

## LED tubes



LR12830M-18W, LR12840M-18W,  
LR12850M-18W

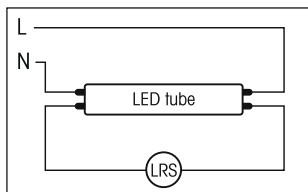
LED tubes 1200 mm long, diameter 30 mm, power consumption 18 Watt, color rendering index Ra  $\geq 80$ , color temperatures 3000K, 4000K or 5000K.

Socket G13, beam angle 120°, frosted plastic cover.

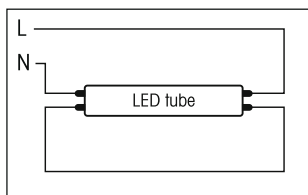
LED tubes are an energy saving alternative to the classic fluorescent tubes with a much softer illumination. No flickering when switching-on, no flickering in operation, no UV radiation, no IR radiation, no big change in color and no black ends due to aging.

LED tubes do not contain mercury and thus are no hazardous waste after up to 50.000 operating hours, but recyclable electronic scrap.

### Wiring diagram of a single lamp



with starter bridge LRS (KVG\*/VVG\*)



without starter bridge (EVG\*)

### Installation advice for lights with conventional electromagnetic ballast KVG or VVG

1. Switch-off supply voltage.
2. Remove fluorescent tubes and starter.
3. Remove and bridge the ballast of one **single light** to save its power loss. Also remove or bridge the condenser **on a DUO circuit**.  
Wire every single light according to the wiring diagram **at different circuits**. The lamps can only be connected in parallel.
4. Insert the LED tubes starter bridge LRS at a single light or DUO circuit without rewiring and lock it clockwise.

5. Connect the LED tube(s) so that the plastic cover points towards the illumination direction after snapping, if necessary with a quarter-turn.
6. Switch on the supply voltage.

### Installation advice for lights with electronic ballast EVG

1. Switch off the supply voltage.
2. Remove the fluorescent tubes.
3. Remove the old wiring and the EVG.
4. Newly wire every single light after the wiring diagram. The lamps can only be connected in parallel.
5. Connect the LED tube(s) so that the plastic cover points towards the illumination direction after snapping, if necessary with a quarter-turn.
6. Switch on the supply voltage.

### Technical data

length	1200mm
diameter	30mm
socket	G13
weight	340g
LED type	SMD3528
amount of LEDs	320
lifespan	50.000
voltage range	88-264V, 50-60Hz
power consumption	18W
ambient temperature max./min.	+50°C/-20°C
humidity	0-95%
color temperatures	3000K Warm white 4000K Cool white 5000K Daylight
color rendering index Ra	$\geq 80$
luminous flux $\pm 10\%$	1700/1800/1900lm
beam angle	120°
cover (plastic)	matf
backside	Al

\* KVG = conventional ballast units;  
VVG = low loss ballast gear;  
EVG = electronic ballast units;

## Attention!

**The lights wiring can only be changed by an electrician, otherwise there is a risk of fire or danger of electric shock!**