



## METOLIGHT® LED-Tube – SCE-RM-160-Series

The LED tubes of the **METOLIGHT®** SCE-RM-160 series comply with the latest technical standards according to DIN EN 62776.

The LED tubes are equipped with rotatable end caps with 30° screening. The LED tubes can also be installed in display cases, shelves or luminaires with G13 sockets open to the side.

The **METOLIGHT®** LED tubes SCE-RM series are contacted unilaterally, so creep current to the other end of the tube is excluded. They can be used in any luminaire for T8 / T10 fluorescent tubes with KVG/VVG and starter without changing luminaires, it is only possible to replace starters with an LED starter (article 101495). However, it is not possible to operate luminaires with an electronic ballast.

The **METOLIGHT®** SCE-RM LED tubes can also be connected directly to the mains via the "Input" labeled side. An integrated protection circuit switches off the LED tube if it is mistakenly connected directly to the mains at the wrong end. It is not possible to operate on dimmers. The slim T8 design also at the contact ends allows the use in luminaires with T8 overlay nuts.

Compared to conventional fluorescent tubes, the **METOLIGHT®** LED tubes save approx. 80% of energy with about 10 times longer shelf life. The tubes are offered in the light colours warm white (2700-3500K), natural white (3800-4300K), pure white (4800-5200K) and cold white (5700-6300K) in the shells clear and matt and the lengths 60 / 90 / 120 / 150 cm.

### The main advantages of the **METOLIGHT®** LED tubes series SCE-R-160 at a glance:

- Replacement for T8 / T10 fluorescent tubes 60 / 90 / 120 / 150 cm degree. 18 / 30 / 36 / 58 Watt
- Each single LED tube is 100% inhouse tested at Asmetec for function and electrical safety
- LED light efficiency 160 lm/W, about 2.3 times as much as fluorescent tubes
- Suitable for T8 - IP65 sockets (the LED tube itself does not correspond to IP65)
- Up to 80% energy cost savings compared to conventional fluorescent lamps
- Replacement for fluorescent tubes without luminaire conversion at magnetic ballast
- One-sided safety contact - no risk of electric shock
- Rotating end caps with 30° grid for optimal light beam
- Double insulated, replaceable power supply, power factor > 0.95
- Average service life up to over 30,000 operating hours
- Full luminosity from the start without flickering or preheating, without 50 Hz flickering
- No stroboscopic effect, pleasantly constant light
- Brighter light, more pleasant than fluorescent tubes, excellent colour reproduction CRI > 80
- Directed light at an angle of 120° - 140°, ideal for installation in luminaires with reflector grate
- High shock and vibration resistance, largely shatterproof
- Free of UV light, only low IR light radiation - no fading of illuminated objects
- Aluminum core circuit board, thermal guide gel, aluminum carrier rohr for efficient heat management.
- Lower power consumption means lower CO<sub>2</sub> emissions - your environmental contribution
- CE, FCC and RoHS compliant, no hazardous waste, no mercury, no lead
- Energy class C

Quality inspection, measurement of phototechnical and electrical data, creation of light distribution curves according to IES is carried out in batches and on request also per customer order in our **own METOLIGHT® test laboratory** at ASMETEC in Kirchheimbolanden.

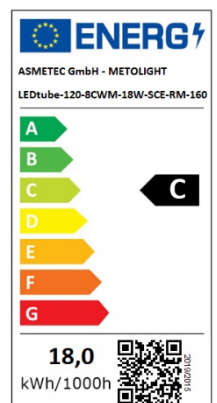
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**METOLIGHT®**  
LED-Tube-SCE-RC-160  
60 / 90 / 120 / 150 cm  
drehbar / rotatable  
160 lm/W

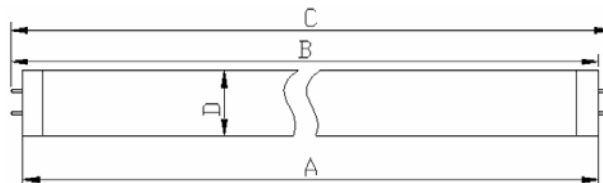



ASMETEC  
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## Technical data

Typical values, type. Tolerance 5%



	60 cm	90 cm	120 cm	150 cm	150 cm
<b>Dimensions</b>					
Length A - Body	585 mm	885 mm	1195 mm	1195 mm	1490 mm
Length B - with pin	595 mm	895 mm	1205 mm	1205 mm	1500 mm
Length C - above all	602 mm	911 mm	1211 mm	1211 mm	1510 mm
Dia. Body	26,1 mm				
Dia. Endcap	27,2 mm				
Weight	202 g	320 g	360 g	465 g	470 g
<b>Light tech. Data</b>					
Luminous flux (CW-C)*	1450 lm	1900 lm	2800 lm	4000 lm	4650 lm
Luminous flux (CW-M)	1400 lm	1800 lm	2650 lm	3800 lm	4450 lm
Number of LEDs	104	110	221	312	364
Efficiency	Up to 160 lm/Watt				
Energy class	C				
Colour fidelity	CRI > 80				
Lichtwinkel	120° - 140°				
Colours	WW (3000K), NW (4000K), DW (5000K), CW (6000)				
Type. Burning time	> 30.000 h				
Available sleeves	clear (C) , matte (M)				
<b>Electr. Data</b>					
Input	90 – 277 V AC				
Frequency	50 / 60 Hz				
Power consumption	9 W	12 W	18 W	25 W	30 W
Factor	0,95				
Frequency	50 / 60 Hz				
Schaltzyklen	> 120.000				
Dimmable?	No				
<b>Workspace</b>					
Working temperature	0 - +40°C (according to OEM UL/VDE test)				
Storage	-20 - +40°C				
Rel. Humidity	< 90 rH				
Class	IP20				
<b>Notes</b>	 <p>Use only in dry interiors            Do not operate in hermetically closed luminaires            Do not operate on dimmers            Installation only in a voltage-free state            Operate on magnetic ballast only with LED starter 101495            Not suitable for Electronic Ballast            Not resistant to alkaline cleaners            Do not use in an alkaline environment</p>				

### Note:

For each type of LED tubes, we create technical data sheets with lighting and electrical data as well as light distribution curves for use in e.g. DIALIUX for light calculation.

The above statements are based on our present knowledge. Our statements should not be interpreted as a guarantee of characteristics. The use of our products by our customers is subject to different conditions, therefore none of our customers are relieved of the responsibility of testing our products by themselves. A liability for consequential damage will not be accepted in any case. For damage resulting from the use of this information we can only be held responsible if there is evidence of malice or negligence on our part. This data-sheet replaces any previous data sheets.

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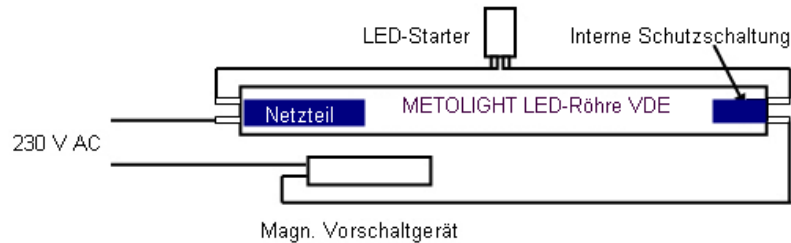
LED-TUBE-SCE-160-DB-E.DOCX, VERSION JUL-21

# Installation Instructions in luminaires with magnetic ballast

1. Power off luminaire and mains
2. Remove fluorescent tube
3. Remove fluorescent tube starters
4. Insert Astemec LED starter
5. Insert **METOLIGHT®** LED tube Type UL, VDE or SCE (installation direction does not matter) (pull out and rotate the end caps if necessary, then reinsert LED tube)
6. Power on mains and luminaire



Schematic for luminaires with KVG (conventional ballast)

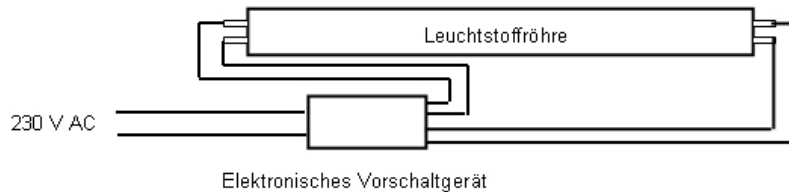


# Installation instructions for luminaires with Electronic ballast (without starter)

Luminaires with electronic ballast (EVG) must be rewired by an electrician when using **METOLIGHT®** UL, VDE or SCE series LED tubes. Converted luminaires must be marked! However, the VDE does not recommend a luminaire conversion.

This is the usual switching of fluorescent tubes on electronic ballast:

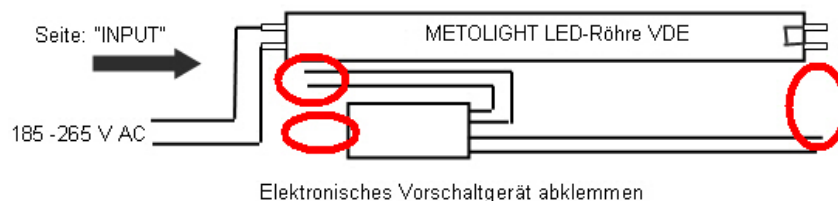
4 cables at the output of the electronic ballast, 2 each are connected to the two contacts in a G13 socket



In order to use such luminaires with **METOLIGHT®** UL, VDE or SCE series LED tubes, the electronic ballast must be completely disconnected. A single-pole connection must be established between the two G13 sockets..



Optionally, you can also connect the LED tubes directly to the side labeled "INPUT".



**Note:** When you convert a luminaire, it loses existing type applications. You are personally responsible for any consequences and are considered to be the manufacturer of the luminaire. For luminaires with electronic ballast you can also use our **METOLIGHT®** TRF series LED tubes, which work on most brand EDGs, so the luminaires do not need to be converted.

Each converted lamp must be in place to demonstrate that the lamp is safe. It is recommended that DIN VDE 0701-0702 "Testing after repair, modification of electrical equipment — Retesting of electrical equipment — General requirements for electrical safety" be applied. The converted lamp must be fitted with a new type plate.

