

# PRODUCT FAMILY DATASHEET

## SubstiTUBE STAR

Economic LED tubes for electromagnetic control gears



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### AREAS OF APPLICATION

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

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### PRODUCT BENEFITS

- High color homogeneity
- Energy savings of up to 68 % compared to conventional 1,500 mm T8 fluorescent lamp
- Instant flickerfree starting

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### PRODUCT FEATURES

- T8 LED tube made of glass with G13 base
- Mercury-free and RoHS compliant
- Luminous efficacy: up to 105 lm/W
- Type of protection: IP20



TECHNICAL DATA

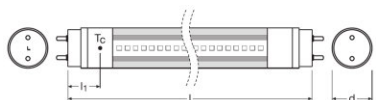
Product description	Electrical data						Photometrical data				
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Color temperature	Nominal luminous flux	Rated luminous flux	Lumen main.fact.at end of nom.life time	Light color (designation)
ST8S-EM 7.6 W/3000 K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	3000 K	720 lm	720 lm	0.70	Warm White
ST8S-EM 7.6 W/4000 K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	4000 K	1100 lm	800 lm	0.70	Cool White
ST8S-EM 7.6 W/6500 K 600 mm EM	7.60 W	220...240 V	50...60 Hz	7.60 W	0.035 A	AC	6500 K	800 lm	800 lm	0.70	Cool Daylight
ST8S-EM 16.2 W/3000 K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	3000 K	1530 lm	1530 lm	0.70	Warm White
ST8S-EM 16.2 W/4000 K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	4000 K	1700 lm	1700 lm	0.70	Cool White
ST8S-EM 16.2 W/6500 K 1200 mm EM	16.20 W	220...240 V	50...60 Hz	16.20 W	0.075 A	AC	6500 K	1700 lm	1700 lm	0.70	Cool Daylight
ST8S-EM 19.1 W/3000 K 1500 mm EM	19.10 W	220...240 V	50...60 Hz	19.10 W	0.088 A	AC	3000 K	1800 lm	1800 lm	0.70	Warm White
ST8S-EM 20.6 W/4000 K 1500 mm EM	20.60 W	220...240 V	50...60 Hz	20.60 W	0.088 A	AC	4000 K	2000 lm	2000 lm	0.70	Cool White
ST8S-EM 19.1 W/6500 K 1500 mm EM	19.10 W	220...240 V	50...60 Hz	19.10 W	0.088 A	AC	6500 K	2000 lm	2000 lm	0.70	Cool Daylight

Product description	Light technical data			Dimensions & weight		Temperatures & operating conditions	Lifespan			
	Color temperature	Luminous flux	Color rendering index Ra	Starting time	Rated beam angle (half peak value)	Warm-up time (60 %)	Product weight	Overall length	Ambient temperature range	Nominal lamp life time
ST8S-EM 7.6 W/3000 K 600 mm EM	3000 K	720 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	100.00 g	603.0 mm	-20...+45 °C	30000 h
ST8S-EM 7.6 W/4000 K 600 mm EM	4000 K	1100 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	100.00 g	603.0 mm	-20...+45 °C	30000 h
ST8S-EM 7.6 W/6500 K 600 mm EM	6500 K	800 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	100.00 g	603.0 mm	-20...+45 °C	30000 h
ST8S-EM 16.2 W/3000 K 1200 mm EM	3000 K	1530 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	200.00 g	1212 mm	-20...+45 °C	30000 h

Product description	Color temperature	Luminous flux	Color rendering index Ra	Light technical data			Dimensions & weight		Temperatures & operating conditions	Lifespan
				Starting time	Rated beam angle (half peak value)	Warm-up time (60 %)	Product weight	Overall length	Ambient temperature range	Nominal lamp life time
ST8S-EM 16.2 W/4000 K 1200 mm EM	4000 K	1700 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	200.00 g	1212 mm	-20...+45 °C	30000 h
ST8S-EM 16.2 W/6500 K 1200 mm EM	6500 K	1700 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	200.00 g	1212 mm	-20...+45 °C	30000 h
ST8S-EM 19.1 W/3000 K 1500 mm EM	3000 K	1800 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	260.00 g	1513 mm	-20...+45 °C	30000 h
ST8S-EM 20.6 W/4000 K 1500 mm EM	4000 K	2000 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	260.00 g	1513 mm	-20...+45 °C	30000 h
ST8S-EM 19.1 W/6500 K 1500 mm EM	6500 K	2000 lm	≥80	< 0.5 s	190.00 °	< 0.50 s	260.00 g	1513 mm	-20...+45 °C	30000 h

Product description	Number of switching cycles	Additional product data		Capabilities	Certificates & standards	Country-specific categorizations	Logistical data
		Base (standard designation)	Mercury-free	Dimmable	Type of protection	ILCOS	Temperature range at storage
ST8S-EM 7.6 W/3000 K 600 mm EM	200000	G13	Yes	No	IP20	DR-7.6/830-G13-25.5/600	-20...80 °C
ST8S-EM 7.6 W/4000 K 600 mm EM	200000	G13	Yes	No	IP20	DR-7.6/840-G13-25.5/600	-20...80 °C
ST8S-EM 7.6 W/6500 K 600 mm EM	200000	G13	Yes	No	IP20	DR-7.6/865-G13-25.5/600	-20...80 °C
ST8S-EM 16.2 W/3000 K 1200 mm EM	200000	G13	Yes	No	IP20	DR-16.2/830-G13-25.5/1200	-20...80 °C
ST8S-EM 16.2 W/4000 K 1200 mm EM	200000	G13	Yes	No	IP20	DR-16.2/840-G13-25.5/1200	-20...80 °C
ST8S-EM 16.2 W/6500 K 1200 mm EM	200000	G13	Yes	No	IP20	DR-16.2/865-G13-25.5/1200	-20...80 °C
ST8S-EM 19.1 W/3000 K 1500 mm EM	200000	G13	Yes	No	IP20	DR-19.1/830-G13-25.5/1500	-20...80 °C
ST8S-EM 20.6 W/4000 K 1500 mm EM	200000	G13	Yes	No	IP20	DR-19.1/840-G13-25.5/1500	-20...80 °C

		Additional product data		Capabilities	Certificates & standards	Country-specific categorizations	Logistical data
Product description	Number of switching cycles	Base (standard designation)	Mercury-free	Dimmable	Type of protection	ILCOS	Temperature range at storage
ST8S-EM 19.1 W/6500 K 1500 mm EM	200000	G13	Yes	No	IP20	DR-19.1/865-G13-25.5/1500	-20...80 °C



- ST8S-EM 7.6 W/3000 K 600 mm EM,
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- ST8S-EM 16.2 W/6500 K 1200 mm EM,
- ST8S-EM 19.1 W/3000 K 1500 mm EM,
- ST8S-EM 20.6 W/4000 K 1500 mm EM,
- ST8S-EM 19.1 W/6500 K 1500 mm EM

### EQUIPMENT / ACCESSORIES

- Suitable for operation on magnetic control gear

**SAFETY ADVICE**

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
4058075024434	ST8S-EM 7.6 W/3000 K 600 mm EM	Shipping carton box 8	753 mm x 182 mm x 125 mm	17.13 dm <sup>3</sup>	1399.00 g
4058075024458	ST8S-EM 7.6 W/4000 K 600 mm EM	Shipping carton box 8	753 mm x 182 mm x 125 mm	17.13 dm <sup>3</sup>	1444.00 g
4058075024472	ST8S-EM 7.6 W/6500 K 600 mm EM	Shipping carton box 8	753 mm x 182 mm x 125 mm	17.13 dm <sup>3</sup>	1433.00 g
4058075024496	ST8S-EM 16.2 W/3000 K 1200 mm EM	Shipping carton box 8	1367 mm x 182 mm x 125 mm	31.10 dm <sup>3</sup>	2610.00 g
4058075024519	ST8S-EM 16.2 W/4000 K 1200 mm EM	Shipping carton box 8	1367 mm x 182 mm x 125 mm	31.10 dm <sup>3</sup>	3810.00 g
4058075024533	ST8S-EM 16.2 W/6500 K 1200 mm EM	Shipping carton box 8	1367 mm x 182 mm x 125 mm	31.10 dm <sup>3</sup>	2570.00 g
4058075024557	ST8S-EM 19.1 W/3000 K 1500 mm EM	Shipping carton box 8	1660 mm x 182 mm x 125 mm	37.77 dm <sup>3</sup>	3150.00 g
4058075024571	ST8S-EM 20.6 W/4000 K 1500 mm EM	Shipping carton box 8	1660 mm x 182 mm x 125 mm	37.77 dm <sup>3</sup>	3190.00 g
4058075024595	ST8S-EM 19.1 W/6500 K 1500 mm EM	Shipping carton box 8	1660 mm x 182 mm x 125 mm	37.77 dm <sup>3</sup>	3170.00 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.

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**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.

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**DISCLAIMER**

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