

LUMINAIRES FOR MOIST/HUMID ENVIRONMENTS

Overview







PLANOX TUBE page 11



PLANOX TUBE FARM page 13



Tube luminaires

A rounded affair

PLANOX TUBE stands for high-quality replaceable components, quick and easy installation as well as adjustable beam angle. The attractive weatherproof LED luminaire with a round housing for wall, ceiling and pendant mounting is ideally suited to both industrial and architectural environments.

With a twinkle in its eye the PLANOX TUBE FARM could be described as the "Wild West version" of our well-known weatherproof luminaire. Their ammonia and dust resistant PMMA housing makes it almost indestructible and therefore an unrestricted and DLG-tested recommendation for permanent use in stables.

Architecture

- Robust: IP67 / IK08 High protection classes for tough requirements.
- Combinable: Also available as an emergency luminaire in accordance with EN 60598-2-22.
- Sustainable: No disposable luminaire. Environmentally and resource-friendly thanks to replaceable components.
- Certified: Qualified for use in the food and drink industry.
- ⊕ Safe: Luminaires with limited surface temperature in accordance with EN 60598-2-24.
- (+) Versatile: Ammonia-resistant version DLG approved.

Lighting design

- Powerful: High luminous flux up to 10000 lm.
- fficient: Good luminous efficiency of up to 162 lm/W.
- ← Long service life: Extended rated LED life 72000 h (L80).
- Flexible: Beam angle can be adjusted by turning the luminaire within the mounting brackets.
- Heliable planning: Suitable for lighting in public car parks and public off-street parking spaces according to EN-67528.

Installation

- Easy installation: No need to open the luminaire for electrical connection thanks to Plug & Play connection system Wieland RST® CLASSIC.
- Standard: Versions with through wiring.
- Versatile: Surface and pendant mounting.
- Flexible: Variable installation thanks to customisable positioning of retaining clips along the length of the luminaire.
- Connected: Versions with Casambi smart+free Bluetooth® control system for wireless network.























Technology





Certified by DLG. This luminaire is resistant to ammonia and is suitable for high pressure cleaning with a min. distance of 5 cm. Therefore ideally useable in barns with livestock and agricultural side areas.



Qualified for use in the food and drink industry.



Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.



Diffuser and end caps made of shockproof plastic.

Homogeneous light distribution thanks to opal diffuser.

My strengths in detail





The diffuser and end caps made of impact-resistant plastic make the luminaire a genuine all-rounder in tough environments. With protective class IP67 and impact resistance IK08 it is perfectly equipped to cope with extreme conditions.



Disposable? Not with me!

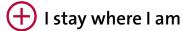
Thanks to the removable and replaceable rack with LED board and driver, every component of the luminaire can be changed or replaced individually. It is not only easy on the budget, but also on our environment and resources.



I shine light wherever you want

The beam angle can easily be changed and adusted at any time by simply turning the luminaire within the retaining clips.





The specially developed retaining brackets can also be used at any time for anti-theft protection. So the luminaire will remain securely in its place.



(+) One after another

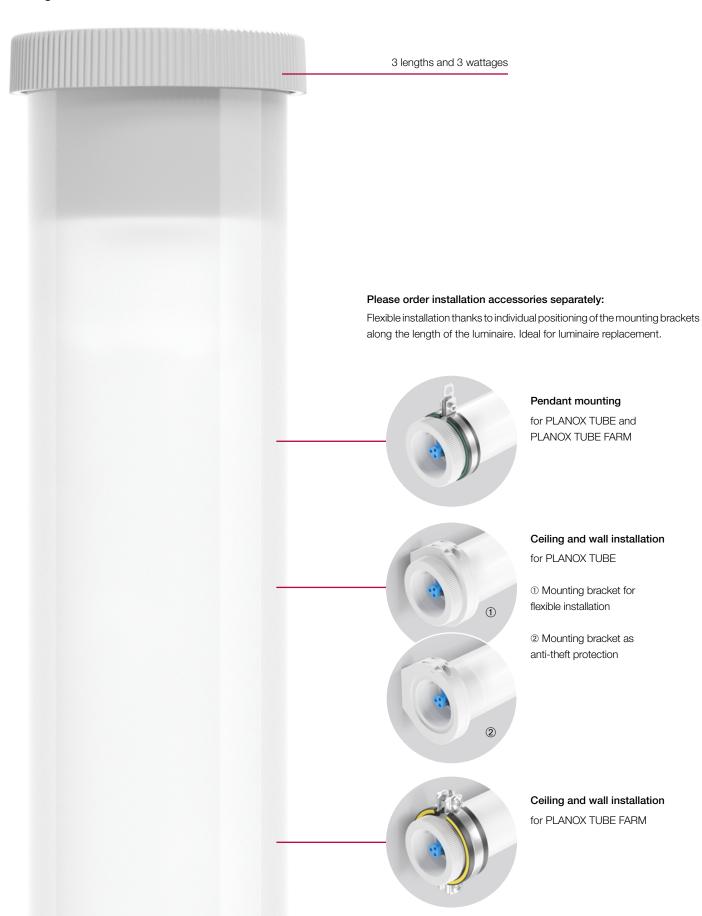
With the variants with pre-installed RST® CLASSIC plug/socket through-wiring, more than one luminaire can be combined and connected quickly and easily. Simply plug in and done!

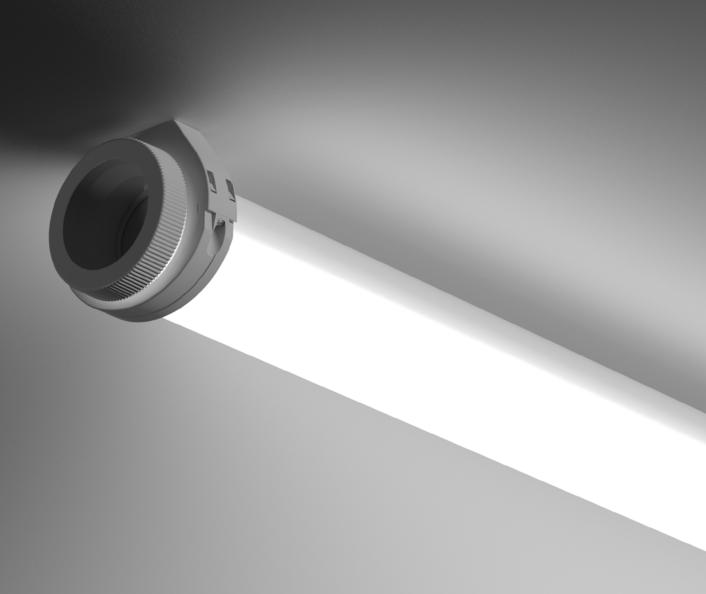


Durable most certainly

Whether humidity, extreme temperatures, dust, salts, acids or vapours, these exceptionally high stresses are no problem for the ammonia-resistant FARM version of the series. The luminaire was developed especially for these enormously high requirements and the DLG test mark makes the luminaire a safe recommendation for permanent use in barns with livestock and in agricultural side areas.

At a glance





Photometrics

- ⊕ Luminous efficiency up to 162 lm/W
- ⊕ Luminaire flux up to 10000 lm
- ⊕ Colour temperature 4000 K
- ⊕ Colour rendering index Ra > 80
- Symmetrical light distribution
- ⊕ LED rated life 72000 h (L80)
- ① Colour tolerance 3-steps MacAdam (3 SDCM)
- ① 1:1 substitute for fluorescent lamps

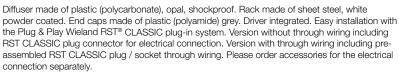




Product overview

Tube luminaire | Planox Tube

Type of protection: IP 67 Protection class: I Impact protection: IK08



Mounting set must be ordered separately.

 $\ensuremath{\mathbb{V}}$ Luminaires with limited surface temperature in accordance with EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

Available colour: 2 = white

Versions with Casambi smart+free Bluetooth® control for wireless management and operation using Android / iOS devices, free app available for download.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [Im]	System power [W]	Lumious- efficiency [lm/W]	dimm- able
Tube luminaires							Price Category 11
without through wiri	ng						
601070.002	D 78, L 772	LED	840	3500	31	113	on/off
601070.002.730	D 78, L 772	LED	840	3500	31	113	smart+free
601070.002.76	D 78, L 772	LED	840	3500	31	113	DALI
601071.002	D 78, L 1280	LED	840	5350	39	138	on/off
601071.002.730	D 78, L 1280	LED	840	5350	39	138	smart+free
601071.002.76	D 78, L 1280	LED	840	5350	39	138	DALI
601072.002	D 78, L 1568	LED	840	8650	62	140	on/off
601072.002.730	D 78, L 1568	LED	840	8650	62	140	smart+free
601072.002.76	D 78, L 1568	LED	840	8650	62	140	DALI
with through wiring							
601070.002.1	D 78, L 772	LED	840	3500	31	113	on/off
601070.002.1.730	D 78, L 772	LED	840	3500	31	113	smart+free
601070.002.1.76	D 78, L 772	LED	840	3500	31	113	DALI
601071.002.1	D 78, L 1280	LED	840	5350	39	138	on/off
601071.002.1.730	D 78, L 1280	LED	840	5350	39	138	smart+free
601071.002.1.76	D 78, L 1280	LED	840	5350	39	138	DALI
601072.002.1	D 78, L 1568	LED	840	8650	62	140	on/off
601072.002.1.730	D 78, L 1568	LED	840	8650	62	140	smart+free
601072.002.1.76	D 78, L 1568	LED	840	8650	62	140	DALI

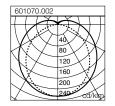
Wall or ceiling inst	tallation		Price Category 11
982117.009	L 98, B 21, H 93	Mounting bracket plastic (set 2 pieces)	

Pendant mounting		Price Category 11
982118.000	L 75, B 28, H 113	Mounting brackets with hanger assembly made of stainless steel (set 2 pieces)

Accessories for	Price Category 11		
982764.006	L 79, B 35, H 35	Connector, 3 pole, with plug and socket	
982765.006	L 82, B 35, H 35	Socket for feed-in	
982766.003	D 23. H 29	End cap	

Accessories for the electrical connection of DALI luminaires with through wiring			Price Category 11
982713.006	L 81, B 35, H 35	Connector, 5 pole, with plug and socket	
982714.006	L 81, B 35, H 35	Socket for feed-in	
982715.003	D 30, H 32	End cap	

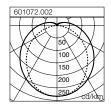
601070	601070.002			
Floor 12	x 2.5 x 3 m	(0.2 m)		
100 lx	150 lx	200 lx		
3	4	5		
Room 6	Room 6 x 4 x 3 m (0.75 m)			
200 lx	300 lx	500 lx		
3	5	8		



601071.002				
Floor 12 x 2.5 x 3 m (0.2 m)				
100 lx	150 lx	200 lx		
2	2	3		
Room 6 x 4 x 3 m (0.75 m)				
200 lx	300 lx	500 lx		
2	3	5		
	Floor 12: 100 lx 2 Room 6 x 200 lx	Floor 12 x 2.5 x 3 m 100 lx 150 lx 2 2 Room 6 x 4 x 3 m (0 200 lx 300 lx		



601072.0	002			
Floor 12	Floor 12 x 2.5 x 3 m (0.2 m)			
100 lx	150 lx	200 lx		
1	2	2		
Room 6 x 4 x 3 m (0.75 m)				
Room 6 x	4 x 3 m (0).75 m)		
200 lx	300 lx	500 lx		







Comparison LED vs. conventional lamps

LED 31 W ≈

1 x 58 W T26 (67 W Psys)

LED 39 W ≈

2 x 58 W T26 (134 W Psys)

LED 62 W ≈

3 x 58 W T26 (201 W Psys)





PLANOX TUBE FARM

Product overview

Tube luminaire | Planox Tube Farm

Type of protection: **IP 67**Protection class: I
Impact protection: IK08

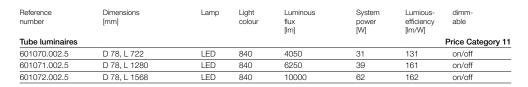
Diffuser made of UV-resistant plastic (PMMA), opal. Rack made of sheet steel, white powder coated. End caps made of plastic (polyamide) grey. Driver integrated. Easy installation with the Plug & Play Wieland RST® CLASSIC plug-in system.

Mounting set must be ordered separately.

 $\ensuremath{\mathbb{V}}$ Luminaires with limited surface temperature in accordance with DIN EN 60598-2-24 for use in environments in which a deposit of conductive dust on the luminaire can be expected.

Ammonia resistant: Suitable for the use in stables with livestock and agricultural side areas.

Available colour: 2 = white



Wall or ceiling in:	stallation	Price Category 11
982118.010	L 125, B 28, H 175	Mounting brackets made of stainless steel with hanger bolts (set 2 pieces)

Pendant mounting		Price Category 11
982118.000	L 75, B 28, H 113	Mounting brackets with hanger assembly made of stainless steel (set 2 pieces)





Comparison LED vs. conventional lamps

LED 31 W ≈

2 x 36 W T26 (86 W Psys)

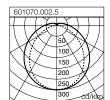
LED 39 W ≈

2 x 58 W T26 (134 W Psys)

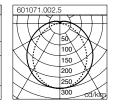
LED 62 W ≈

3 x 58 W T26 (201 W Psys)

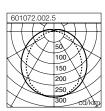
601070.002.5			
Floor 12 x 2.5 x 3 m (0.2 m)			
100 lx	150 lx	200 lx	
2	3	4	
Room 6 x 4 x 3 m (0.75 m)			
200 lx	300 lx	500 lx	
3	1	7	



601071.002.5				
Floor 12 x 2.5 x 3 m (0.2 m)				
x				
Room 6 x 4 x 3 m (0.75 m)				
x				
,				



601072.002.5					
Floor 12 x 2.5 x 3 m (0.2 m)					
100 lx	150 lx	200 lx			
1	1	2			
Room 6 x 4 x 3 m (0.75 m)					
200 lx	300 lx	500 lx			
1	2	3			



LIGHT MANAGEMENT SYSTEMS

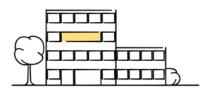
Overview

Casambi എ

free

light control +3 Economy Multi DALI

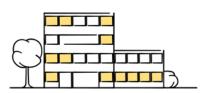
The unbeatable price/performance winner for smaller installations. The system combines simple commissioning via smartphone, low wiring effort and flexible configuration and is therefore ideal for **group offices**, **conference rooms and classrooms**. Programmable buttons and sensors can also be integrated via DALI connections in order to achieve even greater energy savings. The system has an integrated timer and can therefore be used to set up HCL.



Casambi smart+free

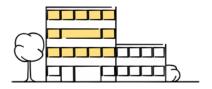
The wireless light management system for maximum functions and configuration options. Casambi smart+free solutions are perfect for **residential**

buildings, shop und hotel, as 3-wire cabling is enough - also suitable as a module for subsequent installation into existing luminaires. The module is already integrated into luminaires with the article number ending .730. You can configure the system to your individual needs due to the wide range of accessories from the Casambi ecosystem. The integration here is very intuitive and can be completed by users without prior knowledge in just a few minutes.



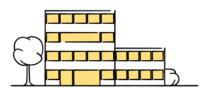
light control +3 Professional Control

The system is suitable for complex applications in warehouses, room and floor control and production areas; daylight dependant control, dynamic light control to circadian daylight simulation in Human Centric Lighting (HCL) and monitoring of energy data. In addition, the systems can be networked to make luminaire data available to other systems. light control+³ Professional is the perfect entry level lighting system for the loT world.



light control +3 Professional Customised

Lighting management can integrate with your building management system in office buildings, production halls and terminals. In this way, you can combine trades such as heating, sanitation, ventilation, security and blinds with lighting in one control system and even add additional functions such as monitoring, predictive maintenance and energy reporting if desired. Other additional functions can be programmed and integrated as per your individual requirements. Our support team would be happy to help in this regard, from planning up to commissioning.



You still haven't found the right system for you?

Along with the systems shown here, we would also be happy to create a customised control system for your project. Please contact your designated on-site sales employee or contact our Planning department via e-mail at Ims@rzb-leuchten.de or by phone at +49 951/79 09-396.

	light control +³ Economy Multi DALI	Casambi smart+free	light control +3 Professional Control	light control +3 Professional Customised
	Economy Multi DALI	smart+ free	Professional Control	Professional Customised
Application	Group offices Conference rooms Classrooms	Residential buildings Shop Hotel	Warehouses Floor control Production areas	Office buildings Production halls Terminals
Integration of indoor/outdoor lighting	✓	✓	✓	✓
Can be combined with	smart + free		smart+ free	smart+ free
Communication	wired	wireless	wired	wired + wireless
Infrastructure requirements	L, N, PE, DA, DA (5 wires cable)	L, N, PE (3 wires cable)	L, N, PE, DA, DA (5 wires cable)	L, N, PE, DA, DA (5 wires cable)
Commissioning	by electrician	by electrician	RZB service technician	RZB service technician
Configuration	App, Plug&Play	App, Remote access	PC-Tool, Remote access	RZB service technician
Operation	Switches, Buttons, App	Switches, Buttons, App	Switches, Buttons, App, Web access	Switches, Buttons, PC, Web access
Number of luminaires (1 EB) (Number of luminaires depends on on the number of EB in the luminaire)	32	1	256	any
Number of sensors (presence, motion)	4	1 per module	50	any
Dimmable	✓	✓	✓	✓
Motion/presence detection	✓	✓	✓	✓
Daylight-dependent control	✓	✓	✓	✓
Scenes/Groups	✓	✓	✓	✓
Timer/Calendar functions	✓	✓	✓	✓
HCL / Tunable White	✓	✓	✓	✓
RGB		✓	✓	✓
Network integration		✓	✓	✓
Remote access: programming, operation, maintenance		✓	✓	✓
IoT ready		✓	✓	✓
Predictive maintenance, monitoring, read out luminaire data			✓	✓
Beacon for indoor navigation, tracking, asset management		✓		✓
Integration of additional sensors (CO ₂ , temperature, gas)				✓
Integration of other trades (heating, air conditioning, security)				✓
Order number with extension	.76 (DALI)	.76 (DALI) .730 (smart+free)	.76 (DALI)	.76 (DALI)



Discover the possibilities...

MORE LUMINAIRES OF THIS PRODUCT FAMILY:







Planox

Planox PRO

Planox ECO

HIGHEST PRODUCT AND CONSULTING QUALITY

RELIABILITY

We are your reliable partner. From the first idea to the implementation and far beyond, we accompany your project. Personal, passionate and individual. Thanks to our excellent expertise, top product quality and services such as lighting design, economic efficiency analysis and commissioning, we meet the high demands of all parties involved in the planning process.

- ✓ availability of BIM files
- ✓ easy and quick installation
- ✓ quality and long warranty

WARRANTY

The creation of high quality lighting solutions is our passion. Our products are developed and manufactured with the utmost care.

In addition to SMART TECHNOLOGY and EXCELLENT DESIGN, we are dedicated to manufacture luminaires of highest quality throughout the entire value chain through to After Sales Service.

Because of this, we confidently grant you a 5 years warranty on LED luminaires and 2 years warranty on emergency luminaires with effect of the date of invoice without prior registration of your project.

Warranty terms to be found under

rzb.de/en/service/led-luminaire-warranty

RZB - FOR A TANGIBLE ADDED VALUE.





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