

Protected luminaires

Catalogue

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Foundation **1980**

Luminaires
manufactured
per year **3.5M**

Employees **360**

Countries
with market
presence **75**

zalutx

AENOR

ENVIRONMENTAL
MANAGEMENT

ISO 14001

AENOR

QUALITY
MANAGEMENT

ISO 9001



ZALUX is the European leader for luminaires with high protection ratings.

Specialised in the development and manufacturing of reliable and durable luminaires for extreme conditions such as tough temperatures, dust, humidity and chemicals.

OEM



OEM design, engineering and manufacturing of bespoke lighting products to meet special needs.

PROTECTED LUMINAIRES



Efficient and quality luminaires specific for industrial applications, with a wide range of options.

ATEX LUMINAIRES



Explosion proof LED luminaires certified for use in EX-Zones according to ATEX directive.



- Headquarters in Zaragoza, Spain
- 3 manufacturing plants in Alhama de Aragón
- Quality Made in Spain



ALHAMA I

- Plastic injection
- Compression press
- Extrusion



ALHAMA II

- Metal workshop
- Automated wiring robots
- 20 assembly lines for LED
- Electronic components assembling



ALHAMA III

- New assembling area
- 1500m² premises
- 13 production lines



LABORATORY

- Thermal and endurance tests
- IPX5 – X6 humidity tests
- Impact tests
- Product safety tests



WAREHOUSE

- 10,000m² storage
- For 5,800 Europallets
- With advanced computer systems

Luminaires with LED module



Specifications

- Luminaires are specified for indoor use and under shelter for outdoor use, unless otherwise noted.



- Net luminaire data at 25°C ambient temperature, unless otherwise specified.
- Outside the recommended ambient temperature range, luminaire lifetime will be reduced.



Operational temperature range under which the luminaire have to be installed. Out of this interval, its electronic components could be affected as well as the lifetime of the luminaire.

- Data tolerance must be considered between +/- 5%.
- Our luminaires comply with the EU Declaration of Conformity and are Made in Europe.



- General guarantee terms apply: see the updated document in our website.
- All information is subject to change without notice due to development. Please, refer to www.zalux.com for current versions of product documentation.



Luminaires with emergency kit

- ZALUX luminaires can be equipped with emergency kit.
- Kit transforms a LED luminaire into an emergency luminaire when necessary.
- It includes a long lasting LiFePO4 battery and an emergency converter.
- All emergency kits are non-permanent, thus, they only work in case of mains failure. The rest of the time the battery is charging or at rest.

Our portfolio¹

HE

- Up to L80 100,000 hours
- Up to 170lm/W
- Up to 15,000lm
- -35°C +50°C
- 5 years warranty
- Wireless lighting control optional



ZALUX BASE



DUNA FLEX



STRONGERTUBE



ZALEDA

STP

- Up to L80 50,000 hours
- Up to 145lm/W
- -25°C +40°C
- 5 years warranty



ZALUX BASE



DUNA FLEX

ST

- Up to L70 35,000 hours
- Up to 120lm/W
- -25°C +35°C
- 3 years warranty



ZALUX BASE



DUNA FLEX

SPECIFIC APPLICATIONS



ZALUX BASE PMMA



STRONGERTUBE ZB



ZALUX BASE D.O.



¹General specifications. Data may vary between models: see product pages with all the details.

ZALUX BASE

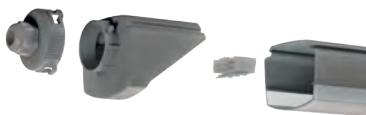


Quick and safe mounting with no tools needed: cable gland and connector fixed to the gear tray by a patented piece

Single-part **IP66 / IP69K** extruded polycarbonate profile

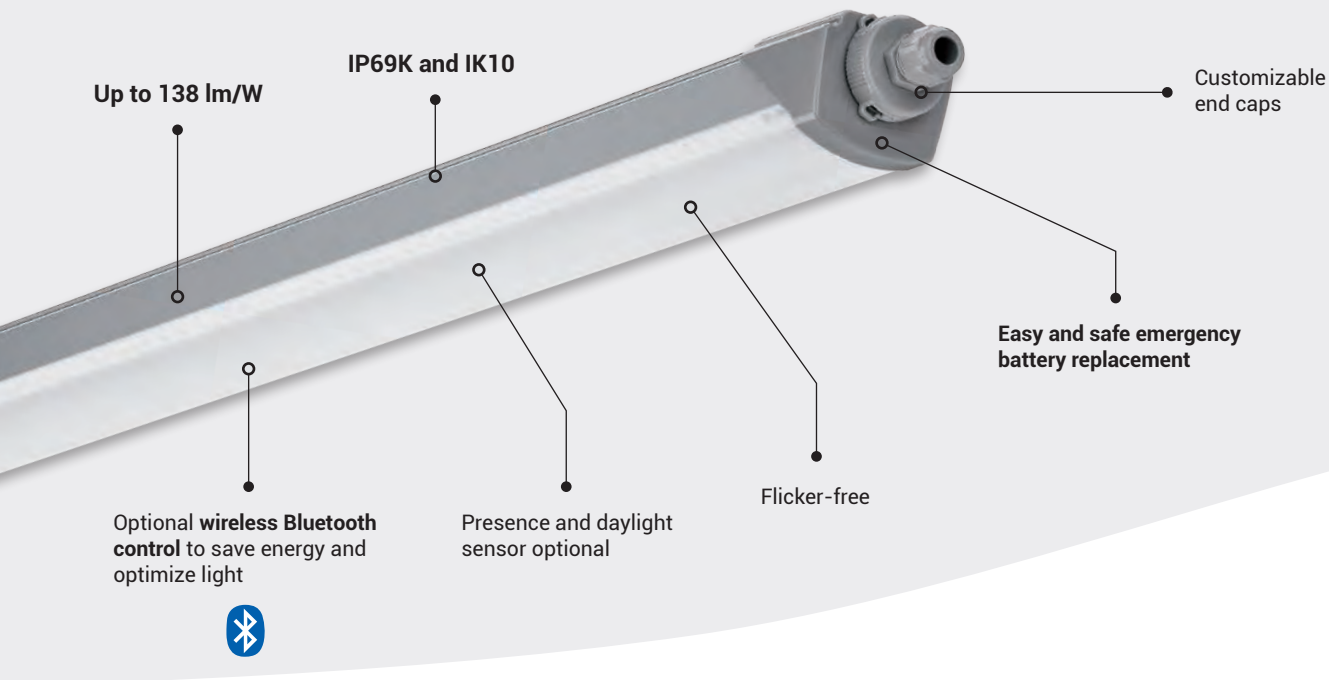
Can be safely used where foods are processed, handled and packed thanks to its **HACCP conformity**

PWIS-free to guarantee a perfect finish in paint shops and coating areas



Long-lasting, compact and resistant
luminaire with easy installation

ZALUX BASE HE



5 YEARS warranty



Characteristics

Mechanical

IK10 IP66 / IP69K

Profile	Extruded polycarbonate with UV protection Upper part grey RAL 7035 Bottom part opal
End caps	Polycarbonate
Gasket	PWIS-free silicone
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 70,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

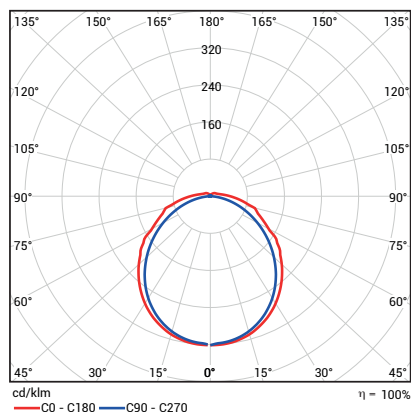
Electrical

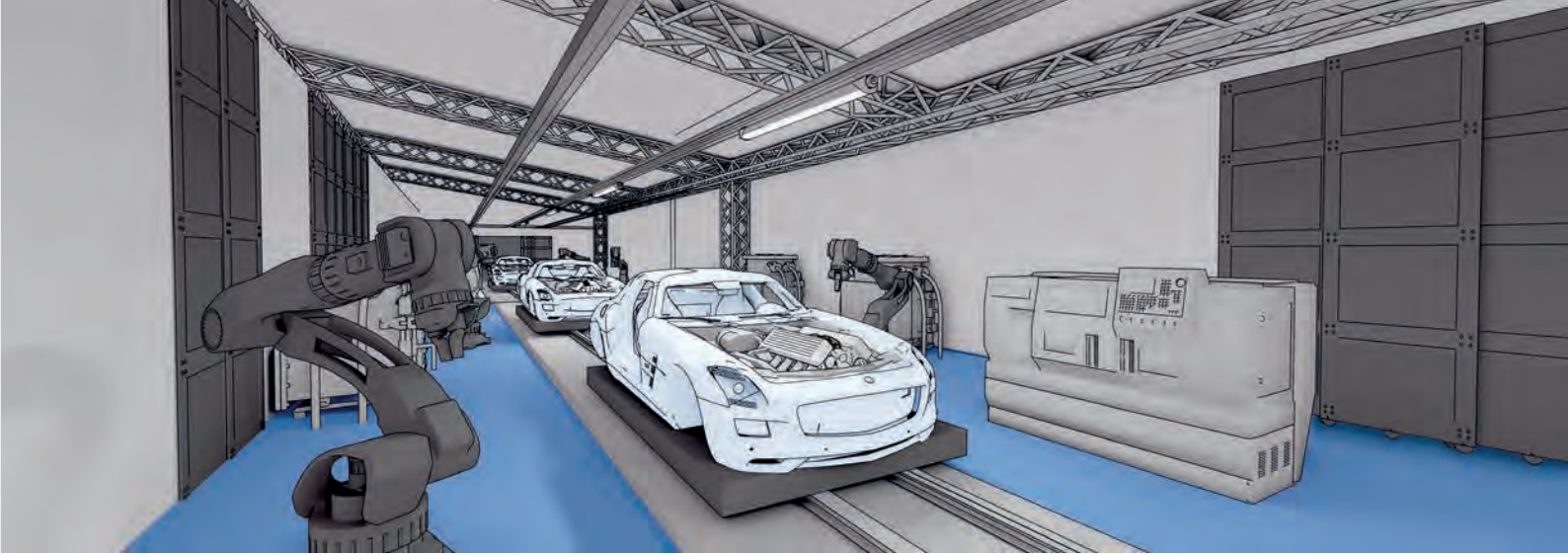


Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





FACTORY



LOGISTICS



SMART PARKING



AUTOMOTIVE

Options Special options in grey under request

Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Profile	Connection	Through wiring	Emergency kit
0.6: 600 1.2: 1200 1.5: 1500	40: 4000 60: 6000	8: >80	40: 4000	ET: non dimmable ETDD: DALI ETDD CS: Casambi dimmable	BPC: PC	CG: cable gland + terminal block	3x1.5mm ² 5x1.5mm ²	EB1: 1 hour EB3: 3 hours
0.3: 300 0.9: 900	2000 to 8000	9: >90	30: 3000 65: 6500 827-865: tunable white	ETDD CLO: Constant Lumen Output ETDD FC: corridor function	BPM: PMMA	TWW: Wieland fast connector TWS: Stucchi fast connector	3x2.5mm ² 5x2.5mm ²	

More options available:

- High frequency sensor (HFS)
- Customized ends caps: custom colour, printed logo...
- Efficiency: up to 150 lm/W

Operational data

Description	Luminous flux (lm)	Power (W) ¹	Efficiency (lm/W)	Non-dimmable				DALI dimmable			
				- ●	3x1.5 ●	EB1 ¹ ●	EB3 ¹ ●	- ●	5x1.5 ●	CS ●	CS HFS ●
BHE 0.6 20-840...	2000	16	125	10171106	-	-	-	-	-	-	-
BHE 1.2 40-840...	4000	29	138	10171107	10171108	10171109	10171110	10181228	10221083	10205974	10205975
BHE 1.5 60-840...	6000	44	136	10171111	10171112	10171113	10171114	10221084	10221085	10205976	10205977

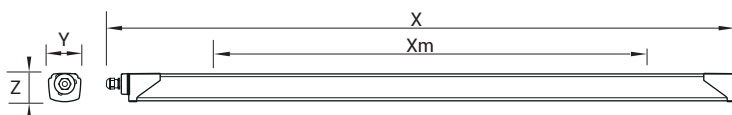
Temperature range | -25°C +40°C ● | -25°C +35°C ●

¹ In emergency versions maximum power consumption increases in 4W during battery charging, which is approximately 5% of the time that luminaire is on. The rest of the time power consumption is as indicated.

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item ²	Pcs./Box	Box ²	Groupage Pcs./pallet	Groupage Pcs./double pallet
BHE 0.6...	637	350	76	67	790 x 85 x 75	1.0	1	1.1	342	216 + 216
BHE 1.2...	1213	800	76	67	1330 x 85 x 75	1.8	1	1.9	171	108 + 108
BHE 1.5...	1493	1100	76	67	1610 x 85 x 75	2.2	1	2.3	171	108 + 108

² Weight in EB1 and EB3 versions: +0.2KG



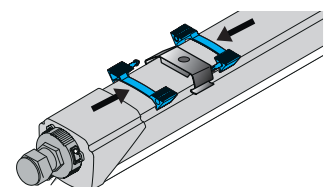
Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ³	10103049
Theft protection (required for wall mounting), 1 unit ³	10149442

³ 2 units required per luminaire



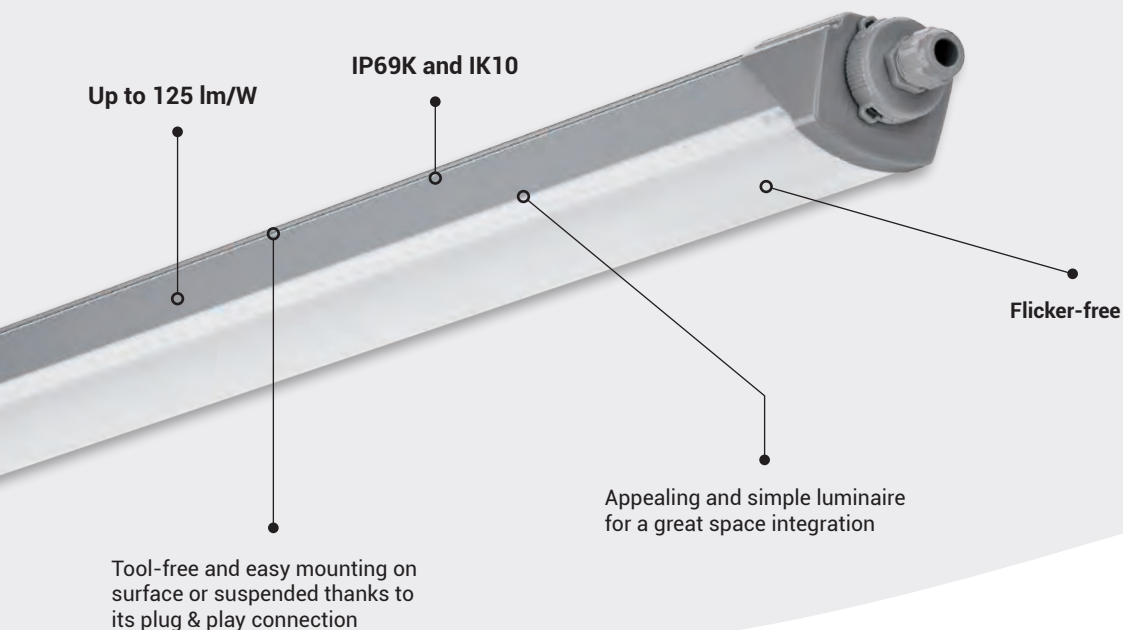
10103049



10149442

Data subject to change. Version 2020.4

ZALUX BASE STP



5 YEARS warranty



Characteristics

Mechanical

IK10 IP66 / IP69K

Profile	Extruded polycarbonate with UV protection Upper part grey RAL 7035 Bottom part opal
End caps	Polycarbonate
Gasket	PWIS-free silicone
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 50,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

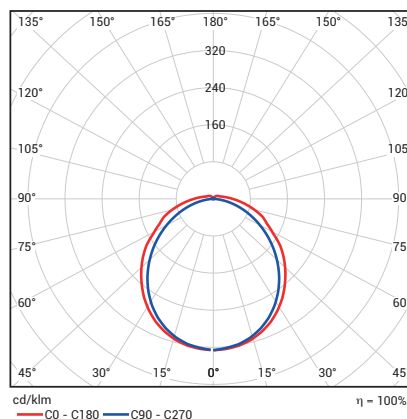
Electrical



Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





Options Special options in grey under request

Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Profile	Connection	Through wiring
0.6: 600 1.2: 1200 1.5: 1500	20: 2000 40: 4000 60: 6000	8: >80	40: 4000	ET: non dimmable ETDD: DALI	BPC: PC	CG: cable gland + terminal block	3x1.5mm ² 5x1.5mm ²
0.9: 900	2000 to 6000	9: >90	30: 3000 65: 6500		BPM: PMMA	TWW: Wieland fast connector TWS: Stucchi fast connector	3x2.5mm ² 5x2.5mm ²

More options available: · Emergency kit: 1 hour (EB1) or 3 hours (EB3)

Operational data

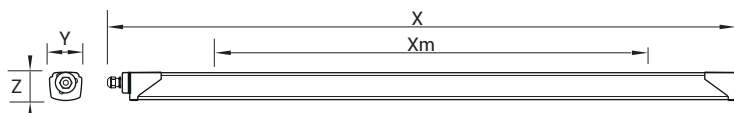
Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable		DALI dimmable	
				- ●	3x1.5 ●	- ●	5x1.5 ●
BSTP 0.6 20-840...	2000	17	120	10171115	-	-	-
BSTP 1.2 40-840...	4000	32	125	10171116	10171117	10175406	10221087
BSTP 1.5 60-840...	6000	51	120	10171118	10171119	10221088	10221089

Temperature range: -25°C +40°C ● | -25°C +35°C ●

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item ¹	Pcs./Box	Box ¹	Groupage Pcs./pallet	Groupage Pcs./double pallet
BSTP 0.6...	637	350	76	67	790 x 85 x 75	1.0	1	1.1	342	216 + 216
BSTP 1.2...	1213	800	76	67	1330 x 85 x 75	1.8	1	1.9	171	108 + 108
BSTP 1.5...	1493	1100	76	67	1610 x 85 x 75	2.2	1	2.3	171	108 + 108

¹ Weight in ETDD versions: +0.2KG



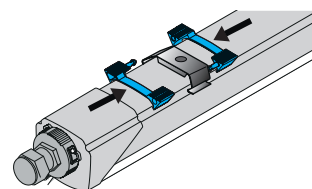
Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ²	10103049
Theft protection (required for wall mounting), 1 unit ²	10149442

² 2 units required per luminaire



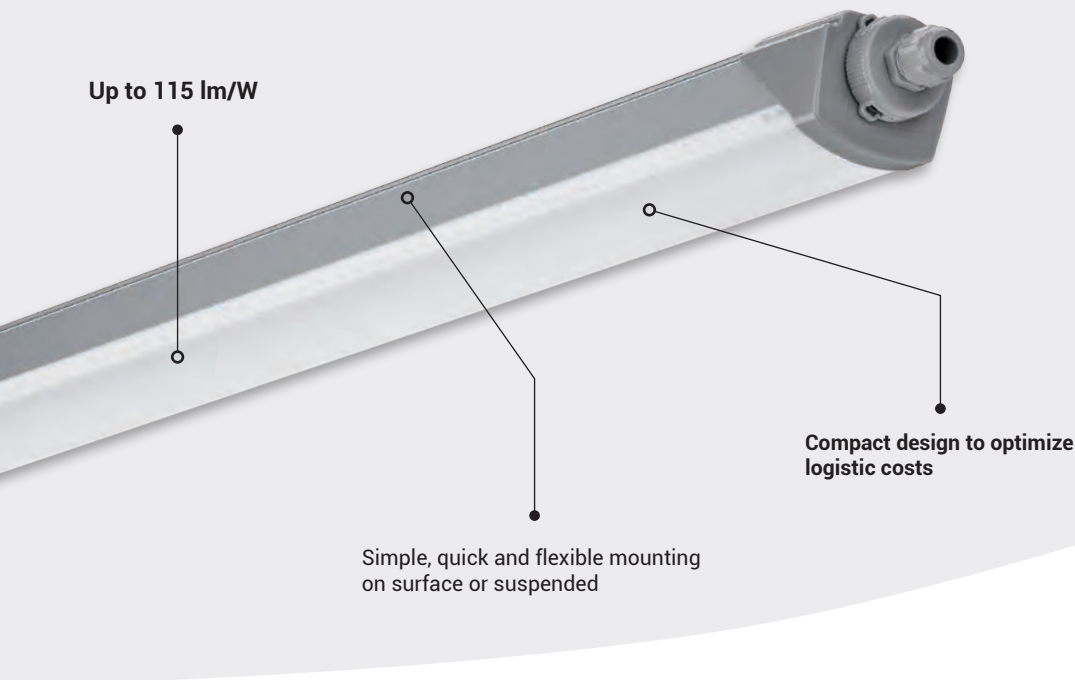
10103049



10149442

Data subject to change. Version 2020.4

ZALUX BASE ST



3 YEARS warranty



Characteristics

Mechanical IK10 IP66 / IP69K

Profile	Extruded polycarbonate with UV protection Upper part grey RAL 7035 Bottom part opal
End caps	Polycarbonate
Gasket	PWIS-free silicone
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

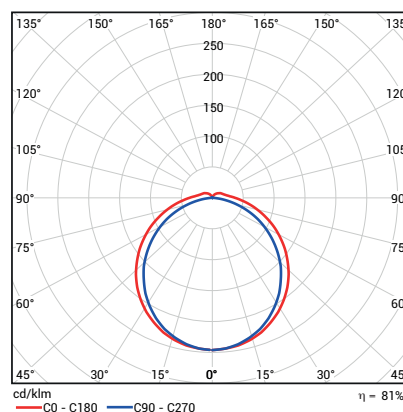
Lifetime	L70 35,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

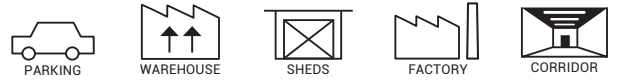
Electrical ⊕ ⊖

Connection	3 pole push wire terminal block
Power factor	>0.9 full load
THD	<20% full load
Flicker factor	5%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3











Options Special options in grey under request

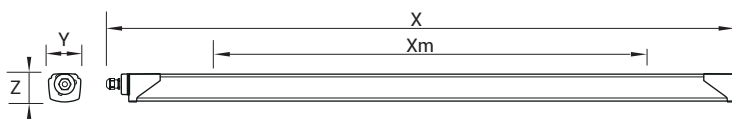
Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Profile	Connection	Through wiring
1.2: 1200	37: 3700	8: >80	40: 4000	ET: non dimmable	BPC: PC	CG: cable gland + terminal block	3x1.5mm ²
1.5: 1500	55: 5500						3x2.5mm ²

Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	
				-	3x1.5
BST 1.2 37-840...	3700	33	115	10170844	10170845
BST 1.5 55-840...	5500	49	115	10170846	10170847

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
BST 1.2...	1213	800	76	67	1330 x 85 x 75	1.8	1	1.9	171	108 + 108
BST 1.5...	1493	1100	76	67	1610 x 85 x 75	2.2	1	2.3	171	108 + 108



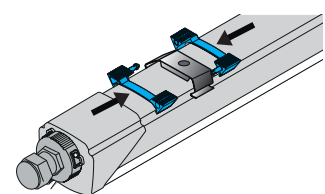
Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ¹	10103049
Theft protection (required for wall mounting), 1 unit ¹	10149442

¹ 2 units required per luminaire

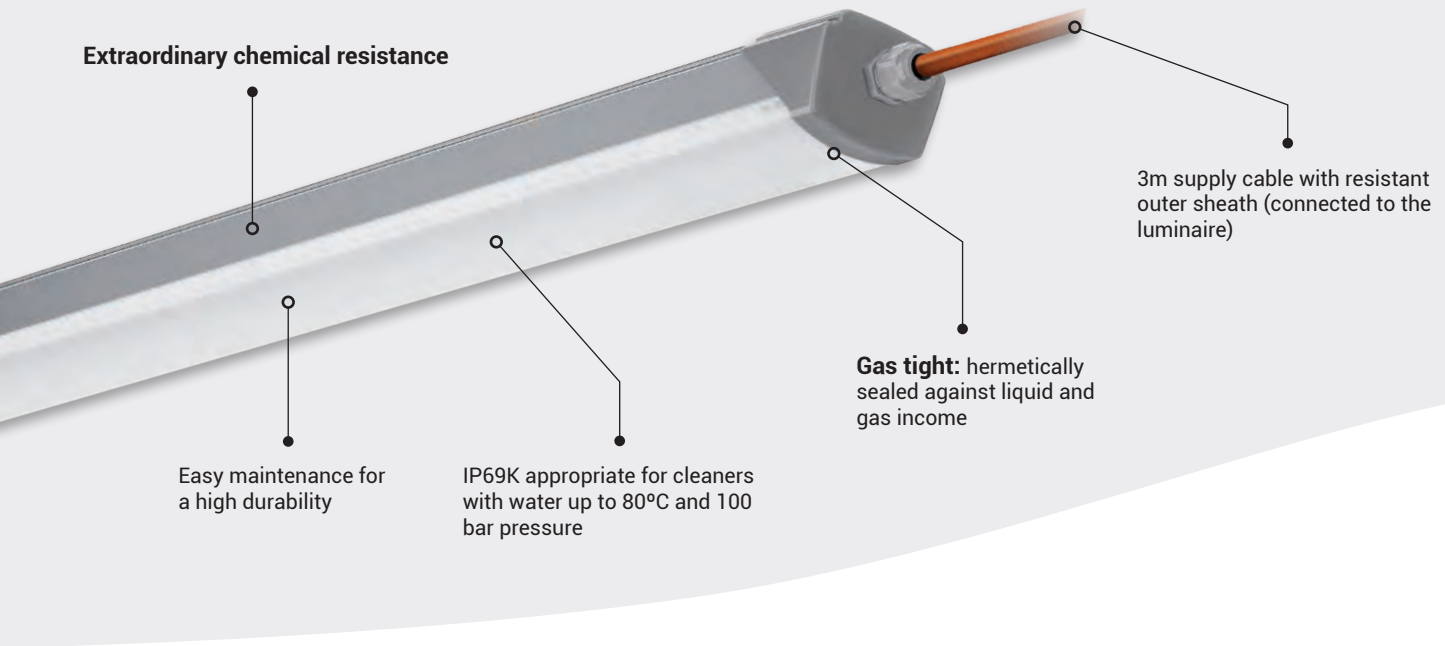


10103049



10149442

ZALUX BASE PMMA







RoHS REACH

5 YEARS
warranty


 +35°C
 -25°C

Characteristics

Mechanical IK03 IP66 / IP69K

Profile	Extruded PMMA with UV protection Upper part grey RAL 7035 Bottom part opal
End caps	Acrylonitrile styrene acrylate (ASA)
Gasket	PWIS-free silicone
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

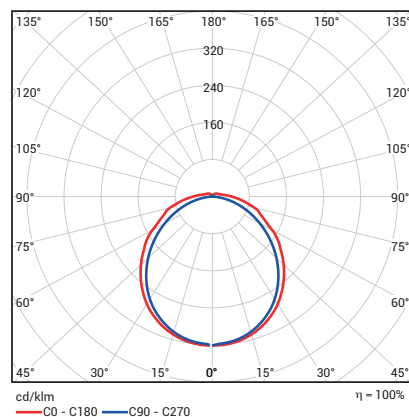
Lifetime	L80 70,000 hours
Fire protection	Flammability (UL94): HB Glow wire test (EN 60595-2-11): 650°C

Electrical

Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





FOOD



CAR WASH



FARM

Options Special options in grey under request

Lenght	Luminous flux(lm)	CRI	Light colour (K)	Driver	Profile	External cable (m)	Through wiring
1.2: 1200 1.5: 1500	40: 4000 60: 6000	8: >80	40: 4000	ET: non dimmable ETDD: DALI	BPM: PMMA	3M: 3	3x1.5mm ² 5x2.5mm ² L1: connected to phase 1
	2000 to 8000	9: >90	30: 3000 65: 6500 827-865: tunable white	ETDD CS: Casambi dimmable ETDD CLO: Constant Lumen Output		0.5 to 5	3x2.5 mm ² 5x1.5 mm ² 5x2.5mm ²

More options available:







- High frequency sensor (HFS)
- Connector: fast connector
- Customized ends caps: custom colour, printed logo...
- Efficiency: up to 150 lm/W

Operational data

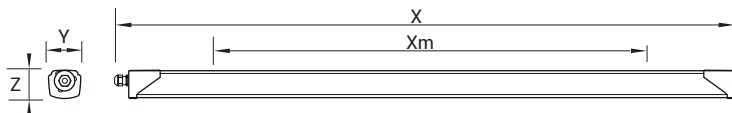
Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Through wiring		
				-	3x1.5	5X2.5 L1 ¹
BHE 69K 1.2 40-840...	4000	29	138	10177469	10177470	10177471
BHE 69K 1.5 60-840...	6000	44	136	10177472	10177473	10177474

¹ Already connected to phase 1

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item ²	Pcs./Box	Box ²	Groupage Pcs./pallet	Groupage Pcs./double pallet
BHE 69K 1.2...	1213	800	76	67	1330 x 85 x 75	1.8	1	1.9	171	108 + 108
BHE 69K 1.5...	1493	1100	76	67	1610 x 85 x 75	2.2	1	2.3	171	108 + 108

² Weight in 5X2.5 L1 versions: +0.2KG



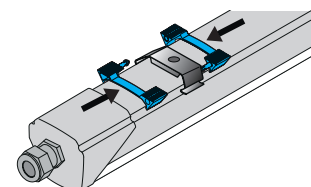
Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ³	10103049
Theft protection (required for wall mounting), 1 unit ³	10149442

³ 2 units required per luminaire

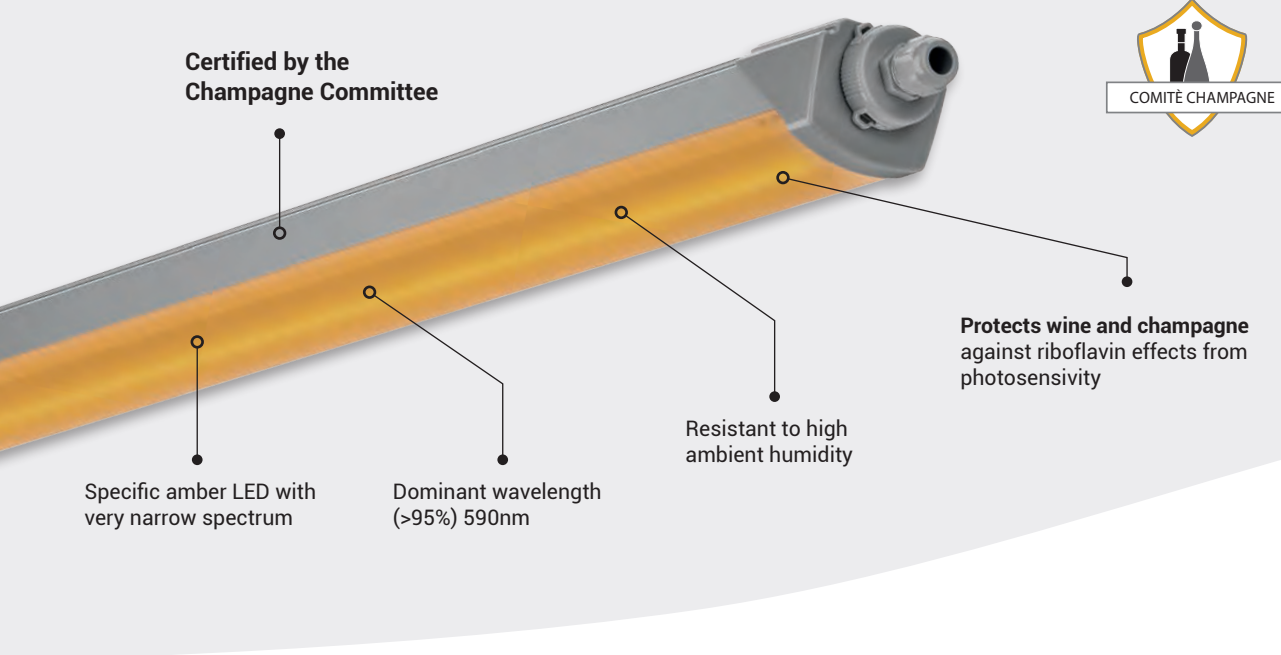


10103049



10149442

ZALUX BASE D.O.



RoHS REACH



5 YEARS warranty



Characteristics

Mechanical

IK10 IP66 / IP69K

Profile	Extruded polycarbonate with UV protection Upper part grey RAL 7035 Bottom part opal
End caps	Polycarbonate
Gasket	PWIS-free silicone
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 50,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

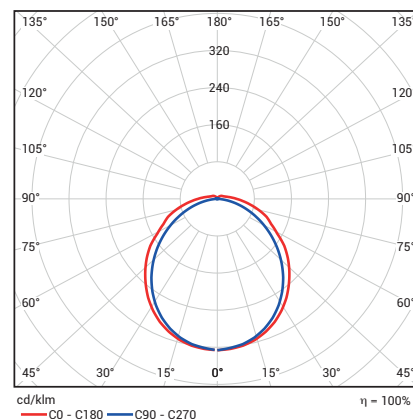
Electrical



Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





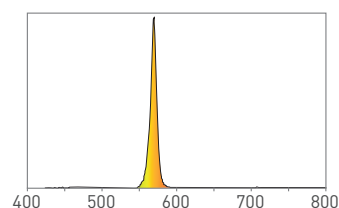
Options Special options in grey under request

Lenght	Luminous flux (lm)	Light colour (K)	Driver	Profile
0.6: 600	12: 1200	YEL: 590nm (>95%)	ET: non dimmable	BPC: PC
1.2: 1200	24: 2400		ETDD: DALI	
0.3: 300				BPM: PMMA
0.9: 900				
1.5: 1500				

More options available:

- Through wiring: 3x1.5mm², 3x2.5mm², 5x1.5mm², 5x2.5mm²
- Connector: fast connector
- Customized ends caps: custom colour, printed logo...






Ambar LED spectrum



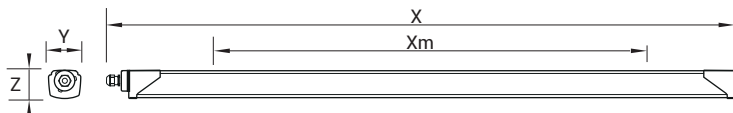
Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	DALI
BDO 0.6 12-YEL...	1200	34	35	10215958	10215959
BDO 1.2 24-YEL...	2400	68	35	10215960	10215961

Dimensions and logistics

Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Item ¹	Pcs./Box	Box ¹	Groupage Pcs./pallet
BDO 0.6...	637	350	76	67	790 x 85 x 75	1.0	1	1.1	342
BDO 1.2...	1213	800	76	67	1330 x 85 x 75	1.8	1	1.9	171

¹ Weight in 1.2 ETDD versions: +0.2KG



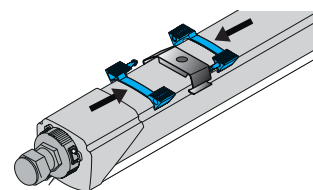
Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ²	10103049
Theft protection (required for wall mounting), 1 unit ²	10149442

² 2 units required per luminaire

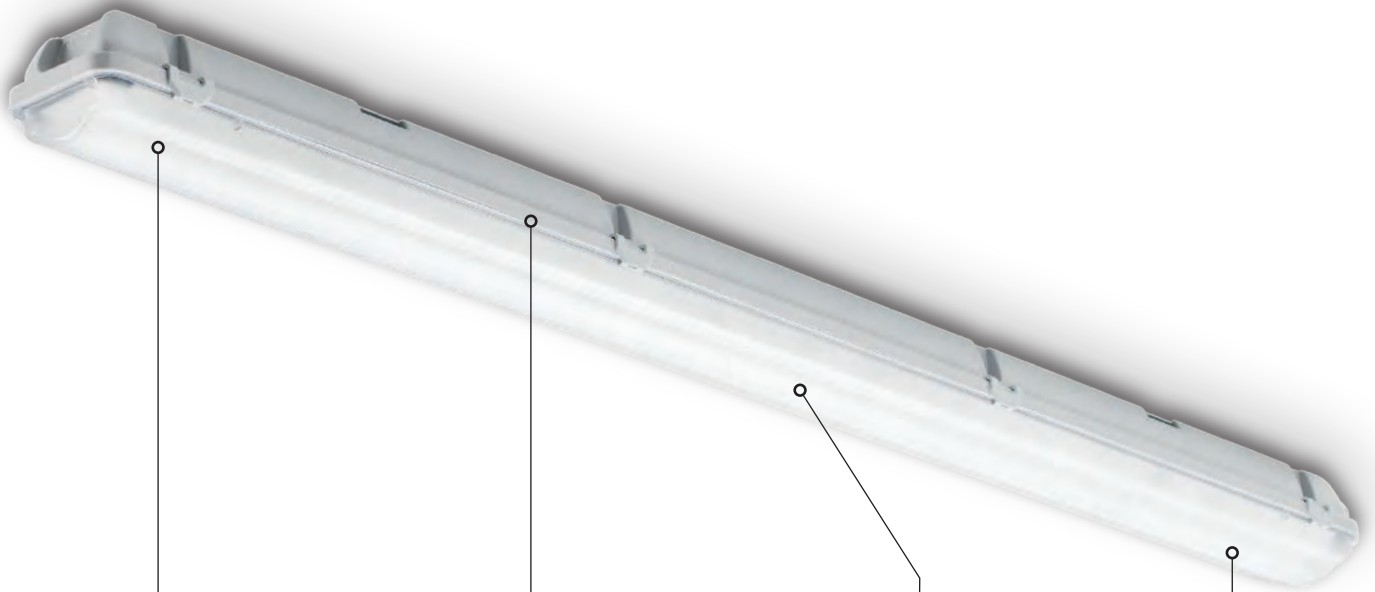


10103049



10149442





Quick, easy and safe mounting
in ceiling, wall or suspended



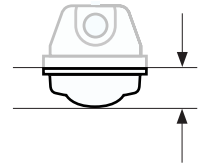
Polyurethane continuous gasket
specific for IP66 for a full protection
against degradation, thanks to its
manufacturing and drying processes



HACCP conformity guarantees
safe use where foods are
processed, handled and packed



Specific slimmer diffuser
for LED modules



Flexible to choose the right components in
a versatile luminaire suitable from basic to
the most demanding applications

DUNA FLEX HE HIGH BAY



5 YEARS warranty



Characteristics

Mechanical

IK03 IP66

Housing	Compressed fibreglass reinforced polyester (GRP) Grey RAL 7035
Diffuser	Injected PMMA with UV protection frosted finish (20% opal)
Closing clips	Stainless steel
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 100,000 hours at 35°C
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 650°C

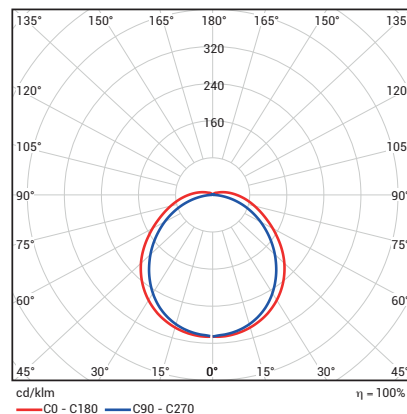
Electrical



Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<7% full load <10% full load for 8,000lm version
Flicker factor	<1%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





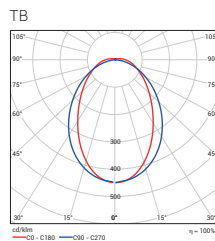
Options Special options in grey under request

Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Housing	Diffuser	Closing clips	Connection	Through wiring
1.5: 1500	80: 8000 100: 10000	8: >80	40: 4000	ET: non dimmable ETDD: DALI	SMC: GRP	DPM: PMMA	IX: stainless steel	CG: cable gland + terminal block	3x1.5mm ² 5x2.5mm ²
0.6: 600 ¹	Up to 15000	9: >90	30: 3000 65: 6500 827-865: tunable white	ETDD CS: Casambi dimmable ETD: 1-10V ETDD CLO: Constant Lumen Output ETDD FC: corridor function	PC: PC	DPC: PC	PA: polyamide	TWW: Wieland fast connector TWS: Stucchi fast connector	5x1.5mm ²

¹ With ALHAMA diffuser

More options available: · High frequency sensor (HFS)

- Emergency kit: 1 hour (EB1) or 3 hours (EB3)
- Optics: narrow (TB), wide (XB) or extreme wide (MXB)



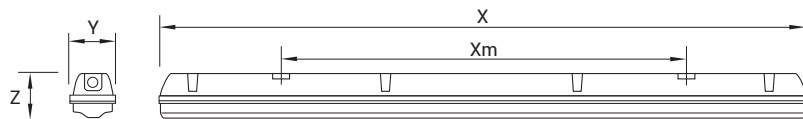
Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable		DALI dimmable	
				-	3x1.5 ●	5x2.5 ●	5x2.5 ●
DHE 1.5 80-840...	8000	51	160	10172636 ●	10172637	10203625	10175694
DHE 1.5 100-840...	10000	59	170	10176408 ●	10203626	10203628	10195391

Temperature range | -25°C +50°C ● | -25°C +45°C ● | -25°C +40°C ● | -25°C +35°C ●

Dimensions and logistics

Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
DHE 1.5...	1573	1100	101	84	1646 x 104 x 84	1	2.3	119	77 + 77



Accessories

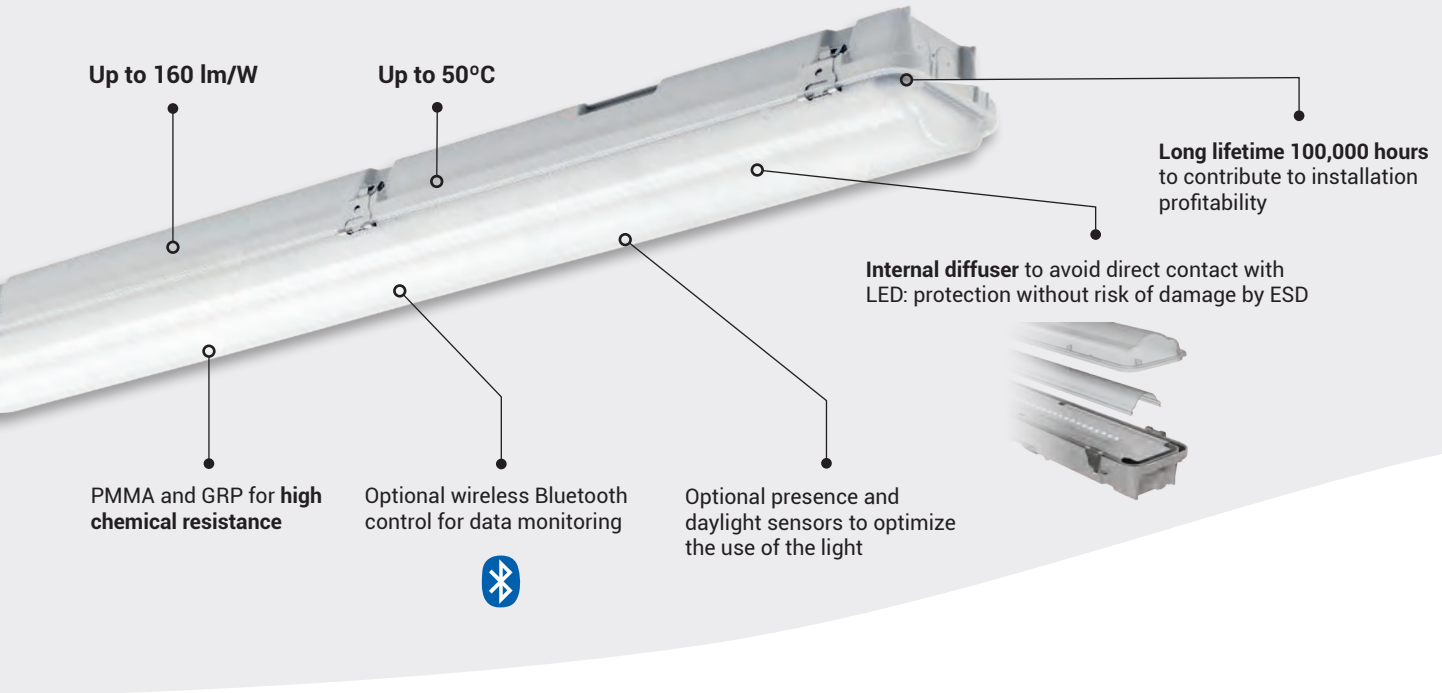
Description	Order number
Suspension wire 2m hook and fastener, 1 unit ²	10103049

² 2 units required per luminaire



Data subject to change. Version 2020.4

DUNA FLEX HE+



5 YEARS warranty



Characteristics

Mechanical

IK03 IP66

Housing	Compressed fibreglass reinforced polyester (GRP) Grey RAL 7035
Diffuser	Injected PMMA with UV protection frosted finish (20% opal)
Closing clips	Stainless steel
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 100,000 hours at 35°C
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 650°C

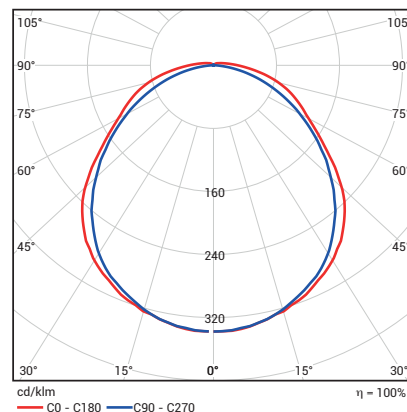
Electrical



Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





STORAGE



LOGISTICS



> 8m



FACTORY



FOOD

Options Special options in grey under request

Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Housing	Diffuser	Closing clips	Connection	Through wiring	Sensor	Emergency kit
1.2: 1200 1.5: 1500	40: 4000 60: 6000	8: >80	40: 4000	ET: non dimmable ETDD: DALI ETDD CS: Casambi dimmable	SMC: GRP	DPM: PMMA	IX: stainless steel	CG: cable gland + terminal block	3x1.5mm ² 5x2.5mm ²	HFS: high frequency sensor	EB3: 3 hours
0.6: 600 ¹	MF: multilumen 2000 to 8000	9: >90	30: 3000 65: 6500 827-865: tunable white	ETD: 1-10V ETDD CLO: Constant Lumen Output ETDD FC: corridor function	PC: PC	DPC: PC	PA: polyamide	TWW: Wieland fast connector TWS: Stucchi fast connector	5x1.5mm ²		EB1: 1 hours EB3 NDA: 3 hours DALI

¹ With ALHAMA diffuser

More options available: Optics: narrow (TB), wide (XB) or extreme wide (MXB)

Operational data

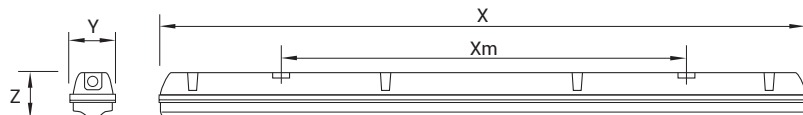
Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable				DALI dimmable			
				- ●	3x1.5 ●	HFS ●	EB3 ² ●	- ●	5x2.5 ●	CS ●	CS HFS ●
DHE+ 1.2 40-840...	4000	25	160	10203607	10203609	10203612	10203611	10203608	10203610	10214670	10214672
DHE+ 1.5 60-840...	6000	37	160	10203617	10203619	10203622	10203621	10203618	10203620	10214671	10214676
Temperature range	-25°C +50°C ●	-25°C +45°C ●	-25°C +40°C ●	-25°C +35°C ●							

² In emergency versions maximum power consumption increases in 4W during battery charging, which is approximately 5% of the time that luminaire is on. The rest of the time power consumption is as indicated.

Dimensions and logistics

Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Pcs./Box	Box ³	Groupage Pcs./pallet	Groupage Pcs./double pallet
DHE+ 1.2...	1277	800	101	84	1384 x 104 x 84	1	1.8	119	77 + 77
DHE+ 1.5...	1573	1100	101	84	1646 x 104 x 84	1	2.3	119	77 + 77

³ Weight in EB3 versions: +0.2KG



Accessories

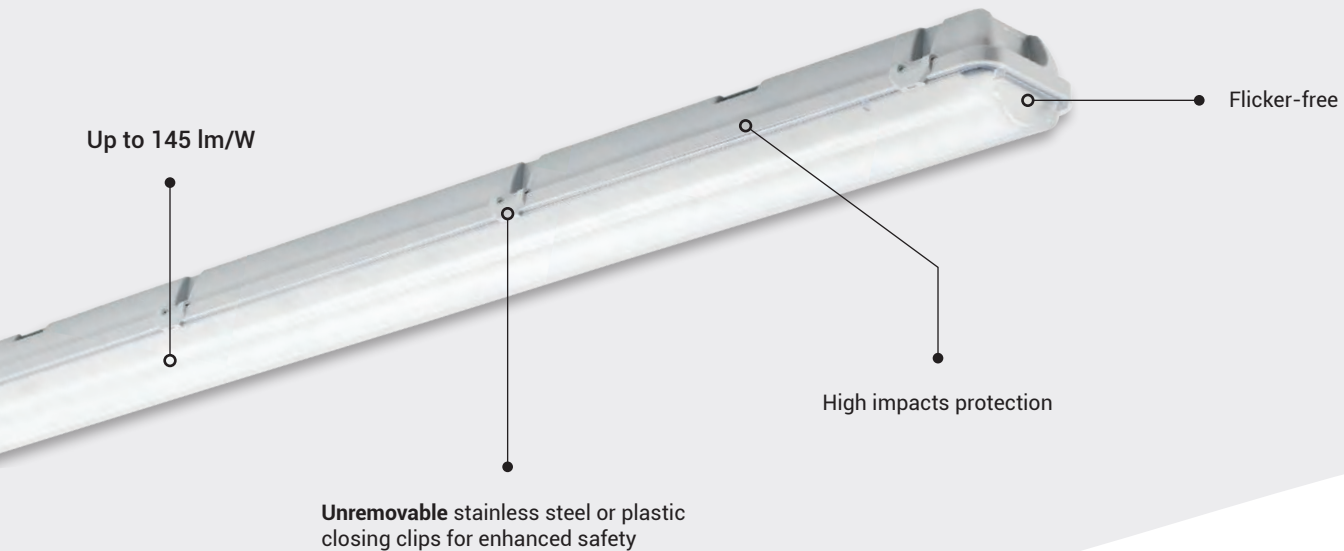
Description	Order number
Suspension wire 2m hook and fastener, 1 unit ⁴	10103049

⁴ 2 units required per luminaire



Data subject to change. Version 2020.4

DUNA FLEX STP



5 YEARS warranty



Characteristics

Mechanical

IK08 IP66

Housing	Injected polycarbonate with UV protection Grey RAL 7035
Diffuser	Injected polycarbonate with UV protection frosted finish (20% opal)
Closing clips	IX-U: stainless steel unremovable PA: polyamide 6
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Grommet
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L80 50,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

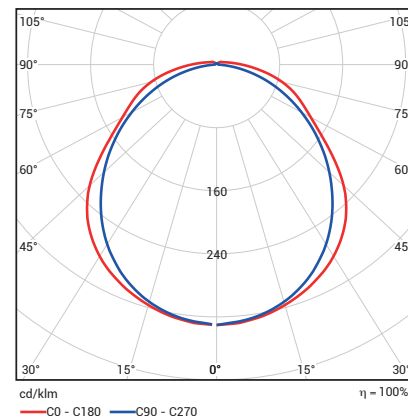
Electrical



Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





Options Special options in grey under request

Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Housing	Diffuser	Closing clips	Connection	Through wiring
1.2: 1200 1.5: 1500	40: 4000 60: 6000	8: >80	40: 4000	ET: non dimmable ETDD: DALI	PC: PC	DPC: PC	PA: polyamide IX-U: stainless steel unremovable	Grommet + terminal block	3x1.5mm ² 5x2.5mm ²
	25: 2500	9: >90	30: 3000 65: 6500	ETD: 1-10V dimmable	SMC: GRP	DPM: PMMA	PA-U: polyamide unremovable IX: stainless steel	CG: cable gland + terminal block TWW: Wieland fast connector TWS: Stucchi fast connector	

More options available: - Emergency kit: 1 hour (EB1), 3 hours (EB3) or 3 hours DALI (EB3 DALI)

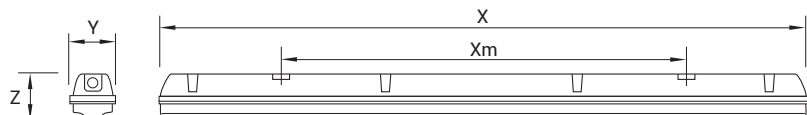
Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable		DALI dimmable	
				- ●	3x1.5 ●	- ●	5x2.5 ●
DSTP 1.2 40-840... IX-U	4000	28	145	10203613	10203615	10203614	10203616
DSTP 1.5 60-840... IX-U	6000	42	145	10203630	10203632	10203631	10203633
DSTP 1.2 40-840... PA	4000	30	130	10171079	10171081	-	-
DSTP 1.5 60-840... PA	6000	46	130	10171080	10171082	-	-

Temperature range -25°C +40°C ● | -25°C +35°C ●

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
DSTP 1.2...	1277	800	101	84	1384 x 104 x 84	1.7	1	1.8	119	77 + 77
DSTP 1.5...	1573	1100	101	84	1646 x 104 x 84	2.2	1	2.3	119	77 + 77



Accessories

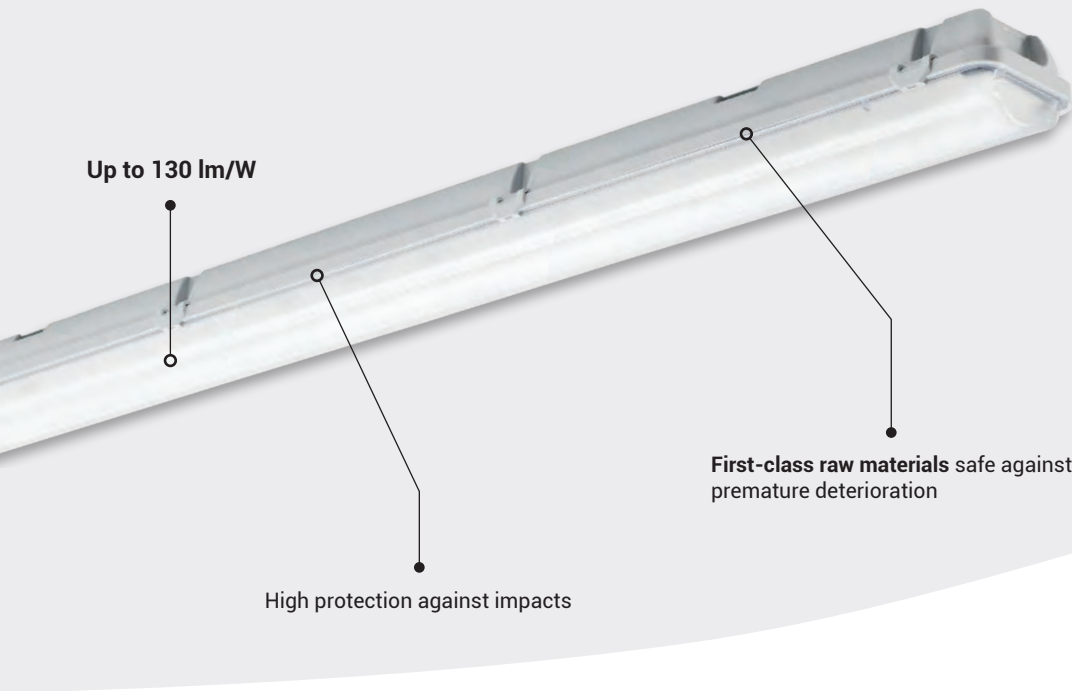
Description	Order number
Suspension wire 2m hook and fastener, 1 unit ¹	10103049

¹ 2 units required per luminaire



Data subject to change. Version 2020.4

DUNA FLEX ST



Up to 130 lm/W

High protection against impacts

First-class raw materials safe against premature deterioration



RoHS REACH

3 YEARS warranty



Characteristics

Mechanical

IK08 IP66

Housing	Injected polycarbonate with UV protection Grey RAL 7035
Diffuser	Injected polycarbonate with UV protection frosted finish (20% opal)
Closing clips	Polyamide 6 unremovable
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Grommet
Fixing clips	Stainless steel
Suspension triangles	Stainless steel



Functional

Lifetime	L70 35,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test (EN 60595-2-11): 850°C

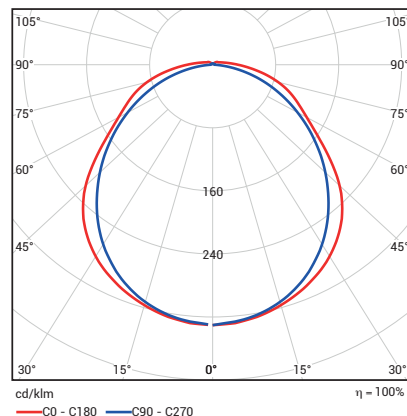
Electrical

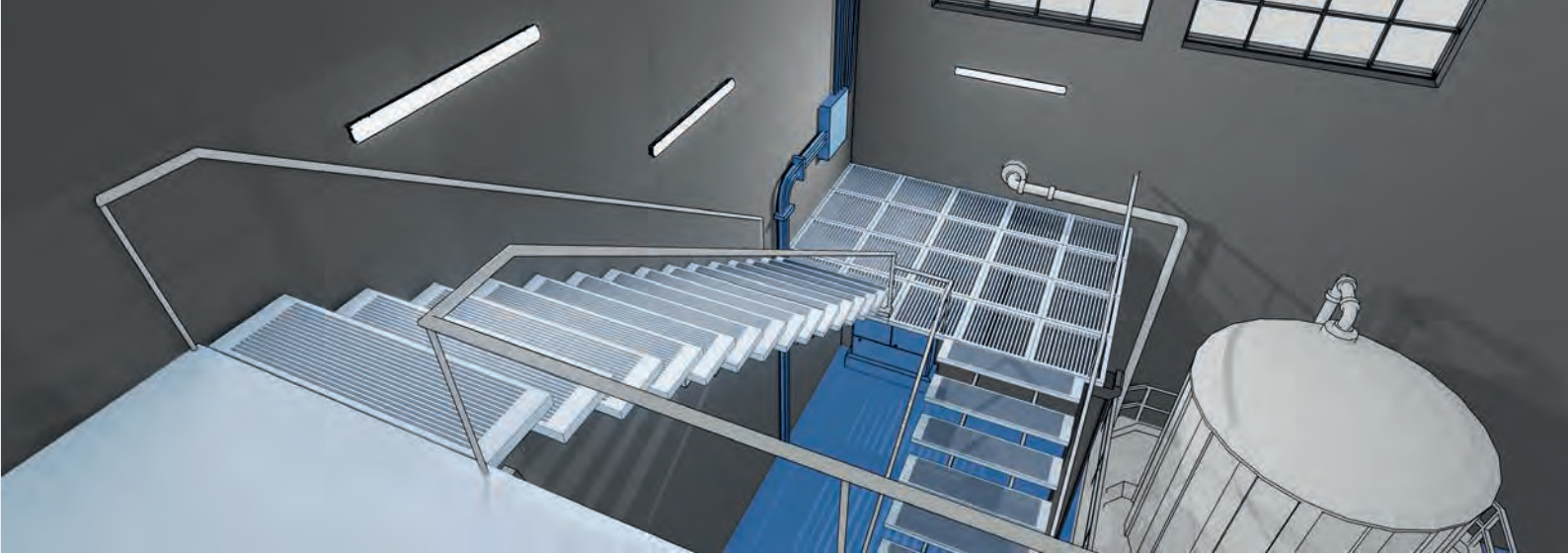


Connection	3 pole push wire terminal block
Power factor	>0.90 full load
THD	<20% full load
Flicker factor	5%
Frequency	0-50/60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 4











Options Special options in grey under request

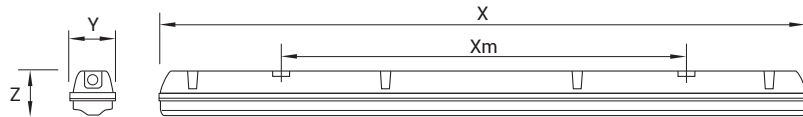
Lenght (mm)	Luminous flux (lm)	CRI	Light colour (K)	Driver	Housing	Diffuser	Closing clips	Through wiring
1.2: 1200 1.5: 1500	40: 4100 60: 6100	8: >80	40: 4000	ET: non dimmable	PC: PC	DPC: PC	PA-U: polyamide unremovable	3x1.5mm ²
							IX: stainless steel IX-U: stainless steel unremovable PA: polyamide	3x2.5mm ²

Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	
				-	3x1.5
DST 1.2 40-840... PA-U	4100	32	130	10199112	10214674
DST 1.5 60-840... PA-U	6100	47	130	10214673	10214675

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
DST 1.2...	1277	800	101	84	1384 x 104 x 84	1.7	1	1.8	119	77 + 77
DST 1.5...	1573	1100	101	84	1646 x 104 x 84	2.2	1	2.3	119	77 + 77



Accessories

Description	Order number
Suspension wire 2m hook and fastener, 1 unit ¹	10103049

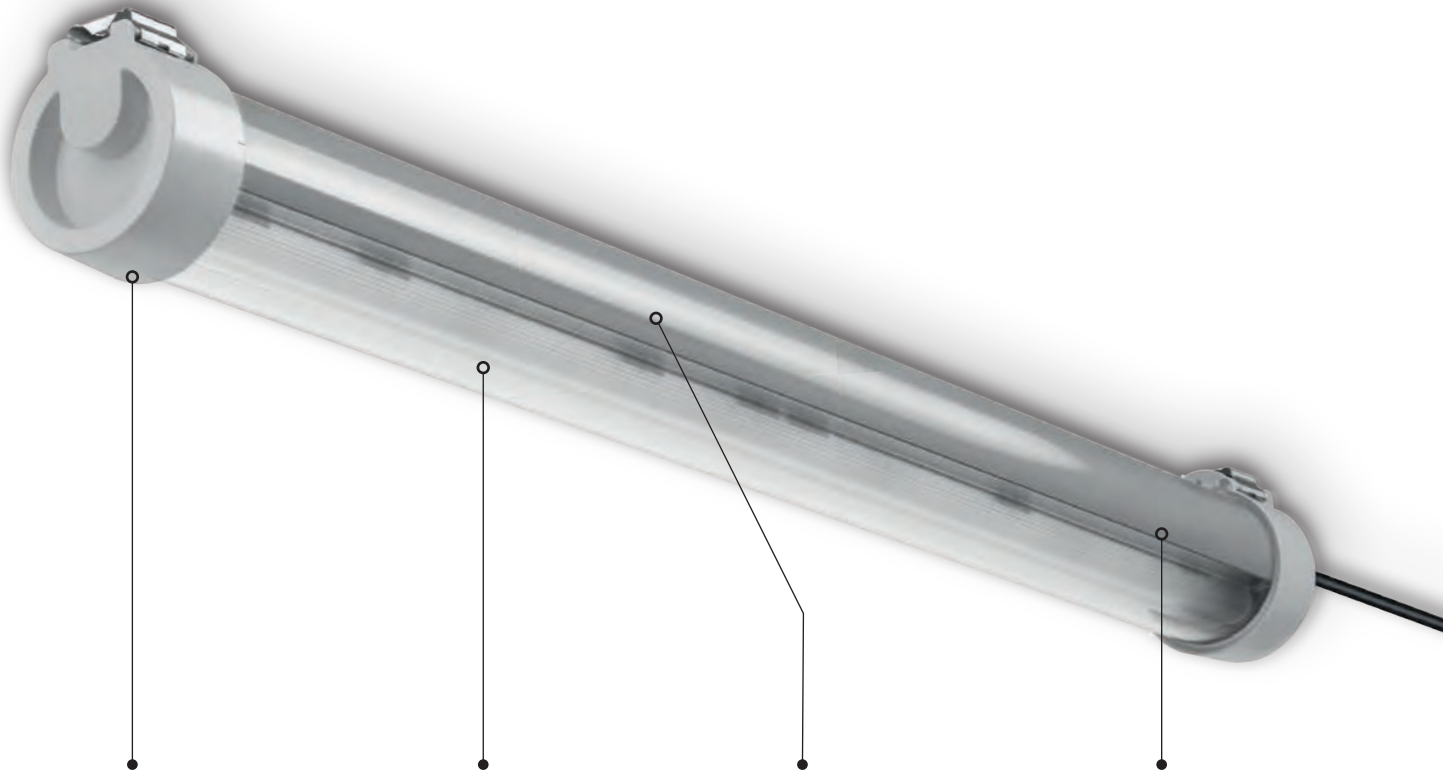
¹ 2 units required per luminaire





HSK TX 260

STRONGERTUBE

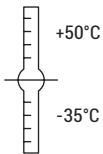


Wide temperature range, suitable from cold storage to heavy industries

Extreme mechanical and chemical resistance for demanding environments even outdoors

Easy to clean with high pressure and high temperature cleaners

Specific **gas tight** potting to avoid the ingress and condensation of gases and to resist to acids and sulphur vapours



Thickness and shape guarantee IK10

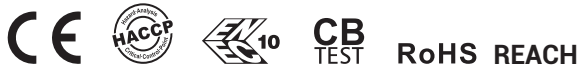
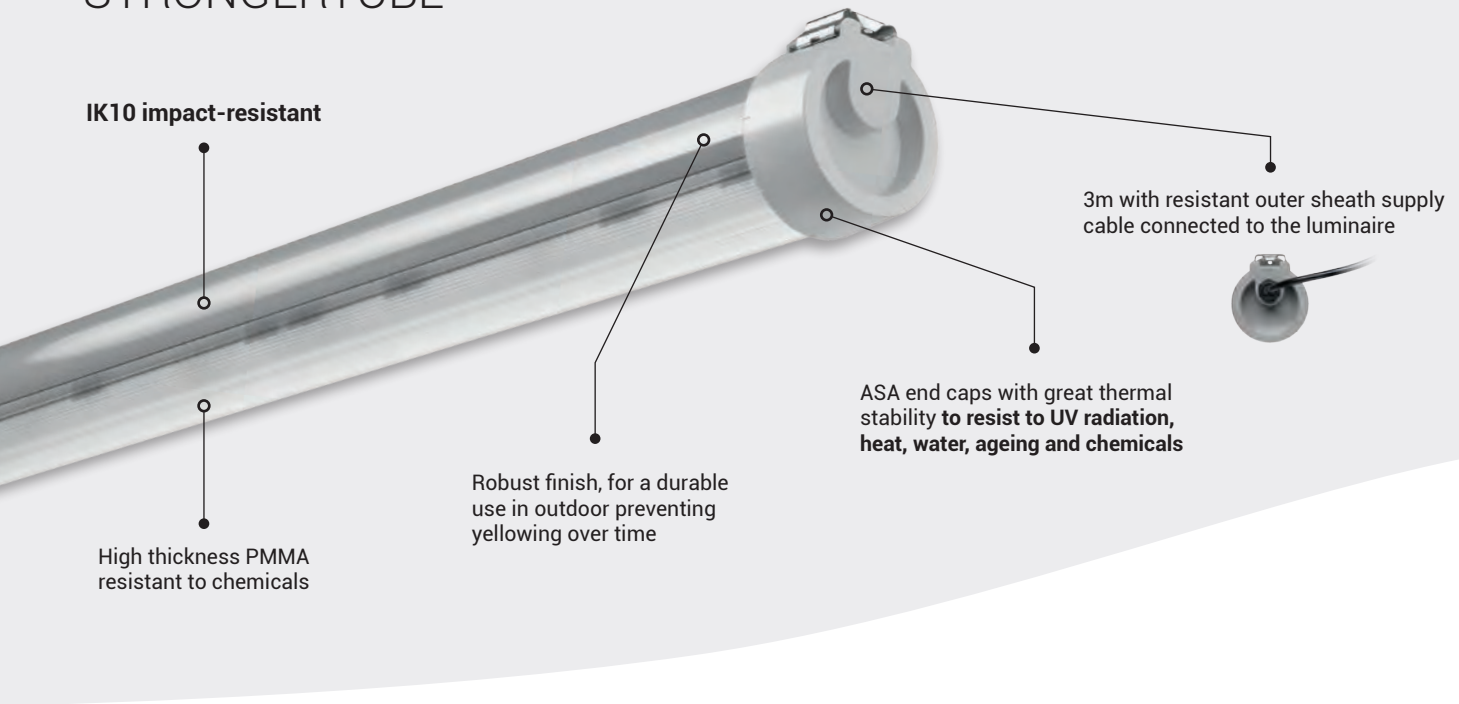
IP69K

Water up to 80°C and 100 bar pressure



High robustness and resistance against corrosion, ammonia and salty environments

STRONGERTUBE



5 YEARS warranty



Characteristics

Mechanical IK10 IP66 / IP69K

Profile	PMMA
End caps	Acrylonitrile styrene acrylate (ASA)
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Cable gland 3m external cable included
Fixing clips	Stainless steel



Functional

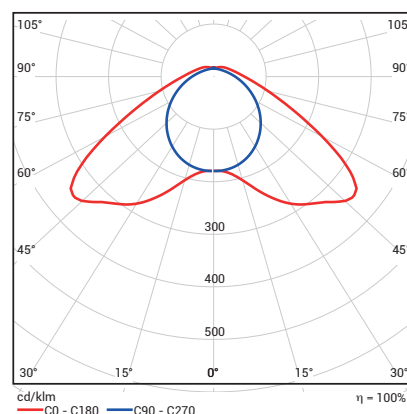
Lifetime	L80 100,000 hours at 35°C
Fire protection	Flammability (UL94): HB Glow wire test (EN 60595-2-11): 650°C

Electrical ⊕ ⊖

Connection	3/5 pole push wire terminal block
Power factor	>0.95 full load
THD	<10% full load <7% full load for HT versions
Flicker factor	<1%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3



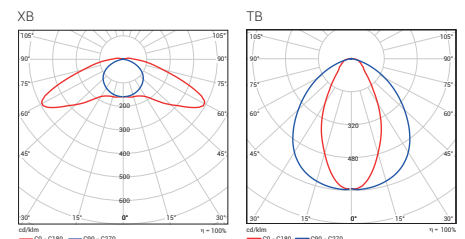


Options Special options in grey under request

Luminous flux (lm)	CRI	Light colour (K)	Driver	Driver version	Profile
65: 6500	8: >80	40: 4000	ET: non dimmable ETDD: DALI	HT: high temperature	PMMA
2000 to 8000		30: 3000 65: 6500 827-865: tunable white	ETDD CS: Casambi dimmable ETD: 1-10V dimmable ETDD CLO: Constant Lumen Output		

More options available:

- High frequency sensor (HFS)
- Through wiring: 3x1.5mm², 3x2.5mm², 5x1.5mm², 5x2.5mm²
- Length: 1800mm with 10,000lm
- Optics: extensive (XB) and narrow (TB)









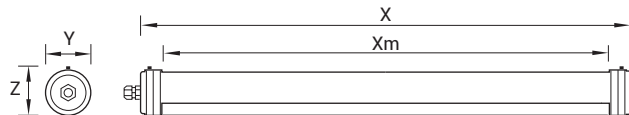
Temperature range ● -35°C +50°C ● -25°C +45°C

Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	DALI dimmable
STRONGERTUBE G2 B 6500-840... HT	6500	43	150	10175731 ●	10175732 ●
STRONGERTUBE G2 B 6500-840...	6500	43	150	10231696 ●	10231697 ●

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
STRONGERTUBE G2 B...	1340	1205	112	112	1350 x 112 x 112	4.6	1	4.8	54	42 + 42



For hyper chlorinated environments and outdoor



Fixing clips Special V4A 316L stainless steel fixing brackets included

Operational data

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	DALI dimmable
STRONGERTUBE G2 B... HT... ZB	6500	43	150	10223684 ●	10223686 ●
STRONGERTUBE G2 B... ZB	6500	43	150	10223683 ●	10223685 ●



Stainless steel fixing bracket included

- Allows luminaire rotation

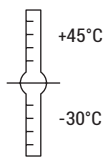


Data subject to change





Wide temperature range, suitable **from cold storage to heavy industries**



Safe for **outdoor** in areas without a roof



Excellent thermal management for use in tough environments

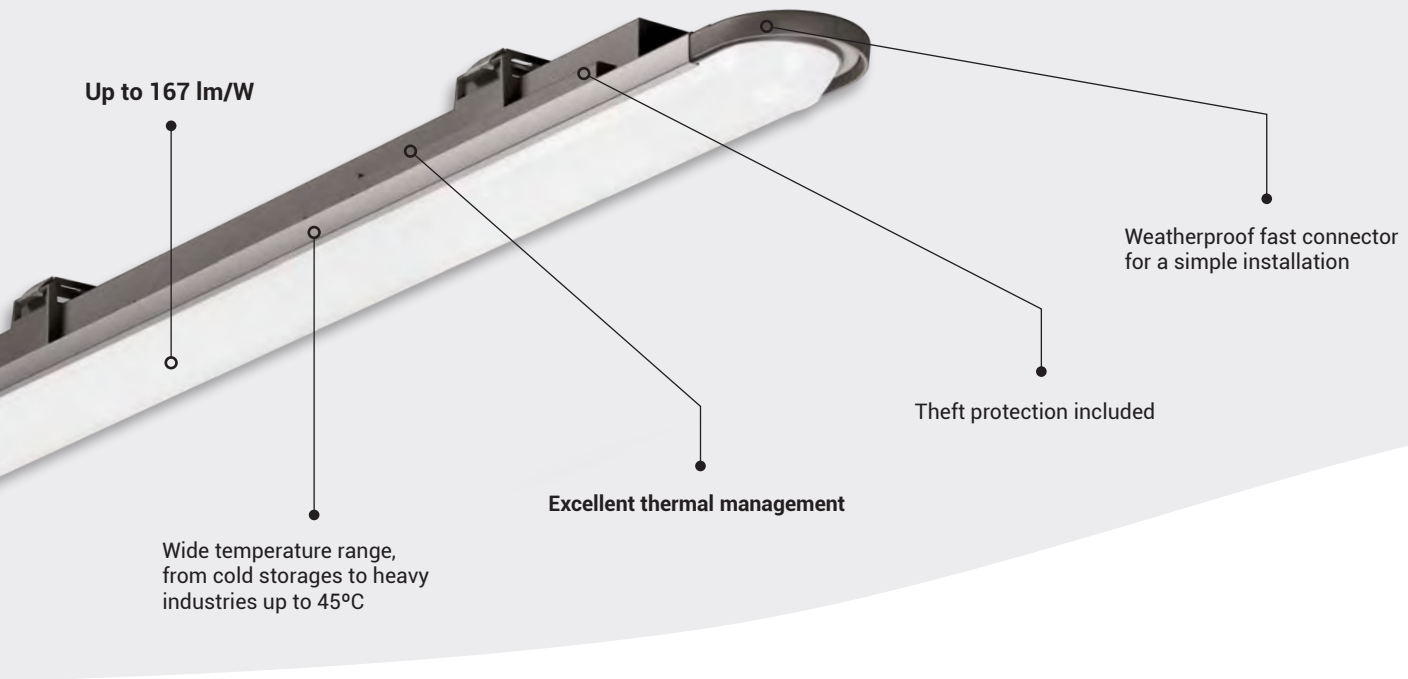


Plug & play for tool-less, fast and easy installation



Flexible luminaire with high protection and for indoor and outdoor applications

ZALEDA



5 YEARS warranty



Characteristics

Mechanical

PC: **IK08** PMMA: **IK03** **IP66**

Housing	Die-cast aluminium alloy EN-47100 Grey RAL DB703
Diffuser	Opal polycarbonate (PC) or PMMA With UV protection, manufactured in injection
Gasket	Polyurethane
Grear tray	White lacquered steel plate
Fixing clips	Stainless steel
Suspension triangles	Stainless steel
Theft protection	Stainless steel (included)



Functional

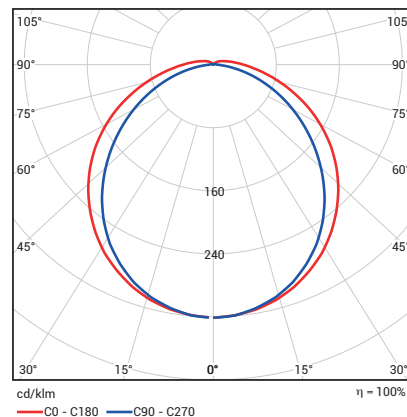
Lifetime	L80B50 85,000 hours at 35°C
Fire protection	PC: Flammability (UL94): V2 Glow wire test(EN 60695-2-11): 850°C PMMA: Flammability (UL94): HB Glow wire test (EN 60695-2-11): 650°C

Electrical

Connection	3 pole weatherproof fast connector
Power factor	>0.95 full load
THD	<10% full load
Flicker factor	<1%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV

Photometrical

SDCM < 3





Options

Luminous flux (lm)	CRI	Light colour (K)	Driver	Diffuser	Through wiring
4000: ~4500	8: >80	40: 4000	ET: non dimmable	PC	3x1.5mm ²
6000: ~6200				PMMA	

More options available:







- High bay versions 8,000 lm and 10,000 lm
- Overvoltage protection KV4 / 5

Operational data

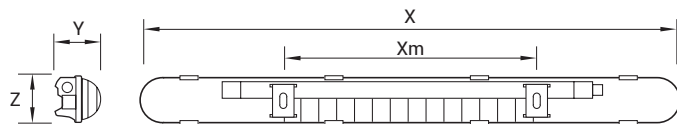
Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	
				-	3x1.5
ZALED A EVOL G2 4000-840...	4400	27	163	10145978	10145982
ZALED A EVOL G2 6000-840...	6000	38	158	10145979	10145983

Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Non-dimmable	
				-	3x1.5
ZALED A EVOL G2 4000-840...	4500	27	167	10145980	10145984
ZALED A EVOL G2 6000-840...	6200	38	163	10145981	10145985

Dimensions and logistics

Description	X	Xm	Y	Z						
	mm	mm	mm	mm	L x W x H mm	Item ¹	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
ZALED A EVOL G2...	1047	492	95	105	1085 x 100 x 125	2.9	1	3.1	96	72 + 72

¹ Weight in through wiring versions: +0.1KG



Luminaires with LED tube



Specifications

Complete high efficiency luminaires with the simplicity and easy maintenance of LED tubes.

High performance

- Up to 160lm/W and 7,300lm
- High visual comfort

Superior quality

- First-class durable materials
- Made in Spain luminaire

Complete guarantee

- Up to 5 years for housing and tube

With premium LED tube

- Optimum thermal dissipation
- Easy maintenance



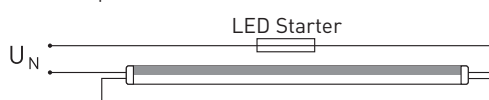
High efficiency LED tube

- Made by glass resistant to sag
- Up to 170lm/W
- 50,000 hours lifetime
- Low flicker <8%
- High power factor >0.9
- Mains supply 220-240V

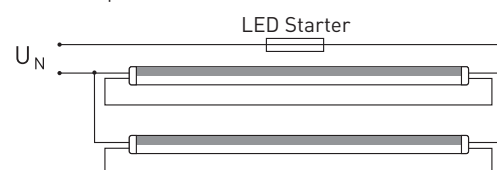


Connection scheme

One lamp:



Two lamps:



Our portfolio

T-LED



ALHAMA



PEP



PEM







Adaptable to all installations



Efficient LED tube made in glass
to avoid deterioration and prevent
sagging over time

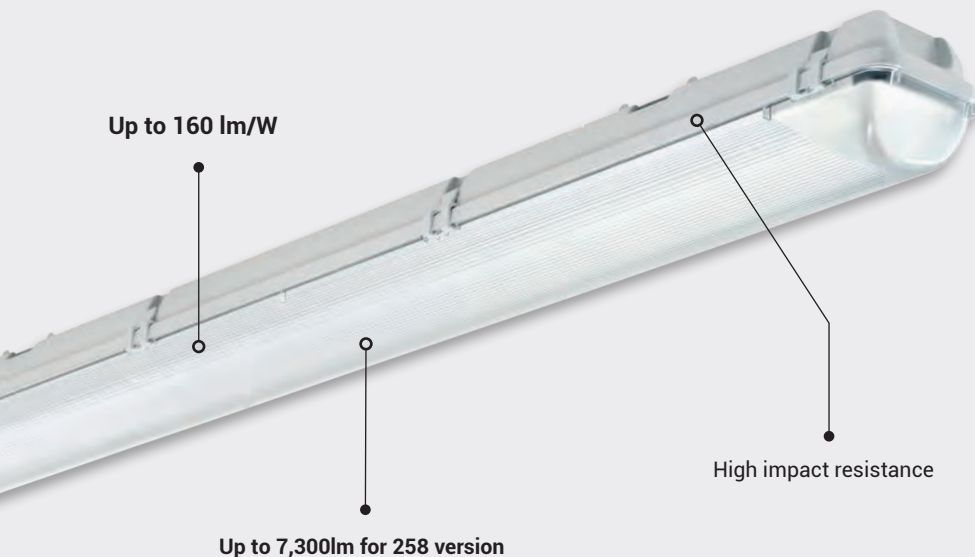


LED starter and filter capacitor
included to avoid EMC issues



All-round solution resistant to impacts,
with a high efficiency LED tube

ALHAMA T-LED



CE RoHS REACH

5 YEARS
warranty



Characteristics

Mechanical **IK08 IP66**

Housing	Injected polycarbonate, with UV protection Grey RAL 7035
Diffuser	Injected polycarbonate with UV protection
Closing clips	Polyamide 6
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Grommet
Lamp holder	G13
Fixing clips	Stainless steel
Suspension triangles	Stainless steel

Electrical

Connection	3 pole push wire terminal block
THD	<25%
Flicker factor	<8%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV
Electrical protection	LED starter and filter capacitor included to protect against surge

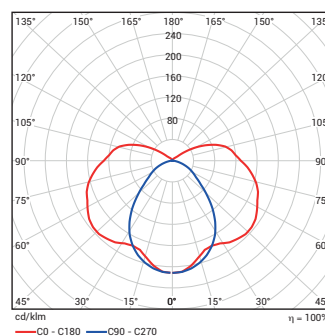


Functional

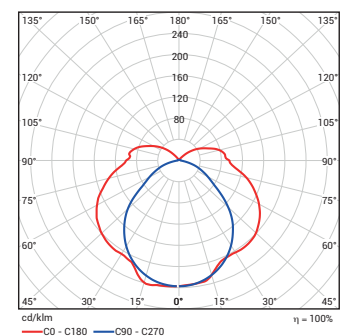
Lifetime	L70 50,000 hours
Fire protection	Flammability (UL94): V2 Glow wire test(EN 60695-2-11): 850°C

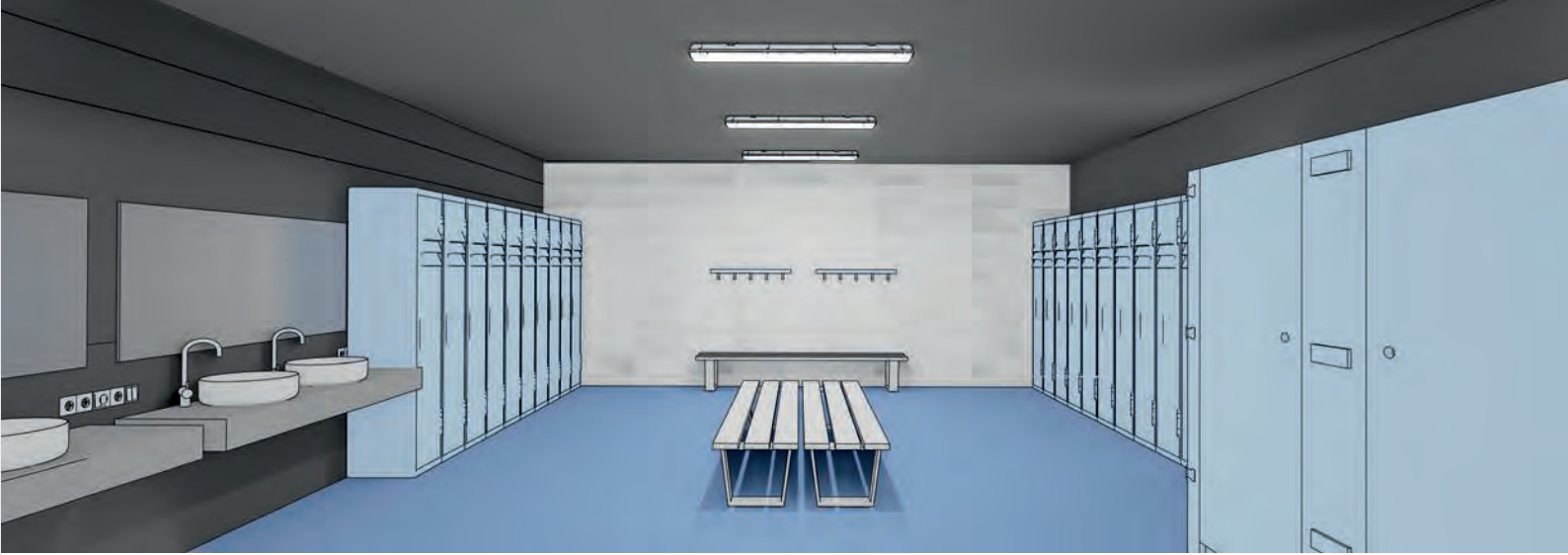
Photometrical

1 TUBE



2 TUBES










Options

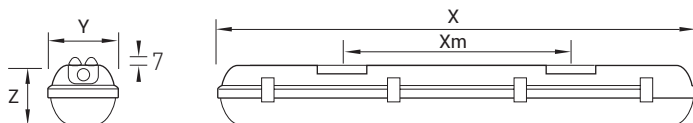
Luminous flux (lm)	Lamp type	Diffuser	Configuration	Light source
118: 950 136: 2350 158: 3800 218: 1900 236: 4600 258: 7200	LED-T8: tube (included)	PC: polycarbonate	C2: both terminals electrified	LM840: 4000K CRI80

Operational data

	Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Order number
1 TUBE	ALHAMA 118...	950	6.5	146	10194239
	ALHAMA 136...	2375	15	158	10194240
	ALHAMA 158...	3850	24	160	10194241
2 TUBES	ALHAMA 218...	1950	13	150	10194242
	ALHAMA 236...	4650	30	155	10194243
	ALHAMA 258...	7300	48	152	10194244

Dimensions and logistics

Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
ALHAMA 118...	660	390	101	101	660 x 101 x 101	1	1.0	294	168 + 168
ALHAMA 136...	1277	800	101	101	1277 x 101 x 101	1	1.8	147	84 + 84
ALHAMA 158...	1573	1100	101	101	1573 x 101 x 101	1	2.2	147	84 + 84
ALHAMA 218...	660	390	145	101	660 x 145 x 101	1	1.3	210	120 + 120
ALHAMA 236...	1277	800	145	101	1277 x 145 x 101	1	2.2	105	60 + 60
ALHAMA 258...	1573	1100	145	101	1573 x 145 x 101	1	2.7	105	60 + 60







Available in three lengths

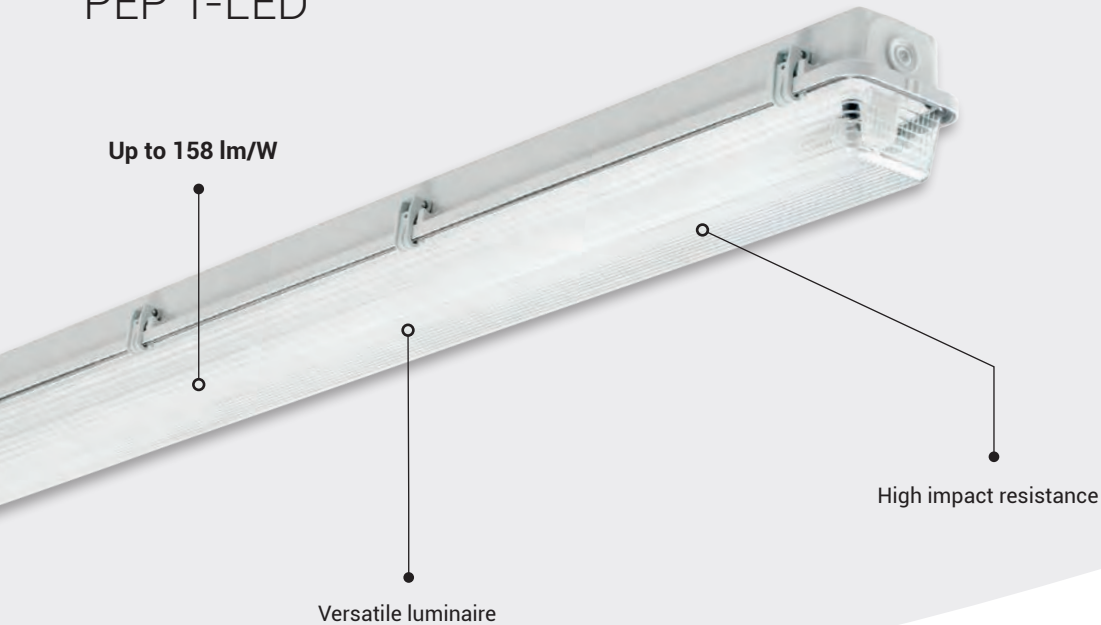
Efficient LED tube made in glass to avoid deterioration and prevent sagging over time

High robustness housing for a long durability



Versatile luminaire with high quality LED tube for different applications

PEP T-LED



CE RoHS REACH

5 YEARS
warranty



Characteristics

Mechanical

IK07 IP65

Housing	Compressed fibreglass reinforced polyester (GRP) Grey RAL 7035
Diffuser	Injected polycarbonate with UV protection
Closing clips	Polyamide 6
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Grommet
Lamp holder	G13
Fixing clips	Stainless steel
Suspension triangles	Stainless steel

Electrical

Connection	3 pole push wire terminal block
THD	<25%
Flicker factor	<8%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV
Electrical protection	LED starter and filter capacitor included to protect against surge

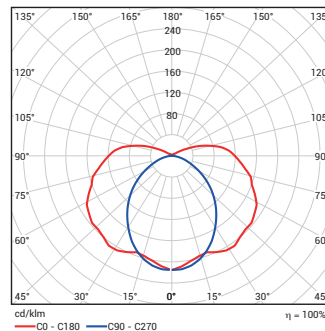


Functional

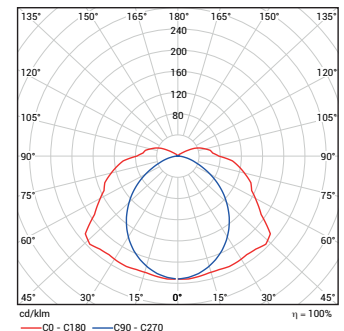
Lifetime	L70 50,000 hours
Fire protection	GRP: Flammability (UL94): HB Glow wire test (EN 60695-2-11): 650°C PC: Flammability (UL94): V2 Glow wire test(EN 60695-2-11): 850°C

Photometrical

1 TUBE



2 TUBES










Options

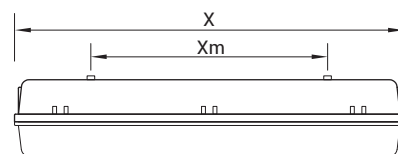
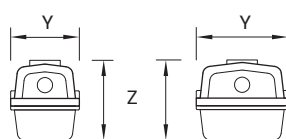
Luminous flux (lm)	Lamp type	Configuration	Closing clips	Light source
118: 950 136: 2350 158: 3800 218: 1950 236: 4640 258: 7300	LED-T8: tube (included)	C2: both terminals electrified	PA: polyamide	LM840: 4000K CRI80

Operational data

	Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Order number
1 TUBE	PEP 118...	950	6.5	146	10194245
	PEP 136...	2350	15	157	10194246
	PEP 158...	3800	24	158	10194247
2 TUBES	PEP 218...	1900	13	146	10194248
	PEP 236...	4600	30	153	10194249
	PEP 258...	7200	48	150	10194250

Dimensions and logistics

Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
PEP 118...	666	230	100	108	690 x 102 x 110	1	1.0	210	168 + 168
PEP 136...	1275	840	100	108	1290 x 102 x 110	1	1.8	105	84 + 84
PEP 158...	1575	1140	100	108	1590 x 102 x 110	1	2.1	105	84 + 84
PEP 218...	666	230	170	108	690 x 172 x 110	1	1.4	120	120 + 120
PEP 236...	1275	840	170	108	1290 x 172 x 110	1	2.1	60	60 + 60
PEP 258...	1575	1140	170	108	1590 x 172 x 110	1	2.6	60	60 + 60



PEM T-LED



CE RoHS REACH

2 YEARS
warranty

+35°C
-20°C

Characteristics

Mechanical

IK03 IP65

Housing	Compressed fibreglass reinforced polyester (GRP) Grey RAL 7035
Diffuser	PMMA with UV protection
Closing clips	Stainless steel
Gasket	Polyurethane
Gear tray	White lacquered steel plate
Cable entry	Cable gland
Lamp holder	G13
Fixing clips	Stainless steel
Suspension triangles	Stainless steel

Electrical

Connection	3 pole push wire terminal block
THD	<25%
Flicker factor	<8%
Frequency	0/50-60Hz
Rated voltage	220-240V
Safety	NON SELV
Electrical protection	LED starter and filter capacitor included to protect against surge

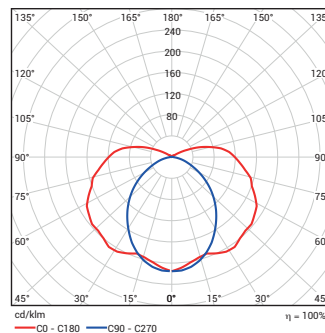


Functional

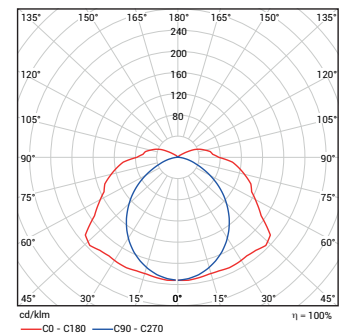
Lifetime	L70 50,000 hours
Fire protection	Flammability (UL94): HB Glow wire test (EN 60595-2-11): 650°C

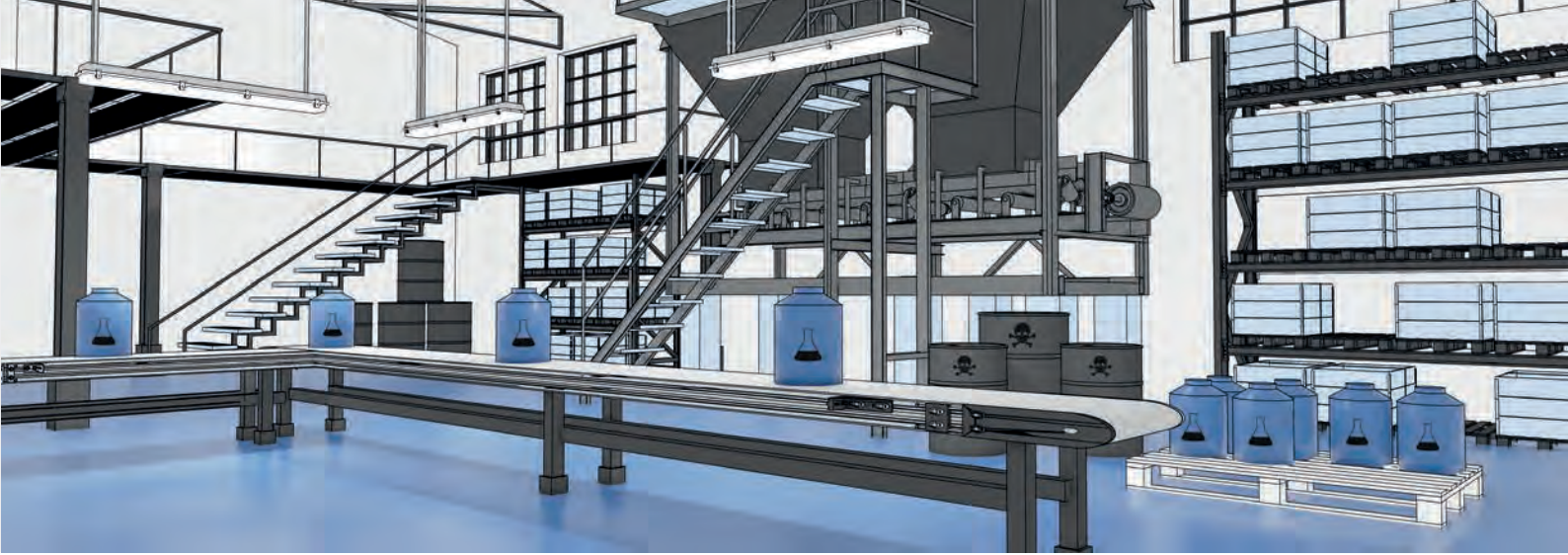
Photometrical

1 TUBE



2 TUBES





FARM



HIGH MOISTURE



CHEMICAL






Options

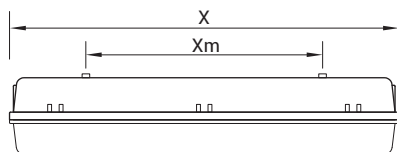
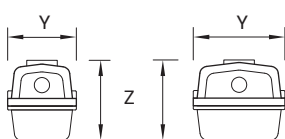
Luminous flux (lm)	Lamp type	Configuration	CONNECTION	Closing clips	Light source
118: 950 136: 2350 158: 3800 218: 1900 236: 4600 258: 7200	LED-T8: tube (included)	C2: both terminals electrified	CG: cable gland	IX: stainless steel	LM840: 4000K CRI80

Operational data

	Description	Luminous flux (lm)	Power (W)	Efficiency (lm/W)	Order number
1 TUBE	PEM 118...	950	6.5	146	10194496
	PEM 136...	2350	15	157	10194497
	PEM 158...	3800	24	158	10194498
2 TUBES	PEM 218...	1950	13	150	10194499
	PEM 236...	4640	30	155	10194500
	PEM 258...	7300	48	152	10194501

Dimensions and logistics

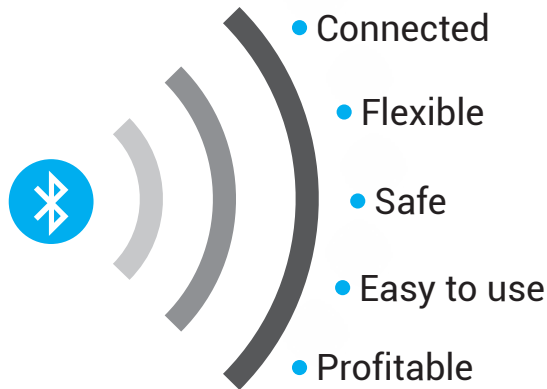
Description	X	Xm	Y	Z					
	mm	mm	mm	mm	L x W x H mm	Pcs./Box	Box	Groupage Pcs./pallet	Groupage Pcs./double pallet
PEM 118...	666	230	100	108	690 x 102 x 110	1	1.0	210	168 + 168
PEM 136...	1275	840	100	108	1290 x 102 x 110	1	1.8	105	84 + 84
PEM 158...	1575	1140	100	108	1590 x 102 x 110	1	2.1	105	84 + 84
PEM 218...	666	230	170	108	690 x 172 x 110	1	1.4	120	120 + 120
PEM 236...	1275	840	170	108	1290 x 172 x 110	1	2.1	60	60 + 60
PEM 258...	1575	1140	170	108	1590 x 172 x 110	1	2.6	60	60 + 60



Wireless lighting control

ADVANCED WIRELESS LIGHTING CONTROL SYSTEM

Control partner: CASAMBI



What are the benefits?

- **Reduced energy consumption** and contribution to the sustainability of the environment.
- **Save installation costs** thanks to a simpler, more flexible and faster commissioning.
- **Increase profitability** in refurbishment because there is no need to rewire to add new dimmable luminaires and sensors (only 3 wires required).
- **Reduce maintenance costs** by optimizing luminaires lifetime and anticipating maintenance works.
- Knowing the actual use and conditions of the spaces to **make better decisions**.



How does it work?

Wireless connection between luminaires through Low Energy Bluetooth

Mesh connection

- All devices connected
- Always communicated in all directions
- Fully interconnected and flexible.
- Every device is a signal amplifier.

High protected system

- Encrypted data
- Inhibitor and hackers proof

Central controller, wiring or devices out of the luminaire are not needed

Free App for mobile devices

- Monitor and access data remotely.



Bluetooth device features

Maximum range (open field)	50 m
Maximum range (indoor)	30 m
Operating radio frequencies	2,4 ... 2,483 Ghz
Maximum radio output power	+4 dBm

What can you do with our wireless control system?

Dimming

Adapt the luminous flux of the luminaire to the needs of space and people.

Scenes control

Define and choose the most efficient lighting configuration at all times.

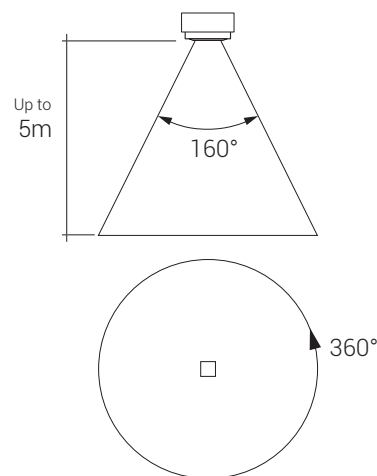
Management and monitoring

Obtain data to optimize the installation.

Presence and daylight sensor

Wireless control can be connected to sensors, which are able to activate scenes or single luminaires.

- Optimize the lighting configuration around the clock to get **up to 45% savings** during business hours.
- Daylight sensor take advantage of the natural light to provide the needed lighting level with **up to 60% savings**.



Adjustable functions

Sensitivity	Continuously between 20 and 100%
Time setting	30 sec. - 30 min.
Brightness setting	2-2,000 lux
Hold time	Continuously between 10 and 300s (2s test mode)

Case study: smart parking

Electrical figures		Estimated savings		
Luminaire power	0,029kW	Overnight, 10 pm - 9 am	85%	11 h
Electricity cost	0,14 € /kWh	Diurnal, presence	15%	5 h
Working hours, per year	8.400,00 h	Diurnal, absence	80%	8 h
ROI	~2 years	Average savings	69%	



Applications





WAREHOUSE



SMART PARKING

Farming

Farmers demand robust and long lasting lighting solutions to save costs and stimulate productivity



Challenge

Solution

Chemicals

There is ammonia from the decomposition of organic matter, sulphur, detergents or disinfectants.

→ **The right material** avoids premature damage in luminaires, even the polycarbonate may fracture.

Dust and vapours

Exposure to moisture and fumes damages the electronics, and dust reduces light output.

→ Robust products with **high IP** are required, even IP69K.

Humidity

High pressure and high temperature cleaners guarantee hygiene and there are also ambient humidity.

→ This is why **sealed luminaires** are a must.

Temperature

Heating systems are used to improve performance, which can increase temperature on the ceiling.

→ LED luminaires need to **resist these conditions**.

Maintenance

Lighting management and maintenance affects energy efficiency.

→ Luminaires which do not accumulate dirt, and with **easy cleaning**, improve useful life and reduce maintenance costs.

Animals comfort

Reducing animals stress improves its well-being and performance.

→ **Flicker-free lighting** creates a calming atmosphere.

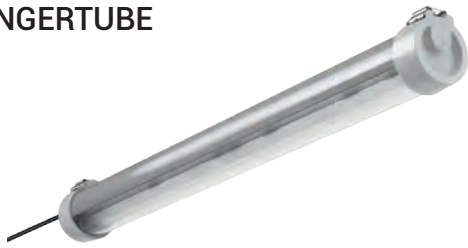




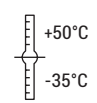
The right light is as important as ventilation, heating and cooling: it influences animals behaviour and productivity. ZALUX luminaires are developed for challenging farming environments, such as stables, mills, farms or granaries.

- Resistant materials avoid the damage caused by corrosive elements.
- IP69K potting process does not allow the income of gases in the luminaire.
- Excellent thermal management resists high temperatures during long times.
- Polyurethane gaskets increase protection against humidity.
- Flicker-free drivers ensure the correct light for employees and animals safety.
- Stainless steel fixing clips and incorporated cable facilitates installation.

STRONGERTUBE



- Up to 150lm/W
- Up to 8,000lm
- L80 100,000 hours (35°C)
- Double asymmetric light
- Gas tight

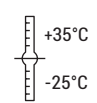


IP69K
IK10

ZALUX BASE PMMA



- Up to 138lm/W
- Up to 6,000lm
- L80 70,000 hours
- Diffuse light
- Gas tight

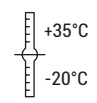


IP66 / IP69K
IK03

PEM T-LED



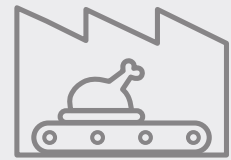
- Up to 158lm/W
- Up to 7,300lm
- L70 50,000 hours
- Diffuse light
- 2 tubes version



IP65
IK03

Food industry

Food is a critical issue for people safety, so there are strict quality and security guidelines



Challenge

Solution

Industry regulations

Food industry products require its compliance with foodstuff legislation, such as Regulation (EC) No. 852/2004.

→ An **official HACCP declaration of conformity** is a guarantee.

Safety

Facilities need to be productive and safe, to keep food free of contaminants.

→ Luminaires must guarantee **the absence of toxic materials** and avoid painted surfaces that could detach.

Hygiene requirements

Excellent cleanness with strict cleaning protocols enhances food quality and safety.

→ Smooth design luminaires with surfaces free of holes for bacteria guarantee **easy cleaning**.

Humidity

Ambient humidity requires IP66 and chemical resistance to prevent internal condensation.

→ High pressure and temperature cleaners ensure food safety, and **IP69K** protects luminaires.

Breakage risk

Glass luminaires could break and danger workers and consumers safety.

→ **Impact- and break-resistant** luminaires with covered light sources and glassless are indispensable.

Visual comfort

There are strict food quality tests, especially visual inspections.

→ Colour reproduction **CRI >80** assures accurate exams.

Thermal changes

Food and beverages production, storage and dispatch require from high to very low temperatures.

→ **Optimum heat management** within the luminaires is required.

Heat

High temperatures can increase food degradation.

→ LED technology **does not emit heat**, so it preserves the atmosphere while lower temperature improves efficiency.

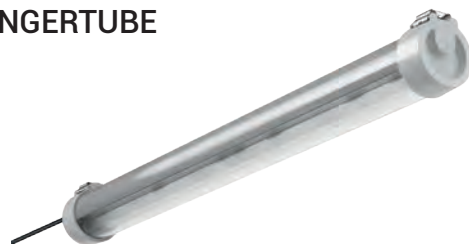




Food industry plays a key role in people well-being, so its strict guidelines are mandatory for people, and products involved. ZALUX luminaires follow HACCP standards, so they can be used safely in places where food is processed, handled and packed.

- Resistant materials facilitate cleaning and contribute to security.
- The absence of glass and toxic elements make facilities safer.
- Robust luminaires provide light quality in a broad range of temperatures.
- Lighting quality improves visual comfort, avoiding risks from bad visual inspections.
- Efficient LED luminaires save energy and increase profitability.
- Easy to install and durable luminaires reduce installation and maintenance costs.

STRONGERTUBE



- Up to 150lm/W
- Up to 8,000lm
- L80 100,000 hours (35°C)
- Double asymmetric light
- Gas tight



IP69K

IK10

ZALUX BASE PMMA



- Up to 138lm/W
- Up to 6,000lm
- L70 70,000 hours
- Diffuse light
- Gas tight



IP66 / IP69K

IK03

DUNA FLEX HE



- Up to 170lm/W
- Up to 10,000lm
- L80 100,000 hours (35°C)
- Diffuse light



IP66

IK03

Warehouses

Large and high warehouses require efficient lighting solutions that contribute to workers safety and productivity



Challenge

Big and high spaces

Workers and forklifts need a clear sight of the goods and their surroundings to drive quick and safely.

Location of the goods

Workers need optimal visual conditions on the floor and in the upper regions of the shelves.

Dust

Transport of goods brings dust, which fly around when forklifts drive by.

Safety

Light must be enough and comfortable for workers to move securely and be concentrated.

Visual comfort

Glare make workers feel uncomfortable or even temporarily blinded, which can cause accidents.

Maintenance

Warehouses usually have very high ceilings, so luminaires are installed out of reach.

Different use

Some areas are used during short times, while others 24/7, so dimming can adapt the light to the needs.

Solution

→ **High performance** luminaires illuminate all zones.

→ **Uniform horizontal and vertical light** helps them.

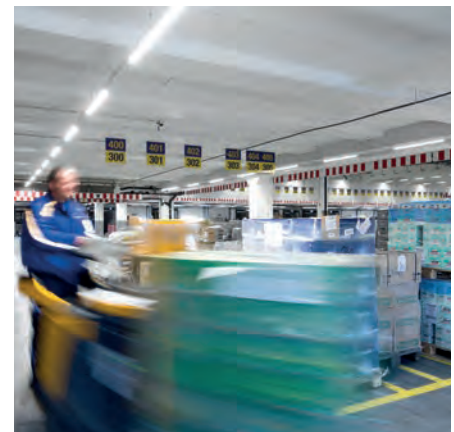
→ Luminaires must be **sealed** against its income.

→ Well illuminated areas and **flicker-free luminaires** increase productivity and safety and avoid mistakes.

→ Luminaires must guarantee **low glare**.

→ LED luminaires with **long lifetime and quick installation** save maintenance costs and increase profitability.

→ **Presence and daylight sensors** optimize light, take advantage of the natural light and reduce consumption.





Warehouses need to guarantee safety and optimal visual conditions for workers and forklifts in the right time. ZALUX luminaires are developed to offer high protection and visual comfort, while improving energy efficiency.

- The right light provides optimal conditions for workers, which increases safety and concentration.
- Longer useful life and resistant materials guarantee quality lighting during more time.
- Robust luminaires with easy mounting reduce mounting and maintenance costs.
- Smart luminaires increase energy savings through better use of the light when and where needed.
- Wireless lighting control, sensors and scenes optimize the installation to save costs.
- Professional commissioning makes installation efficient and faster.

ZALEDA



- Up to 167lm/W
- Up to 6,200lm
- L80 85,000 hours (35°C)
- Diffuse light



IP66

IK08

ZALUX BASE HE with wireless control



- Up to 138lm/W
- Up to 6,000lm
- L80 70,000 hours
- Diffuse light



IP66 / IP69K

IK10

DUNA FLEX HE



- Up to 170lm/W
- Up to 10,000lm
- L80 100,000 hours (35°C)
- Diffuse light



IP66

IK03

Smart parking

Car parks have an intensive activity, so detecting their real use helps to make better use of light while saving energy



Challenge

Use 24/7

Parking areas never close or are open for many hours a day, although its use varies.

Dirt and fumes

Dust and gas, like fumes from cars, could enter into the luminaires and damage its electronics.

Impact protection

Luminaires could be damaged easily.

Safe and sound

Safety and a good orientation for people and cars prevent accidents.

Visual comfort

Warm light can reduce visual accuracy, while cold darken the area.

Optimal light distribution

Indoor parking are dark spaces with columns and corners.

Different use from areas and time

Car parks have from light to heavy traffic in peak hours, as well as natural light, and cars move around.

Flexibility

Quick installation and easy maintenance improve installation profitability, while wireless control increases flexibility.

Solution

→ **Long lifetime products** contribute to installation efficiency.

→ **Robust products with high IP rating** are required.

→ A **high IK rating** is essential, especially in luminaires within reach of vehicles.

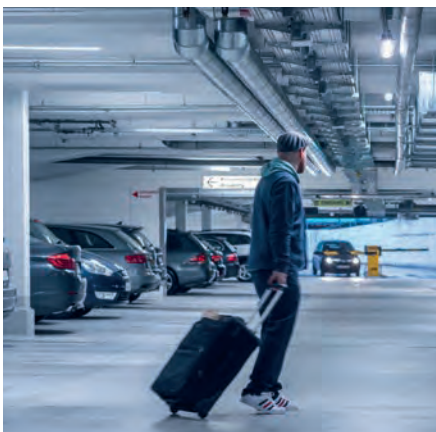
→ An **proper light level** facilitate recognition of vehicles, people and signage, avoiding dark zones and the lack of light in peak times.

→ A **neutral white light** makes people more comfortable and helps CCTV, creating a safe environment.

→ A **diffuse and uniform light** reduces the number of points, which cut investment, installation and operation costs.

→ **Dimmable luminaires and presence sensors** adapt the light to improve efficiency.

→ Intelligent control facilitates commissioning and provides real time information to **anticipate maintenance**.





Car parks need to guarantee safety and optimal visual conditions for pedestrians and cars in the right time. ZALUX luminaires are developed to offer high protection and visual comfort, while improving energy efficiency.

- The right light provides optimal conditions for people and cars, which guarantees safety.
- Longer useful life and resistant materials guarantee quality lighting during more time, even in outdoor.
- Robust luminaires with easy mounting reduce mounting and maintenance costs.
- Intelligent luminaires increase energy savings through better use of the light when and where needed.
- Wireless control, sensors and scenes optimize the installation to save costs with flexibility.
- Professional and easy commissioning makes installation efficient.

ZALEDA



- Up to 167lm/W
- Up to 6,200lm
- L80 85,000 hours at 35°C
- Diffuse light



IP66

IK08

ZALUX BASE HE with wireless control



- Up to 138lm/W
- Up to 6,000lm
- L80 70,000 hours
- Diffuse light



IP66 / IP69K

IK10

DUNA FLEX STP



- Up to 145lm/W
- Up to 6,000lm
- L80 50,000 hours
- Different optics



IP66

IK08

Technical Information

Icons



The product complies with the dispositions of the European Community. Luminaires must comply with 2004/108/EC for Electromagnetic Compatibility, 2006/95/EC for the production of the luminaires and 2009/125/EC for ecodesign.



Marking common to luminaires, associated equipments and information technology equipments, that indicates the conformity with European standards. The complying of the norms by the manufacturers is tested by external official bodies (AENOR, VDE...).



Compatibility for safety approval certification is confirmed by the Certification Body (CB) of each standard based on the test result provided by the authorized test laboratory.



Luminaires comply with the specifications of foodstuff legislation in accordance with Regulation (EU) No. 852/2004 (HACCP) Appendix II Section I No. 2 a, b Section II No. 1c for luminaires, and can be used in applications where foodstuffs are processed, handled and packed.



The RoHS Directive restricts the use of six hazardous materials in the manufacture of electronic and electrical equipment: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).



Luminaires comply with the related requirements of European Union Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).



Class I luminaires are earthed.



Class II luminaires are double insulated.









On luminaires with electronic ballast, it means that they can be used in places where it is needed to limit external surface temperatures, due to the risk of accumulating combustible dust on the luminaires, but without an atmosphere with risk of an explosion.



Luminaires are 100% free of paint-wetting impairment substances.

Applications

 AUTOMOTIVE	 AVIATION	 CAR WASH	 CELLAR
 CHEMICAL	 CORRIDOR	 FACTORY	 FARM
 FOOD	 > 8m HIGH BAY	 HIGH MOISTURE	 LABORATORY
 LOGISTICS	 MARITIME	 PARKING	 PHARMA
 SHEDS	 SMART PARKING	 STORAGE	 SWIM POOL
 TRANSPORT	 WAREHOUSE	 WORKSHOP	

Resistance to chemical agents

Chemical agents	Polyester	Polycarbonate	Aluminium	PMMA	Stainless steel
Acetic acid 10%	✓	✓	✓	✓	✓
Acetone	∅	X	✓	X	✓
Alcoholic beverages	✓	✓	✓	∅	✓
Aluminium sulphate	✓	✓	✓	✓	∅
Ammonia 5%	∅	X	✓	✓	✓
Aniline	∅	X	✓	X	✓
Arsenic acid 20%	∅	✓	✓	✓	✓
Benzene	X	X	✓	X	∅
Bencylic alcohol	X	X	∅	X	∅
Bromine	X	X	X	X	X
Calcium Chloride	✓	✓	✓	✓	∅
Calcium nitrate	✓	✓	✓	✓	∅
Carbon tetrachloride	X	X	✓	X	∅
Carbonic acid	✓	X	✓	X	✓
Caustic potash 5%	X	X	X	✓	∅
Cement	✓	✓	✓	✓	∅
Hydrochloric acid 1-5%	∅	✓	X	✓	X
Chlorine liquids (vapours)	X	X	X	X	∅
Chloroform	X	X	✓	X	✓
Chromic acid	X	∅	X	∅	∅
Citric acid 20%	✓	✓	✓	✓	∅
Copper sulphate	✓	✓	X	✓	∅
Diesel-naphtha oil	✓	∅	✓	✓	✓
Ethyl alcohol 30%	✓	✓	✓	∅	✓
Ethyl chloride	X	X	∅	X	✓
Ethyl ether	✓	X	✓	X	∅
Food oils and fats	✓	X	✓	✓	✓
Formic acid 10%	∅	✓	X	✓	∅
Glycerine	✓	✓	✓	✓	✓
Hexane	∅	✓	✓	✓	✓
Iodine	✓	X	∅	✓	X
Isopropyl alcohol	✓	∅	✓	∅	∅
Lubricating oil	✓	✓	✓	✓	✓
Magnesium sulphate	✓	✓	✓	✓	✓
Methanol	✓	X	✓	∅	✓
Mineral oils	✓	✓	✓	✓	✓
Nitric acid 20%	X	∅	X	✓	✓
Oxygen	✓	✓	✓	✓	✓
Ozone	✓	✓	✓	✓	∅
Perchloric acid 10%	X	✓	X	✓	X
Petrol	✓	X	✓	✓	✓
Phenol	∅	X	✓	X	∅
Potassium bromide	✓	✓	∅	✓	∅
Potassium nitrate	✓	✓	✓	✓	∅
Potassium permanganate	✓	✓	✓	✓	∅
Sea climate	✓	✓	∅	✓	∅
Silicon oils	✓	✓	✓	∅	✓
Soda bleach 15%	✓	X	∅	✓	∅
Sodium chloride	✓	✓	∅	✓	∅
Sodium hydroxide 5%	✓	X	X	✓	∅
Sodium sulphate	✓	✓	✓	✓	∅
Sugar	✓	✓	✓	✓	✓
Sulphur	✓	✓	✓	✓	∅
Sulphuric acid 30%	X	✓	X	✓	X
Toluene	X	X	✓	X	✓
Trichloroethylene	X	X	✓	X	∅
Zinc sulphate	✓	✓	∅	✓	∅

- ✓ Resistant
- ∅ Relatively resistant
- X Non-resistant

This is a recommendation about the compatibility of equivalent or similar chemical agents included in the composition of the cleaning products with the polymers present in the luminaires. It is based on information from material suppliers, available documentation, tests and our experience in different applications.

Materials resistance can be also affected by concentration, temperature, presence of various chemicals, solvent evaporation and other factors, so this table must be considered as a general reference. Product compliance must be determined by the customer for each specific use.

Ingress protection: IP

The protection of luminaires against the penetration of dust, solid matter and dampness is in accordance with UNE-EN 60529:2018 standard.

↓ IP66

Protection against the penetration of solid matter and dust.

0	Unprotected
1	Protected against solid matter greater than 50 mm
2	Protected against solid matter greater than 12 mm
3	Protected against solid matter greater than 2.5 mm
4	Protected against solid matter greater than 1 mm (e.g. small tools, small cables, etc.)
5	Protected against dust (without damaging sediment)
6	Protected against dust

↓ IP66

Protection against the penetration of liquids.

0	Unprotected
1	Protected against vertical water splashes (condensation)
2	Protected against water splashes of up to 15° of the vertical
3	Protected against water splashes of up to 60° of the vertical
4	Protected against water projections in all directions
5	Protected against water assault in all directions
6	Protected against water assault similar to heavy seas
7	Protected against immersion
8	Protected against prolonged effects of underwater immersion
9K ¹	Protected against high-pressure / steam-jet cleaning ¹ .

¹The third figure K is in accordance with ISO 20653:2013 standard, related to the protection of electrical equipment against foreign objects, water and access.

Impact protection: IK

↓↓ IK08

00	Unprotected
01	Impact Energy 0.15 Joules
02	Impact Energy 0.20 Joules
03	Impact Energy 0.35 Joules
04	Impact Energy 0.50 Joules
05	Impact Energy 0.70 Joules
06	Impact Energy 1 Joule
07	Impact Energy 2 Joules
08	Impact Energy 5 Joules
09	Impact Energy 10 Joules
10	Impact Energy 20 Joules

Product descriptions

Product model	Description	Order number	Pg.
ZALUX BASE			
ZALUX BASE HE	BHE 0.6 20-840 ET BPC	10171106	12
ZALUX BASE HE	BHE 1.2 40-840 ET BPC	10171107	12
ZALUX BASE HE	BHE 1.2 40-840 ET BPC 3X1.5	10171108	12
ZALUX BASE HE	BHE 1.2 40-840 ET BPC EB1	10171109	12
ZALUX BASE HE	BHE 1.2 40-840 ET BPC EB3	10171110	12
ZALUX BASE HE	BHE 1.2 40-840 ETDD BPC	10181228	12
ZALUX BASE HE	BHE 1.2 40-840 ETDD BPC 5X1.5	10221083	12
ZALUX BASE HE	BHE 1.2 40-840 ETDD CS BPC HFS	10205975	12
ZALUX BASE HE	BHE 1.2 40-840 ETDD CS BPC	10205974	12
ZALUX BASE HE	BHE 1.5 60-840 ET BPC	10171111	12
ZALUX BASE HE	BHE 1.5 60-840 ET BPC 3X1.5	10171112	12
ZALUX BASE HE	BHE 1.5 60-840 ET BPC EB1	10171113	12
ZALUX BASE HE	BHE 1.5 60-840 ET BPC EB3	10171114	12
ZALUX BASE HE	BHE 1.5 60-840 ETDD BPC	10221084	12
ZALUX BASE HE	BHE 1.5 60-840 ETDD BPC 5X1.5	10221085	12
ZALUX BASE HE	BHE 1.5 60-840 ETDD CS BPC HFS	10205977	12
ZALUX BASE HE	BHE 1.5 60-840 ETDD CS BPC	10205976	12
ZALUX BASE STP	BSTP 0.6 20-840 ET BPC	10171115	14
ZALUX BASE STP	BSTP 1.2 40-840 ET BPC	10171116	14
ZALUX BASE STP	BSTP 1.2 40-840 ET BPC 3x1.5	10171117	14
ZALUX BASE STP	BSTP 1.2 40-840 ETDD BPC	10175406	14
ZALUX BASE STP	BSTP 1.2 40-840 ETDD BPC 5x1.5	10221087	14
ZALUX BASE STP	BSTP 1.5 60-840 ET BPC	10171118	14
ZALUX BASE STP	BSTP 1.5 60-840 ET BPC 3x1.5	10171119	14
ZALUX BASE STP	BSTP 1.5 60-840 ETDD BPC	10221088	14
ZALUX BASE STP	BSTP 1.5 60-840 ETDD BPC 5x1.5	10221089	14
ZALUX BASE ST	BST 1.2 37-840 ET BPC	10170844	16
ZALUX BASE ST	BST 1.2 37-840 ET BPC 3x1.5	10170845	16
ZALUX BASE ST	BST 1.5 55-840 ET BPC	10170846	16
ZALUX BASE ST	BST 1.5 55-840 ET BPC 3x1.5	10170847	16
ZALUX BASE PMMA	BHE 69K 1.2 40-840 ET BPM 3M	10177469	18
ZALUX BASE PMMA	BHE 69K 1.2 40-840 ET BPM 3M 3X1.5	10177470	18
ZALUX BASE PMMA	BHE 69K 1.2 40-840 ET BPM 3M 5X2.5 L1	10177471	18
ZALUX BASE PMMA	BHE 69K 1.5 60-840 ET BPM 3M	10177472	18
ZALUX BASE PMMA	BHE 69K 1.5 60-840 ET BPM 3M 3X1.5	10177473	18
ZALUX BASE PMMA	BHE 69K 1.5 60-840 ET BPM 3M 5X2.5 L1	10177474	18
ZALUX BASE D.O.	BDO 0.6 12-YEL ET BPC	10215958	20
ZALUX BASE D.O.	BDO 0.6 12-YEL ETDD BPC	10215959	20
ZALUX BASE D.O.	BDO 1.2 24-YEL ET BPC	10215960	20
ZALUX BASE D.O.	BDO 1.2 24-YEL ETDD BPC	10215961	20

Product model	Description	Order number	Pg.
DUNA FLEX			
DUNA FLEX HE HIGH BAY	DHE 1.5 80-840 ET SMC DPM IX CG	10172636	24
DUNA FLEX HE HIGH BAY	DHE 1.5 80-840 ET SMC DPM IX CG 3x1.5	10172637	24
DUNA FLEX HE HIGH BAY	DHE 1.5 80-840 ET SMC DPM IX CG 5x2.5	10203625	24
DUNA FLEX HE HIGH BAY	DHE 1.5 80-840 ETDD SMC DPM IX CG 5x2.5	10175694	24
DUNA FLEX HE HIGH BAY	DHE 1.5 100-840 ET SMC DPM IX CG	10176408	24
DUNA FLEX HE HIGH BAY	DHE 1.5 100-840 ET SMC DPM IX CG 3x1.5	10203626	24
DUNA FLEX HE HIGH BAY	DHE 1.5 100-840 ET SMC DPM IX CG 5x2.5	10203628	24
DUNA FLEX HE HIGH BAY	DHE 1.5 100-840 ETDD SMC DPM IX CG 5x2.5	10195391	24
DUNA FLEX HE+	DHE+ 1.2 40-840 ET SMC DPM IX CG	10203607	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ET SMC DPM IX CG 3x1.5	10203609	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ET SMC DPM IX CG EB3	10203611	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ETDD SMC DPM IX CG	10203608	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ETDD SMC DPM IX CG 5x2.5	10203610	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ET SMC DPM IX CG HFS	10203612	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ETDD CS SMC DPM IX CG	10214670	26
DUNA FLEX HE+	DHE+ 1.2 40-840 ETDD CS SMC DPM IX CG HFS	10214672	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ET SMC DPM IX CG	10203617	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ET SMC DPM IX CG 3x1.5	10203619	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ET SMC DPM IX CG EB3	10203621	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ETDD SMC DPM IX CG	10203618	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ETDD SMC DPM IX CG 5x2.5	10203620	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ET SMC DPM IX CG HFS	10203622	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ETDD CS SMC DPM IX CG	10214671	26
DUNA FLEX HE+	DHE+ 1.5 60-840 ETDD CS SMC DPM IX CG HFS	10214676	26
DUNA FLEX STP	DSTP 1.2 40-840 ET PC DPC IX-U	10203613	28
DUNA FLEX STP	DSTP 1.2 40-840 ETDD PC DPC IX-U	10203614	28
DUNA FLEX STP	DSTP 1.2 40-840 ET PC DPC IX-U 3x1.5	10203615	28
DUNA FLEX STP	DSTP 1.2 40-840 ETDD PC DPC IX-U 5x2.5	10203616	28
DUNA FLEX STP	DSTP 1.2 40-840 ET PC DPC PA	10171079	28
DUNA FLEX STP	DSTP 1.2 40-840 ET PC DPC PA 3x1.5	10171081	28
DUNA FLEX STP	DSTP 1.5 60-840 ET PC DPC IX-U	10203630	28
DUNA FLEX STP	DSTP 1.5 60-840 ETDD PC DPC IX-U	10203631	28
DUNA FLEX STP	DSTP 1.5 60-840 ET PC DPC IX-U 3x1.5	10203632	28
DUNA FLEX STP	DSTP 1.5 60-840 ETDD PC DPC IX-U 5x2.5	10203633	28
DUNA FLEX STP	DSTP 1.5 60-840 ET PC DPC PA	10171080	28
DUNA FLEX STP	DSTP 1.5 60-840 ET PC DPC PA 3x1.5	10171082	28
DUNA FLEX ST	DST 1.2 40-840 ET PC DPC PA-U	10199112	30
DUNA FLEX ST	DST 1.2 40-840 ET PC DPC PA-U 3x1.5	10214674	30
DUNA FLEX ST	DST 1.5 60-840 ET PC DPC PA-U	10214673	30
DUNA FLEX ST	DST 1.5 60-840 ET PC DPC PA-U 3x1.5	10214675	30

Product model	Description	Order number	Pg.
STRONGERTUBE			
STRONGERTUBE	STRONGERTUBE G2 B 6500-840 ET HT PMMA	10175731	34
STRONGERTUBE	STRONGERTUBE G2 B 6500-840 ETDD HT PMMA	10175732	34
STRONGERTUBE	STRONGERTUBE G2 B 6500-840 ET PMMA	10231696	34
STRONGERTUBE	STRONGERTUBE G2 B 6500-840 ETDD PMMA	10231697	34
STRONGERTUBE ZB	STRONGERTUBE G2 B 6500-840 ET HT PMMA ZB	10223684	34
STRONGERTUBE ZB	STRONGERTUBE G2 B 6500-840 ETDD HT PMMA ZB	10223686	34
STRONGERTUBE ZB	STRONGERTUBE G2 B 6500-840 ET PMMA ZB	10223683	34
STRONGERTUBE ZB	STRONGERTUBE G2 B 6500-840 ETDD PMMA ZB	10223685	34

ZALED A

ZALED A	ZALED A EVOL G2 4000-840 ET PC	10145978	38
ZALED A	ZALED A EVOL G2 6000-840 ET PC	10145979	38
ZALED A	ZALED A EVOL G2 4000-840 ET PMMA	10145980	38
ZALED A	ZALED A EVOL G2 6000-840 ET PMMA	10145981	38
ZALED A	ZALED A EVOL G2 4000-840 ET PC 3x1.5	10145982	38
ZALED A	ZALED A EVOL G2 6000-840 ET PC 3x1.5	10145983	38
ZALED A	ZALED A EVOL G2 4000-840 ET PMMA 3x1.5	10145984	38
ZALED A	ZALED A EVOL G2 6000-840 ET PMMA 3x1.5	10145985	38

ALHAMA T-LED

ALHAMA T-LED	ALHAMA 118 LED-T8 PC C2 LM840	10194239	44
ALHAMA T-LED	ALHAMA 136 LED-T8 PC C2 LM840	10194240	44
ALHAMA T-LED	ALHAMA 158 LED-T8 PC C2 LM840	10194241	44
ALHAMA T-LED	ALHAMA 218 LED-T8 PC C2 LM840	10194242	44
ALHAMA T-LED	ALHAMA 236 LED-T8 PC C2 LM840	10194243	44
ALHAMA T-LED	ALHAMA 258 LED-T8 PC C2 LM840	10194244	44

PEP T-LED

PEP T-LED	PEP 118 LED-T8 C2 PA LM840	10194245	48
PEP T-LED	PEP 136 LED-T8 C2 PA LM840	10194246	48
PEP T-LED	PEP 158 LED-T8 C2 PA LM840	10194247	48
PEP T-LED	PEP 218 LED-T8 C2 PA LM840	10194248	48
PEP T-LED	PEP 236 LED-T8 C2 PA LM840	10194249	48
PEP T-LED	PEP 258 LED-T8 C2 PA LM840	10194250	48

Product model	Description	Order number	Pg.
PEM T-LED			
PEM T-LED	PEM 118 LED-T8 C2 CG IX LM840	10194496	50
PEM T-LED	PEM 136 LED-T8 C2 CG IX LM840	10194497	50
PEM T-LED	PEM 158 LED-T8 C2 CG IX LM840	10194498	50
PEM T-LED	PEM 218 LED-T8 C2 CG IX LM840	10194499	50
PEM T-LED	PEM 236 LED-T8 C2 CG IX LM840	10194500	50
PEM T-LED	PEM 258 LED-T8 C2 CG IX LM840	10194501	50

General sale conditions

Our acceptance of an order entails, in any event, that the buyer accepts the following general conditions of sale and supply:

1. Source of supply

ZALUX luminaires can be obtained through our established network of distributors in the different countries.

2. Offers

The written, oral and telephone offers are without compromise. The delivery of offers does not oblige us to accept the order. All orders and compromises are only valid if we have expressly ratified them in writing.

3. Prices

The prices of the Price List in force are understood to be for materials in stock. We reserve the right to modify the prices; if it is possible, said variation will be communicated in the best possible time.

4. Delivery time

Delivery time will be confirmed individually once the order is accepted. Delivery time set by ZALUX, S.A., will be respected and only modified due to production or force majeure. Delay will be communicated to the customer in advance, for his approval. Delivery delays will not allow the buyer to neither cancel the order nor to apply any penalty nor indemnifications for it, except for the case that it has been specifically agreed in advance.

5. Orders

ZALUX, S.A., can unilaterally annul current orders, if the circumstances of a main force that impede their completion should occur. Understood as circumstances of a main force: industrial disputes, labour disruptions, shortage of raw materials, etc. The buyer cannot annul orders for specially made materials without our written agreement. In case of acceptance on our part the expenses incurred up to the moment of cancellation will be charged to the buyer.

6. Packaging

The products are sold in their original cardboard package. Under certain circumstances or the buyer indicates to us to use another package, it will be charged to the buyer at its cost price.

7. Transport

With the delivery of the merchandise to the transport agency the delivery is considered to have been correctly made. The risks of transport of the consignment of our products are on the buyers' account. They can only reclaim from the transport agency for the damages incurred during transport. We will with the utmost pleasure collaborate and support their reclamation with details, etc.

8. Measurements

The measurements are given in millimetres in the descriptions of the models. We reserve the right to introduce small deviations in the measurements as well as modifications due to improvements to the models. The price would be susceptible to variation in this case.

9. Reclamations

Reclamations relative to numerous faults and defects will only be valid if the proper reclamation has been sent within the seven days as from the reception of the merchandise. If the reclamation is founded and the merchandise is in its original state, the corresponding acceptance will be sent.

10. Return of material

Return of material will not be accepted for reasons of mistaken instructions, shapes, quantities or material to be repaired, if we have not previously given our written authorisation. Those returns must be sent DDP ZALUX and 30% demerit of the original value will be applied. We do not accept the return of specially made products.

11. Property rights

In all cases and even against a third party, ZALUX, S.A., conserves full ownership of all the supplied materials, in the case that the agreed payment has not been settled.

12. Patent rights

All the models in this catalogue are protected by law. Legal action with right to redemption will be taken against anyone making imitations.

13. Reprints

Total or partial reproduction of this catalogue is forbidden without the corresponding written authorisation of ZALUX, S.A.

14. Payment

The form of payment will be established at the time of making a firm order for the merchandise, in accordance with the usual standards in ZALUX, S.A.

15. Jurisdiction

For any question that could arise in the completion or interpretation of these general rules, the contracting parties, with expressly renouncing any local law code that could correspond to them, will be submitted expressly to the Magistrate Law Courts of Zaragoza.

16. Modifications

ZALUX, S.A. in its continuous improvement process, reserves the right to modify its technical specifications without any previous notice.

The buyer is responsible that the product purchased in components, once fully wired, meets the requirements of the respective country.



NUNTAWOOT PANGPUKDEE

นันทวุฒิ แพ่งภักดิ์

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เลขที่ 332/158 หมู่ที่ 3 ถนนจางหวง-โทรจาง
อ. บางกรพพัฒนา อ. บางบัวทอง จ.นนทบุรี 11110

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