear
Energy Efficiency Class	A++	A++	A++	A++	A++	A++	A++	A++
Color Temperature ¹⁾	4 000 K	4 000 K	4 000 K	4 000 K	4 000 K	4 000 K	4 000 K	4 000 K
Rated Luminous Flux	1 190 lm	1 285 lm	1 780 lm	1 910 lm	2 345 lm	2 520 lm	2 970 lm	3 190 lm
Luminous Efficacy	117 lm/W	126 lm/W	118 lm/W	127 lm/W	121 lm/W	130 lm/W	124 lm/W	133 lm/W
Socket Type	T8 / G13							
Input Voltage	230 V AC, 50/60 Hz							
Power Factor	> 0.95							
THD	< 10 %							
Color Rendering Index ^(CRI)	> Ra 80							
Beam Angle	120°							
Average Lifespan L ₇₀ B ₅₀ / T _a 25 °C	125 000 hours							
Warranty	7 years (5 years + 2 years with registration *)							
Operating Temperature	- 40 °C – + 50 °C							
Operating Humidity	< 95 %							
Protection Class	IP20							
Housing Material	Anodised aluminum, PC plastic							
Markings	CE, RoHS							

1) Colour temperatures of 3000K and 5700K available on request. Please contact Valtavallo sales for other colour temperatures.

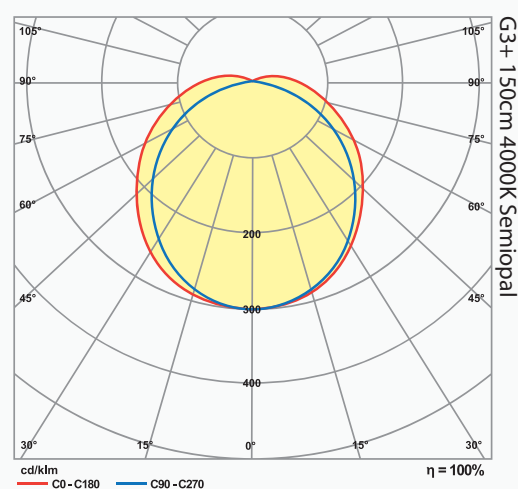
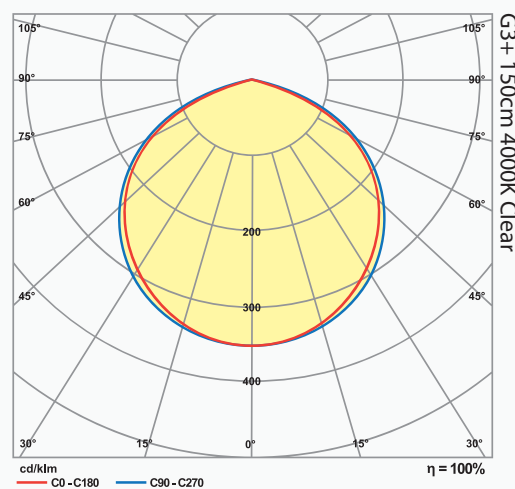
* Registration at www.valtavallo.com

Dimensions



T8-standard lengths 60 cm (2 feet), 90 cm (3 feet), 120 cm (4 feet) and 150 cm (5 feet)

Light Distribution



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