
SubstiTUBE Value

LED tubes for electromagnetic control gears

Areas of application

- Corridors, stairways, parking garages
- Cooling and storage rooms
- Domestic applications
- Industry
- Warehouses
- Supermarkets and department stores

Product benefits

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 65 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures
- Extremely break resistant thanks to aluminum heat sink and polycarbonate cover

Product features

- LED alternative to classic T8 fluorescent lamps in CCG luminaires
- Bright, robust and durable
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant
- Type of protection: IP20
- Integrated ECG with high power factor



Product family datasheet

Technical data

Product description	Electrical data					Photometrical data				Light technical data
	Rated luminous flux	Nominal wattage	Nominal voltage	Nominal current	Type of current	Light color (designation)	Color temperature	Nominal luminous flux	Color rendering index Ra	Beam angle
ST8V 8.9 W/830 600 mm EM ¹⁾	720 lm	8.90 W	220...240 V	0.04 A	AC	Warm White	3000 K	720 lm	>80	160 °
ST8V 8.9 W/840 600 mm EM ¹⁾	800 lm	8.90 W	230 V		AC	Cool White	4000 K	800 lm	>80	160 °
ST8V 8.9 W/865 600 mm EM ¹⁾	800 lm	8.90 W	230 V		AC	Daylight	6500 K	800 lm	>80	160 °
ST8V-EM 19 W/830 1200 mm EM ¹⁾	1500 lm	19.0 W	230 V		AC	Warm White	3000 K	1500 lm	>80	160 °
ST8V-EM 19 W/840 1200 mm EM ¹⁾	1700 lm	19.0 W	230 V		AC	Cool White	4000 K	1700 lm	>80	160 °
ST8V-EM 19 W/865 1200 mm EM ¹⁾	1700 lm	19.0 W	230 V		AC	Daylight	6500 K	1700 lm	>80	160 °
ST8V 21.5 W/830 1500 mm EM ¹⁾	1890 lm	21.5 W	230 V		AC	Warm White	3000 K	1890 lm	>80	150 °
ST8V 21.5 W/840 1500 mm EM ¹⁾	2100 lm	21.5 W	230 V		AC	Cool White	4000 K	2100 lm	>80	150 °
ST8V 21.5 W/865 1500 mm EM ¹⁾	2100 lm	21.5 W	230 V		AC	Daylight	6500 K	2100 lm	>80	150 °

Product description	Dimensions & weight				Temperatures		Lifespan		
	Overall length	Tube diameter	Base diameter	Product weight	Ambient temperature range	Temperature range in operation	Nominal lamp life time	Lumen main. fact. at end of nom. life time	Number of switching cycles
ST8V 8.9 W/830 600 mm EM ¹⁾	600.0 mm	27.5 mm	27.5 mm	90.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V 8.9 W/840 600 mm EM ¹⁾	600.0 mm	27.5 mm	27.5 mm	90.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V 8.9 W/865 600 mm EM ¹⁾	600.0 mm	27.5 mm	27.5 mm	90.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V-EM 19 W/830 1200 mm EM ¹⁾	1200 mm	27.5 mm	27.5 mm	165.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V-EM 19 W/840 1200 mm EM ¹⁾	1200 mm	27.5 mm	27.5 mm	165.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V-EM 19 W/865 1200 mm EM ¹⁾	1200 mm	27.5 mm	27.5 mm	165.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V 21.5 W/830 1500 mm EM ¹⁾	1513 mm	27.5 mm	27.5 mm	275.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000
ST8V 21.5 W/840 1500 mm EM ¹⁾	1513 mm	27.5 mm	27.5 mm	275.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000

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Product description	Dimensions & weight				Temperatures		Lifespan		
	Overall length	Tube diameter	Base diameter	Product weight	Ambient temperature range	Temperature range in operation	Nominal lamp life time	Lumen main. fact. at end of nom. life time	Number of switching cycles
ST8V 21.5 W/865 1500 mm EM ¹⁾	1513 mm	27.5 mm	27.5 mm	275.00 g	-20...+45 °C	-20...65 °C	30000 h	0.70	200000

Product description	Additional product data		Capabilities	Certificates & standards	Logistical data	Country specific categorizations
	Base (standard designation)	Mercury-free	Dimmable	Energy efficiency class	Temperature range at storage	ILCOS
ST8V 8.9 W/830 600 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	
ST8V 8.9 W/840 600 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	
ST8V 8.9 W/865 600 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	
ST8V-EM 19 W/830 1200 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	DR-24/840-G13-27.5/1500
ST8V-EM 19 W/840 1200 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	DR-24/840-G13-27.5/1500
ST8V-EM 19 W/865 1200 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	DR-24/840-G13-27.5/1500
ST8V 21.5 W/830 1500 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	
ST8V 21.5 W/840 1500 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	
ST8V 21.5 W/865 1500 mm EM ¹⁾	G13	Yes	No	A	-20...80 °C	

¹⁾ In development, data preliminary

Product family datasheet



— ST8V 8.9 W/830 600 mm EM, ST8V 8.9 W/840 600 mm EM, ST8V 8.9 W/865 600 mm EM, ST8V-EM 19 W/830 1200 mm EM, ST8V-EM 19 W/840 1200 mm EM, ST8V-EM 19 W/865 1200 mm EM, ST8V 21.5 W/830 1500 mm EM, ST8V 21.5 W/840 1500 mm EM, ST8V 21.5 W/865 1500 mm EM

Equipment / Accessories

– Suitable for operation with low-loss and conventional control gears

Product family datasheet

Safety advice

Not suitable for operation with electronic control gear.

Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

Application advice

For more detailed application information and graphics please see product datasheet.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899937116	ST8V 8.9 W/830 600 mm EM	Shipping carton box 8	719 mm x 139 mm x 73 mm	7.30 dm ³	1352.00 g
4052899937123	ST8V 8.9 W/840 600 mm EM	Shipping carton box 8	719 mm x 139 mm x 73 mm	7.30 dm ³	1352.00 g
4052899937130	ST8V 8.9 W/865 600 mm EM	Shipping carton box 8	719 mm x 139 mm x 73 mm	7.30 dm ³	1400.00 g
4052899937147	ST8V-EM 19 W/830 1200 mm EM	Shipping carton box 8	1330 mm x 139 mm x 73 mm	13.50 dm ³	2420.00 g
4052899937154	ST8V-EM 19 W/840 1200 mm EM	Shipping carton box 8	1330 mm x 139 mm x 73 mm	13.50 dm ³	2400.00 g
4052899937161	ST8V-EM 19 W/865 1200 mm EM	Shipping carton box 8	1330 mm x 139 mm x 73 mm	13.50 dm ³	2380.00 g
4052899937178	ST8V 21.5 W/830 1500 mm EM	Shipping carton box 8	1630 mm x 139 mm x 73 mm	16.54 dm ³	3490.00 g
4052899937185	ST8V 21.5 W/840 1500 mm EM	Shipping carton box 8	1630 mm x 139 mm x 73 mm	16.54 dm ³	3500.00 g

Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899937192	ST8V 21.5 W/865 1500 mm EM	Shipping carton box 8	1630 mm x 139 mm x 73 mm	16.54 dm ³	3450.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

For current information see

▶ www.osram.com/substitute

Legal advice

When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.