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## SubstiTUBE Basic

LED tubes for electromagnetic control gears

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### Areas of application

- Cooling and storage rooms
- Corridors, stairways, parking garages
- Ideal for simple lighting tasks

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### Product benefits

- Quick, simple and safe replacement without rewiring
- Low maintenance costs thanks to long lifetime
- Energy savings of up to 65 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Maximum resistance to switching loads
- Correct operation even at low temperatures

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### Product features

- LED alternative to classic T8 fluorescent lamps in CCG luminaires
- Uniform illumination
- Wide beam angle: 160° x 120°
- Integrated ECG with high power factor
- Mercury-free and RoHS compliant
- Type of protection: IP20



# Product family datasheet

## Technical data

Product description	Electrical data				Photometrical data			Light technical data	Dimensions & weight	
	Rated luminous flux	Nominal wattage	Nominal voltage	Nominal current	Light color (designation)	Color temperature	Nominal luminous flux	Beam angle	Overall length	Tube diameter
ST8-HB2 10 W/840 600 mm	1000 lm	10.0 W	230 V	0.047 A	Cool White	4000 K	1000 lm	160 °	603.2 mm	27.5 mm
ST8-HB2 10 W/865 600 mm	1000 lm	10.0 W	230 V	0.047 A	Cool Daylight	6500 K	1000 lm	160 °	603.2 mm	27.5 mm
ST8-HB2 10 W/830 600 mm	900 lm	10.0 W	230 V	0.047 A	Warm White	3000 K	900 lm	160 °	603.2 mm	27.5 mm
ST8-HB4 21 W/840 1200 mm	2100 lm	21.0 W	230 V	0.094 A	Cool White	4000 K	2100 lm	150 °	1213 mm	27.5 mm
ST8-HB4 21 W/865 1200 mm	2100 lm	21.0 W	230 V	0.094 A	Cool Daylight	6500 K	2100 lm	150 °	1213 mm	27.5 mm
ST8-HB5 24 W/830 1500 mm	2160 lm	24.0 W	230 V	0.109 A	Warm White	3000 K	2160 lm	150 °	1513 mm	27.5 mm
ST8-HB4 21 W/830 1200 mm	1900 lm	21.0 W	230 V	0.094 A	Warm White	3000 K	1900 lm	150 °	1213 mm	27.5 mm
ST8-HB5 24 W/840 1500 mm	2400 lm	24.0 W	230 V	0.109 A	Cool White	4000 K	2400 lm	150 °	1513 mm	27.5 mm
ST8-HB5 24 W/865 1500 mm	2400 lm	24.0 W	230 V	24.0 A	Cool Daylight	6500 K	2400 lm	150 °	1513 mm	27.5 mm
ST8-RB2 10 W/840 600 mm Rotatable	1000 lm	10.0 W	220...240 V	0.047 A		4000 K	1000 lm		603.2 mm	
ST8-RB2 10 W/865 600 mm Rotatable	1000 lm	10.0 W	220...240 V	0.047 A		6500 K	1000 lm		603.2 mm	
ST8-RB4 21 W/840 1200 mm Rotatable	2100 lm	21.0 W	220...240 V	0.094 A		4000 K	2100 lm		1213 mm	
ST8-RB4 21 W/865 1200 mm Rotatable	2100 lm	21.0 W	220...240 V	0.094 A		6500 K	2100 lm		1213 mm	
ST8-RB5 24 W/840 1500 mm Rotatable	2400 lm	24.0 W	220...240 V	0.109 A		4000 K	2400 lm		1513 mm	
ST8-RB5 24 W/865 1500 mm Rotatable	2400 lm	24.0 W	220...240 V			6500 K	2400 lm		1513 mm	

## Product family datasheet

Product description	Base diameter	Product weight	Temperatures		Lifespan			Additional product data	
			Ambient temperature range	Temperature range in operation	Nominal lamp life time	Lumen main. fact. at end of nom. life time	Number of switching cycles	Base (standard designation)	Mercury-free
ST8-HB2 10 W/840 600 mm	27.5 mm	100.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB2 10 W/865 600 mm	27.5 mm	100.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB2 10 W/830 600 mm	27.5 mm	100.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB4 21 W/840 1200 mm	27.5 mm	260.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB4 21 W/865 1200 mm	27.5 mm	260.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB5 24 W/830 1500 mm	27.5 mm	400.00 g	-20...+45 °C	-20...75 °C	1000 h	0.70	200000	G13	Yes
ST8-HB4 21 W/830 1200 mm	27.5 mm	260.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB5 24 W/840 1500 mm	27.5 mm	400.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-HB5 24 W/865 1500 mm	27.5 mm	400.00 g	-20...+45 °C	-20...75 °C	40000 h	0.70	200000	G13	Yes
ST8-RB2 10 W/840 600 mm Rotatable		120.00 g			40000 h	0.70	200000	G13	
ST8-RB2 10 W/865 600 mm Rotatable		120.00 g			40000 h	0.70	200000	G13	
ST8-RB4 21 W/840 1200 mm Rotatable		280.00 g			40000 h	0.70	200000	G13	
ST8-RB4 21 W/865 1200 mm Rotatable		280.00 g			40000 h	0.70	200000	G13	
ST8-RB5 24 W/840 1500 mm Rotatable		335.00 g			40000 h	0.70	200000	G13	
ST8-RB5 24 W/865 1500 mm Rotatable		335.00 g			40000 h	0.70	200000	G13	

## Product family datasheet

	Capabilities	Certificates & standards	Country specific categorizations	Logistical data
Product description	Dimmable	Energy efficiency class	ILCOS	Temperature range at storage
ST8-HB2 10 W/840 600 mm	No	A+	DR-10/840-G13-27.5/590	-20...80 °C
ST8-HB2 10 W/865 600 mm	No	A+	DR-10/865-G13-26/590	-20...80 °C
ST8-HB2 10 W/830 600 mm	No	A	DR-10/830-G13-27.5/590	-20...80 °C
ST8-HB4 21 W/840 1200 mm	No	A+	DR-20/840-G13-27.5/1200	-20...80 °C
ST8-HB4 21 W/865 1200 mm	No	A+	DR-20/865-G13-26/1200	-20...80 °C
ST8-HB5 24 W/830 1500 mm	No	A	DR-24/830-G13-27.5/1500	-20...80 °C
ST8-HB4 21 W/830 1200 mm	No	A	DR-21/830-G13-27.5/590	-20...80 °C
ST8-HB5 24 W/840 1500 mm	No	A+	DR-23/840-G13-26/1500	-20...80 °C
ST8-HB5 24 W/865 1500 mm	No	A+	DR-24/865-G13-27.5/1500	-20...80 °C
ST8-RB2 10 W/840 600 mm Rotatable		A+	DR-10/840-G13-27.5/590	
ST8-RB2 10 W/865 600 mm Rotatable		A+	DR-10/865-G13-26/590	
ST8-RB4 21 W/840 1200 mm Rotatable		A+	DR-21/840-G13-27.5/1200	
ST8-RB4 21 W/865 1200 mm Rotatable		A+		
ST8-RB5 24 W/840 1500 mm Rotatable		A+	DR-24/840-G13-27.5/1500	
ST8-RB5 24 W/865 1500 mm Rotatable		A+	DR-24/865-G13-27.5/1500	

## Product family datasheet



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— ST8-HB2 10 W/840 600 mm, ST8-HB2  
10 W/865 600 mm, ST8-HB2 10  
W/830 600 mm, ST8-HB4 21 W/840  
1200 mm, ST8-HB4 21 W/865 1200  
mm, ST8-HB5 24 W/830 1500 mm,  
ST8-HB4 21 W/830 1200 mm, ST8-  
HB5 24 W/840 1500 mm, ST8-HB5 24  
W/865 1500 mm

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### Application advice

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

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### Logistical Data

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899922488	ST8-HB2 10 W/840 600 mm	Shipping carton box 25	726 mm x 191 mm x 207 mm	28.70 dm <sup>3</sup>	4462.00 g
4052899922495	ST8-HB2 10 W/865 600 mm	Shipping carton box 25	726 mm x 191 mm x 207 mm	28.70 dm <sup>3</sup>	4474.00 g
4052899922471	ST8-HB2 10 W/830 600 mm	Shipping carton box 25	726 mm x 191 mm x 207 mm	28.70 dm <sup>3</sup>	4456.00 g
4052899922518	ST8-HB4 21 W/840 1200 mm	Shipping carton box 25	1335 mm x 191 mm x 207 mm	52.78 dm <sup>3</sup>	9540.00 g
4052899922525	ST8-HB4 21 W/865 1200 mm	Shipping carton box 25	1335 mm x 191 mm x 207 mm	52.78 dm <sup>3</sup>	9623.00 g
4052899922532	ST8-HB5 24 W/830 1500 mm	Shipping carton box 25	1637 mm x 191 mm x 207 mm	64.72 dm <sup>3</sup>	13941.00 g
4052899922501	ST8-HB4 21 W/830 1200 mm	Shipping carton box 25	1335 mm x 191 mm x 207 mm	52.78 dm <sup>3</sup>	9623.00 g
4052899922549	ST8-HB5 24 W/840 1500 mm	Shipping carton box 25	1637 mm x 191 mm x 207 mm	64.72 dm <sup>3</sup>	12720.00 g
4052899922556	ST8-HB5 24 W/865 1500 mm	Shipping carton box 25	1637 mm x 191 mm x 207 mm	64.72 dm <sup>3</sup>	13941.00 g
4052899934535	ST8-RB2 10 W/840 600 mm Rotatable	Shipping carton box 25	726 mm x 191 mm x 207 mm	28.70 dm <sup>3</sup>	4919.00 g
4052899934542	ST8-RB2 10 W/865 600 mm Rotatable	Shipping carton box 25	726 mm x 191 mm x 207 mm	28.70 dm <sup>3</sup>	4927.00 g
4052899934559	ST8-RB4 21 W/840 1200 mm Rotatable	Shipping carton box 25	1335 mm x 191 mm x 207 mm	52.78 dm <sup>3</sup>	10110.00 g
4052899934566	ST8-RB4 21 W/865 1200 mm Rotatable	Shipping carton box 25	1335 mm x 191 mm x 207 mm	52.78 dm <sup>3</sup>	10110.00 g
4052899934573	ST8-RB5 24 W/840 1500 mm Rotatable	Shipping carton box 25	1637 mm x 191 mm x 207 mm	64.72 dm <sup>3</sup>	12570.00 g

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899934580	ST8-RB5 24 W/865 1500 mm Rotatable	Shipping carton box 25	1637 mm x 191 mm x 207 mm	64.72 dm <sup>3</sup>	11750.00 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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### References / Links

For current information see

▶ [www.osram.com/substitute](http://www.osram.com/substitute)

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### Disclaimer

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