

# UPDATE: Emergency lighting

# PLANOX ECO

LUMINAIRES FOR MOIST/HUMID ENVIRONMENTS



Overview



Luminaires for moist/humid environments





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NH3

Combined luminaires for escape route illumination



PLANOX page 15



Luminaires for moist/humid environments

## Yes. Different from the rest...

Even more energy efficient, even more durable and even smarter: After the latest technical relaunch, PLANOX ECO is once again justifiably being referred to as the "most innovative moisture-proof luminaire of its kind". The best of all the clever improvements now is undoubtedly the MultiLumen function – the combination of several wattage levels in one single luminaire body: there could hardly be a more appropriate and more efficient solution.

The "FARM" version of the PLANOX ECO has also been designed down to the smallest detail for installation-friendly, low-maintenance and high-performance use in harsh environments. At the same time, it is suitable as a highly economical lighting solution for production facilities with high levels of dust and ammonia – complete with German Agricultural Society (DLG) approval.

## Architecture

- + Protected: IP66 High type of protection for tough requirements.
- Robust: IK08 Versions with diffuser made of shockproof polycarbonate.
- Hereatile: Ammonia-resistant version DLG approved.
- + Tested: Qualified for use in the food and drink industry.
- Generative Safe: Luminaire with limited surface temperature in accordance with EN 60598-2-24.
- ← Combinable: Also available as an emergency luminaire in accordance with EN IEC 60598-2-22.

## Lighting design

- + Powerful: High luminous flux up to 9000 lm.
- HultiLumen: Several steps adjustable luminous flux.
- ← Uniform: The diffuser with inner prisms guarantees homogenous light distribution.
- Dynamic: Versions with infrared movement sensor.
- Reliable planning: Suitable for lighting in public car parks and public off-street parking spaces according to EN-67528.

## Installation

- Easy installation: Tool-free opening and closing with twist lock.
- General Standard: Through-wiring for additional luminaires.
- + Versatile: Surface and pendant mounting.
- Flexible: Sliding mounting brackets. Ideal for luminaire replacement.
- Horizonte Cable entries at both ends.



# PLANOX ECO | PLANOX ECO FARM

## Technology





PLANOX ECO: Versions with infrared movement sensor: adjustable time delay of 10 s to 20 min and response brightness of 0 to 90 lux.

Can be opened and closed without tools using a turn lock fastener.

Cable screw fitting as standard.

#### MultiLumen:

The user can choose from several different luminous flux levels.

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- 2 levels (L=Low/H=High) - 3 levels (L=Low/M=Middle/H=High)



The initial setting is "H" (high lumen).



MultiLumer

IK08

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PLANOX ECO: Diffuser and end caps made of shockproof polycarbonate.



The sensitivity and time regulation can simply be adjusted with movement sensor model.

Master-Slave operation possible.



Also available as an emergency luminaire in accordance with EN IEC 60598-2-22.



Qualified for use in the food and drink industry.

PLANOX ECO FARM

Certified by DLG. This luminaire is resistant to ammonia and is suitable for high pressure cleaning with a min. distance of 10 cm.

Therefore ideally useable in livestock housing and agricultural buildings.

Diffuser and end caps made of ammonia resistant PMMA.



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.

Flexible installation thanks to sliding mounting bracket.

Ideal for luminaire replacement.



Indirect light to illuminate the ceiling. Homogeneous illumination through satin finish diffuser.

My strengths in detail



# 🕂 I can withstand quite a lot

Diffuser and end caps made of impact-resistant polycarbonate make the luminaire a genuine allrounder in tough environments. Thanks to its high IP66 protection type and IK08 impact resistance, this version can withstand even the most extreme environmental conditions.



# Prepared for anything

PLANOX ECO is equipped with the MultiLumen function for adaptability and economy. It allows an uncomplicated change between two resp. three luminous flux packages via dip switch. This means that the luminaire can be adapted to change lighting requirements without any significant effort, even after installation.



# 🕂 Quick and easy

Cable entry via a cable gland at both ends allows an extremely easy handling of the luminaire, as do the sliding stainless steel brackets, which enable to use existing drill holes again. As a result, it really does not take much time at all to install these luminaires in new installations or to exachange them from 'old to new' as a refurbishment.

Thanks to the standard through-wiring, several luminaires can be quickly and conveniently interconnected.



# + In action: light on!

HF motion detectors with master-slave function enable control of several luminaires. The master luminaire is activated by movement and controls the simultaneous switch-on of the slave luminaires.

This system offers an intelligent and efficient way to monitor rooms and control lighting while increasing safety and reducing energy costs.



# 🕂 I will never leave you in the dark

As a luminaire generalist, we combine general lighting with emergency lighting to create an entire lighting solution. Our products not only provide optimal and efficient light, but also integrated safety functions to ensure orientation and safety in buildings during emergencies.



# 🕂 Durable most certainly

Whether humidity, extreme temperatures, dust, salts, acids or vapours, these exceptionally high strains are no problem for the ammonia-resistant "FARM" version. These version was specially developed for exceptionally high requirements. Confirmed by the DLG test mark, this makes it a reliable recommendation for permanent use in barns with livestock and in agricultural side areas.

## **Photometrics**

- ← Luminous efficiency up to 157 lm/W
- ← Luminous flux up to 9000 lm
- ← Colour temperature 3000 K and 4000 K
- $\bigcirc$  Colour rendering index Ra > 80
- General Symmetrical light distribution
- ⊕ LED rated life 50000 h (L80)
- Colour matching tolerance 4-steps MacAdam (4 SDCM)
- 1:1 substitute for luminaires with fluorescent lamps



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Price Category 11

Product overview

#### Ceiling and wall luminaires | PLANOX ECO

Type of protection: **IP 66** Protection class: II

Impact protection: IK08

Side panels: plastic, grey polycarbonate, shockproof. Diffuser: plastic (non-yellowing polycarbonate), opal, impact resistant. Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Turn lock fastener on both sides for easy installation. Luminaire with integrated through-wiring for lining up further luminaires. Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in delivery.

 ${\it \boxtimes}$  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.

Available colour: 9 = grey

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MultiLumen: 2 or 3 steps adjustable luminous flux. Factory setting is the highest luminous flux.

	Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [Im]	System power [W]	Max. luminous- efficiency [lm/W]	dimm- able
>	Ceiling, wall and pen	dant luminaires					Price	Category 11
	451210.009 .Q*	L 769, B 61, H 50	LED	840	1100/2100	9/17	124	on/off
	451210.009.76	L 852, B 61, H 50	LED	840	2100	16	132	DALI
	451218.009.3*	L 1369, B 61, H 50	LED	830	2800/4600	22/37	128	on/off
	451218.009 .Q*	L 1369, B 61, H 50	LED	840	3050/4950	22/37	139	on/off
	451218.009.76	L 1452, B 61, H 50	LED	840	4950	36	138	DALI
	451219.009.2*	L 1669, B 61, H 50	LED	830	4350/6300	33/54	132	on/off
	451219.009 .Q*	L 1669, B 61, H 50	LED	840	4700/6800	33/54	143	on/off
	451219.009.76	L 1752, B 61, H 50	LED	840	6800	50	136	DALI
	451236.009.1*	L 1680, B 61, H 50	LED	830	47008600	3262	147	on/off
	451236.009*	L 1680, B 61, H 50	LED	840	50009000	3262	157	on/off

\* MultiLumen: Specification of the lowest and highest possible lumen output. You will find more detailed information on www.rzb-lighting.com.

Mounting bracket	s made of stainless steel (theft protection) for ceiling and wall mounting	Price Category 11
982430.000	L 146, B 16, H 38	

#### End piece for turn lock fastener with D 25 mm

982179.009 D 25, H 13

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### Comparison

LED vs. conventional lamps LED 9 W ≈

1 x 21 W T16 (24 W Psys)

LED 16 / 17 W ≈ 1 x 39 W T16 (41 W Psys)

LED 22 W ≈ 1 x 54 W T16 (58 W Psys) 1 x 58 W T26 (59 W Psys)

LED 32 / 33 / 36 / 37 W ≈ 1 x 80 W T16 (86 W Psys)

LED 50 / 54 W ≈ 2 x 58 W T26 (118 W Psys)

LED 62 W ≈ 3 x 58 W T26 (177 W)

451218.009 (4950 lm)	451218.009	451219.009 (6800 lm)	451219.009	451236.009 (9000 lm)	451236.009
Floor 12 x 2.5 x 3 m (0.2 m)		Floor 12 x 2.5 x 3 m (0.2 m)	XXXX	Floor 12 x 2.5 x 3 m (0.2 m)	
100 lx 150 lx 200 lx		100 lx 150 lx 200 lx		100 lx 150 lx 200 lx	
2 3 4		2 2 3		1 2 2	
Room 6 x 4 x 3 m (0.75 m)		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	120	200 lx 300 lx 500 lx		200 lx 300 lx 500 lx	120
3 5 68	200 00/km	2 3 5	200 00/km	2 2 4	160. Col/klp

Specifications subject to alteration | The values indicated for power and luminous flux are rated values. MultiLumen: The luminaire luminous efficacy may vary at the individual levels.

## Product overview





Comparison LED vs. conventional lamps

LED 9 W ≈ 1 x 21 W T16 (24 W Psys)

LED 17 W ≈ 1 x 39 W T16 (41 W Psys)

LED 22 W ≈ 1 x 54 W T16 (58 W Psys) 1 x 58 W T26 (59 W Psys)

LED 33 / 37 W ≈ 1 x 80 W T16 (86 W Psys)

LED 54 W ≈ 2 x 58 W T26 (118 W Psys)

#### Ceiling and wall luminaires | PLANOX ECO - movement sensor



Price Category 11

Protection class: II Impact protection: IK08 Side panels: plastic, grey polycarbonate, shockproof. Diffuser: plastic (non-yellowing polycarbonate), opal, impact resistant. Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Turn lock fastener on both sides for easy

installation. Luminaire with integrated 4-phase through-wiring to connect multiple luminaires. Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in delivery. With integrated movement sensor. Master-Slave operation possible.

♥ 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.

#### Available colour: 9 = grey

Type of protection: IP 66

MultiLumen: 2 steps adjustable luminous flux. Factory setting is the highest luminous flux.

	Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [Im]	System power [W]	Max. luminous- efficiency [lm/W]	dimm- able
$\overline{\gamma}$	Ceiling, wall and per	ndant luminaires with mo	vement sen	sor			Price	e Category 11
IJ	451210.009.19 .Q	L 800, B 66, H 71	LED	840	1100/2100	9/17	124	on/off
	451218.009.19 .Q	L 1400, B 66, H 71	LED	840	3050/4950	22/37	139	able ce Category 11
	451219.009.19 .Q	L 1700, B 66, H 71	LED	840	4700/6800	33/54	143	on/off

MultiLumen: Specification of the lowest and highest possible lumen output. You will find more detailed information on www.rzb-lighting.com.

Mounting brackets made of stainless steel (theft protection) for ceiling and wall mounting Price Category 11 982180.000 L 115, B 13, H 62

End piece for turn lock fastener with D 25 mm 982179.009 D 25, H 13

#### Details on movement sensor

Single luminaire with infrared movement sensor.

Detection range 360°. Cover of movement sensor made of polyethylene, prismatic. Run-down time and intensity can be adjusted.

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Technical data on movement sensor Tolerance 10 percent						
Mounting height (H)	3,0 m	4,0 m	5,0 m	6,0 m	8,0 m	
Detection range (Diameter D)	7,40 m	11,0 m	13,0 m	13,8 m	14,4 m	
Run-down time	10 s - 20 min adjustable					
Intensity	0 - 90 lx adjustable					
Detection angle	120°					





# PLANOX ECO FARM

⋑**⊚**∓ ⊣⊦⋼┤ ӊ Product overview

#### Ceiling and wall luminaires | PLANOX ECO FARM

Type of protection: **IP 66** Protection class: II

Impact protection: IK07

Side panels: plastic, grey polyamide. Diffuser made of non-yellowing plastic (PMMA), opal. Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Cable screw fittings for convenient wiring. Luminaire with integrated 4-phase through-wiring to connect multiple luminaires. Ceiling mounting stainless steel brackets and triangular brackets for pendant mounting included in delivery.

 ${\bf \triangledown}$  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: 9 = grey

MultiLumen: 2 steps adjustable luminous flux. Factory setting is the highest luminous flux.

Reference number	Dimensions [mm]	Lamp	Light colour	Luminous flux [Im]	System power [W]	Max. luminous- efficiency [lm/W]	dimm- able
Ceiling, wall and pe	endant luminaires				Pric	e Category 11	
451212.009.1 .Q	L 1369, B 61, H 50	LED	840	3050/4950	22/37	139	on/off
451214.009.1 .Q	L 1669, B 61, H 50	LED	840	4700/6800	33/54	143	on/off

Mounting brackets	made of stainless steel (theft protection) for ceiling and wall mounting	Price Category 11
982430.000	L 146, B 16, H 38	

Turn lock fastenin	g	Price Category 11
982429.019	D 44, H 41	



Comparison LED vs. conventional lamps
LED 22 W ≈
1 x 54 W T16 (58 W Psys) 1 x 58 W T26 (59 W Psys)
1 x 58 W T26 (59 W Psys)
LED 33 / 37 W ≈

1 x 80 W T16 (86 W Psys) LED 54 W ≈

2 x 58 W T26 (118 W Psys)







## Product overview | Emergency lighting

#### Ceiling and wall luminaires | PLANOX ECO

Type of protection: **IP 66** Protection class: I, II Impact protection: IK08



I-B-





Luminaires for central battery system











Side panels: plastic, grey polycarbonate, shockproof. Diffuser: plastic (non-yellowing polycarbonate), opal, impact resistant. Cable screw fittings for convenient wiring. Stainless steel brackets for ceiling mounting and triangular brackets for pendant mounting included in delivery.

 $\forall$  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.

Available colour: 9 = grey

#### Self-contained emergency luminaires

Connection via separate emergency light box with through-wiring. Emergency light box dimensions: LG 329, BG 184, HG 61 mm. Connection cable from the luminaire to the emergency light box: 500 mm. Fixing set for pendant mounting of emergency light box needs to be ordered separately!

Voltage type: AC

Automatic self test in all standard versions.

Operating mode: Can either be connected in non-maintained power mode or in maintained power mode.

#### Luminaires for central battery system

Converter encapsulated, integrated and permanently connected to the diffuser and side panel. Turn lock fastener on both sides for easy installation. Through-wiring as standard.

Voltage type: AC/DC

Reference number	Dimensions [mm]	Light colour	Luminous flux [lm]	Luminous flux emergency [Im]	System power [W]	Battery	() [h]	Monitoring
Self-contained em	ergency luminaires, protec	tion class I						Price Category 23
672573.009	L 749, B 61, H 50	840	1150/2250	460 lm	11 /17	LiFePO4	3	Autotest
672573.009.04	L 749, B 61, H 50	840	1150/2250	460 lm	11 /17	LiFePO4	3	MultiDigit
672573.009.07	L 749, B 61, H 50	840	1150/2250	460 lm	11 /17	LiFePO4	3	DALI-Sibe
672576.009	L 1349, B 61, H 50	840	3150/5000	450 lm	21 / 35	LiFePO4	3	Autotest
672576.009.04	L 1349, B 61, H 50	840	3150/5000	450 lm	21 / 35	LiFePO4	3	MultiDigit
672576.009.07	L 1349, B 61, H 50	840	3150/5000	450 lm	21 / 35	LiFePO4	3	DALI-Sibe
672579.009	L 1649, B 61, H 50	840	4950/7150	440 lm	33 / 49	LiFePO4	З	Autotest
672579.009.04	L 1649, B 61, H 50	840	4950/7150	440 lm	33 / 49	LiFePO4	3	MultiDigit
672579.009.07	L 1649, B 61, H 50	840	4950/7150	440 lm	33 / 49	LiFePO4	3	DALI-Sibe

 Fixing set for pendant mounting of the PLANOX ECO emergency light box (self-contained emergency luminaires)
 Price Category 23

 983066.000
 L 46, B 33, H 24
 consisting of 2 brackets, 2 snap hooks and 2 cheese head screws

Luminaires for central battery system, protection class II Price Category 24										
672575.009	L 852, B 61, H 50	840	2100	720 lm	16	without battery	Standard			
672578.009	L 1452, B 61, H 50	840	4950	740 lm	36	without battery	Standard			
672581.009	L 1752, B 61, H 50	840	6800	750 lm	50	without battery	Standard			

672573.009						
Lumin	Luminous flux emergency: 460 lm					
Follow	ing valu	ies are	indicate	d in m		
h	а	b	С	d		
2,5	11,8	4,5	9,2	3,7		
3,0	12,4	4,7	9,9	3,8		
3,5	12,9	4,8	10,4	4,0		
4,0	13,2	4,8	10,8	4,0		

67257	672575.009						
Luminous flux emergency: 720 lm Following values are indicated in m							
h	а	a b c d					
2,5	10,5	4,3	13,7	5,4			
3,0	11,4	4,5	14,6	5,6			
3,5	12,1	4,8	15,2	5,8			
4,0	12,7	4,9	15,8	6,0			

672576.009						
Luminous flux emergency: 450 lm						
Followi	ng valu	ies are	indicate	d in m		
h	а	b	С	d		
2,5	11,6	4,5	9,1	3,6		
3,0	12,3	4,6	9,8	3,8		
3,5	12,7	4,7	10,3	3,9		
4,0 13,1 4,8 10,7 4,0						

672578.009							
Lumino	Luminous flux emergency: 740 lm						
Followi	ng valu	ies are	indicated	d in m			
h	а	a b c d					
2,5	10,6	4,3	13,9	5,4			
3,0	11,5	4,6	14,7	5,7			
3,5	12,2	4,8	15,3	5,9			
4,0 12,8 5,0 15,9 6,0							

672579.009				
Luminous flux emergency: 440 lm				
Follow	ing valu	ies are	indicate	d in m
h	а	b	С	d
2,5	11,6	4,5	9,0	3,6
3,0	12,2	4,6	9,7	3,8
3,5	12,7	4,7	10,2	3,9
4,0	13,0	4,7	10,6	3,9

672581.009						
Lumino	Luminous flux emergency: 750 lm					
Follow	ing valu	ies are	indicate	d in m		
h	а	b	С	d		
2,5	10,6	4,3	13,9	5,4		
3,0	11,5	4,6	14,8	5,7		
3,5	12,2	4,8	15,4	5,9		
4,0 12,8 5,0 16,0 6,1						

Specifications subject to alteration | The values indicated for power and luminous flux are rated values. MultiLumen: The luminaire luminous efficacy may vary at the individual levels.

# LIGHT MANAGEMENT SYSTEMS

Overview

## Economy Multi DALI

#### 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 Bluetooth<sup>®</sup> light management system for maximum functions and configuration options. **Casambi smart+free solutions are particularly suitable for applications where wireless networking is required.** The modules are also suitable for retrofitting in existing luminaires, as only a power supply is required. The module is already integrated into luminaires with the article number ending .730. With accessories from the extensive Casambi ecosystem (Catalogue starting on P. 576), the system can be configured according to individual needs. The integration here is very intuitive and can be





Casambi App - download now!



#### light control +3 Professional IoT

completed by users without prior knowledge in just a few minutes.

The future of automated light control: RZB's IoT system. Daylight-dependent control and dynamic light control up to circadian daylight simulation in Human Centric Lighting (HCL) are easy to implement. In addition, the control system can be easily networked to make luminaire data available to other systems. Automatic switch-off functions save energy and money. All this can be configured across several rooms and floors.



#### 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 + <sup>3</sup> Economy Multi DALI	Casambi smart+free	light control +³ Professional IoT
	Economy Multi DALI	casambi م smart + free	Professional IoT
Application	Single room	Wireless networking	Building control
Can be combined with	smart+ free		smart free
Communication	wired	wireless	wired
Infrastructure requirements	L, N, PE, DA, DA (5 wires cable)	L, N, PE (3 wires cable)	L, N, PE, DA, DA (5 wires cable)
Commissioning	by electrician	by electrician	RZB service technician
Configuration	App, Plug&Play	App, Remote access	PC-Tool, Remote access
Operation	Switches, Buttons, App	Switches, Buttons, App	Switches, Buttons, App, Web access
Number of luminaires (1 EB) (Number of luminaires depends on on the number of EB in the luminaire)	32	up to 64 depending on the module	128
Number of sensors/push-button COupler (presence, motion)	4	1 per module	126
Dimmable	1	1	$\checkmark$
Motion/presence detection	1	1	$\checkmark$
Daylight-dependent control	1	1	$\checkmark$
Scenes/Groups	1	1	✓
Timer/Calendar functions	1	1	$\checkmark$
HCL / Tunable White	1	1	✓
RGB		1	$\checkmark$
Network integration		1	✓
Remote access: programming, operation, maintenance		1	<ul> <li>Image: A second s</li></ul>
IoT ready		1	✓
Predictive maintenance, monitoring, read out luminaire data			✓
Beacon for indoor navigation, tracking, asset management		1	
Luminaires with the reference number extension	.76 (DALI)	.730 (smart+free)	.76 (DALI)

# CHEMICAL RESISTANCE

## to the plastics used in the manufactured luminaires

Chemical Agents	max. concen- tration	PC	PMMA
Acetone		-	-
Battery Acid		0	-
Aliphate. Hydrocarbons		+	0
Alcohol	30%	+	+
Alcohol concentrate		-	-
Aluminium sulphate	10%	+	
Formic acid	30%	-	0
Ammonia	5%	-	+
Ammonia	25%	-	+
Aniline		-	-
Aromatic hydrocarbons		-	-
Arsenic acid		+	+
Ether		-	-
Caustic potash		-	
Benzene		-	-
Beer		+	+
Blood		+	+
Bromic acid		-	-
Calcium Chloride		+	+
Chloroform		-	-
Chlorophenol		-	-
Chromic acid	40%	0	0
Diesel fuel		0	+
Dioxane		-	-
Acetic acid	5%	+	0
Acetic acid	30%	+	-
Ethyl acetate (ester)		-	-
Ethanol	30%	+	0
Ethanol	50%	+	-
Ethyl acetate		-	-
Ethyl alcohol		+	0
Mineral fat		-	+
Vegetable fat		-	+
Animal fat		-	+
Glycerin		0	+
Glycol		+	+
Glysantin		+	+
Glycerine		0	+
Fuel oil		-	0
Caustic potash	30%	-	+
Potassium nitrate		+	+
milk of lime		0	+
Ketone		-	-
Saline solution	20%	+	+
Carbon dioxide		+	+
Carbon monoxide		+	+

Chemical Agents	max. concen- tration	PC	PMMA
Hydrocarbons		-	0
Lye		0	+
Lysol		-	-
Sea water		+	+
Methanol		-	-
Methyl chloride		-	-
Lactic acid, aqueous	10%	+	+
Mineral oils		+	+
Sodium hydroxide solution	2%	-	+
Sodium hydroxide solution	10%	-	+
Regular petrol (ROZ 91)		0	-
Petroleum ether		0	+
Phenol		-	-
Nitric acid	10%	+	+
Nitric acid	20%	0	0
Hydrochloric acid	5%	+	+
Hydrochloric acid	15%	+	+
Hydrochloric acid	20%	0	+
Sulfur dioxide		0	-
Sulphuric acid	30%	+	+
Sulphuric acid	50%	+	+
Sulphuric acid	70%	0	0
Hydrogen sulfide		+	+
Soap sud		+	+
Silicone oils		+	0
Soda bleach		+	+
Premium petrol		-	+
Turpentine oil		0	0
Carbon tetrachloride		-	-
Toluene		-	-
Trichloroethylene		-	-
Hydrogen peroxide	30%	0	-
Hydrogen sulfide		+	+
Xylene / Dimethylbenzene		-	-
Citric acid	20%	+	+

+ resistant

o partially resistant

- non-resistant

## Product overview

RZB



## MORE LUMINAIRES OF THIS PRODUCT FAMILY:





🕀 Planox PRO



🕀 Planox Tube

## HIGHEST PRODUCT AND CONSULTING QUALITY

## 

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
- $\checkmark$  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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