

# LED TUBE

RL LED TUBE: THE NEW GENERATION OF ENERGY SAVING TUBE LIGHTING



# TUBE 60CM 7W

## RL LED TUBE SINGLE INPUT: SEVENTH GENERATION OF REFLEXION LED TUBES

The LED technology is integrated into our tubes.

Our design creates a perfect uniformity so as not to distinguish it from traditional neon lighting (with *milky* cover).

## TUBI A LED RL: SETTIMA GENERAZIONE DEI TUBI LED REFLEXION

Nei nostri tubi la tecnologia a LED è integrata.

Il loro design crea un'uniformità perfetta tanto da non poter distinguerlo dal tradizionale tubo a neon (con la copertura *milky*).

## LED RÖHRE RL: DIE SIEBTE GENERATION VON REFLEXION LED-RÖHRCHEN

In unseren Röhren ist die LED-Technologie integriert.

Unser Design schafft eine perfekte Gleichförmigkeit und es unterscheidet sich nicht von den herkömmlichen Neonröhren (mit milchiger Abdeckung).



### TECHNICAL DATA

ARTICLE NUMBER	100101M	100102M	100103M
NAME OF PRODUCT	LED TUBE 60 CM SINGLE INPUT		
INNER CARTON	5	5	5
MASTER CARTON	25	25	25
WEIGHT SINGLE PIECE	0,178 Kg	0,178 Kg	0,178 Kg

### GENERAL CHARACTERISTICS

MAIN APPLICATION	Commercial lighting	Commercial lighting	Commercial lighting
NOMINAL LIFETIME	> 50.000 hours	> 50.000 hours	> 50.000 hours
SOURCE (LED TYPE)	SMD 2835	SMD 2835	SMD 2835
IP RATE	IP 20	IP 20	IP 20

### LIGHTING DATA

COLOR TEMPERATURE	3.000K ±300	4.000K ±300	6.000K ±300
CRI	>85	>85	>85
LUMINOUS FLUX	>940 Lm	> 980 Lm	> 1020 Lm
LLMF (LUMEN MAINTENANCE)	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs
RATED BEAM ANGLE	> 160°	> 160°	> 160°

### ELECTRICAL DATA

SYSTEM POWER	7W	7W	7W
START TIME (SECOND)	< 0,5 S	< 0,5 S	< 0,5 S
WARM-UP TIME TO 60% LIGHT OUTPUT	INSTANT FULL LIGHT	INSTANT FULL LIGHT	INSTANT FULL LIGHT
INPUT VOLTAGE	AC 180-265V	AC 180-265V	AC 180-265V
FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
OUTPUT VOLTAGE	112 V	112 V	112 V
OUTPUT CURRENT	58 mA	58 mA	58 mA
POWER FACTOR	> 90	> 90	> 90
DIMMABLE	NO	NO	NO
ENERGY SAVING	A+	A+	A+
WORKING TEMPERATURE	-20°/45°C	-20°/45°C	-20°/45°C
HUMIDITY	< 85%	< 85%	< 85%

### DIMENSION

LENGTH	600 mm	600 mm	600 mm
DIAMETER	26 mm	26 mm	26 mm

### APPROVAL & APPLICATIONS CHARS

VDE MARKING	IN PROCESS	IN PROCESS	IN PROCESS
CE MARKING	YES	YES	YES
UL MARKING	IN PROCESS	IN PROCESS	IN PROCESS
ROHS COMPLIANCE	YES	YES	YES

# TUBE 120 18W

## RL LED TUBE SINGLE INPUT: SEVENTH GENERATION OF REFLEXION LED TUBES

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## TUBI A LED RL: SETTIMA GENERAZIONE DEI TUBI LED REFLEXION

Nei nostri tubi la tecnologia a LED è integrata. Il loro design crea un'uniformità perfetta tanto da non poter distinguerlo dal tradizionale tubo a neon (con la copertura *milky*).

## LED RÖHRE RL: DIE SIEBTE GENERATION VON REFLEXION LED-RÖHRCHEN

In unseren Röhren ist die LED-Technologie integriert. Unser Design schafft eine perfekte Gleichförmigkeit und es unterscheidet sich nicht von den herkömmlichen Neonröhren (mit milchiger Abdeckung).



### TECHNICAL DATA

ARTICLE NUMBER	100107M	100108M	100109M
NAME OF PRODUCT	LED TUBE 120 CM SINGLE INPUT		
INNER CARTON	5	5	5
MASTER CARTON	25	25	25
WEIGHT SINGLE PIECE	0,335 Kg	0,335 Kg	0,335 Kg

### GENERAL CARACHTERISTICS

MAIN APPLICATION	Commercial lighting	Commercial lighting	Commercial lighting
NOMINAL LIFETIME	> 50.000 hours	> 50.000 hours	> 50.000 hours
SOURCE (LED TYPE)	SMD 2835	SMD 2835	SMD 2835
IP RATE	IP 20	IP 20	IP 20

### LIGHTING DATA

COLOR TEMPERATURE	3.000K ±300	4.000K ±300	6.000K ±300
CRI	>85	>85	>85
LUMINOUS FLUX	>2.300 Lm	> 2.380 Lm	> 2.460 Lm
LLMF (LUMEN MAINTENANCE)	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs
RATED BEAM ANGLE	> 160°	> 160°	> 160°

### ELECTRICAL DATA

SYSTEM POWER	18W	18W	18W
START TIME (SECOND)	< 0,5 S	< 0,5 S	< 0,5 S
WARM-UP TIME TO 60% LIGHT OUTPUT	INSTANT FULL LIGHT	INSTANT FULL LIGHT	INSTANT FULL LIGHT
INPUT VOLTAGE	AC 180-265V	AC 180-265V	AC 180-265V
FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
OUTPUT VOLTAGE	110 V	110 V	110 V
OUTPUT CURRENT	159 mA	159 mA	159 mA
POWER FACTOR	> 90	> 90	> 90
DIMMABLE	NO	NO	NO
ENERGY SAVING	YES	YES	YES
WORKING TEMPERATURE	-20°/45°C	-20°/45°C	-20°/45°C
HUMIDITY	< 85%	< 85%	< 85%

### DIMENSION

LENGHT	1.200 mm	1.200 mm	1.200 mm
DIAMETER	26 mm	26 mm	26 mm

### APPROVAL & APPLICATIONS CHARS

VDE MARKING	IN PROCESS	IN PROCESS	IN PROCESS
CE MARKING	YES	YES	YES
UL MARKING	IN PROCESS	IN PROCESS	IN PROCESS
ROHS COMPLIANCE	YES	YES	YES

# TUBE 150CM 23W

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## TUBI A LED RL: SETTIMA GENERAZIONE DEI TUBI LED REFLEXION

Nei nostri tubi la tecnologia a LED è integrata.

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## LED RÖHRE RL: DIE SIEBTE GENERATION VON REFLEXION LED-RÖHRCHEN

In unseren Röhren ist die LED-Technologie integriert.

Unser Design schafft eine perfekte Gleichförmigkeit und es unterscheidet sich nicht von den herkömmlichen Neonröhren (mit milchiger Abdeckung).



### TECHNICAL DATA

ARTICLE NUMBER	100110M	100111M	100112M
NAME OF PRODUCT	LED TUBE 150 CM SINGLE INPUT		
INNER CARTON	5	5	5
MASTER CARTON	25	25	25
WEIGHT SINGLE PIECE	0,408 Kg	0,408 Kg	0,408 Kg

### GENERAL CHARACTERISTICS

MAIN APPLICATION	Commercial lighting	Commercial lighting	Commercial lighting
NOMINAL LIFETIME	> 50.000 hours	> 50.000 hours	> 50.000 hours
SOURCE (LED TYPE)	SMD 2835	SMD 2835	SMD 2835
IP RATE	IP 20	IP 20	IP 20

### LIGHTING DATA

COLOR TEMPERATURE	3.000K ±300	4.000K ±300	6.000K ±300
CRI	>85	>85	>85
LUMINOUS FLUX	>2.976 Lm	> 3.080 Lm	> 3.183 Lm
LLMF (LUMEN MAINTENANCE)	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs	80% AFTER 25.000 hrs
RATED BEAM ANGLE	> 160°	> 160°	> 160°

### ELECTRICAL DATA

SYSTEM POWER	23W	23W	23W
START TIME (SECOND)	< 0,5 S	< 0,5 S	< 0,5 S
WARM-UP TIME TO 60% LIGHT OUTPUT	INSTANT FULL LIGHT	INSTANT FULL LIGHT	INSTANT FULL LIGHT
INPUT VOLTAGE	AC 180-265V	AC 180-265V	AC 180-265V
FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
OUTPUT VOLTAGE	114V	114 V	114 V
OUTPUT CURRENT	210 mA	210 mA	210 mA
POWER FACTOR	> 0,95	> 0,95	> 0,95
DIMMABLE	NO	NO	NO
ENERGY SAVING	YES	YES	YES
WORKING TEMPERATURE	-20°/45°C	-20°/45°C	-20°/45°C
HUMIDITY	< 85%	< 85%	< 85%

### DIMENSION

LENGTH	1.500 mm	1.500 mm	1.500 mm
DIAMETER	26 mm	26 mm	26 mm

### APPROVAL & APPLICATIONS CHARS

VDE MARKING	IN PROCESS	IN PROCESS	IN PROCESS
CE MARKING	YES	YES	YES
UL MARKING	IN PROCESS	IN PROCESS	IN PROCESS
ROHS COMPLIANCE	YES	YES	YES

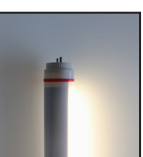


**ALL PLASTIC PIPE**

All plastic pipe, more secure.  
High transmittance, greater than 90



>130 lumen/watt  
Beam angle over 160°  
lightly milky cover



**THE LIGHT IS UNIFORM AND SOFT**

High CRI: Ra>85, Restore the true color of objects  
No glare, protect the eyes

**HIGH QUALITY POWER SUPPLY**

PF > 0,90  
Starting time <0,5s  
Power efficiency >92%  
Power Supply replacing is easy



High quality  
heat dissipation  
aluminum good

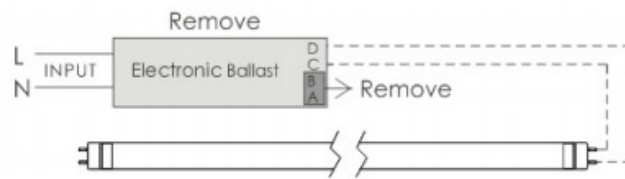


Thickened tubular packaging  
Copper needle protection

# TUBE

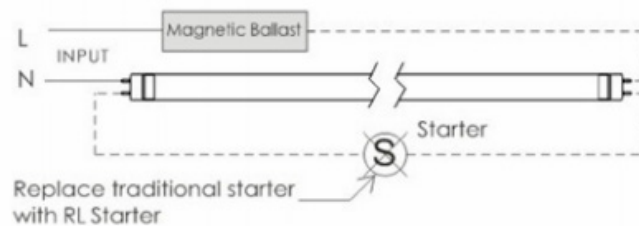
## METHOD ONE: REPLACE THE ELECTRONIC BALLAST

## INSTALLATION GUIDE



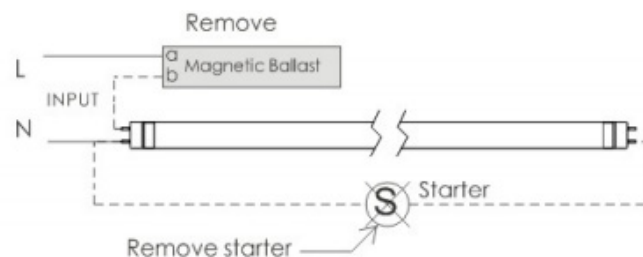
1. BEFORE INSTALLATION CUT OFF POWER SUPPLY
2. REMOVE THE ELECTRONIC BALLAST
3. REMOVE A.B. TERMINAL LINE
4. CONNECT C TO TUBE'S N CONNECTOR. CONNECT D TO TUBE'S L CONNECTOR
5. CONNECT THE LAMP-SOCKET (C AND D) TO POWER SUPPLY'S L AND N CONNECTOR

## METHOD TWO: REPLACE INDUCTIVE TRADITIONAL FLUORESCENT LAMP SCHEME



1. BEFORE INSTALLATION CUT OFF POWER SUPPLY
2. REPLACE TRADITIONAL STARTER WITH RL STARTER RL001
3. REMOVE TRADITIONAL FLUORESCENT LAMP, REPLACE WITH LED LAMP.

## METHOD THREE: THE MOST ENERGY-EFFICIENT METHOD



1. BEFORE INSTALLATION CUT OFF POWER SUPPLY
2. REMOVE STARTER
3. REMOVE BALLAST, CONNECT POWER SUPPLY INPUT L AND N TO TUBE'S L AND N. (SEE ILLUSTRATION)

**IMPORTANT: TAKE ALWAYS CARE TO REMOVE THE CONDENSATOR OF OLD FIXTURE IF IT IS PRESENT**