

PRODUCT FAMILY DATASHEET

SubstiTUBE Value

Economic LED tubes for electromagnetic control gears



AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Cooling and storage rooms
- Domestic applications
- Industry
- Warehouses
- Supermarkets and department stores

PRODUCT BENEFITS

- No bending thanks to glass technology
- 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

PRODUCT FEATURES

- LED alternative to classic T8 fluorescent lamps in CCG luminaires
- Uniform illumination
- Mercury-free and RoHS compliant
- Luminous efficacy: up to 105 lm/W
- Tube made of glass



TECHNICAL DATA

Product description	Electrical data								
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Max. lamp no. on circuit break. B10 A - CCG without compensation	Max. lamp no. on circuit break. B16 A - CCG with compensation	Max. lamp no. on circuit break. B16 A - CCG without compensation
ST8V-EM 7.6 W/3000K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	208	32	333
ST8V-EM 7.6 W/4000K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	208	32	333
ST8V-EM 7.6 W/6500K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	208	32	333
ST8V-EM 16.2 W/3000K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	98	32	157
ST8V-EM 16.2 W/4000K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	98	32	157
ST8V-EM 16.2 W/6500K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	98	32	157
ST8V-EM 19.1 W/3000K 1500 mm EM	19.10 W	220...240 V	50...60 Hz	19.10 W	0.09 A	AC	85	22	136
ST8V-EM 19.1 W/4000K 1500 mm EM	19.10 W	220...240 V	50...60 Hz	19.10 W	0.09 A	AC	85	22	136
ST8V-EM 19.1 W/6500K 1500 mm EM	19.10 W	220...240 V	50...60 Hz	19.10 W	0.09 A	AC	85	22	136

Product description	Electrical data			Photometrical data				
	Max. lamp no. on circuit break. 10 A (B)	Max. lamp no. on circuit break. B10 A - CCG with compensation	Max. lamp no. on circuit break. 16 A (B)	Color temperature	Nominal luminous flux	Rated luminous flux	Lumen main.fact.at end of nom.life time	Light color (designation)
ST8V-EM 7.6 W/3000K 600 mm EM	208	20	333	3000 K	720 lm	720 lm	0.70	Warm White
ST8V-EM 7.6 W/4000K 600 mm EM	208	20	333	4000 K	800 lm	800 lm	0.70	Cool White
ST8V-EM 7.6 W/6500K 600 mm EM	208	20	333	6500 K	800 lm	800 lm	0.70	Cool Daylight
ST8V-EM 16.2 W/3000K 1200 mm EM	98	20	157	3000 K	1530 lm	1530 lm	0.70	Warm White
ST8V-EM 16.2 W/4000K 1200 mm EM	98	20	157	4000 K	1700 lm	1700 lm	0.70	Cool White
ST8V-EM 16.2 W/6500K 1200 mm EM	98	20	157	6500 K	1700 lm	1700 lm	0.70	Cool Daylight
ST8V-EM 19.1 W/3000K 1500 mm EM	85	14	136	3000 K	1800 lm	1800 lm	0.70	Warm White
ST8V-EM 19.1 W/4000K 1500 mm EM	85	14	136	4000 K	2000 lm	2000 lm	0.70	Cool White
ST8V-EM 19.1 W/6500K 1500 mm EM	85	14	136	6500 K	2000 lm	2000 lm	0.70	Cool Daylight

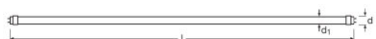
Product description	Color temperature	Luminous flux	Color rendering index Ra	Light technical data			Dimensions & weight				Temperatures & operating conditions
				Rated beam angle (half peak value)	Warm-up time (60 %)	Starting time	Tube diameter	Base diameter	Product weight	Overall length	Ambient temperature range
ST8V-EM 7.6 W/3000K 600 mm EM	3000 K	720 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	105.00 g	603.0 mm	-20...+45 °C
ST8V-EM 7.6 W/4000K 600 mm EM	4000 K	800 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	105.00 g	603.0 mm	-20...+45 °C
ST8V-EM 7.6 W/6500K 600 mm EM	6500 K	800 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	105.00 g	603.0 mm	-20...+45 °C
ST8V-EM 16.2 W/3000K 1200 mm EM	3000 K	1530 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	208.00 g	1212 mm	-20...+45 °C
ST8V-EM 16.2 W/4000K 1200 mm EM	4000 K	1700 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	208.00 g	1212 mm	-20...+45 °C
ST8V-EM 16.2 W/6500K 1200 mm EM	6500 K	1700 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	208.00 g	1212 mm	-20...+45 °C
ST8V-EM 19.1 W/3000K 1500 mm EM	3000 K	1800 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	235.00 g	1513 mm	-20...+45 °C
ST8V-EM 19.1 W/4000K 1500 mm EM	4000 K	2000 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	235.00 g	1513 mm	-20...+45 °C
ST8V-EM 19.1 W/6500K 1500 mm EM	6500 K	2000 lm	≥80	190.00 °	< 0.50 s	< 0.5 s	25.6 mm	26.7 mm	235.00 g	1513 mm	-20...+45 °C

Product description	Maximum temperature at tc test point	Lifespan		Additional product data		Capabilities	Certificates & standards	Country-specific categorizations
		Nominal lamp life time	Number of switching cycles	Base (standard designation)	Mercury-free	Dimmable	Type of protection	ILCOS
ST8V-EM 7.6 W/3000K 600 mm EM	65 °C	30000 h	200000	G13	Yes	No	IP20	DR-7.6/830-G13-25.5/590

Product description	Maximum temperature at tc test point	Lifespan		Additional product data		Capabilities	Certificates & standards	Country-specific categorizations
		Nominal lamp life time	Number of switching cycles	Base (standard designation)	Mercury-free	Dimmable	Type of protection	ILCOS
ST8V-EM 7.6 W/4000K 600 mm EM	65 °C	30000 h	200000	G13	Yes	No	IP20	DR-7.6/840-G13-25.5/590
ST8V-EM 7.6 W/6500K 600 mm EM	65 °C	30000 h	200000	G13	Yes	No	IP20	DR-7.6/865-G13-25.5/590
ST8V-EM 16.2 W/3000K 1200 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-16.2/830-G13-25.5/1200
ST8V-EM 16.2 W/4000K 1200 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-16.2/840-G13-25.5/1200
ST8V-EM 16.2 W/6500K 1200 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-16.2/865-G13-25.5/1200
ST8V-EM 19.1 W/3000K 1500 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-19.1/830-G13-25.5/1500
ST8V-EM 19.1 W/4000K 1500 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-19.1/840-G13-25.5/1500
ST8V-EM 19.1 W/6500K 1500 mm EM	75 °C	30000 h	200000	G13	Yes	No	IP20	DR-19.1/865-G13-25.5/1500

Logistical data	
Product description	Temperature range at storage
ST8V-EM 7.6 W/3000K 600 mm EM	-20...+80 °C
ST8V-EM 7.6 W/4000K 600 mm EM	-20...+80 °C
ST8V-EM 7.6 W/6500K 600 mm EM	-20...+80 °C
ST8V-EM 16.2 W/3000K 1200 mm EM	-20...+80 °C
ST8V-EM 16.2 W/4000K 1200 mm EM	-20...+80 °C

Product description	Logistical data	
	Temperature range at storage	
ST8V-EM 16.2 W/6500K 1200 mm EM	-20...+80 °C	
ST8V-EM 19.1 W/3000K 1500 mm EM	-20...+80 °C	
ST8V-EM 19.1 W/4000K 1500 mm EM	-20...+80 °C	
ST8V-EM 19.1 W/6500K 1500 mm EM	-20...+80 °C	



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 ST8V-EM 19.1 W/3000K 1500 mm EM,
 ST8V-EM 19.1 W/4000K 1500 mm EM,
 ST8V-EM 19.1 W/6500K 1500 mm EM

EQUIPMENT / ACCESSORIES

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

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	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075156166	Shipping carton box 10	742 mm x 210 mm x 115 mm	1653.00 g	17.92 dm ³
4058075156180	Shipping carton box 10	742 mm x 210 mm x 115 mm	1667.00 g	17.92 dm ³
4058075024663	Shipping carton box 10	742 mm x 210 mm x 115 mm	1642.00 g	17.92 dm ³
4058075024687	Shipping carton box 10	1278 mm x 154 mm x 65 mm	2520.00 g	12.79 dm ³
4058075156241	Shipping carton box 10	1352 mm x 210 mm x 115 mm	2981.00 g	32.65 dm ³
4058075156265	Shipping carton box 10	1352 mm x 210 mm x 115 mm	2920.00 g	32.65 dm ³
4058075024748	Shipping carton box 10	1652 mm x 210 mm x 115 mm	3640.00 g	39.90 dm ³
4058075156302	Shipping carton box 10	1652 mm x 210 mm x 115 mm	3780.00 g	39.90 dm ³
4058075156326	Shipping carton box 10	1652 mm x 210 mm x 115 mm	3620.00 g	39.90 dm ³

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.ledvance.com/substitube

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.