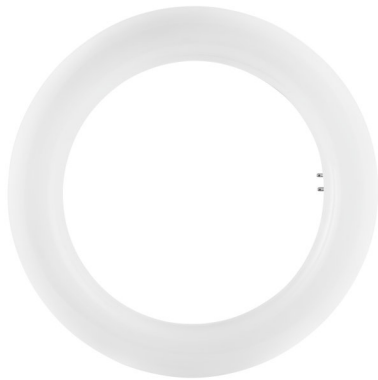


PRODUCT FAMILY DATASHEET

SubstiTUBE T9 EM

Circular LED tube for electromagnetic control gear (CCG) and AC mains



AREAS OF APPLICATION

- General illumination within ambient temperatures from -20...+45 °C
- Corridors, stairways, parking garages
- Domestic applications
- Decorative applications

PRODUCT BENEFITS

- Quick, simple and safe replacement without rewiring
- Energy savings of up to 50% (compared to T9 fluorescent lamp on CCG)
- Also suitable for operation at low temperatures
- Operation directly on 230 V AC mains possible

PRODUCT FEATURES

- LED alternative to classic T9 fluorescent lamps in CCG luminaires
- Uniform illumination
- Lifetime: up to 30,000 h
- Mercury-free and RoHS compliant
- Luminous efficacy: up to 100 lm/W



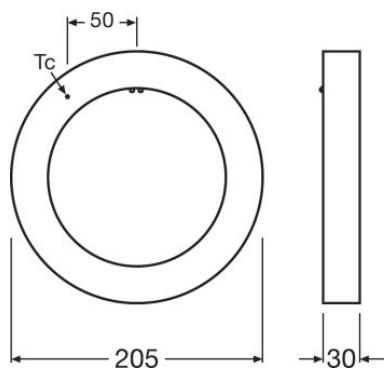
TECHNICAL DATA

Product description	Electrical data								
	Rated wattage	Nominal voltage	Operating frequency	Nominal wattage	Nominal current	Type of current	Max. lamp no. on circuit break. B16 A - CCG without compensation	Max. lamp no. on circuit break. B10 A - CCG without compensation	Max. lamp no. on circuit break. 10 A (B)
ST9-EM 22 123° 12 W/4000K G10q	12.00 W	220...240 V	50...60 Hz	12.00 W	0.06 A	AC	140	80	80
ST9-EM 22 123° 12 W/6500K G10q	12.00 W	220...240 V	50...60 Hz	12.00 W	0.06 A	AC	140	80	80
ST9-EM 32 123° 20 W/4000K G10q	20.00 W	220...240 V	50...60 Hz	20.00 W	0.1 A	AC	80	50	50
ST9-EM 32 123° 6 W/6500K G10q	20.00 W	220...240 V	50...60 Hz	20.00 W	0.1 A	AC	80	50	50

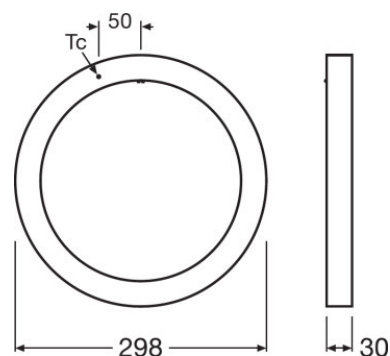
Product description	Max. lamp no. on circuit break. 16 A (B)	Photometrical data								Light technical data
		Color temperature	Nominal luminous flux	Rated luminous flux	Lumen main.fact.at end of nom.life time	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Starting time
ST9-EM 22 123° 12 W/4000K G10q	140	4000 K	1200 lm	1200 lm	0.70	Cool White	4000 K	1200 lm	≥80	< 0.5 s
ST9-EM 22 123° 12 W/6500K G10q	140	6500 K	1200 lm	1200 lm	0.70	Cool Daylight	6500 K	1200 lm	≥80	< 0.5 s
ST9-EM 32 123° 20 W/4000K G10q	80	4000 K	2000 lm	2000 lm	0.70	Cool White	4000 K	2000 lm	≥80	< 0.5 s
ST9-EM 32 123° 6 W/6500K G10q	80	6500 K	2000 lm	2000 lm	0.70	Cool Daylight	6500 K	2000 lm	≥80	< 0.5 s

Product description	Dimensions & weight			Temperatures & operating conditions	Lifespan	Additional product data		
	Rated beam angle (half peak value)	Warm-up time (60 %)	Product weight	Overall length	Ambient temperature range	Nominal lamp life time	Number of switching cycles	Base (standard designation)
ST9-EM 22 123° 12 W/4000K G10q	123.00 °	< 0.50 s	143.00 g	205.0 mm	-20...+45 °C	30000 h	200000	G10q
ST9-EM 22 123° 12 W/6500K G10q	123.00 °	< 0.50 s	143.00 g	205.0 mm	-20...+45 °C	30000 h	200000	G10q
ST9-EM 32 123° 20 W/4000K G10q	123.00 °	< 0.50 s	217.00 g	298.0 mm	-20...+45 °C	30000 h	200000	G10q
ST9-EM 32 123° 6 W/6500K G10q	123.00 °	< 0.50 s	217.00 g	298.0 mm	-20...+45 °C	30000 h	200000	G10q

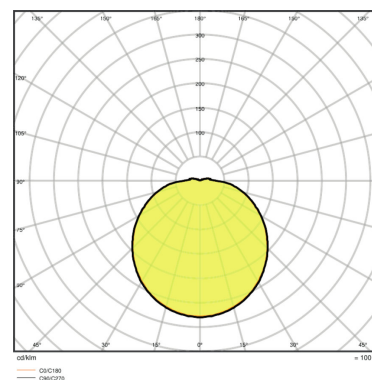
Product description	Mercury-free	Capabilities		Certificates & standards		Logistical data
		Dimmable	Type of protection	Photobiological safety group EN62778	Temperature range at storage	
ST9-EM 22 123° 12 W/4000K G10q	Yes	No	IP20	RG0	-20...+65 °C	
ST9-EM 22 123° 12 W/6500K G10q	Yes	No	IP20	RG1	-20...+65 °C	
ST9-EM 32 123° 20 W/4000K G10q	Yes	No	IP20	RG1	-20...+65 °C	
ST9-EM 32 123° 6 W/6500K G10q	Yes	No	IP20	RG1	-20...+65 °C	



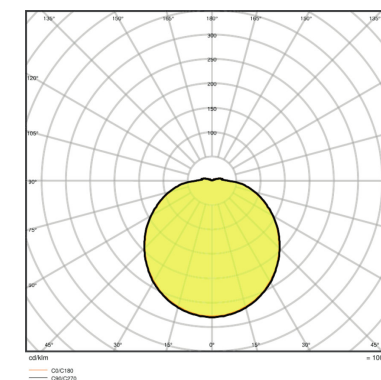
ST9-EM 22 123° 12 W/4000K G10q,
ST9-EM 22 123° 12 W/6500K G10q



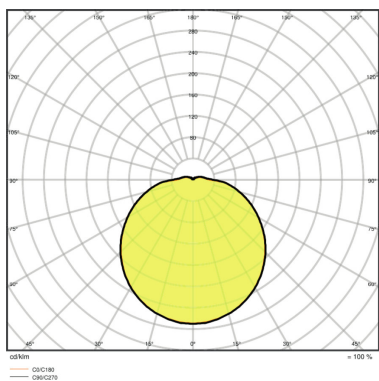
ST9-EM 32 123° 20 W/4000K G10q,
ST9-EM 32 123° 6 W/6500K G10q



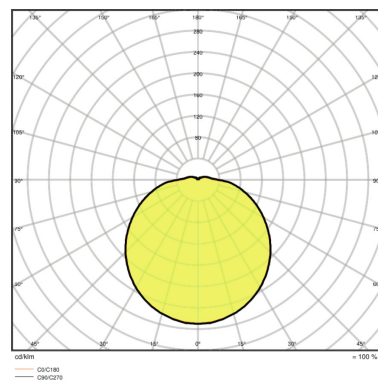
ST9-EM 22 123° 12 W/4000K G10q



ST9-EM 22 123° 12 W/6500K G10q



ST9-EM 32 123° 20 W/4000K G10q



ST9-EM 32 123° 6 W/6500K G10q

EQUIPMENT / ACCESSORIES

- Suitable for operation with low-loss and conventional control gears
- Suitable for operation with AC mains

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
4058075135451	Shipping carton box 10	385 mm x 232 mm x 237 mm	2608.00 g	21.17 dm ³
4058075135475	Shipping carton box 10	385 mm x 232 mm x 237 mm	2613.00 g	21.17 dm ³
4058075135499	Shipping carton box 10	385 mm x 325 mm x 330 mm	4192.00 g	41.29 dm ³
4058075135512	Shipping carton box 10	385 mm x 325 mm x 330 mm	4186.00 g	41.29 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/substitute

LEGAL ADVICE

When used to replace a T9 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.