

# **NORTHCLIFFE**

## **MAKING LIFE BRIGHTER**

# **2012**

## HOW TO USE CATALOGUE FOR STANDARD RANGE?

Passat 4 18 A07 9CR EM3 HF

**Option list**, there:

9CR- means 9 cross blades

EM3 -means emergency version 3 hours

HF -means high frequency control gear

**Product number**

**Wattage of lamps**

**Quantity of lamps**

**Name of luminaire**

### Illustrations

Pictures of fitting and options, markings

### Product description

luminaire parts, their materials, packaging and applications

### Product table

basic information of the products: names, lamp types and sockets, dimensions, weights and wattages

### Option list

modifications of the luminaire

### Photometric data

light characteristics of the product or range of products



<b>Type:</b>	Traditional recessed T8 luminaire with glossy V-shaped louvre. A classic design for general commercial lighting.
<b>Specification:</b>	A glossy V-shaped louvre with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Number of cross blades is optional from 5 upto 11 for better glare protection. Two types of fully enclosed white painted steel bodies to choose from: standard (Passat 418 A07 RGD) or economic (Passat 418 A05). Wiring is concealed and not visible from ground level.
<b>Installation:</b>	Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Application:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Passat 218 D/5	2x18 (G13)	598x299x85	2,4	42
Passat 418 A05	4x18 (G13)	595x595x72	3,0	84
Passat 418 A07 RGD	4x18 (G13)	595x595x72	3,7	84
Passat 236 D/6	2x36 (G13)	1134x299x85	3,9	84
Passat 436 D/7	4x36 (G13)	1134x598x85	7,2	168

Options available on request:		
HF- High frequency control gear	M01- Matt reflector	
D05- Dimmable ballasts	7CR- Louvre with 7 cross blades	
07E- Emergency version 1 hour	9CR- Louvre with 9 cross blades	
07H- Emergency version 2 hour	11CR- Louvre with 11 cross blades	
07L- Emergency version 3 hour	3- poles connector (subject to minimum order)	
4TB- 4 way terminal block for loop feed and ease of wiring	W01- Low Power Factor	
5TB- 5 way terminal block for loop feed and ease of wiring		

Factors of relative lighting distribution, %												
Operating ratio, 0												
Beam angle, °	0	10	20	30	40	50	60	70	80	90	100	110
0	100	80	60	40	20	10	5	3	2	1	0	0
10	100	80	60	40	20	10	5	3	2	1	0	0
20	100	80	60	40	20	10	5	3	2	1	0	0
30	100	80	60	40	20	10	5	3	2	1	0	0
40	100	80	60	40	20	10	5	3	2	1	0	0
50	100	80	60	40	20	10	5	3	2	1	0	0
60	100	80	60	40	20	10	5	3	2	1	0	0
70	100	80	60	40	20	10	5	3	2	1	0	0
80	100	80	60	40	20	10	5	3	2	1	0	0
90	100	80	60	40	20	10	5	3	2	1	0	0
100	100	80	60	40	20	10	5	3	2	1	0	0
110	100	80	60	40	20	10	5	3	2	1	0	0





The diagram illustrates the structure of a barcode with the following labels for each segment:

- BARAT LED**: Name of luminaire
- B104**: Product number
- 2x**: Quantity of strips
- 2140lm**: Luminous flux: 1900 lm/strip
- T8->**: Color rendering: Ra >80%
- 40->**: Color temperature: 4000K
- OP**: Option list, there: OP- opalized diffuser

## Pictures of fitting and options, markings

luminaire parts, their materials,  
packaging and applications

basic information of the products:  
names, lamp types and sockets,  
dimensions, weights and wattages

modifications of the luminaire

light characteristics of  
the product or range of products

IP66 for High impact resistance with opalized diffuser



Elbow with two long slots for easy pipe fitting, sealing with an O-ring and a nut and washer.

10	Barium meal study	GB	Spent 10 minutes preparing the office
20	2 x 1000 cc enema for constipation	1.5hr	Through using 2nd hand sink was patient's personal linen
30	3 x 1000 cc enema for constipation	1.5hr	Through using 2nd hand sink was patient's personal linen

# CONTENTS

About company

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Why T5 lighting fixtures?

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iDIM applications

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PIR devices for plastic luminaires

Energy saving solutions and power reduction devices for street lighting

## Recessed T5/LED luminaires

Sirius 2/4x14/24 W



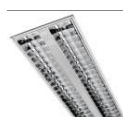
Polaris 2/4x14/24 W



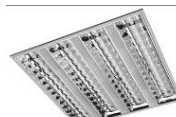
Polaris 1/2x28/54 W



Polaris 2x28/54 W



Polaris 4x14/24W



Polaris 3/4x14/24 W



Levanto R LED



Marenco R LED



Breeze ECO  
2/4x14/24/28/54 W



## Recessed Indirect Luminaires

Jetta 2x36/40/55 W



Jetta 2x36/40/55W



Jetta  
1/2x14+2x50W



Bali 1x14-80/4x14-24



## Recessed T8 Luminaires

Breeze 4x18W



Breeze 2x18/36W



Breeze 4x36W



Breeze DPAR 4x18/14-24



Breeze 4x18W RIB



Passat 2/4x18/36W



Mistral 4x18W ECO



Monsoon 4x18W ECO



Levanto  
2/4x18/36W



Marenco 2/4x18/36W



## Surface and Suspended T5/LED Luminaires

Polaris 1/2x14/24W



Polaris  
2/4x14/24W



Polaris  
4x14/24W



Polaris  
1/2x28/54W



Polaris 2/4x28/54W



Suspension kit



Cap with spiral cable



Levanto S LED



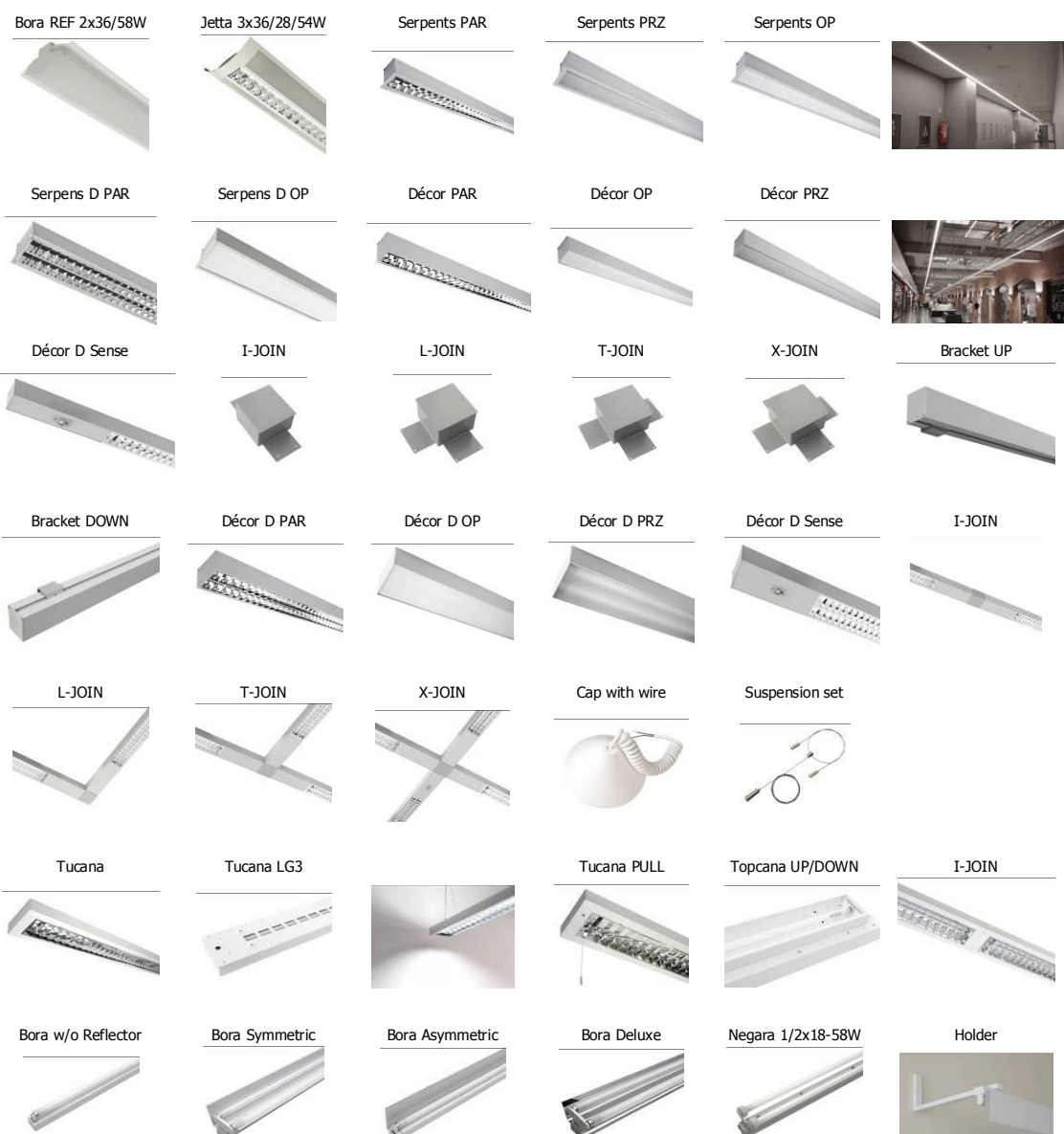
Marenco S LED



## Surface and Suspended T8 Luminaires



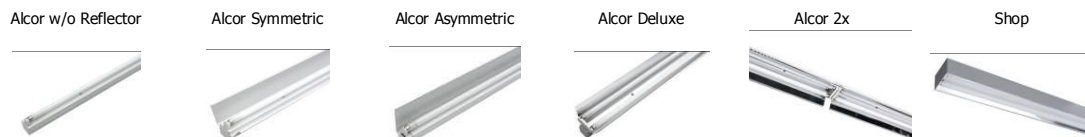
## Suspended & Aluminum profile Luminaires



## Battens T8



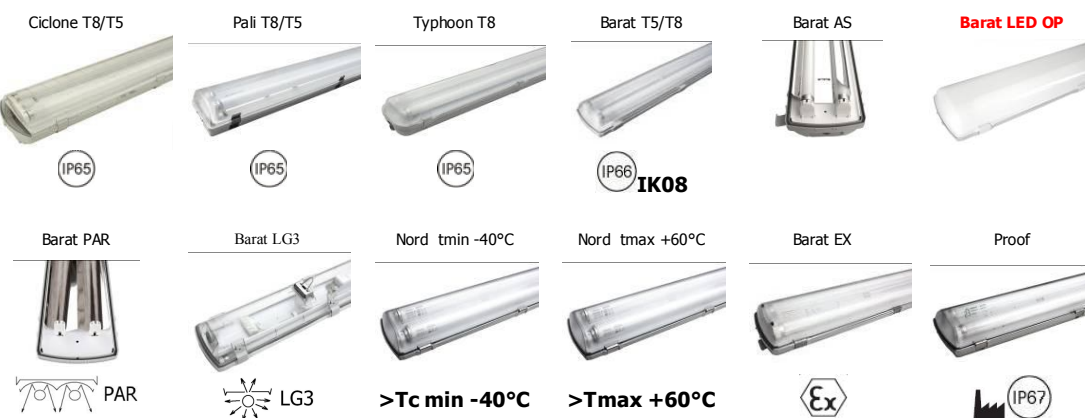
## Battens T5



## Plastic Luminaires



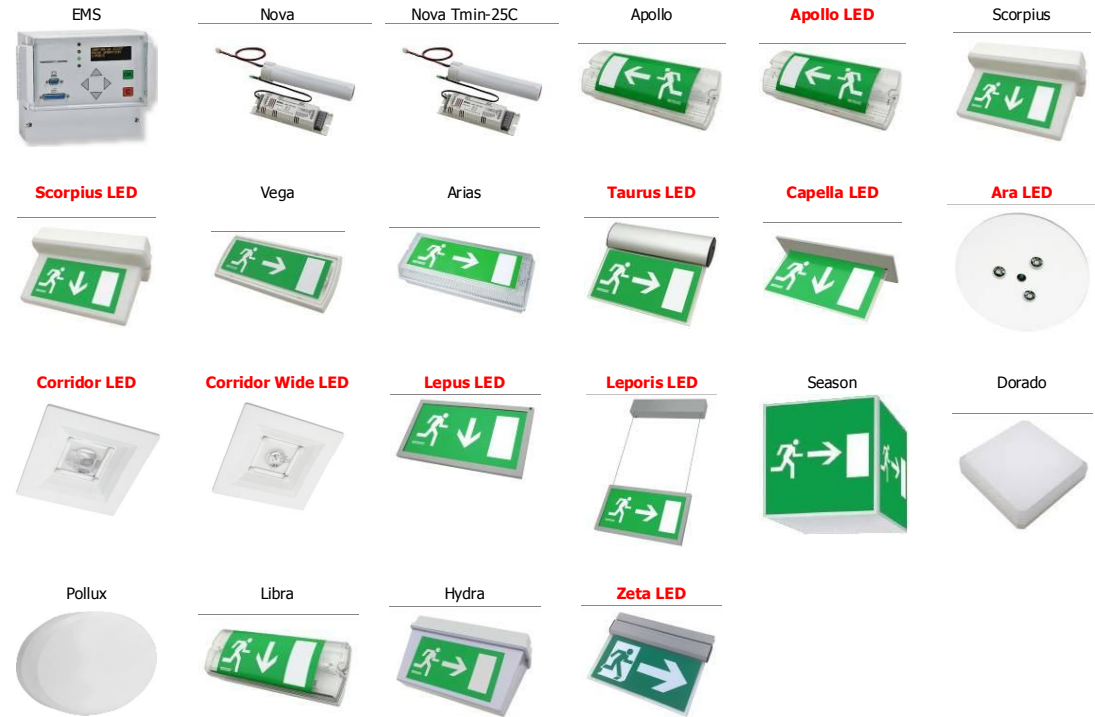
## Industrial IP65 Luminaires



# Industrial IP65 Luminaires



# Emergency Lighting



# Spotlights



# HID Downlights



Downlights

Orion	Orion FCT	Orion OGL	Orion GLR	Orion OP	Orion SOP
Orion LED SOP	Orion MIR	Orion MR4	Ursa fct	Ursa SOP	SGEAR
Tetra SOP	Tetra LED SOP	Tetra MR4	Orion Surface	Orionis Surface	Orionis LED
Perseus IP65					

High bay  
Luminaires

Montblanc 1x70-150W	Prizma 1x70-250W	Auster	Norte	Norte GRID	Norte FRAME
Sky Sport	Everest 1x250-400W	Everest 1x250-400W STR	Protection Grid	Switch	RAL

Floodlighting

Boreas LED	Boreas Symmetric 1x70-150W	Boreas Asymmetric 1x70-150W	Boreas Asymmetric 1x250-400W	Boreas Symmetric 1x250-400W	Boreas CL 1x70-150W
Boreas CL 1x150-400W	Boreas CL SPOT 70-150W	Boreas CL 1000W	Arena SPOT BLADE 1000-2000W	Arena SPOT 1000-2000W	Arena BLADE 1000-2000W



Floodlighting

Arena 1000-2000W	GRID	REF	VIS		
					
Radius 35-150 W	Grus 50-150W	Cygni 14-54W	Floor 14-54W	Tube B 2x70-150W	Tube B HOL 1x70-150W
					
Tube M 35-70W	Tube M UP 35-70W	Tube S	Arcturus 1x50-70W	Eta	Eta LOUVER
					
Oval	Oval LOUVER	Pyxis	Mensa	Pocket	Theta
					
Theta GRID	Atlas B 35-150W	Atlas B AS 35-150W	Atlas B SQUARE 35-150W	Atlas B MOVE 35-150W	Atlas B COVER 35-150W
					
Atlas B ANGLE 35-150W	Atlas B LOUVER 35-150W	Atlas M 35-70W	Atlas M SQUARE 35-70W	Atlas M COVER 35-70 W	Atlas S
					
Atlas S SQUARE	Atlas S COVER	Kappa	Kappa LONG	Apus	Apus HOL
					
Apus HOL LOUVER	Apus GRO	Apus GRO LOUVER	Fish	Fish	INOX BOX4
					

Street Lighting



General Information  
Contacts

All Northcliffe luminaires are supplied without lamps and tubes

# NORTHCLIFFE

## MAKING LIFE BRIGHTER



**NORTHCLIFFE LIGHTING** was established in 1993 with the factories in **the** Lithuania, Russia and Ukraine and since then it has become one of the largest independent lighting manufacturers in **the** Central and Eastern Europe. The company has achieved rapid growth over **the** last 15 years and currently produces 3.5 million light fixtures per year.



All our products are made using high quality components from reputable European suppliers, such as Helvar, Electronicon, Meco, Alanod, Anofol, AAG Stucchi, Osram, etc.



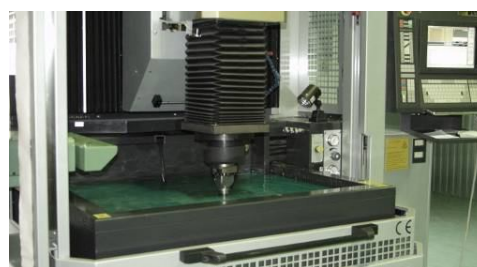
Northcliffe utilizes the most advanced technologies, some of them **are** unique and patented, to produce low weight and slim light fixtures for easy installation, as well as for efficient storage and transportation.



Our current product range includes recessed, surface-mounted and suspended T8 and T5 modular louvre luminaires, as well as water-proof IP65 light fixtures, battens, downlights, floodlights and many others. Northcliffe light fixtures can be factory-fitted with emergency packs, dimmable or DALI ballasts, offered with gloss, matt or MIRO reflectors, various types of connectors and plugs to suit specific requirements of any European market.



100% of our products are individually tested before leaving our factories and comply with all the EGSE, CE and ROHS standards and requirements.



To make it more convenient for our potential customers to make choice we show the most demanded products, which best reflect NORTHCLIFFE strong ability to offer high quality products for very competitive prices. We believe that this catalogue will help you **to** find solutions to reach your goals and make NORTHCLIFFE your reliable business partner for the future.



For further and most up-to-date information please visit [www.northcliffe.org](http://www.northcliffe.org) or send us an email to [info@northcliffe.org](mailto:info@northcliffe.org)



## Certificates:



The production and products are approved by "CERTIFICATION CENTER OF ELECTROTECHNICAL PRODUCTS" (UAB "ELEKTROTECHNINIŲ GAMINIŲ SERTIFIKAVIMO CENTRAS" (EGSC)), that gives the right to use "EGSC" sign on the labeling of products, as a sign of products conformity with EU norms.

In November 1995 EGSC was accredited by ~~the~~ Lithuanian National Accreditation Bureau to carry out certification of electro technical products, and EGSC Testing center – to carry out testing of electro technical products.

Certificates of Conformity and testing results given out by EGSC are admitted in the European Union, as EGSC participates in work of **CCA, CENELEC**, cooperates with Lithuanian and foreign conformity assessment bodies as well **as with testing laboratories.**

From 2004 EGSC is also a Notified Body under Low Voltage Directive (73/23/EEC and Amendment 96/68/EEC) on the harmonization of the laws of Member States relating to electrical equipment designed (from 2007-01-16 validity 2006/95/EC) for usage within certain voltage limits.



CE marking indicates that the products are in conformity with the provisions of the following EC Directive(s) when installed in accordance with the installation instructions contained in the product documentation:

**73/23/EEC** Low voltage Directive as amended by 93/68/EEC

**89/336/EEC** Electromagnetic Compatibility Directive, amended by 93/68/EEC

**96/57/EEC** Energy Efficiency Directive

The standards referenced below have been applied:

**LST EN 60598-1** Luminaires. Part 1: General requirements and tests

**LST EN 60598-2-1** Luminaires. **Part 2:** Particular requirements. Section 1: Fixed general purpose luminaires

**LST EN 60598-2-2** Luminaires. **Part 2:** Particular requirements. Section 2: Recessed luminaires

**LST EN 60598-2-5** Luminaires. Part 2: Particular requirements. Section 1: Floodlights

**LST EN 60598-2-22** Luminaires. Part 2: Particular requirements. Section 22: Luminaires for emergency lighting

**LST EN 1838:2005** Lighting applications. Emergency lighting

**LST EN 61347-1:2003** Lamp **control gear**. Part 1. General and safety requirements

**LST EN 61347-2-3:2002** Lamp **control gear**. Part 2. Section 3: Particular requirements for a.c. supplied electronic ballasts for fluorescent lamps

**LST EN 61347-2-7:2002** Lamp **control gear**. Part 2. Particular requirements for d.c. supplied electronic ballasts for emergency lighting



## RoHS

The products are in conformity with the provisions of the following EC Directive(s):

**2002/95/EC** EC Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)



Certificates of Conformity to GOST standards are given out by the certification center of lighting and electrical equipment DNO "CvetoC" according to EMC electrical equipment testing laboratory IL "EP EMC" reports.

The products are in conformity with provisions of the following GOST P standards:

**GOST P 60598-1-2003**

**GOST P 60598-2-1-97**

**GOST P 60598-2-2-99**

**GOST P 60598-2-22-99**

And EMC:

**GOST P 51318.15-99, GOST P 51514-99,**

**GOST P 51317.3.2-99, GOST P 51317.3.3-99**

Products marking should be done according to the requirements of GOST P 50460-2 standards.



## Our PARTNERS

The components used in NORTHCLIFFE light fixtures are of the highest quality from the world's leading manufacturers:

- Anodized aluminum from ALANOD, Germany



- Ballasts from HELVAR, Finland



- Capacitors from ELECTRONICON, Germany



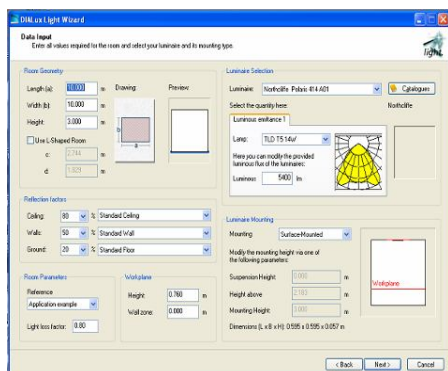
- Lamp and starter holders, terminal blocks from AAG STUCCHI, Italy



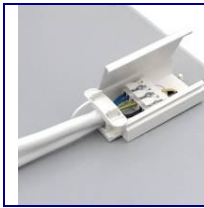
- Starters and tubes from OSRAM, Germany



Photometric data for Northcliffe light fixtures can be downloaded from our website: [www.northcliffe.org](http://www.northcliffe.org)



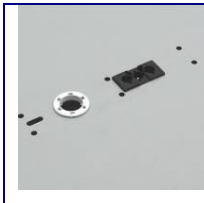
## Sophisticated solutions:



QCK- Encased push-in type terminal for quick connection



PLUG- fitting with an outgoing flexible cable and plug



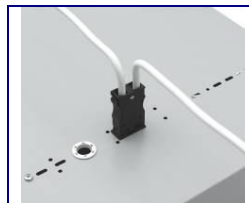
WIE- 3- poles connector (subject to minimum order)



Wieland type recessed outlet fitted with 3 or 5m flexible cable with mother/father type connectors at the ends and T-type connector



"T" type connector



Wieland type recessed outlet fitted with push-in type connector for two 3x2,5mm<sup>2</sup> cables



CON- 3 poles connector (please indicate connector type (mother or father) and wire length placing order)



CON5- 5 poles connector (please indicate connector type (mother or father) and wire length placing order)



1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks (or 1LIN2,5- through wiring 3x2.5 mm<sup>2</sup>)



3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks (or 3LIN2,5- through wiring 5x2.5 mm<sup>2</sup>)



SW- Security wire 1,5 m length mounted on the back side of the fixture can be delivered. The length of wire should be specified placing order.



FILM- Plastic protection film to save reflector from the dust during construction of the building



DLIGHT- Daylight dimming detector for simple setting of constant light level



SENSE- Minisensor with constant light sensor, IR receiver and PIR detector allows advanced lighting control features. Has 6 out-of box application modes.



SGEAR- quick installation independent gear box



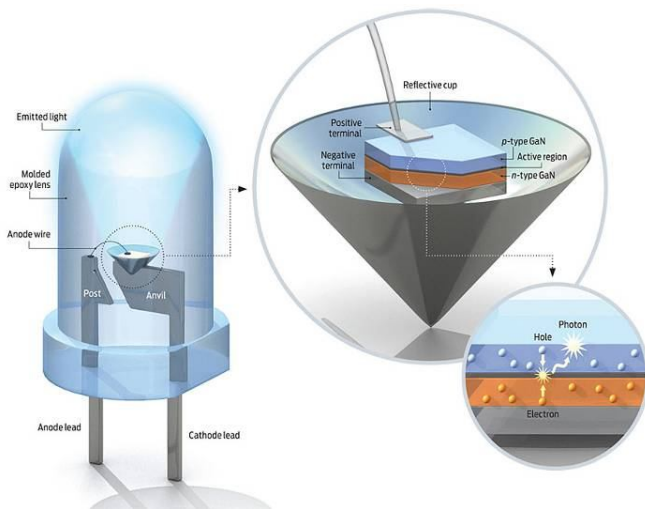
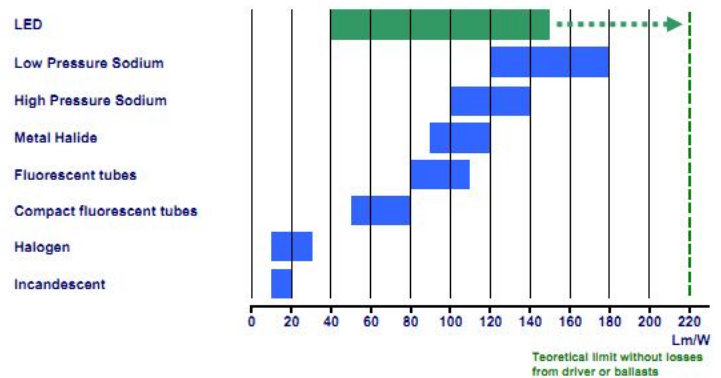
SPORT- white painted protection grid for sport halls (available on request for surface and suspended type 2x36, 2x58 and 4x18 type fixtures)



## LED is the technology of the future

LED (Light-emitting diode) technology is becoming more and more important in the world market of illumination, thanks to the numerous features which make it superior to other traditional light sources allowing savings of up to 80% of electricity for the same amount of emitted light. The luminous efficiency of **LEDs** continues to reach higher values and already theoretical border of 220 Lumens per Watt is reached in laboratory conditions. LED are semi-conductor diodes which, when electricity passes through them, emit a monochromatic light. The color of the light depends on the type of impurity purposely inserted into the chip.

Efficiency table of different light sources



A fundamental feature of LED is their long life as they can work up to 100 000 hours as long as two fundamental requisites are respected: work temperature and voltage.

LED technology also offers other advantages:

- high mechanical resistance to stress and vibrations
- working in **safe low voltage**
- very high brightness efficiency and ongoing development
- extremely versatile in design and making of illuminating bodies
- no UV and IR emissions

**Creating LED lighting series we think about replacement of traditional lighting sources allowing substantial saving in electrical energy for the similar amount of **emitted light**.**

Life testing results in laboratory proves savings in energy consumption switching from tradition lighting sources to LED technology.



T8 Luminaire 4x18W with magnetic ballasts

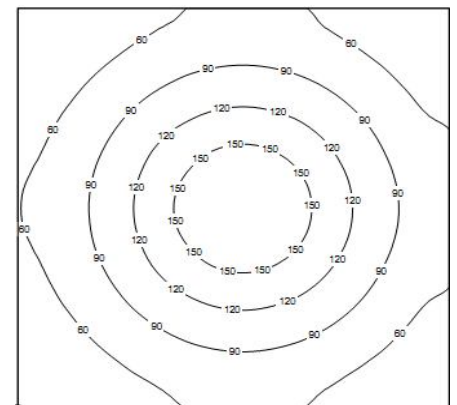
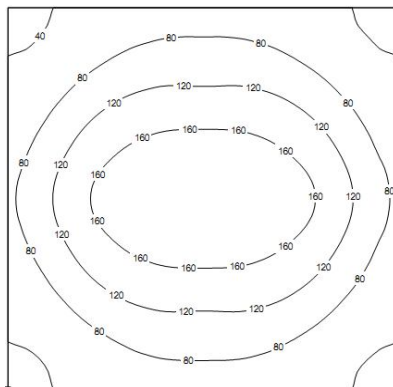
**86-90W**



LED luminaire

**40-41 W**

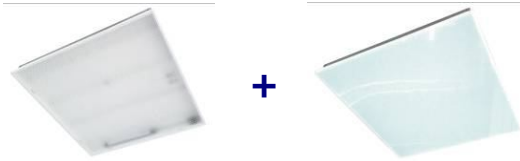
\*- up to 15-17 EUR can be saved every year, if used 8 hours per day (based on 0,12 EUR/kWh)



**To satisfy present demand of LED technology based lighting solutions, we offer ready products to each application.**

## Application areas

Recessed LED fittings: for office and commercial buildings



Downlight LED fittings: for shops, interiors, corridors, receptions and others public areas



Emergency LED lighting: for information purposes when electricity supply fails



IP66 luminaires: for environments subject to high humidity and excessive dust



Spot LED luminaires: for display lighting, show rooms and exhibitions



Plastic LED luminaires: for hospitals, colleges and other similar institutions



Low bays LED luminaires: trade centers, shops and other commercial applications



Floodlighting LED: for building facades and perimeters, billboards, car parks etc.



**Products which were not included or mentioned in this list can be produced on request. For further and most up-to-date information please visit [www.northcliffe.org](http://www.northcliffe.org) or send us an email to [info@northcliffe.org](mailto:info@northcliffe.org)**

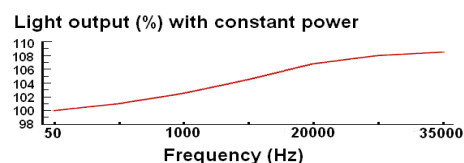
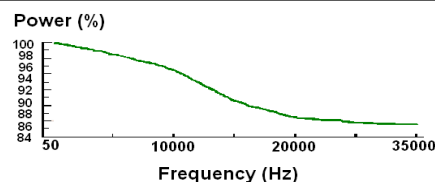
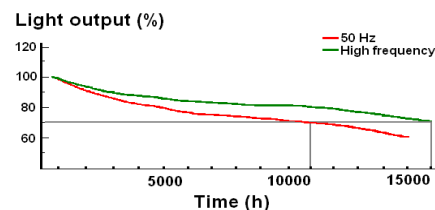
## Why electronic ballasts?



NORTHCLIFFE lighting fixtures T8 series with electronic technology are now becoming the standard in new construction and renovation applications. The operation **of energy** saving luminaires with fluorescent lamps is quieter, with no flickering and increased efficiency in lighting output with less energy consumption than traditional luminaires with magnetic ballasts.

Ordinary luminaire that regulates power to fluorescent tubes, operates at 50Hz or cycles per second, resulting in a barely perceptible flicker and a noticeable hum. The flickering light increases stress and the hum is quite annoying for people. Many people are sensitive to ballast flicker and hum and it can cause headaches, burning eyes, tension and general fatigue.

T8 Energy Savings series are now available with high frequency cycling which effectively eliminates all flicker and hum, removing associated health concerns.

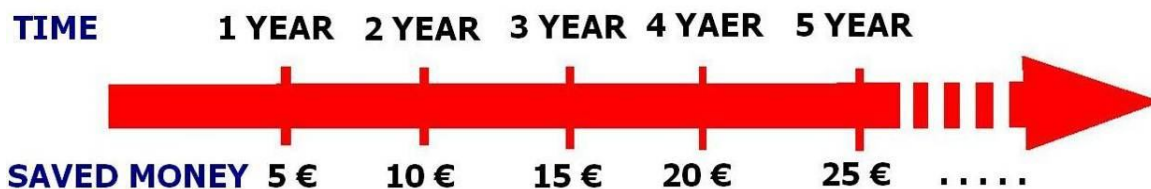


### The benefits of using BREEZE T8 Energy saving series

	Ordinary luminaire with magnetic ballast	BREEZE T8 Energy saving series, with electronic technology
The lower system electrical energy usage	Stable power losses	Requires 15-20 % less electrical energy, mainly due to the efficiency gain of the lamp, when it is operated at high frequencies and advanced technology.
Quieter operation	Vibration of electromagnetic field causes humming noise.	No audible noise, less distracting
Reduced lamp flicker	50 Hz frequency causes lighting flicker levels, which could cause burning eyes and headache.	Flicker-free (46 kHz) light improves the working environment, doesn't cause people fatigue and headaches
Longer lamp life	The starters and lamp maintenance costs	The longer lamp life due to the optimal starting conditions and the optimal setting of the electrodes during burning
No end life effect	System attempts to ignite the lamp until the contact of starter switch sticks together, then a current can continuously lead to overheating of the lamp ends. Fire danger.	Electronic technology has built-in protection so that in case of end of life of a lamp, the ballast will then switch off the supply to the lamps to prevent unnecessary stress to the circuit

**The higher first investment cost will be covered during one year (or less) and customer will save 4-5 € per year\* from every luminaire installed every coming year !!!**

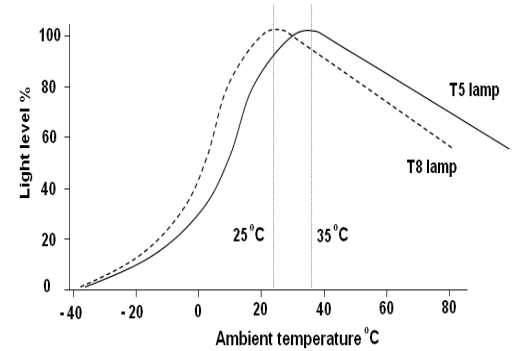
**How many lighting fixtures you are planning to install?**



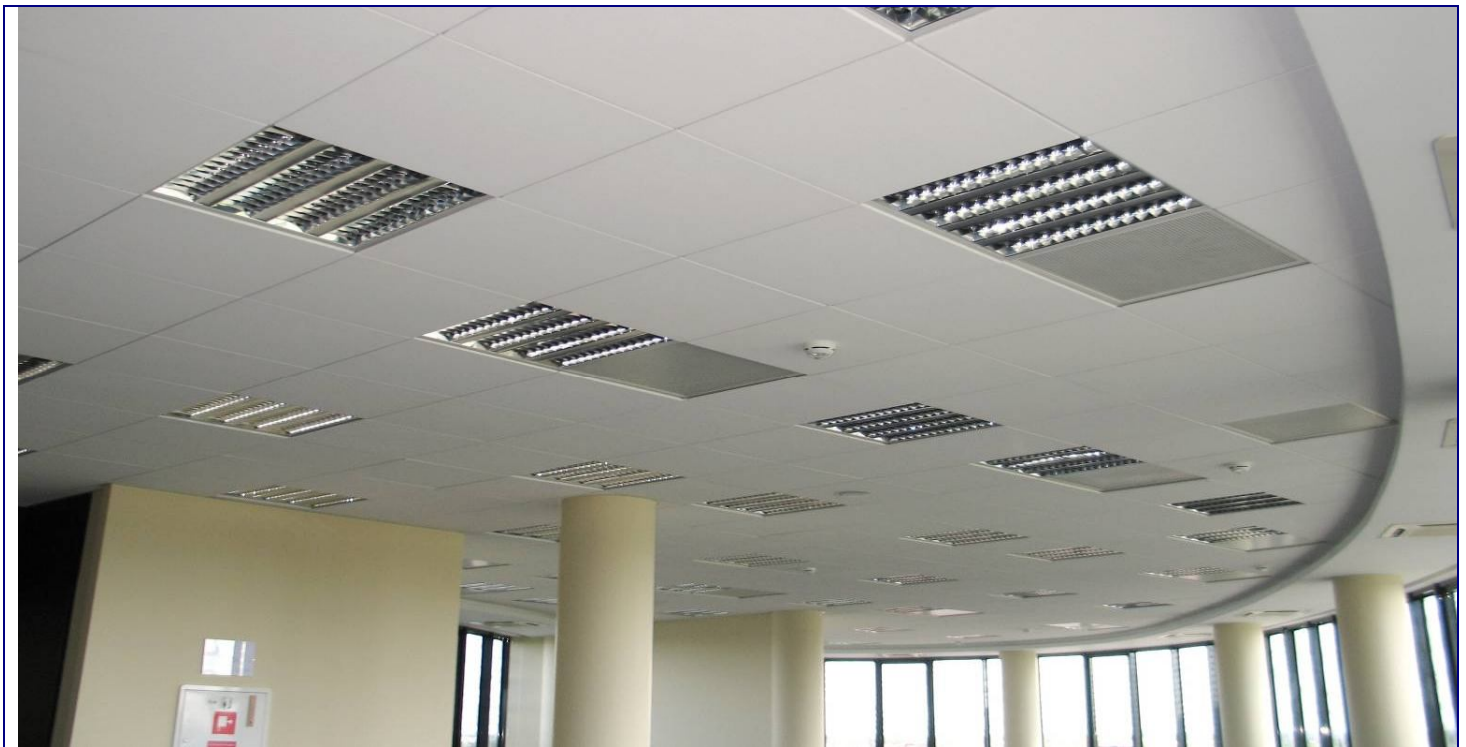
**\*Annual savings per fixture per year based on 0,12 EUR/kWh, 10 hours/day, 265 working days**

**Don't mix lighting fixtures with magnetic and electronic ballasts on the same electrical circuit. The energy spikes from magnetic ballasts may damage electronic ballasts**

## Why T5 lighting fixtures?



- **Energy costs, reduced by 30 % compared to T8 fixtures with magnetic ballasts and 10-15 % compared to T8 fixtures with electronic ballast**
- **Eco-friendly, with 38% less glass, weight of lighting fixture less than 2 kg and less mercury contained, as a result, lower utilization costs**
- **Design of a smaller enclosed luminaire is allowed due to 10 % higher light output at 35°C of T5 tubes**
- **Cheaper recycling due to 50 % lower weight of a lighting fixture**
- **Average life of T5 tubes is 20 000-24 000 hours**
- **Low maintenance cost due to long lamp life and increased service circle**
- **High light emission level (90-104lm/W) compared to T8 tubes (67-90 lm/W)**
- **Minimal loss in lumen flux during lamp life time**





## Illumination control systems

Light plays a huge role in today's world and it goes far beyond the limits of simple illumination. However, it seems rather difficult to control such miracles as multifunctional illumination or light atmosphere changes in accordance with the situation. This problem could be solved by implementation of an illumination control system. Northcliffe offers illumination control systems, designed and developed by the leading European company Helvar.

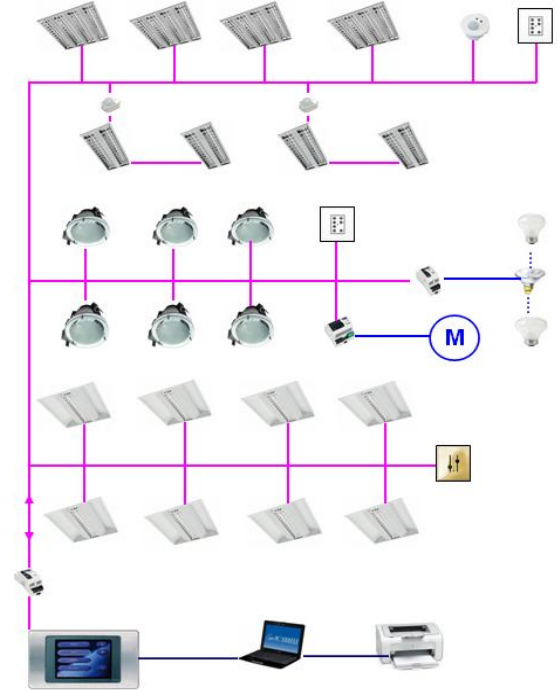
Illumination control system unites all the light sources in the building and gives an opportunity to control each of them individually from any location. Such system **allows controlling** illumination as much as possible, starting from illumination control in one room and extending to its control in as many premises as necessary, even having difficult configurations.

Illumination control system could be integrated into the general control scheme of other components, such as an alarm system, **media etc.**, in such way improving the efficiency of service.

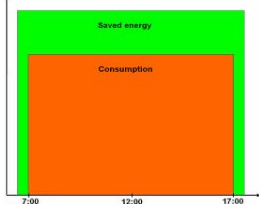
The cost-effectiveness and possibility of illumination sources self-adjustments seems to be one more obvious benefit of the system.

The range of illumination control systems is quite wide. **The simplest** one is a standard combination of several light scenarios, preprogrammed in the central control unit. This option is the best solution for small premises, such as cafes, separate rooms in the apartments, cottages, offices, director's rooms, presentation rooms, bars, saunas, restaurants, **cinemas, boutiques etc**

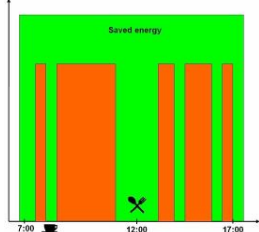
Upon the requests of a client, the system could be adjusted to a more sophisticated one. In such case, a special illumination design is drawn. Such individual complex designs are realized through the adoption of multiple control units corresponding between each other. The more difficult project is, the easier solution with the help of illumination control system can be provided.



## Energy savings with illumination control systems

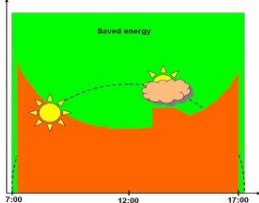


**T8 Luminaire with magnetic ballast replaced with T5 luminaire operated by high frequency ballast**



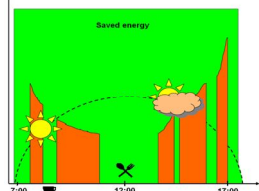
**T8 Luminaire with magnetic ballast replaced with T5 luminaire operated by high frequency ballast**

**+ PIR function (presence detection)**



**T8 Luminaire with magnetic ballast replaced with T5 luminaire operated by high frequency ballast**

**+ Daylight function added (natural light detection)**



**T8 Luminaire with magnetic ballast replaced with T5 luminaire operated by high frequency ballast**

**+ PIR function (presence detection)**

**+ Daylight function added (natural light detection)**

## Lighting system components



The **SENSE allows** advanced lighting control features from a minimal package. Three inbuilt sensors create opportunity for energy saving. Flexible smart control of up to 4 digitally controllable (DALI) ballasts.

- Constant light sensor
- Presence detector
- IR receiver

Constant light measuring range 100-1500 Lux. Presence detector reception area 4.5x3m, mounting height 3m.



**MIMO3** is a cylindrical light sensor that can be fitted into a luminaire casing. By using T5 or T8 mounting brackets sensor can also be **retrofitted** to existing luminaires. **MIMO3 is connected** directly to the control input of electronic controllable ballast (1-10V).

- Simple setting of the constant light level
- Start up at full level
- Controls up to 15 (DIM 1-10V) ballasts.
- Supply voltage derived from the ballast

Constant light measuring range 200-600 Lux.



**Modular ballast controller** offers (1-10V) ballast control together with a mains power switch. The **TK4 is designed** to complement the DIGIDIM panel range and offers the same flexibility that the modular concept provides, which allows any mix of **TK4** and DIGIDIM control panels.

- High power mains switch
- Easy to use slider control
- Switch on to last level



**Remote 304** is a handheld unit that can be used to control basic system functions as on/off, increasing and decreasing the general light level and the section of four scenes. Could be used for simple systems programming.

- Operating range is 5 meters.



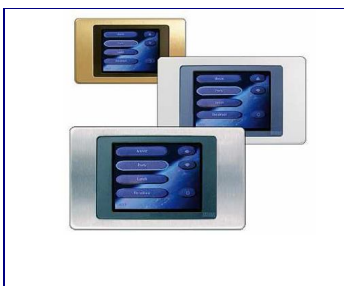
The **Multisensor** is a compact unit containing the necessary sensors to provide energy saving functions. It has a constant light sensor, passive **infrared** detector (PIR) and **infrared** receiver for the Infrared Remote. The Multisensor is designed to push fit into a ceiling or **luminaire** housing.

- DALI consumption: 15mA
- Constant light reception area: 100° (40° restrictor)
- PIR detector area: 85°



**Modular control panels** are a fully DALI compatible range of user interface that allow basic adjustments to the system. The range includes a pushbutton, rotary and slider controls in a range of panel finishes.

- DALI consumption: 10mA



**LCD touch panel.** The most commonly used interface in a lighting control system are **control panels**. A range of decorative face plates to suit every different décor and scenario. The control panels allow a user designing, programming and controlling the system by recalling the scenes at the touch of a button.

- DALI system control
- Astronomic real time clock
- Sequences and cycles
- Infrared control
- Users selectable graphics and languages



The *DIGIDIM Router* uses standard Ethernet communication to combine multiple DALI networks. The router features two DALI universes allowing for a total of 128 control devices and load interfaces.

- Two DALI subnets with 250 mA power supply
- Distributed intelligence
- Ethernet port for network backbone
- OPC interface to link to Building management Systems



*Wall mounted dimmer* for use in a DIGIDIM lighting control system. Suitable for tungsten, halogen, low voltage tungsten or neon loads. Different power dimmers available such as 16A, 25A or 8x5A.

- Stabilized output.
- Over temperature protection.



*DIN rail dimmer* for use in a DIGIDIM lighting control system. Suitable for tungsten, halogen, low voltage tungsten or neon loads. Different power dimmers available such as 500W and 1000W. No programming required when using DIGIDIM slider, rotary, or push button panels.

- Stabilized output.
- Over temperature protection.



*Blinds controller* designed for control of blinds and curtains. Two independent control channels each with two single pole, volt free contacts for switching up/down or power/direction motors. Programmable "blind travel time".

- Status LED
- "Break before Make" operation to prevent motor damage.



*Relay unit* designed to allow control of non-dimmable loads. Unit is DIN-rail **mounted**, can have 4 or 8 channels, each channel individually programmable.

- Status LED.
- Manual override.

Relay loads 10A (resistive), 8A (incandescent), 5A (inductive).



Fully DALI compatible *Power supply unit* designed to provide a DIGIDIM system with the required supply of up to 250mA. DIN-rail mounted.

- Status LED.
- DALI short circuit and over temperature protected



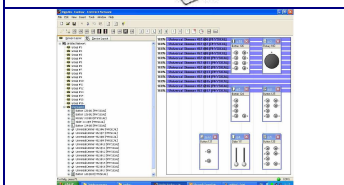
*Input unit* is a fully DALI compatible interface, designed to allow customer specified switches, sensors, time clocks or other on/off control devices to be incorporated into a DIGIDIM lighting control system.

- Status LED
- Can be used with momentary or latching switches.



*AV-Interface* is a DIN-rail mounted unit that permits the connection of a DIGIDIM system to personal computer/AV system.

- Status LED
- Terminal blocks for wiring.

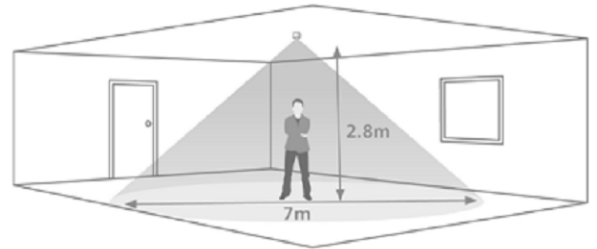


The *DESIGNER software Package* is a complete Windows® based application for designing, programming and maintaining a DALI lighting control system.

## Detector PIR 311

The 311 is a compact PIR detector for flush ceiling mounting. Having a detection field of 7m at a mounting height of 2.8m, **this** sensor is ideal where automatic turning on when a room is occupied, and off when the room is vacated.

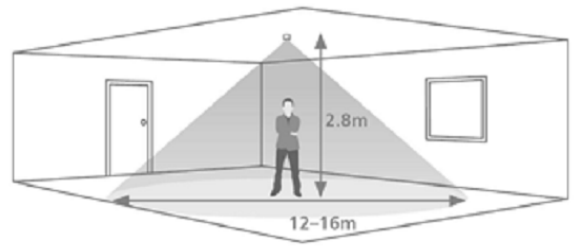
- IR Receiver receives programming commands from the 307 **infrared** handset (available separately).
- Programmable using the IR Remote. Full system access is available using Helvar's lighting system design and control software; Designer, and DIGIDIM Toolbox.



## Detector MW 313

The 313 detects movement using a highly sensitive ceiling mounted microwave detector. It works by emitting low-power microwave signals and measuring the reflections as the signal bounces off moving objects. The 313 has a circular detection field with a diameter of 12m – 16m at a mounting height of 2.8m. With this coverage area, it can be seen that a single 313 sensor can be used to control lighting over a much larger area, reducing the number of sensors required in, for instance, an open plan office area.

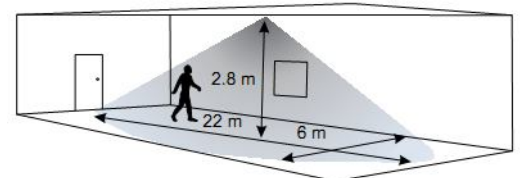
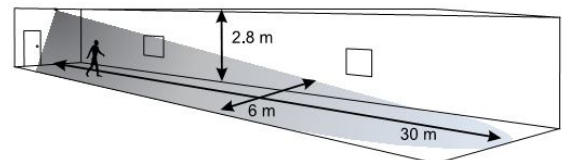
- IR Receiver receives control and programming commands from a 307 IR (infrared) handset (available separately).
- Programmable using the IR Remote. Full system access is available using Helvar's lighting system design and control software; Designer, and DIGIDIM Toolbox.



## Detector MW 314

The 314 is also a microwave detector. Again, it works by emitting low-power microwave signals and measuring the reflections as the signal bounces off moving objects. However the detection field for this device is a long narrow beam for use in corridors and aisle ways. The sensor can detect movement up to 30m range.

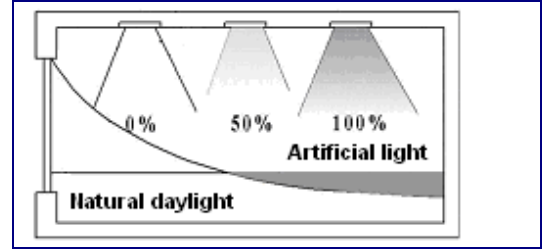
- IR Receiver receives control and programming commands from a 307 IR (infrared) handset (available separately).
- Full system access is available using Helvar's lighting system design and control software; Designer, and DIGIDIM Toolbox.



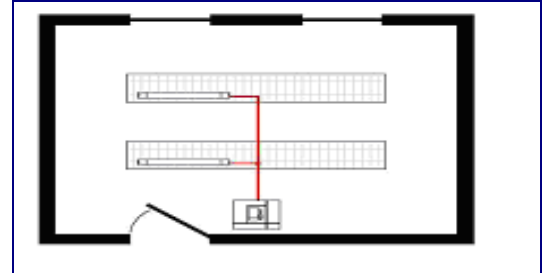


## Simple solutions

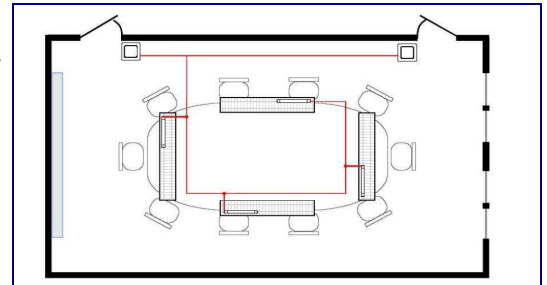
**Simple classroom solution.** Keeps constant light level combining daylight and artificial light. Using **Mimo3** sensor and controllable (**DIM**) ballasts, fittings could be arranged in groups or act as individual units depending on illumination requirements. Substantial savings could be achieved.



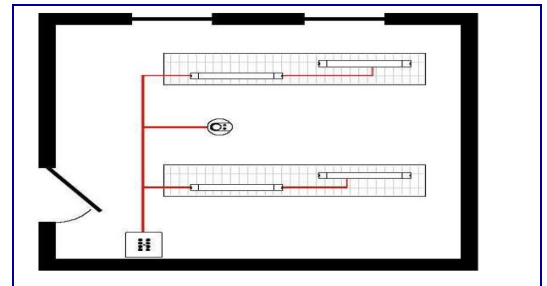
**Simple office solution.** Light level adjusted manually using **TK4** (switch+dim) panel and controllable (**DIM**) ballasts. Dimming of the fluorescent lamps down to 1% can be achieved using **TK4**.



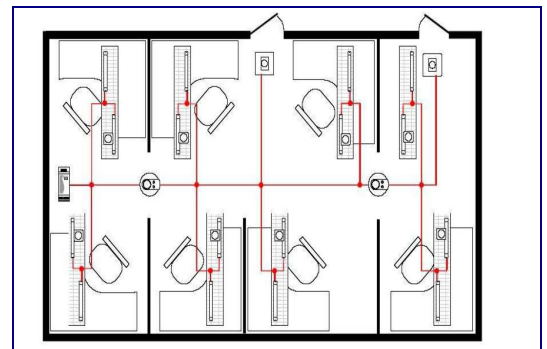
**Cost effective meeting room.** Luminaires fitted with controllable (**DIM**) ballasts combined with one or more **momentary switches**. Quick push of the button toggles lights on and off, and long press fades the lamps up or down. Solution allows multiple control points by simply connecting switches in parallel.

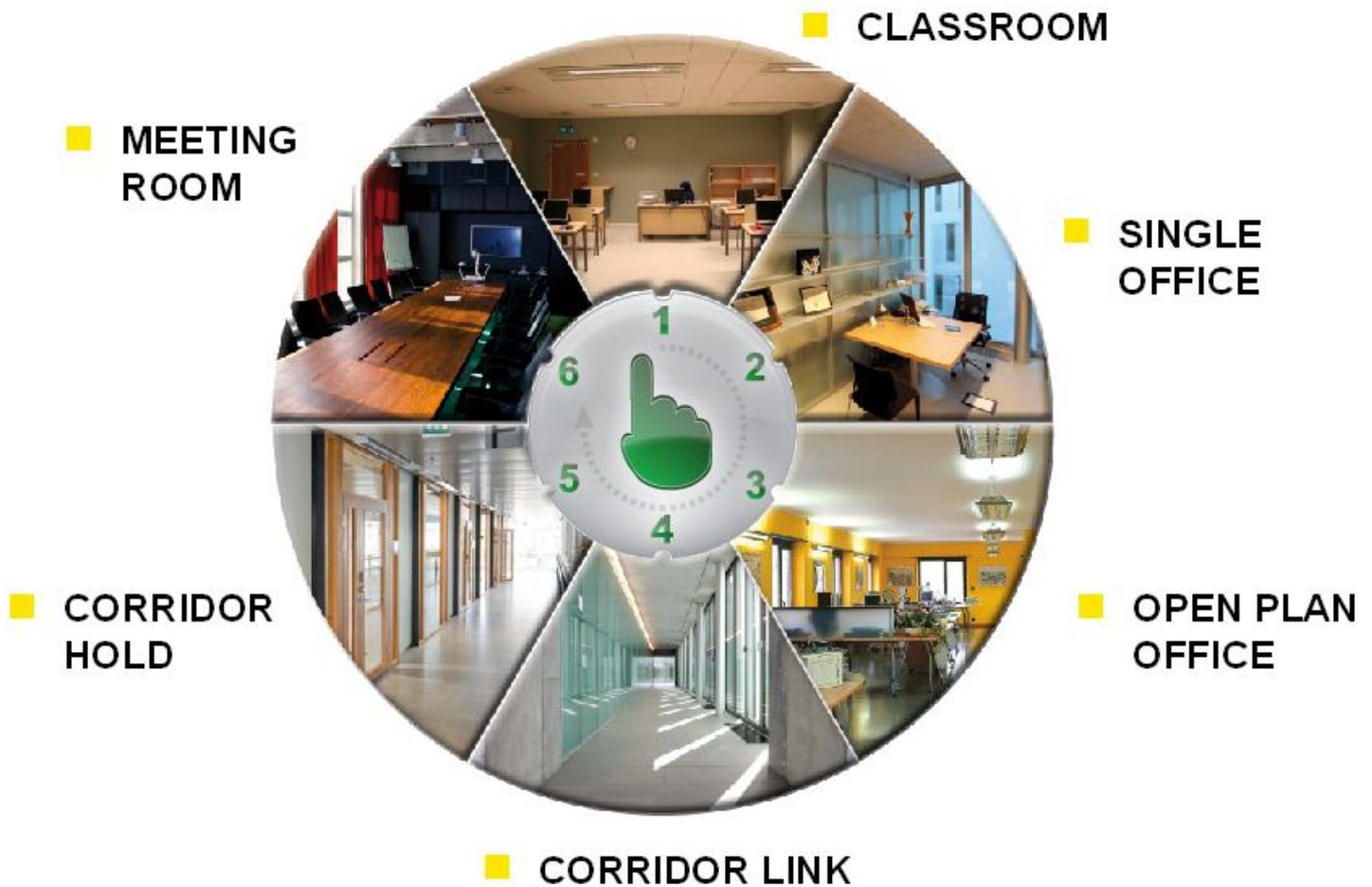


**Efficient office solution.** Luminaires fitted with digitally controlled (**DALI**) ballasts, give individual control of each fitting. Multiple light scenes could be stored and recalled at the press of a button using different **Modular panels**. Incorporated **Multisensor** prevents lighting of unused offices and reduces lighting level when sufficient natural light exists. Possible **remote control**.



**Open plan office solution.** Luminaires fitted with digitally controlled (**DALI**) ballasts and **Minisensor2**, give individual control of each fitting. Combined into system multipoint control of overall office is achieved. Existing luminaires could be reprogrammed if the functionality of the area changes. Energy savings are achieved through combination of presence detection, constant light functionality and individual dimming of each work area. Control of lights can be manual or automated for user comfort.





Select the mode

The luminaire based iDim concept provides 6 out-of-box application modes that are easy to select just by rotating the Mode Selector on the iDim Sense. The modes are designed to fulfil the needs for easy-to-use, energy saving lighting control. The basic functions are pre-programmed and are fully adjustable to meet all requirements.

effortless

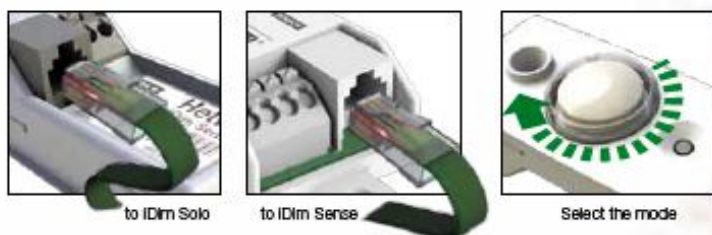
## Easy intelligence in luminaires

The iDim intelligence is literally the sum of its parts. Intelligent components iDim Sense, iDim Solo and EL-iDim ballast with the iDim Remote can turn every luminaire into a smart solution providing optimal lighting and energy efficiency. Designed for the future, all components meet the demanding legislations.

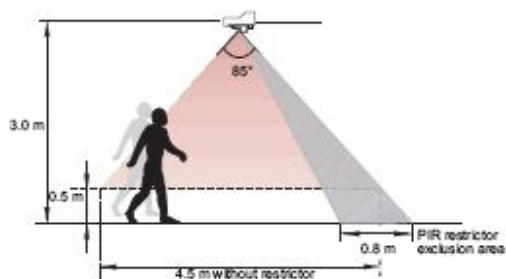
### Click-and-go!

Simple clip-on connectors make the assembly into the luminaire quick and easy; just click-and-go!

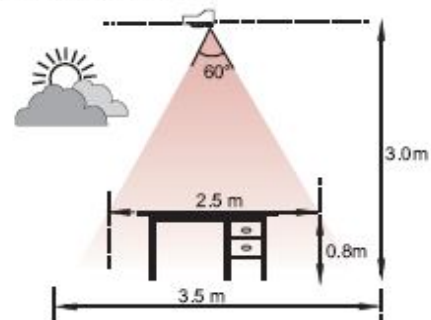
1. Click the iDim Sense into the luminaire
2. Click the iDim Sense cable into the iDim Solo unit
3. Turn the iDim Sense mode selector and choose the right application mode



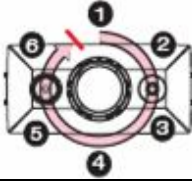






Movement Detector (PIR) Coverage



Photocell Coverage (CL)





								
			CLASS - ROOM	SINGLE OFFICE	OPEN PLAN OFFICE	CORRIDOR LINK	CORRIDOR HOLD	MEETING ROOM
TIMING & LEVEL	OCCUPANCY TIMEOUT		15 min	15 min	15 min	5 min	15 min	15 min
	TRANSITION TIMEOUT (LEVEL)		0.5 min (20%)	0.5 min (20%)	60 min (20%)	30 min (20%)	0.5 min (20%)	0.5 min (20%)
BRIGHT OUT	GO OFF		✓	✓	✓	✓	✓	✓
	STAY OFF		✓	✓	✓	✓	✓	✓
CHANNELS	DALI 1		CL	CL	CL	FL	CL	CL
	DALI 2		Offset	Offset	Offset	-	-	FL
PRESENCE	ENABLED / DISABLED		Disabled Manual On	Enabled Auto On	Enabled Auto On	Enabled Auto On	Enabled Auto On	Disabled Manual On
ABSENCE	ENABLED / DISABLED		Enabled Auto Off	Enabled Auto Off	Enabled Auto Off	Enabled Auto Off	Enabled Auto Off	Enabled Auto Off

**Occupancy Timeout:** Time when PIR detects no movement and maintains level before moving to transition timeout

**Transition Timeout:** Lights are lowered to energy saving level for a specific time before switching off.

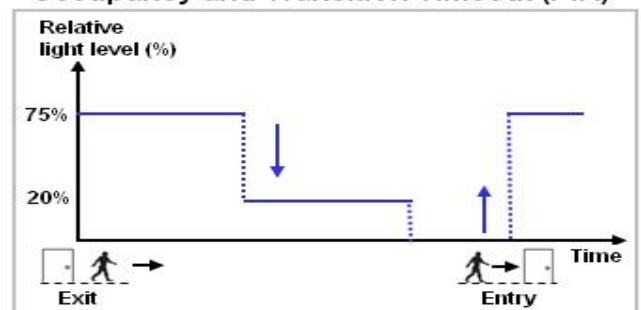
**Bright Out – Go Off:** If lights are on and there is enough daylight then the lights will go to min level (or off).

**Bright Out – Stay Off:** If lights are off and there is enough daylight then the lights will stay at min level (or off).

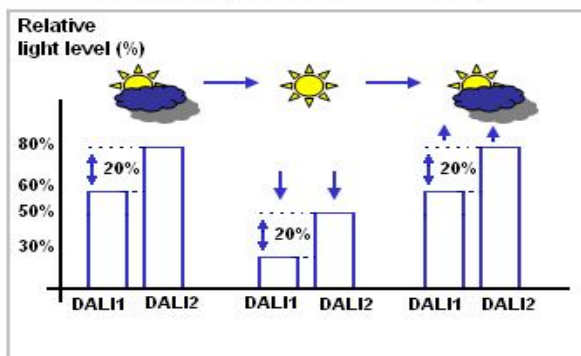
**DALI 1 / DALI 2:** The outputs can operate as either Constant Light (CL), Fixed Light (FL) and Offset light.

**Presence and absence:** Functions can either be enabled or disabled.

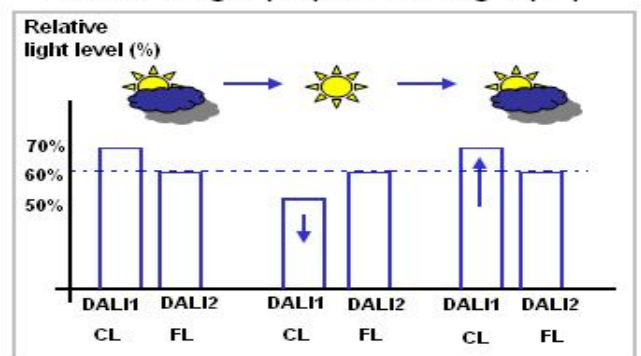
Occupancy and Transition Timeout (PIR)



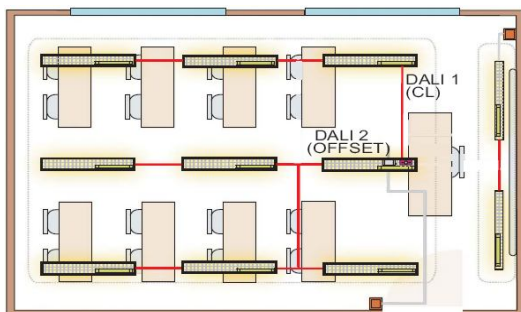
Constant Light (CL) & Offset



Constant Light (CL) & Fixed Light (FL)

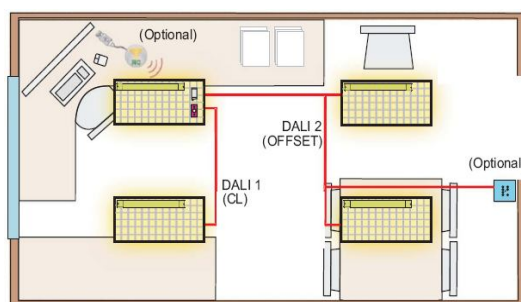






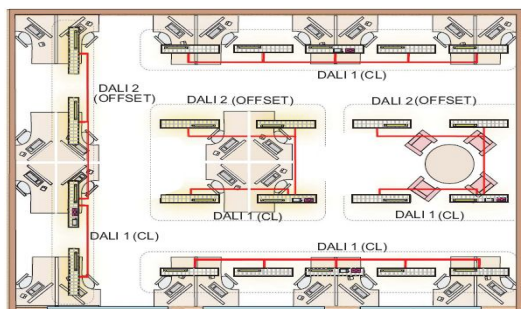
## Classroom

Optimal lighting and maximum energy saving are automatically achieved thanks to the intelligent technology. iDim adjusts the lights depending on presence detection and ambient light. Out-of-box features can be easily customised to meet different needs.



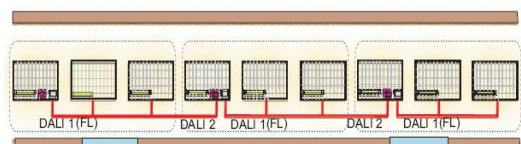
## Single office

The simple out-of-box functionality responds to area occupation and ambient light always producing the right light. Automatic features enable energy saving and user comfort. Advanced features as individual control and custom settings are possible with iDim Remote, PC-interface and DIGIDIM modular panels.



## Open plan office

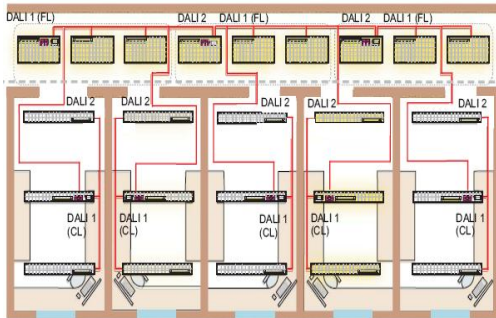
This mode keeps the lights on only when and where needed. It is an energy and cost efficient application creating a safe and convenient working environment for everyone at the same time. All advanced features are available for custom fine tuning.



## Corridor link

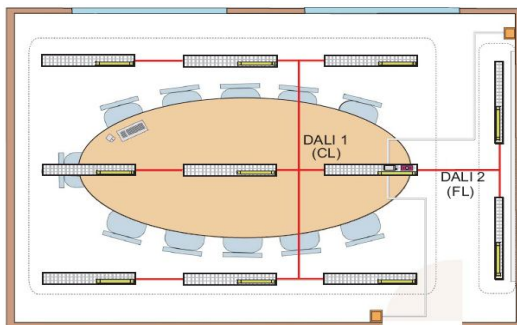
Wherever occupancy is detected, the whole corridor lights up at once. Multiple sections / sensors can be interlinked together creating a powerful solution that can light up a corridor of every length.





## Corridor hold

This unique application links the single offices with the corridor link mode. Whenever the offices are occupied, the corridor is held lit. The corridor hold is a fully automatic function that promotes energy savings as well as safety.



## Meeting room

This mode takes care that the lights are switched only when needed. You can switch the lights on and off manually or let the system take care of switching off. The constant light feature adjusts right lighting and scene control is possible with Remote and DIGIDIM modular panels.



**The Remote 304** is a handheld unit that can be used to control basic system functions as on/off, increasing and decreasing the general light level and the section of four scenes. Could be used for simple systems programming.

- Configuration of target light levels
- Advanced programming (upload settings via PC+“zap function”)
- Graphical PC user interface
- Desktop holder/wall mount holder

Integrated lux sensor



**Sense** is a luminaire based DALI sensor. It combines a movement detector (PIR), remote control receiver (IR) and photosell (CL) in one enclosure. Manual mode selector allows user to easily select one of the 6 out-of-box application modes.

- PIR, Constant light and Infrared control
- Easy to select application modes
- Clip-on PIR restrictor
- Mode selector with LED feedback
- 3m mounting height

**Solo** is used as an interface module to connect Sense and Dali ballasts as well as user interfaces. Additionally it acts as DALI power supply (PSU).

- Power capability: 64mA (DALI 1), 32mA (DALI 2) or 96mA when operating in parallel
- 2xDALI outputs
- 2xSwitch control inputs
- Connection to **Sense** (RJ style)



**Microwave motion detection:** when motion is detected the load will automatically turn on; when the area is no longer occupied the load will automatically switch off after an adjustable time period. Operating Temperature, -10°C to 35°C.



**iMW- Presence detection with ON/OFF function.**

Max load capacity- 2 A

**iMWDIM- Presence detection with 1-10V constant light flux control**

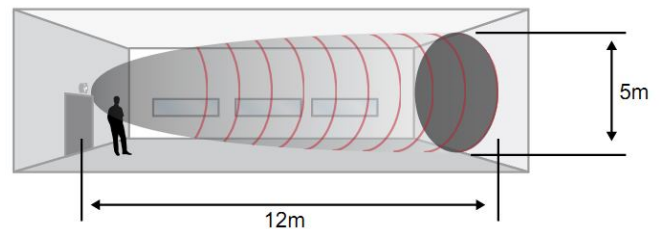
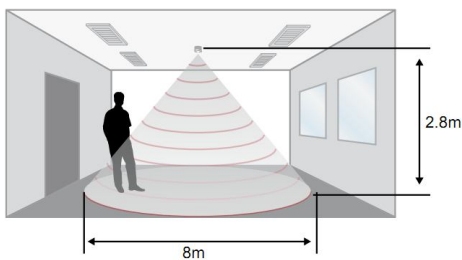
Max load capacity - 2 A

Dimmed Output - 4 x 1-10V ballasts

**iMWDALI- Presence detection with DALI constant light flux control**

Max load capacity Relay Output - 2 A

Dimmed Output - 4 x DALI ballasts



**PIR presence detection:** The unit detects presents using a PIR sensor and turns the load on. When an area is no longer occupied the load will switch off after an adjustable time period.

The 1-10 V output can be used to control the light output of luminaires that are fitted with dimming ballasts. The detector measures the overall light level in the detection area and calculates the correct output for the luminaires, to achieve a preset lux level (Constant Light).



**iPIR- Presence detection with ON/OFF function.**

Max load capacity- 2 A

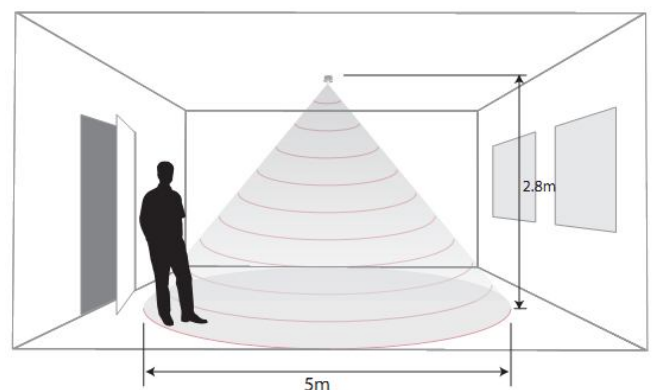
**iPIRDIM- Presence detection with 1-10V constant light flux control**

Max load capacity - 2 A

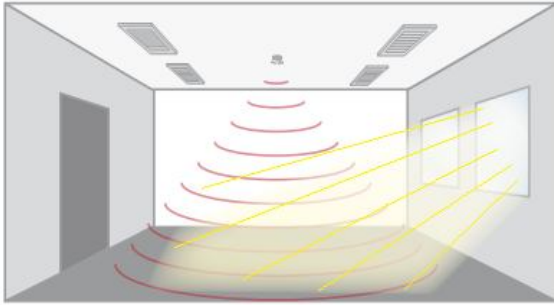
Dimmed Output - 4 x 1-10V ballasts

### Key Features

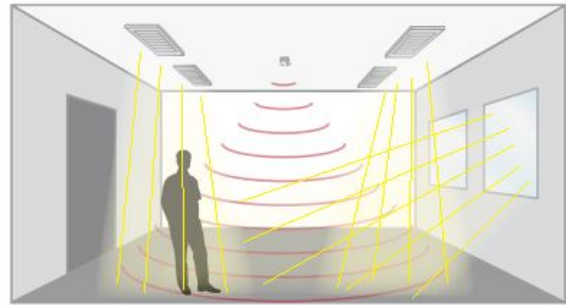
- Dimming with lux level sensing
- Presence/Absence detection functionality
- Constant Light
- Programmable using optional IR handset



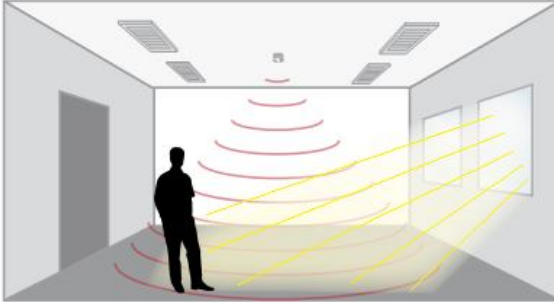




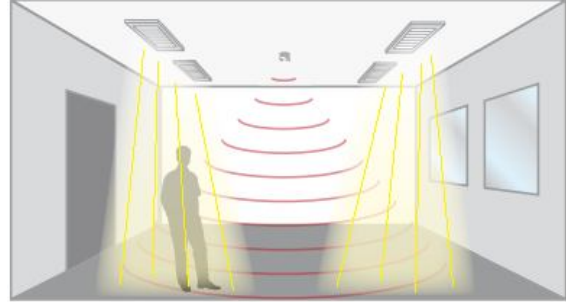
**No presence detected, daylight, lights are OFF**



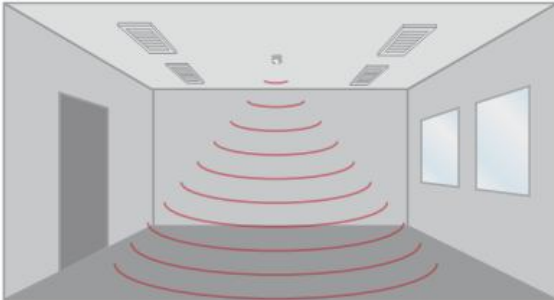
**Presence detected some daylight. Lights are ON and dimmed to maintain lux level**



**Presence detected, sufficient daylight, lights are OFF**



**Presence detected, insufficient daylight. Detector measures and implements maintained illuminance**

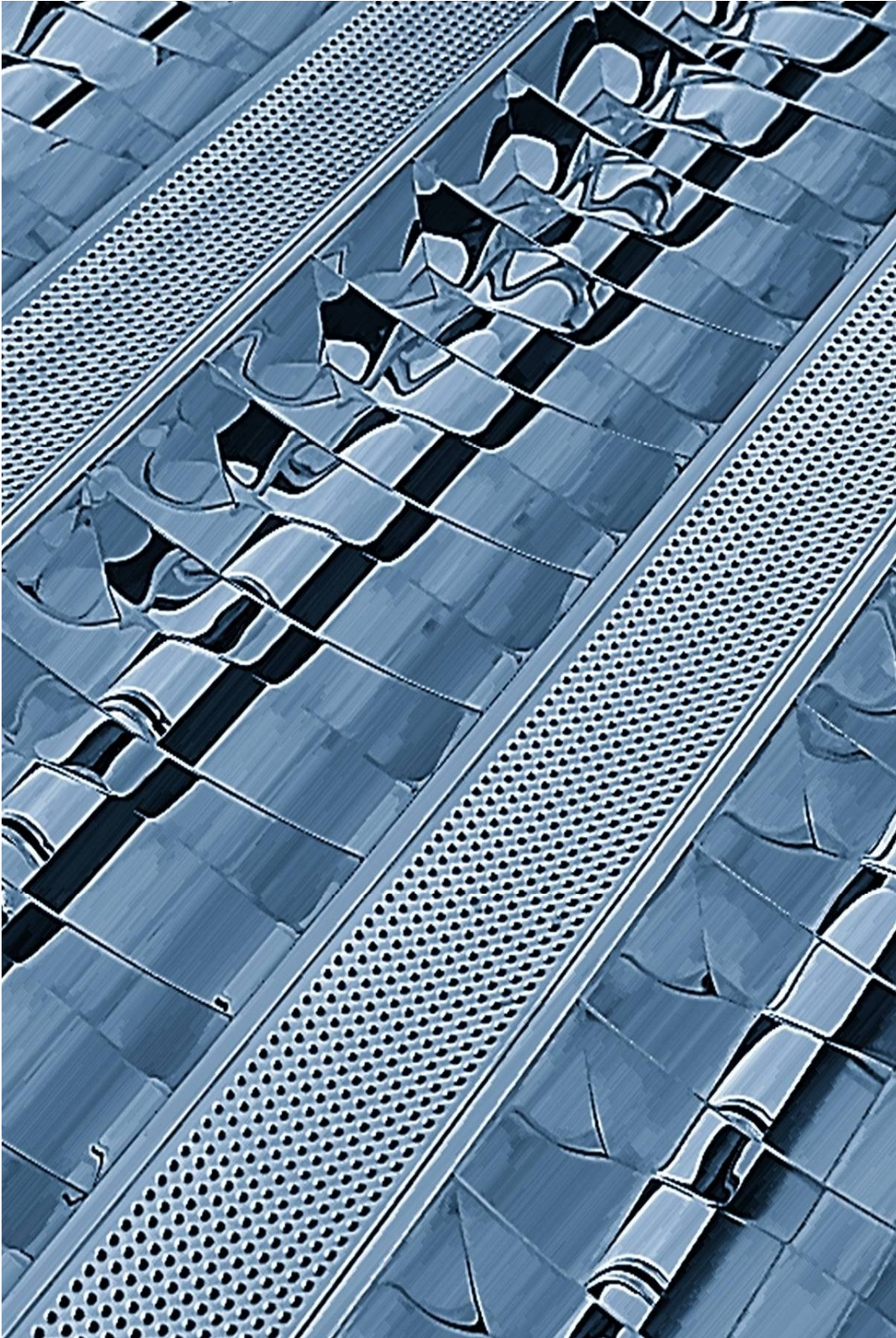


**No presence detected, night time, lights are OFF**

The **IR REMOTE CONTROL 307** is a compact infrared handset used for the programming of iPIR and iDIM sensors.







**NORTHCLIFFE**  
MAKING LIFE BRIGHTER

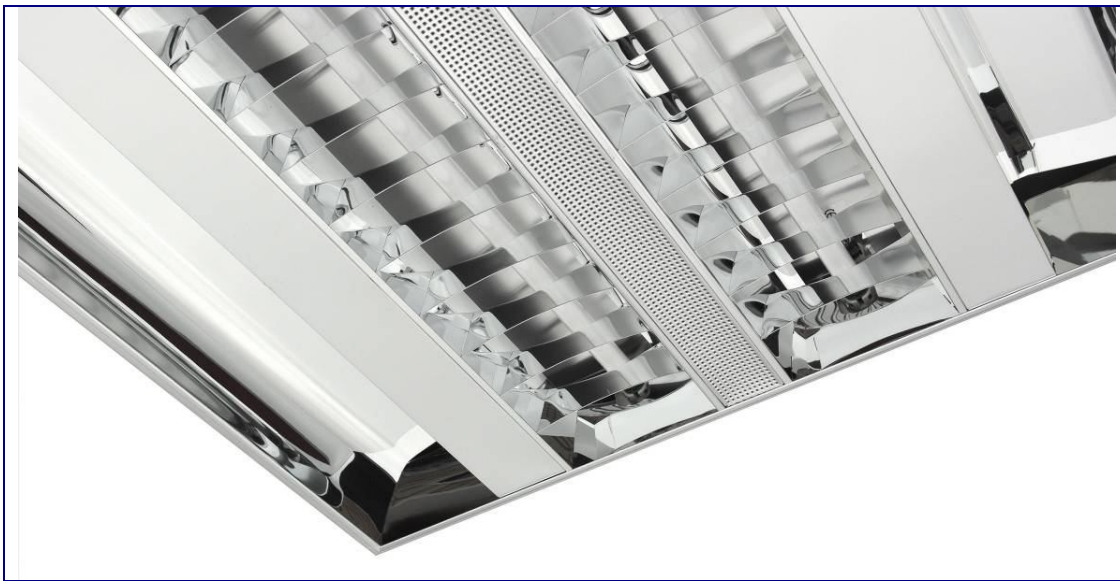
# RECESSED

[www.northcliffe.org](http://www.northcliffe.org)



# SIRIUS

## T5 Direct-Indirect Recessed Luminaire



<b>Type:</b>	Unique direct-indirect recessed T5 luminaire that incorporates the latest technology of Class A High Frequency Helvar Control gear, giving maximum efficiency, energy saving and quality of light. Outstanding design and look. One of the most elegant recessed luminaires on the market with superior lighting performance. Lightweight at just 1.8 kg with a height of only 66 mm.
<b>Specification:</b>	A combination of two aluminum curved reflectors for indirect light projection and a double parabolic specular aluminum louver, for direct light projection, with specular inserts to give better light distribution. The louver is fitted into the body with four spring locks for maximum stability. Deluxe version louvres are manufactured using Alanod MIRO aluminum with 95% reflectiveness. Fully enclosed white steel body. Deluxe version made completely of specular aluminum. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings and/or plasterboard ceilings. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.



SB - Support brackets (4 pcs) for installation into a plasterboard ceiling. Available on request

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Sirius 224 B37	2x24 (G5)	595x595x66	1,8	49
Sirius 414 A03	4x14 (G5)	595x595x66	1,8	62
Sirius 424 D59	4x24 (G5)	595x595x66	2,1	98
Sirius 224 B37 Deluxe	2x24 (G5)	595x595x66	1,8	49
Sirius 414 A03 Deluxe	4x14 (G5)	595x595x66	1,8	62
Sirius 424 D59 Deluxe	4x24 (G5)	595x595x66	2,1	98

Options available on request:

DIM- Dimmable ballasts

SWITCHDIM- Switch DIM ballast

DALI- DALI ballasts

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

MRO- Reflector Deluxe

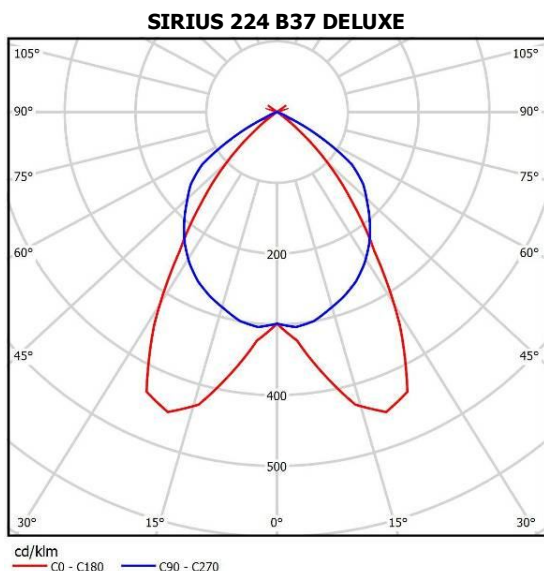
PMT- Matted perforated inserts (subject to minimum order)

MTO- Matted reflector Deluxe (subject to minimum order)

SMS- Glossy aluminum body

WIE- 3- poles connector (subject to minimum order)

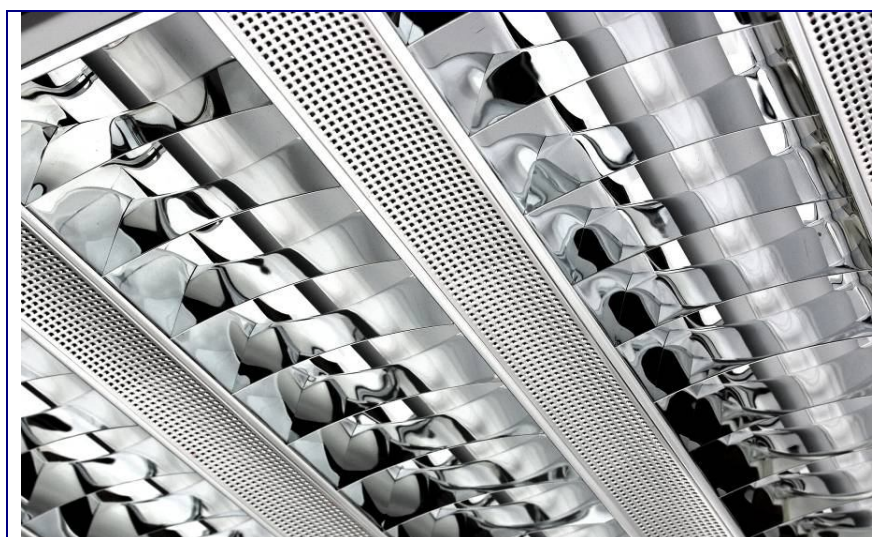
W625- Designed for the German market to fit 625x625 suspended ceiling





# POLARIS

## T5 Recessed Luminaire with Perforated Inserts



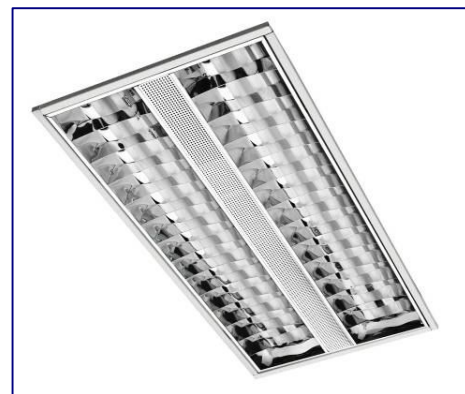
**Polaris 128 I10**



**Polaris 228 F04**



**Polaris 214 B12**



**Polaris 414 F45**



<b>Type:</b>	Innovative recessed T5 luminaire that incorporates the latest technology of Class A High Frequency Helvar Control gear, giving maximum efficiency, energy saving and quality of light. Outstanding design and look. One of the most elegant recessed luminaires on the market with superior lighting performance. Lightweight at just 1.8 kg with a height of only 57 mm.
<b>Specification:</b>	Double parabolic louvre, with perforated inserts to give better light distribution. Fully enclosed body with mirror reflector, which improves light output and is exceptional to NORTHCLIFFE Lighting. The louvre is fitted into the body with four spring locks for maximum stability. Deluxe version louvres are manufactured using Alanod MIRO® aluminum with 95% reflectiveness. Fully enclosed white steel body. Deluxe version made completely of matted aluminum. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings and/or plasterboard ceilings. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.



Supports brackets (4 pcs) for installation into a plasterboard ceiling available on request.



To fit 625x625mm suspended ceiling (Germany market) could be designed. More information see in option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Polaris 214 B12	2x14 (G5)	295x 595x57	1,1	31
Polaris 224 D70	2x24 (G5)	295x 595x57	1,1	49
Polaris 414 F45	4x14 (G5)	295x 595x57	1,2	62
Polaris 424 F46	4x24 (G5)	295x 595x57	1,2	98
Polaris 414 A01	4x14 (G5)	595x595x57	1,8	62
Polaris 424 D06	4x24 (G5)	595x595x57	1,8	98
Polaris 128 I10	1x28 (G5)	143x 1195x57	1,1	30,5
Polaris 228 I11	2x28 (G5)	143x 1195x57	1,2	60
Polaris 154 I12	1x54 (G5)	143x 1195x57	1,1	58
Polaris 254 I13	2x54 (G5)	143x 1195x57	1,2	116
Polaris 228 F04	2x28 (G5)	295x 1195x57	3,4	60
Polaris 254 F05	2x54 (G5)	295x 1195x57	3,4	114,5
Polaris 428 F06	4x28 (G5)	595x 1195x57	6,7	120
Polaris 454 F07	4x54 (G5)	595x 1195x57	6,7	229
Polaris 214 B12 Deluxe	2x14 (G5)	295x 595x57	1,1	31
Polaris 224 D70 Deluxe	2x24 (G5)	295x 595x57	1,1	49
Polaris 414 A01 Deluxe	4x14 (G5)	595x 595x57	1,8	62
Polaris 424 D06 Deluxe	4x24 (G5)	595x 595x57	1,8	98



**Deluxe version** manufactured from MIRO® aluminum louvre and matted aluminum body



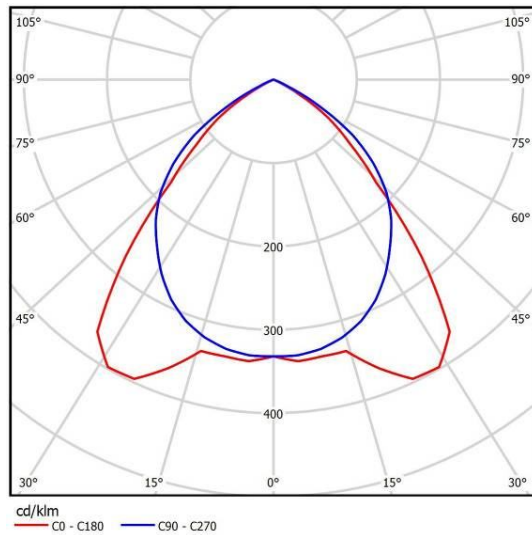
**Standard version** manufactured from glossy aluminum louvre and white steel body

Options available on request:

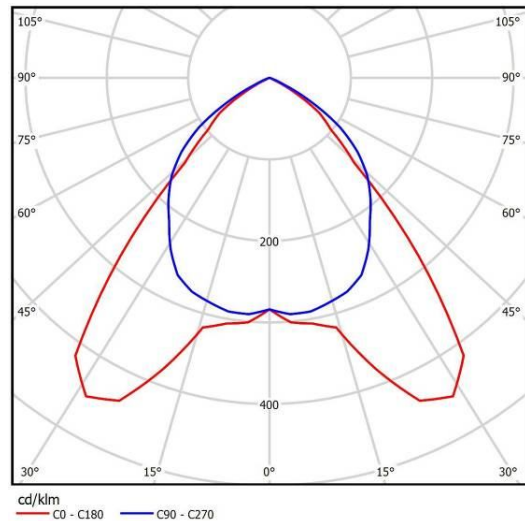
- DIM- Dimmable ballasts
- SWITCHDIM- Switch DIM ballast
- DALI- DALI ballasts
- EMG- Emergency version 1 hour
- EM2- Emergency version 2 hours
- EM3- Emergency version 3 hours
- 4TB- 4 way terminal block for loop feed and ease of wiring
- 5TB- 5 way terminal block with two holes (for in and out going cable)
- Deluxe- MIRO® aluminum louvre and matted aluminum body

- MAT- Matted reflector (subject to minimum order)
- MTO- Matted reflector Deluxe (subject to minimum order)
- MRO- Reflector Deluxe
- WHT- White perforated inserts
- W625- Designed for the German market to fit 625x625 suspended ceiling
- WIE- 3- poles connector
- SB- Supports brackets (4 pcs)

**POLARIS 414 A01**



**POLARIS 214 B12 DELUXE**



# POLARIS

## T5 Recessed Luminaire with White Inserts



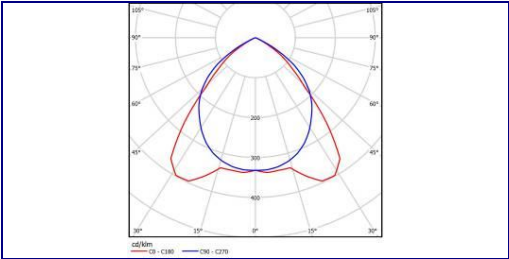
Type:	Innovative recessed T5 luminaire that incorporates the latest technology of Class A High Frequency Helvar Control gear, giving maximum efficiency, energy saving and quality of light.
Specification:	Double parabolic louvre, with white inserts to give better light distribution. Fully enclosed body with mirror reflector, which improves light output and is exclusive to NORTHCLIFFE Lighting. The louvre is fitted into the body with four spring locks for maximum stability. Fully enclosed white steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Fits 15-24mm exposed T-Bar ceilings and/or plasterboard ceilings. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
Application:	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Polaris 314 E61	3x14 (G5)	598x598x60	1,8	47
Polaris 324 E62	3x24 (G5)	598x598x60	1,8	74
Polaris 414 F02	4x14 (G5)	598x598x60	1,8	62
Polaris 424 F03	4x24 (G5)	598x598x60	1,8	98

2x14/2x28/2x54/4x28W versions are available on Request

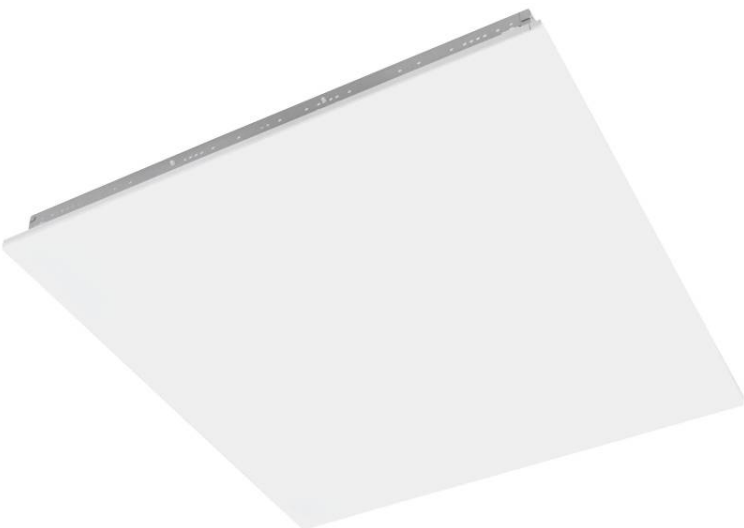
Options available on request:		
DIM-	Dimmable ballasts	4TB- 4 way terminal block for loop feed and ease of wiring
SWITCHDIM-	Switch DIM ballast	5TB- 5 way terminal block with two holes (for in and out going cable)
DALI-	DALI ballasts	Deluxe- MIRO® aluminum louvre and matted aluminum body
EMG-	Emergency version 1 hour	MAT- Matted reflector (subject to minimum order)
EM2-	Emergency version 2 hours	WIE- 3- poles connector Wieland or similar connectors (subject to minimum order)
EM3-	Emergency version 3 hours	W625- Designed specifically for the German market to fit 625x625 suspended ceiling (subject to min. order)

Polaris 314 E61



# LEVANTO & MARENCO LED

## Recessed Luminaire with Opal or Pizmatic Diffuser



Marenco R LED B202 4x950lm T840

Type:	Traditional recessed LED luminaire with opal diffuser for most applications. Premium quality at competitive prices.
Specification:	UV stable opal or prismatic diffuser. Fully enclosed white steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Fits 15-24mm exposed T-Bar ceilings 600x600mm.
Application:	Office buildings, shops and other commercial environments.



Fitting made with "Wieland" type socket for quick connection. "Push in" type connector for 2 cables 3x2,5mm2 supplied with a fitting. So total installation time can be reduced to a few minutes.



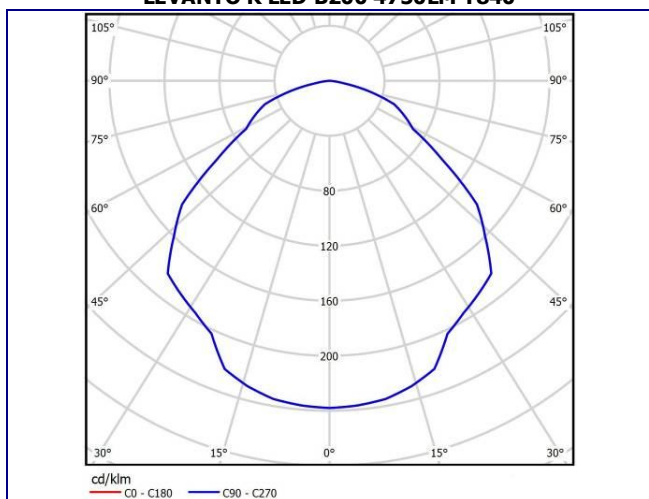
Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Levanto R LED B209 2x950lm T840	295x595x57	1900	4000	>80	21	2
Levanto R LED B209 2x1000lm T857	295x595x57	2000	5700	>80	21	2
Levanto R LED B198 3x950lm T840	595x595x57	2850	4000	>80	31	3
Levanto R LED B198 3x1000lm T857	595x595x57	3000	5700	>80	31	3
Levanto R LED B199 4x950lm T840	595x595x57	3800	4000	>80	41	3
Levanto R LED B199 4x1000lm T857	595x595x57	4000	5700	>80	41	3
Levanto R LED B200 4750lm T840	595x595x57	4750	4000	>80	51	3
Levanto R LED B200 5000lm T857	595x595x57	5000	5700	>80	51	3
Levanto R LED B210 2x2140lm T840	295x1195x57	4280	4000	>80	46	3,2
Levanto R LED B210 2x2250lm T857	295x1195x57	4500	5700	>80	46	3,2
Levanto R LED B211 3x2140lm T840	595x1195x57	6420	4000	>80	69	5,8
Levanto R LED B211 3x2250lm T857	595x1195x57	6750	5700	>80	69	5,8
Levanto R LED B212 4x2140lm T840	595x1195x57	8560	4000	>80	91	5,8
Levanto R LED B212 4x2250lm T857	595x1195x57	9000	5700	>80	91	5,8

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Marenco R LED B213 2x950lm T840	295x595x57	1900	4000	>80	21	2
Marenco R LED B213 2x1000lm T857	295x595x57	2000	5700	>80	21	2
Marenco R LED B201 3x950lm T840	595x595x57	2850	4000	>80	31	3
Marenco R LED B201 3x1000lm T857	595x595x57	3000	5700	>80	31	3
Marenco R LED B202 4x950lm T840	595x595x57	3800	4000	>80	41	3
Marenco R LED B202 4x1000lm T857	595x595x57	4000	5700	>80	41	3
Marenco R LED B203 4750lm T840	595x595x57	4750	4000	>80	51	3
Marenco R LED B203 5000lm T857	595x595x57	5000	5700	>80	51	3
Marenco R LED B214 2x2140lm T840	295x1195x57	4280	4000	>80	46	3,2
Marenco R LED B214 2x2250lm T857	295x1195x57	4500	5700	>80	46	3,2
Marenco R LED B215 3x2140lm T840	595x1195x57	6420	4000	>80	69	5,8
Marenco R LED B215 3x2250lm T857	595x1195x57	6750	5700	>80	69	5,8
Marenco R LED B215 4x2140lm T840	595x1195x57	8560	4000	>80	91	5,8
Marenco R LED B215 4x2250lm T857	595x1195x57	9000	5700	>80	91	5,8

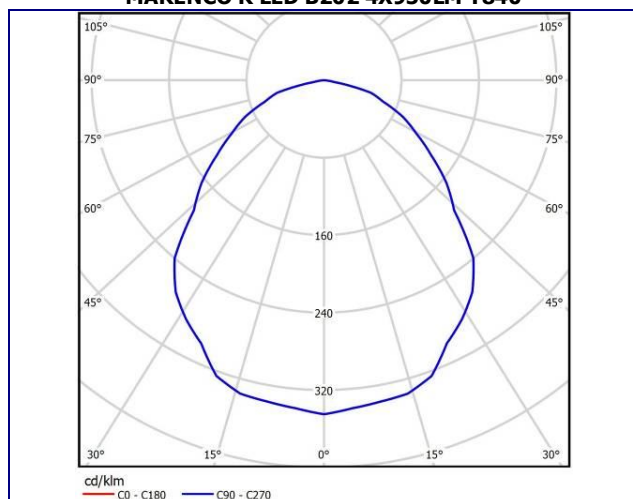
Options available on request:

STB- 5 way terminal block for loop feed and ease of wiring

**LEVANTO R LED B200 4750LM T840**



**MARENCO R LED B202 4X950LM T840**



## BREEZE T5 ECO

### T5 Recessed Luminaire



**Breeze 414 F41**



**Breeze 414 F41 9CR**

<b>Type:</b>	Recessed T5 luminaire with a choice of louvres for most applications. A very competitively priced luminaire that achieves over 45 lumens/circuit –watt, required by Buildings Regs Part L2A.
<b>Specification:</b>	There are two types of louvres in the range: specular parabolic with mirror cross blades and with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Number of cross blades is optional from 5 to 11 for better glare protection. Fully enclosed painted steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.



To fit plasterboard and/or 625x625mm suspended ceiling (Germany market) could be designed. For more information, see Option list.

SB – Support brackets (4 pcs) for installation into a plasterboard ceiling. Available on request.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 214 I25	2x14 (G5)	295x595x85	2,2	31
Breeze 224 I26	2x24 (G5)	295x595x85	2,2	49
Breeze 314 K27	3x14 (G5)	595x595x72	2,8	46
Breeze 314 K27 7CR	3x14 (G5)	595x595x72	2,8	46
Breeze 314 K27 9CR	3x14 (G5)	595x595x72	2,8	46
Breeze 324 K34	3x24 (G5)	595x595x72	3,05	73
Breeze 324 K34 9CR	3x24 (G5)	595x595x72	3,05	73
Breeze 414 F41	4x14 (G5)	595x595x72	2,9	62
Breeze 414 F41 7CR	4x14 (G5)	595x595x72	2,9	62
Breeze 414 F41 9CR	4x14 (G5)	595x595x72	2,9	62
Breeze 414 F41 11CR	4x14 (G5)	595x595x72	2,9	62
Breeze 424 F08	4x24 (G5)	595x595x72	3,15	98
Breeze 424 F08 9CR	4x24 (G5)	595x595x72	3,15	98
Breeze 228 I27	2x28 (G5)	295x1195x85	3,2	60
Breeze 254 I28	2x54 (G5)	295x1195x85	3,2	115
Breeze 328 K30	3x28 (G5)	595x1195x85	5,7	90
Breeze 354 K31	3x54 (G5)	595x1195x85	5,7	172,5
Breeze 428 I29	4x28 (G5)	595x1195x85	5,7	120
Breeze 454 I30	4x54 (G5)	595x1195x85	5,7	230

Options available on request:

DIM- Dimmable ballasts

SWITCHDIM- Switch DIM ballast

DALI- DALI ballasts

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block for loop feed and ease of wiring

MAT- Matted reflector

MBL- Matted cross blades

RIB- Ribbed cross blades

7CR- Louvre with 7 cross blades

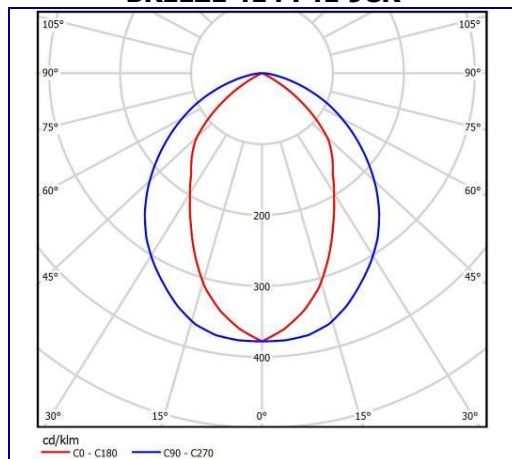
9CR- Louvre with 9 cross blades

11CR- Louvre with 11 cross blades

24CR- Louvre with 24 cross blades (2/4x28/54 W)

W625- Designed specifically for the German market to fit 625x625 suspended ceiling

### BREEZE 414 F41 9CR



# JETTA

## Recessed Indirect Luminaire



**Type:** Recessed Indirect luminaire for CFL and T5 lamps suitable for installation into standard modular ceilings. Modern design with lamps hidden under a perforated diffuser. The light is reflected across the two parabolic reflectors to allow a comfortable and glare-free lighting effect.

**Specification:** A white painted perforated diffuser with UV stable opal film to give soft light distribution. Two parabolic reflectors.  
Fully enclosed white steel body.  
Luminaire is plastic-wrapped and packaged in twin boxes.

**Installation:** Fits 15-24mm exposed T-Bar ceilings 600x600mm

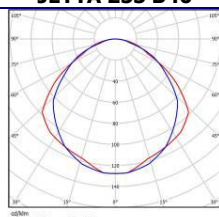
**Application:** Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Jetta 236 C49	2x36 (2G11)	596x596x100	4	84
Jetta 240 B44	2x40 (2G11)	596x596x100	4	84
Jetta 255 B40	2x55 (2G11)	596x596x100	4	121

Options available on request:

HF-	High Frequency control gear	EM3-	Emergency version <b>3 hours</b>
DIM-	Dimmable ballasts	4TB-	4 way terminal block for loop feed and ease of wiring
SWITCHDIM-	Switch DIM ballast	5TB-	5 way terminal block for loop feed and ease of wiring
DALI-	DALI ballasts	WIE-	3- poles connector Wieland or similar connectors (subject to minimum order)
EMG-	Emergency version 1 hour	W625-	Designed specifically for the German market to fit 625x625 suspended ceiling (subject to min. order)
EM2-	Emergency version <b>2 hours</b>		

**JETTA 255 B40**





# JETTA

## Recessed Indirect Luminaire



- Type:

Recessed Indirect luminaire for CFL lamps with two perforated reflectors on the sides to allow a small amount of light to pass through. The rest of light is reflected from the main parabolic reflector for comfortable and glare-free lighting effect .
- Specification:

Two white painted perforated diffusers with UV stable opal film, placed in sides, to give soft light distribution. Parabolic reflector.  
Fully enclosed white steel body.  
Luminaire is plastic-wrapped and packaged in twin boxes.
- Installation:

Fits 15-24mm exposed T-Bar ceilings.
- Application:

Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Jetta 236 C48	2x36 (2G11)	596x596x100	4	84
Jetta 240 C50	2x40 (2G11)	596x596x100	4	87
Jetta 255 C51	2x55 (2G11)	596x596x100	4	121

- Options available on request:
- HF- High Frequency control gear

EM3- Emergency version 3 hours
- DIM- Dimmable ballasts

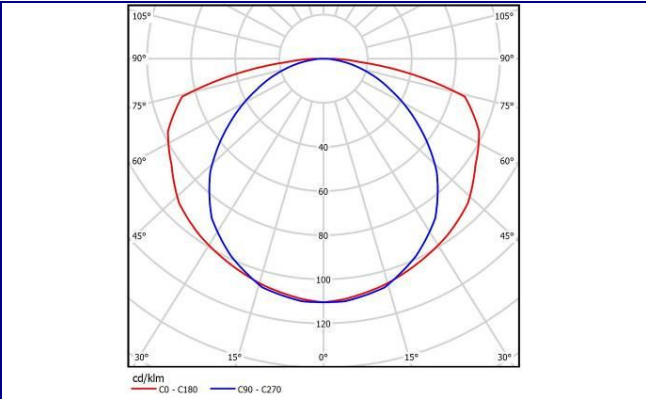
4TB- 4 way terminal block for loop feed and ease of wiring
- SWITCHDIM- Switch DIM ballast

5TB- 5 way terminal block for loop feed and ease of wiring
- DALI- DALI ballasts

WIE- 3- poles connector Wieland or similar connectors
- EMG- Emergency version 1 hour

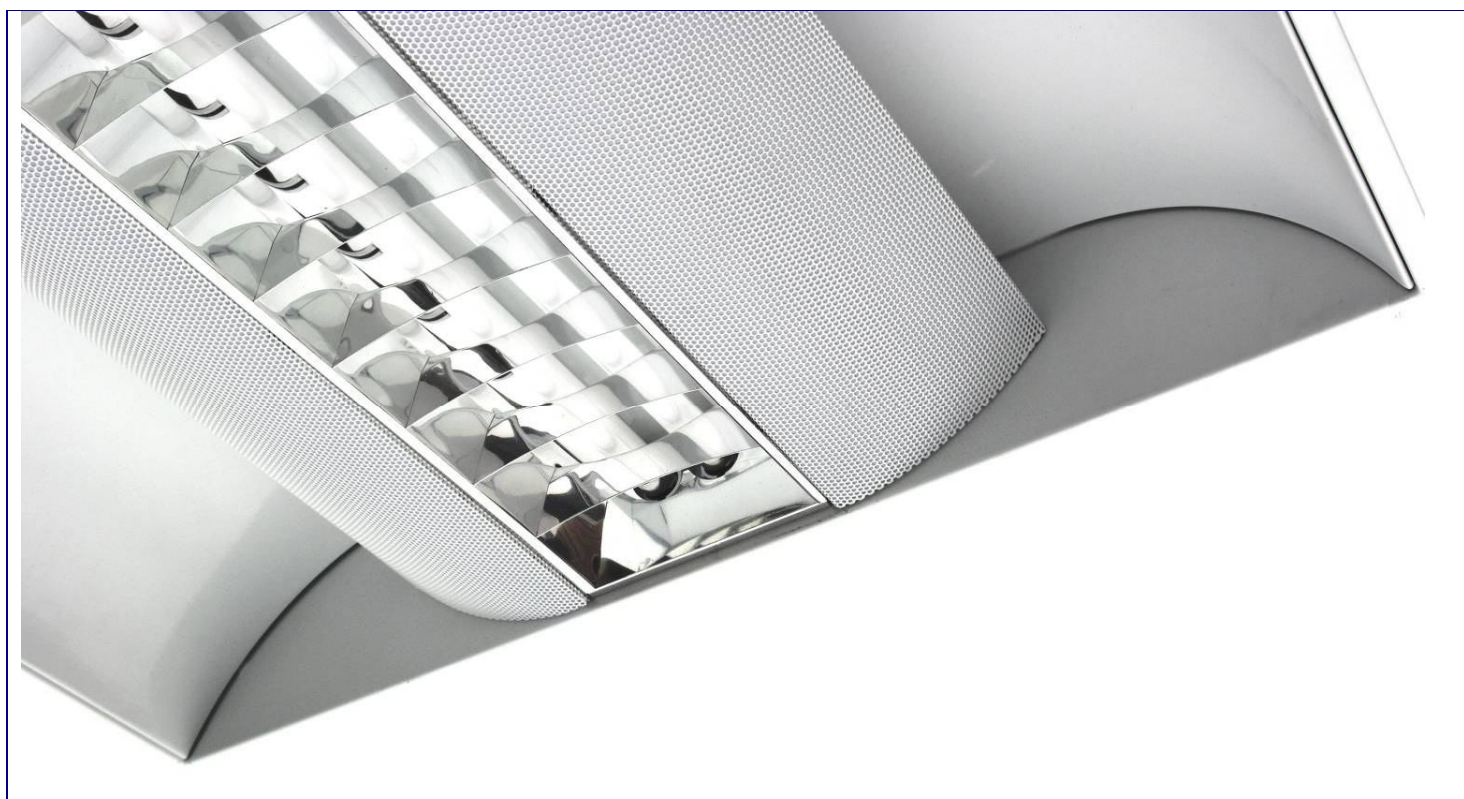
W625- Designed specifically for the German market to fit 625x625 suspended ceiling (subject to min. order)
- EM2- Emergency version 2 hours

JETTA 255 B51





## JETTA Recessed Luminaire with Central Louvre



<b>Type:</b>	Recessed luminaire with direct/indirect lighting possibilities for CFL and T5 lamps.
<b>Specification:</b>	A white painted perforated diffuser with UV stable opal film to give soft light distribution and mirror louver for direct lighting applications. Two parabolic reflectors. Fully enclosed white steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Jetta 414 D62	4x14 (G5)	596x596x100	5,1	62
Jetta 424 G45	4x24 (G5)	596x596x100	5,2	98
Jetta 255 O26	2x55 (2G11)	596x596x100	4	121
Jetta 214214 G46*	2x14(G5)+2x14(G5)	596x596x100	5,3	62
Jetta 214224 G47*	2x14(G5)+2x24(G5)	596x596x100	5,3	80
Jetta 224224 G48*	2x24(G5)+2x24(G5)	596x596x100	5,3	98
Jetta 214240 G49*	2x14(G5)+2x40(2G11)	596x596x100	5,3	118
Jetta 224240 G50*	2x24(G5)+2x40(2G11)	596x596x100	5,3	136
Jetta 214255 G51*	2x14(G5)+2x55(2G11)	596x596x100	5,3	144
Jetta 314 H54	3x14 (G5)	596x596x100	5,1	46
Jetta 324 H91	3x24 (G5)	596x596x100	5,2	73
Jetta 114214 H55*	1x14(G5)+2x14(G5)	596x596x100	5,3	46
Jetta 114224 H56*	1x14(G5)+2x24(G5)	596x596x100	5,3	61
Jetta 124224 H57*	1x24(G5)+2x24(G5)	596x596x100	5,3	74
Jetta 114240 H58*	1x14(G5)+2x40(2G11)	596x596x100	5,3	102
Jetta 124240 H59*	1x24(G5)+2x40(2G11)	596x596x100	5,3	112
Jetta 114255 H60*	1x14(G5)+2x55(2G11)	596x596x100	5,3	129

**\*- lighting fixture supplied with two electronic ballasts to play three different scenes (direct light, indirect light or both direct and indirect light). The two-phase switcher is needed.**

Options available on request:

DIM- Dimmable ballasts

SWITCHDIM- Switch DIM ballast

DALI- DALI ballasts

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

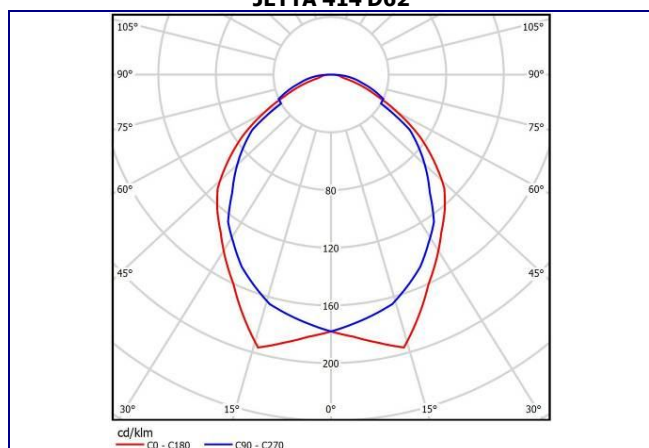
5TB- 5 way terminal block for loop feed and ease of wiring

WIE- 3- poles connector Wieland or similar connectors

W625- Designed specifically for the German market to fit 625x625 suspended ceiling (subject to min. order)

SB- Support brackets (4 pcs) for installation into a plasterboard ceiling

**JETTA 414 D62**





# BALI

## T5 Recessed Frame-free Luminaire with Opal Diffuser



**Type:** Frame free recessed T5\CFL luminaire for installation into plasterboard ceilings.

**Specification:** UV stable opal diffuser mounted into frame free body.  
Fully enclosed white steel body.  
Luminaire is plastic-wrapped and packaged in twin boxes.

**Installation:** Fits to plasterboard ceiling.

**Application:** Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Bali 213 M04 HF	2x13 (G24q-1)	205x215x80	1,8	28
Bali 218 M05 HF	2x18 (G24q-2)	205x215x80	1,8	40
Bali 226 M06 HF	2x26 (G24q-3)	205x215x80	1,8	55
Bali 114 M07	1x14 (G5)	90x 580x80	1,8	16
Bali 124 M08	1x24 (G5)	90x 580x80	1,8	25
Bali 121 M09	1x21 (G5)	90x 880x80	2,1	23
Bali 128 M10	1x28 (G5)	90x 1180x80	2,4	30,5
Bali 135 M11	1x35 (G5)	90x 1480x80	2,8	38
Bali 139 M12	1x39 (G5)	90x 880x80	2,4	42
Bali 149 M13	1x49 (G5)	90x 1480x80	2,8	53
Bali 154 M14	1x54 (G5)	90x 1180x80	2,4	58
Bali 180 M15	1x80 (G5)	90x 1480x80	2,8	85
Bali 314 M16	3x14 (G5)	300x 580x80	3,8	47
Bali 324 M17	3x24 (G5)	300x 580x80	3,9	74
Bali 414 M18	4x14 (G5)	300x 580x80	3,8	62
Bali 424 M19	4x24 (G5)	300x 580x80	3,9	98

Options available on request:

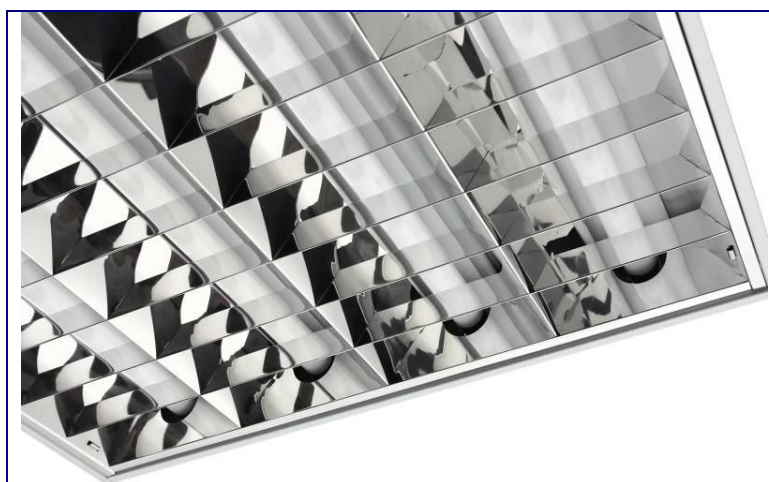
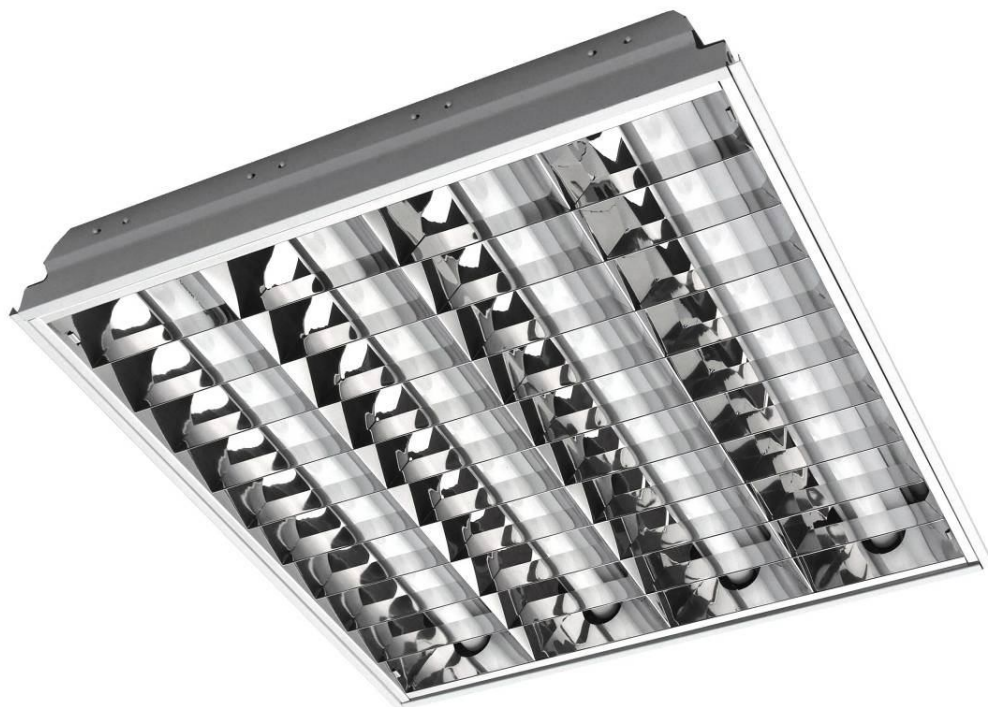
DIM- Dimmable ballasts  
SWITCHDIM- Switch DIM ballast

DALI- DALI ballasts  
EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
4TB- 4 way terminal block for loop feed and ease of wiring  
5TB- 5 way terminal block for loop feed and ease of wiring  
WIE- 3- poles connector Wieland or similar connectors (subject to minimum order)

## BREEZE

### T8 Recessed Luminaire with Specular Parabolic Louvre and Mirror Cross Blades



**Breeze 418 A04**



**Breeze 236 B35**



**Breeze 436 C45**



**Breeze 418 A04 11CR**

<b>Type:</b>	A versatile recessed T5/T8 luminaire with a choice of glossy cross blades for most applications. Premium quality at competitive prices
<b>Specification:</b>	<p>A glossy parabolic reflector with glossy cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement.</p> <p>Number of cross blades is optional from 5 up to 11 for better glare protection.</p> <p>Fully enclosed painted steel body, wiring is concealed and not visible from ground level.</p> <p>Luminaire is plastic-wrapped and packaged in twin boxes.</p>
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.



To fit 625x625mm recessed ceiling (Germany market) could be designed.  
For more information, see Option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 318 F21	3x18 (G13)	595x595x72	3,6	63
Breeze 318 F21 7CR	3x18 (G13)	595x595x72	3,6	63
Breeze 318 F21 9CR	3x18 (G13)	595x595x72	3,6	63
Breeze 418 A04	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 7CR	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 9CR	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 11CR	4x18 (G13)	595x595x72	3,7	63
Breeze 218 C44	2x18 (G13)	595x295x85	2,4	42
Breeze 236 B35	2x36 (G13)	1195x295x85	3,9	84
Breeze 336 L69	3x36 (G13)	1195x595x85	6,6	126
Breeze 436 C45	4x36 (G13)	1195x595x85	7,2	168

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block for loop feed and ease of wiring

MAT- Matted reflector

MBL- Matted cross blades

7CR- Louvre with 7 cross blades

9CR- Louvre with 9 cross blades

11CR- Louvre with 11 cross blades

24CR- Louvre with 24 cross blades (2/4x36W)

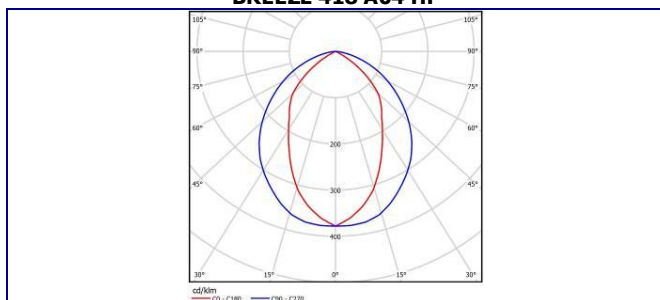
WIE- 3- poles connector (subject to minimum order)

NCP- Low Power Factor

W625- Designed for the German market to fit 625x625 suspended ceiling

QCK- Quick connection version, includes tubes.

**BREEZE 418 A04 HF**





## BREEZE DPAR

### T5 & T8 Recessed Luminaire with Double Parabolic Louvre



**Breeze 414 M70**

<b>Type:</b>	A recessed T8 luminaire with a Double Parabolic louvre.
<b>Specification:</b>	A glossy double parabolic reflector with glossy cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Fully enclosed painted steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 418 I92	4x18 (G13)	595x595x72	3,7	84
Breeze 414 M70	4x14 (G5)	595x595x72	2,9	62
Breeze 424 M71	4x24 (G5)	595x595x72	2,9	98

**2 or 3 Tube (2/3x18/14W) versions are available on Request**

Options available on request:

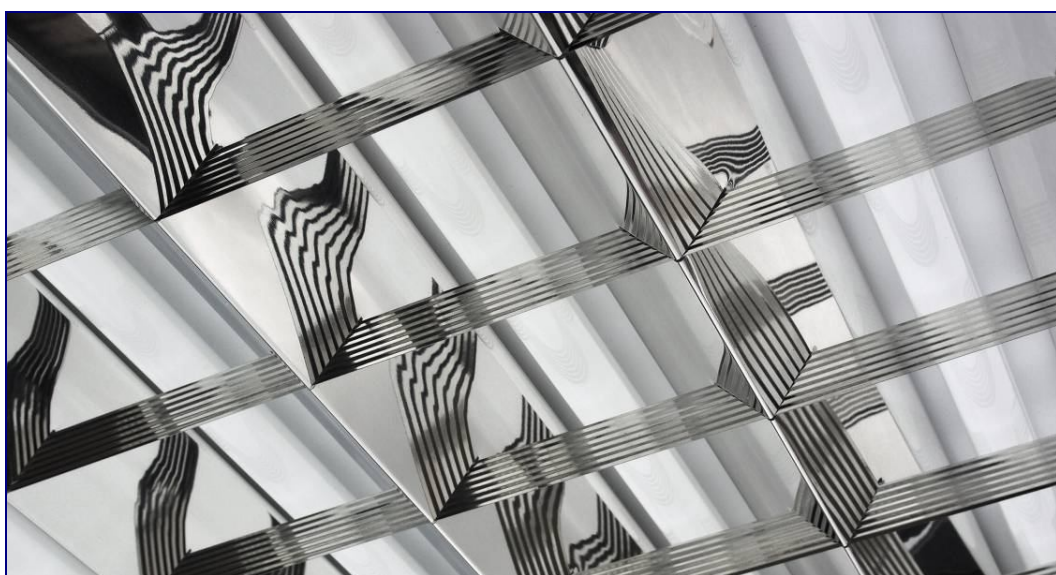
HF- High Frequency control gear  
 DIM- Dimmable ballasts  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 MAT- Matted reflector (subject to minimum order)  
 WIE- 3- poles connector (subject to minimum order)  
 NCP- Low Power Factor  
 W625- Designed for the German market to fit 625x625 suspended ceiling  
 QCK- Quick connection version, includes tubes.



## BREEZE RIB

**T8 Recessed  
Luminaire  
with Glossy  
Parabolic  
Louvre and  
Ribbed Cross  
Blades**



**Breeze 418 A04 RIB**



**Breeze 418 A04 RIB 9CR**



**Breeze 418 A04 RIB 11CR**

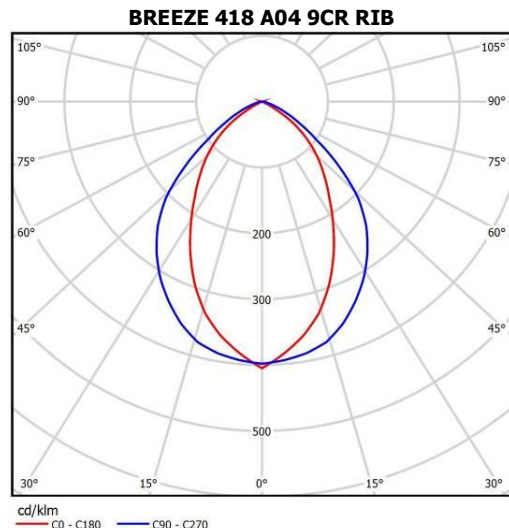
<b>Type:</b>	A versatile recessed T8 luminaire with a choice of ribbed cross blades for most applications. Premium quality at competitive prices.
<b>Specification:</b>	<p>A glossy parabolic reflector with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement.</p> <p>Number of cross blades is optional from 5 up to 11 for better glare protection.</p> <p>Fully enclosed painted steel body, wiring is concealed and not visible from ground level.</p> <p>Luminaire is plastic-wrapped and packaged in twin boxes.</p>
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets.
<b>Application:</b>	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 418 A04 RIB	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 7CR RIB	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 9CR RIB	4x18 (G13)	595x595x72	3,7	84
Breeze 418 A04 11CR RIB	4x18 (G13)	595x595x72	3,7	84
Breeze 218 C44 RIB	2x18 (G13)	598x299x85	2,4	42
Breeze 236 B35 RIB	2x36 (G13)	1195x295x85	3,9	84
Breeze 436 C45 RIB	4x36 (G13)	1195x595x85	7,2	168

**3 Tube (3x18/14W) versions are available on request**

Options available on request:

HF-	High Frequency control gear	4TB-	4 way terminal block for loop feed and ease of wiring
DIM-	Dimmable ballasts	MAT-	Matted reflector
SWITCHDIM-	Switch DIM ballast	7CR-	Louvre with 7 cross blades
DALI-	DALI ballast	9CR-	Louvre with 9 cross blades
EMG-	Emergency version 1 hour	11CR-	Louvre with 11 cross blades
EM2-	Emergency version 2 hours	WIE-	3- poles connector (subject to minimum order)
EM3-	Emergency version 3 hours	NCP-	Low Power Factor
5TB-	5 way terminal block for loop feed and ease of wiring	QCK-	Quick connection version, includes tubes



# PASSAT

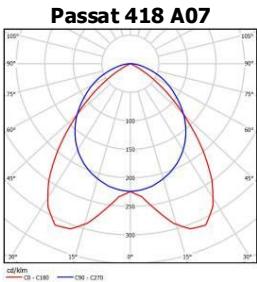
## T8 Recessed Luminaire with Glossy V-shaped Louvre



Type:	Traditional recessed T8 luminaire with glossy V-shaped louvre. A classic design for general commercial lighting.
Specification:	<p>A glossy V-shaped louvre with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability.</p> <p>Number of cross blades is optional from 5 up to 11 for better glare protection.</p> <p>Fully enclosed white painted steel body. Wiring is concealed and not visible from ground level.</p> <p>Luminaire is plastic-wrapped and packaged in twin boxes.</p>
Installation:	Fits 15-24mm exposed T-Bar ceilings 600x600mm.
Application:	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Passat 218 D75	2x18 (G13)	595x295x85	2,4	42
Passat 418 A07 RGD	4x18 (G13)	595x595x72	3,7	84
Passat 236 D76	2x36 (G13)	1195x295x85	3,9	84
Passat 436 D77	4x36 (G13)	1195x595x85	7,2	168

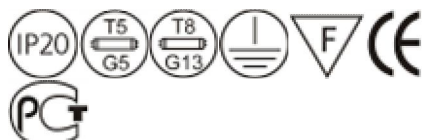
Options available on request:			
HF-	High Frequency control gear	MAT-	Matted reflector
DIM-	Dimmable ballasts	7CR-	Louvre with 7 cross blades
EMG-	Emergency version 1 hour	9CR-	Louvre with 9 cross blades
EM2-	Emergency version 2 hours	11CR-	Louvre with 11 cross blades
EM3-	Emergency version 3 hours	WIE-	3- poles connector
4TB-	4 way terminal block for loop feed and ease of wiring	NCP-	Low Power Factor
5TB-	5 way terminal block for loop feed and ease of wiring		





# MISTRAL& MONSOON

## T5 & T8 Recessed Luminaire with Unique “One-piece” V-shaped Louvre



**Monsoon 418 B21**

<b>Type:</b>	Modern budget recessed luminaire with ideal light distribution without blinding glare.
<b>Specification:</b>	A unique “One-piece” patented “Soft Light” V-shaped louvre with 5 ribbed cross blades for better light distribution. Louvre is fitted into the body with a locking safety clip for maximum stability. Fully enclosed economy steel body: white painted. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm.
<b>Application:</b>	Office buildings, shops and other commercial environments.

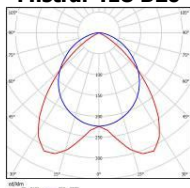
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Mistral 418 B20	4x18 (G13)	595x595x72	2,6	84
Mistral 418 A13	4x18 (G13)	595x595x72	3,7	84
Mistral 414 O96	4x14 (G5)	595x595x72	2,9	62
Monsoon 418 B21	4x18 (G13)	595x595x72	2,6	84

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballasts  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 NCP- Low Power Factor

**Mistral 418 B20**





## LEVANTO

### T5 & T8 Recessed Luminaire with Opal Diffuser



**Levanto 418 F24 (framed opal glass)**

<b>Type:</b>	Traditional recessed luminaire with opal diffuser for most applications. Premium quality at competitive prices.
<b>Specification:</b>	UV stable opal diffuser. Fully enclosed white steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm.
<b>Application:</b>	Office buildings, shops and other commercial environments.

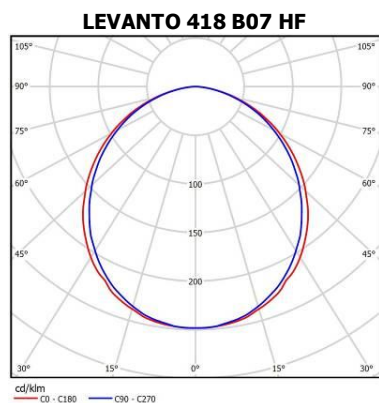
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Levanto 218 H61	IP20	2x18 (G13)	295x595x85	2,4	42
Levanto 318 L51	IP20	3x18 (G13)	595x595x72	3,7	63
Levanto 318 L52	IP40, framed opal glass	3x18 (G13)	595x595x72	3,7	63
Levanto 418 B07	IP20	4x18 (G13)	595x595x72	3,7	84
Levanto 418 F24	IP40, framed opal glass	4x18 (G13)	595x595x72	3,7	84
Levanto 236 H62	IP20	2x36 (G13)	295x1195x85	3,9	84
Levanto 336 L53	IP20	3x36 (G13)	595x1195x85	7,2	126
Levanto 436 H63	IP20	4x36 (G13)	595x1195x85	7,2	168

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Levanto 214 H67	IP20	2x14 (G5)	295x595x85	2,2	31
Levanto 224 H68	IP20	2x24 (G5)	295x595x85	2,2	49
Levanto 314 L54	IP20	3x14 (G5)	595x595x72	2,9	47
Levanto 324 L55	IP20	3x24 (G5)	595x595x72	2,9	74
Levanto 314 L56	IP40, framed opal glass	3x14 (G5)	595x595x72	2,9	47
Levanto 324 L57	IP40, framed opal glass	3x24 (G5)	595x595x72	2,9	74
Levanto 414 H69	IP20	4x14 (G5)	595x595x72	2,9	62
Levanto 424 H70	IP20	4x24 (G5)	595x595x72	2,9	98
Levanto 414 I34	IP40, framed opal glass	4x14 (G5)	595x595x72	2,9	62
Levanto 424 I35	IP40, framed opal glass	4x24 (G5)	595x595x72	2,9	98
Levanto 228 H71	IP20	2x28 (G5)	295x1195x85	3,2	60
Levanto 254 H72	IP20	2x54 (G5)	295x1195x85	3,2	115
Levanto 328 L58	IP20	3x28 (G5)	595x1195x85	5,7	90,5
Levanto 354 L59	IP20	3x54 (G5)	595x1195x85	5,7	173
Levanto 428 H73	IP20	4x28 (G5)	595x1195x85	5,7	120
Levanto 454 H74	IP20	4x54 (G5)	595x1195x85	5,7	230

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballasts  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 WIE- 3- poles connector (subject to minimum order)  
 NCP- Low Power Factor



## MARENCO

### T5 & T8 Recessed Luminaire with Prismatic Diffuser



**Marenco 418 F47**

<b>Type:</b>	Traditional recessed luminaire with prismatic diffuser for most applications. Premium quality at competitive prices
<b>Specification:</b>	UV stable prismatic diffuser. Marenco 418 F47 with framed prismatic glass. Fully enclosed white steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Fits 15-24mm exposed T-Bar ceilings 600x600mm.
<b>Application:</b>	Office buildings, shops and other commercial environments.

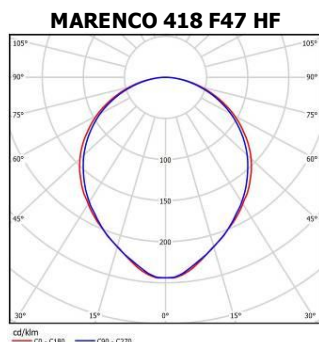
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Marenco 218 I33	IP20	2x18 (G13)	295x595x85	2,4	42
Marenco 318 L60	IP20	3x18 (G13)	595x595x72	3,7	63
Marenco 318 L61	IP40, framed opal glass	3x18 (G13)	595x595x72	3,7	63
Marenco 418 D09	IP20	4x18 (G13)	595x595x72	3,7	84
Marenco 418 F47	IP40, framed opal glass	4x18 (G13)	595x595x72	3,7	84
Marenco 236 K25	IP20	2x36 (G13)	295x1195x85	3,9	84
Marenco 336 L62	IP20	3x36 (G13)	595x1195x85	7,2	126
Marenco 436 K26	IP20	4x36 (G13)	595x1195x85	7,2	168

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Marenco 214 I36	IP20	2x14 (G5)	295x595x85	2,2	31
Marenco 224 I37	IP20	2x24 (G5)	295x595x85	2,2	49
Marenco 314 L63	IP20	3x14 (G5)	595x595x72	2,9	47
Marenco 324 L64	IP20	3x24 (G5)	595x595x72	2,9	74
Marenco 314 L65	IP40, framed opal glass	3x14 (G5)	595x595x72	2,9	47
Marenco 324 L66	IP40, framed opal glass	3x24 (G5)	595x595x72	2,9	74
Marenco 414 I38	IP20	4x14 (G5)	595x595x72	2,9	62
Marenco 424 I39	IP20	4x24 (G5)	595x595x72	2,9	98
Marenco 414 I40	IP40, framed opal glass	4x14 (G5)	595x595x72	2,9	62
Marenco 424 I41	IP40, framed opal glass	4x24 (G5)	595x595x72	2,9	98
Marenco 228 J59	IP20	2x28 (G5)	295x1195x85	3,2	60
Marenco 254 J60	IP20	2x54 (G5)	295x1195x85	3,2	115
Marenco 328 L67	IP20	3x28 (G5)	595x1195x85	5,7	90,5
Marenco 354 L68	IP20	3x54 (G5)	595x1195x85	5,7	173
Marenco 428 J61	IP20	4x28 (G5)	595x1195x85	5,7	120
Marenco 454 J62	IP20	4x54 (G5)	595x1195x85	5,7	230

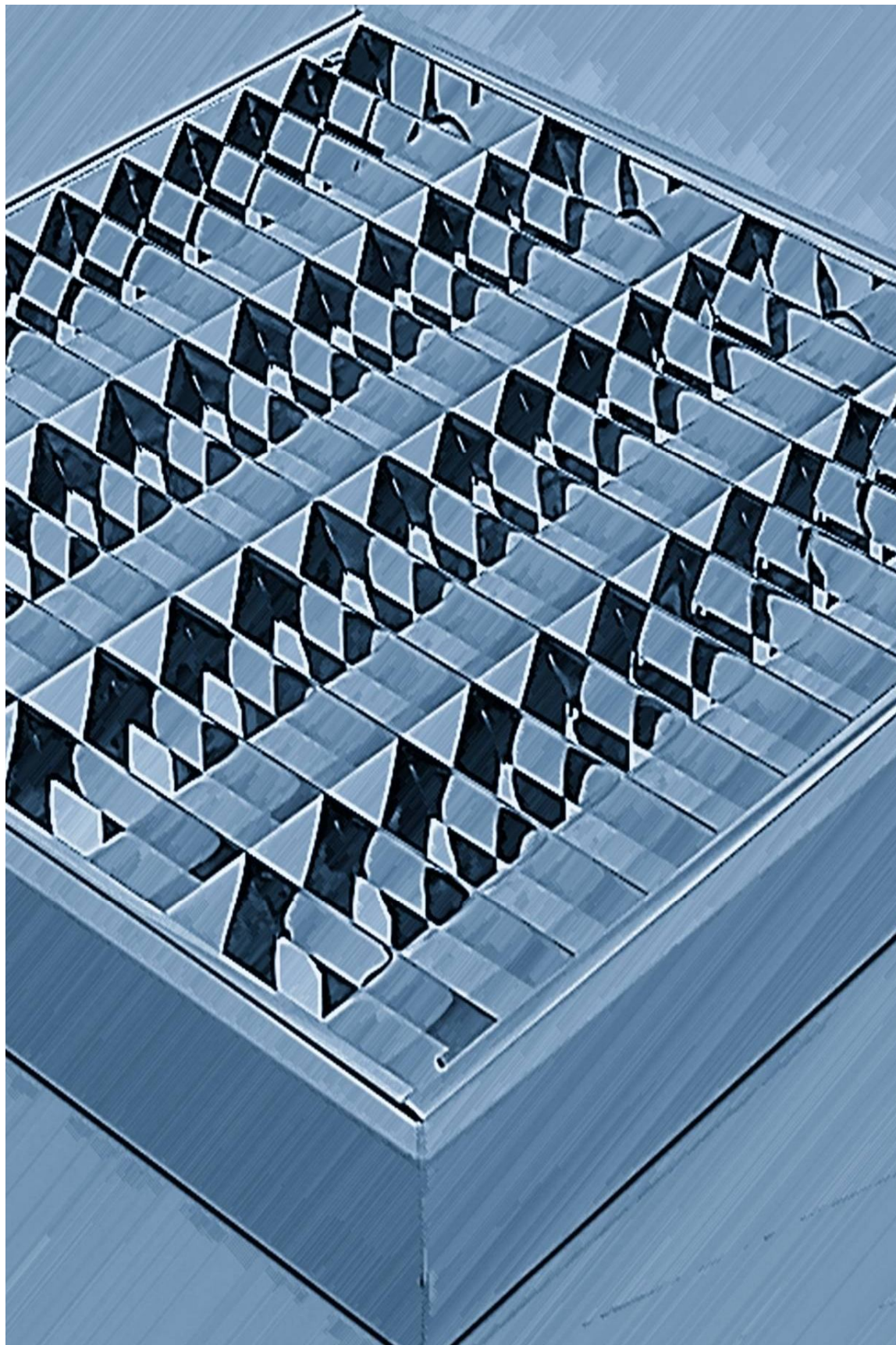
Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 WIE- 3- poles connector (subject to minimum order)  
 NCP- Low Power Factor





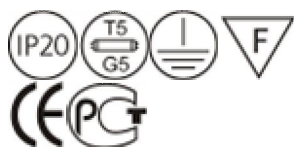


# SURFACE



# POLARIS

## T5 Surface Double Parabolic Luminaire with Perforated Inserts



**Polaris 214 F22**



**Polaris 214 B22**



**Polaris 414 F43**

<b>Type:</b>	One of the most elegant T5 surface luminaires on the market with superior lighting performance. Outstanding design and look. Lightweight at just 1.9 kg with a height of only 57 mm.
<b>Specification:</b>	Double parabolic louvre, with perforated aluminum inserts to give better light distribution. The louvre is fitted into the body with four spring locks for maximum stability. Deluxe version louvres are manufactured using Alanod MIRO aluminum with 95% reflection. Fully enclosed white steel body. Deluxe version made completely of matted aluminum. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Office buildings, shops and other commercial environments.



**Deluxe version** manufactured from MIRO® aluminum louver and matted aluminum body



**Standard version** manufactured from glossy aluminum louver and white steel body

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Polaris 114 I23	1x14 (G5)	143x595x57	1	15
Polaris 124 I24	1x24 (G5)	143x595x57	1	25
Polaris 214 F22	2x14 (G5)	143x595x57	1	31
Polaris 224 F23	2x24 (G5)	143x595x57	1	49
Polaris 214 B22	2x14 (G5)	295x595x57	1,2	31
Polaris 224 D79	2x24 (G5)	295x595x57	1,2	49
Polaris 414 F43	4x14 (G5)	295x595x57	1,3	31
Polaris 424 F44	4x24 (G5)	295x595x57	1,3	49
Polaris 414 A19	4x14 (G5)	595x595x57	1,9	62
Polaris 424 D12	4x24 (G5)	595x595x57	2,1	98
Polaris 114 I23 Deluxe	1x14 (G5)	143x595x57	1	15
Polaris 124 I24 Deluxe	1x24 (G5)	143x595x57	1	25
Polaris 214 F22 Deluxe	2x14 (G5)	143x595x57	1	31
Polaris 224 F23 Deluxe	2x24 (G5)	143x595x57	1	49
Polaris 214 B22 Deluxe	2x14 (G5)	295x595x57	1,2	31
Polaris 224 D79 Deluxe	2x24 (G5)	295x595x57	1,2	49
Polaris 414 F43 Deluxe	4x14 (G5)	295x595x57	1,3	31
Polaris 424 F44 Deluxe	4x24 (G5)	295x595x57	1,3	49
Polaris 414 A19 Deluxe	4x14 (G5)	595x595x57	1,9	62
Polaris 424 D12 Deluxe	4x24 (G5)	595x595x57	2,1	98

3x14/24 W version with white inserts available on request.

Options available on request:

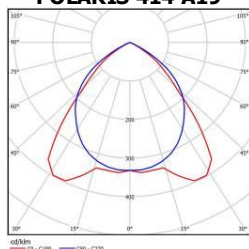
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast

DALI- DALI ballast  
EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes  
MAT- Matted reflector (subject to minimum order)  
MRO- Mirror reflector Deluxe  
PMT- Matted perforated inserts (subject to minimum order)  
MTO- Matted reflector Deluxe (subject to minimum order)  
SMS- Glossy aluminum body  
WHT- White perforated inserts

#### POLARIS 414 A19



**POLARIS Linear  
Narrow&Wide**

**T5 Surface/ Suspended  
Slimline Double  
Parabolic Luminaire**



**Polaris 228 A22**



LG3 – Luminaire fit LG3 requirements (with 30% light distribution to the ceiling and 70% to the floor). Available on request.

<b>Type:</b>	Slim&Wide versions of suspended or surface T5 luminaire for maximum efficiency and quality of light. Attractive design and look. Lightweight at just 1.1-2,1 kg with a height of only 57 mm.
<b>Specification:</b>	Double parabolic louvre to give better light distribution. Fully enclosed body with mirror reflector, which improves light output and is exceptional to NORTHCLIFFE Lighting. The louvre is fitted into the body with six spring locks for maximum stability. Deluxe version louvres are manufactured using Alanod MIRO aluminum with 95% reflection. Fully enclosed white steel body. Deluxe version made completely of matted aluminum. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended.
<b>Application:</b>	Office buildings, shops and other commercial environments.





Wire suspension set (**SUS2**) and plastic cap with spiral cable (**CAPW**) are available on request. For more information see in Option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Polaris 128 A20	1x28 (G5)	143x1210x57	1,1	30,5
Polaris 154 A24	1x54 (G5)	143x1210x57	1,1	58
Polaris 228 A21	2x28 (G5)	143x1210x57	1,2	60
Polaris 254 A25	2x54 (G5)	143x1210x57	1,2	116
Polaris 228 A22	2x28 (G5)	295x1210x57	1,9	60
Polaris 254 A26	2x54 (G5)	295x1210x57	1,9	116
Polaris 428 A23	4x28 (G5)	295x1210x57	2,1	120
Polaris 454 A27	4x54 (G5)	295x1210x57	2,1	232
Polaris 128 A20 Deluxe	1x28 (G5)	143x1210x57	1,1	30,5
Polaris 154 A24 Deluxe	1x54 (G5)	143x1210x57	1,1	58
Polaris 228 A21 Deluxe	2x28 (G5)	143x1210x57	1,2	60
Polaris 254 A25 Deluxe	2x54 (G5)	143x1210x57	1,2	116
Polaris 228 A22 Deluxe	2x28 (G5)	295x1210x57	1,9	60
Polaris 254 A26 Deluxe	2x54 (G5)	295x1210x57	1,9	116
Polaris 428 A23 Deluxe	4x28 (G5)	295x1210x57	2,1	120
Polaris 454 A27 Deluxe	4x54 (G5)	295x1210x57	2,1	232

**1x14/24 and 2x14/24W versions are available on request**

Options available on request:

DIM- Dimmable ballasts

SWITCHDIM- Switch DIM ballast

DALI- DALI ballasts

MAT- Matted reflector (subject to minimum order)

LG3- LG3 option

MRO- Mirror reflector Deluxe

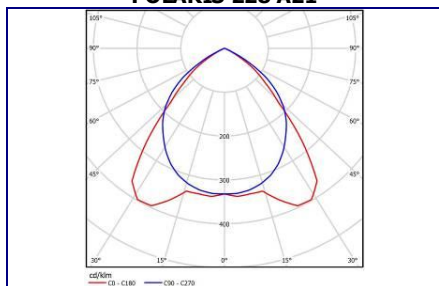
MTO- Matted reflector Deluxe (subject to minimum order)

SMS- Glossy aluminum body

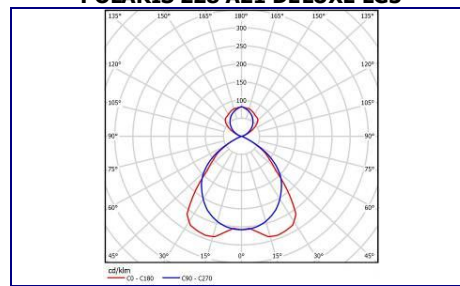
SUS2- Suspension wires set (2 pcs)

CAPW- White cap with spiral cable 3x1mm2

**POLARIS 228 A21**



**POLARIS 228 A21 DELUXE LG3**



# LEVANTO & MARENCO LED

## Surface Luminaire with Opal or Prismatic Diffuser



Marenco S LED B150 4x950lm T840



Levanto S LED B145 2x2140lm T840



Levanto S LED B145 2x2140lm T840 SPORT

Type:	Economical surface mounted LED luminaire with a modern low profile body and diffuser. Premium quality at competitive prices.
Specification:	UV stable opal or prismatic sheet is fitted to the body with a steel frame. Option SPORT is equipped with a special white painted steel protective grid for sport halls and others areas, where a high degree of protection is required. Fully enclosed painted steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Office buildings, shops, sport halls and other commercial environments.

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Levanto S LED B142 2x950lm T840	360x635x66	1900	4000	>80	21	2
Levanto S LED B142 2x1000lm T857	360x635x665	2000	5700	>80	21	2
Levanto S LED B143 3x950lm T840	635x635x66	2850	4000	>80	31	3
Levanto S LED B143 3x1000lm T857	635x635x66	3000	5700	>80	31	3
Levanto S LED B144 4x950lm T840	635x635x66	3800	4000	>80	41	3
Levanto S LED B144 4x1000lm T857	635x635x66	4000	5700	>80	41	3
Levanto S LED B216 4750lm T840	635x635x66	4750	4000	>80	51	3
Levanto S LED B216 5000lm T857	635x635x66	5000	5700	>80	51	3
Levanto S LED B145 2x2140lm T840	220x1245x66	4280	4000	>80	46	3
Levanto S LED B145 2x2250lm T857	220x1245x66	4500	5700	>80	46	3
Levanto S LED B146 2x2140lm T840	360x1245x66	4280	4000	>80	46	3,2
Levanto S LED B146 2x2250lm T857	360x1245x66	4500	5700	>80	46	3,2
Levanto S LED B147 3x2140lm T840	360x1245x66	6420	4000	>80	69	3,5
Levanto S LED B147 3x2250lm T857	360x1245x66	6750	5700	>80	69	3,5

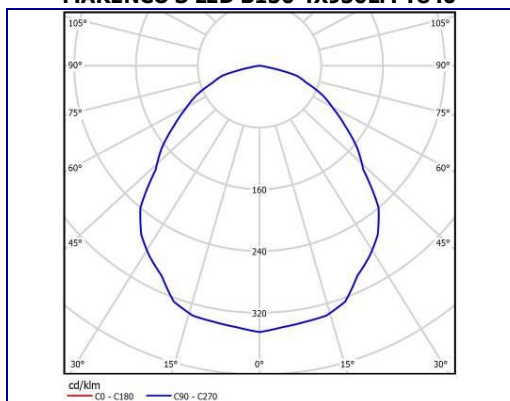
Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Marenco S LED B148 2x950lm T840	360x635x66	1900	4000	>80	21	2
Marenco S LED B148 2x1000lm T857	360x635x66	2000	5700	>80	21	2
Marenco S LED B149 3x950lm T840	635x635x66	2850	4000	>80	31	3
Marenco S LED B149 3x1000lm T857	635x635x66	3000	5700	>80	31	3
Marenco S LED B150 4x950lm T840	635x635x66	3800	4000	>80	41	3
Marenco S LED B150 4x1000lm T857	635x635x66	4000	5700	>80	41	3
Marenco S LED B217 4750lm T840	635x635x66	4750	4000	>80	51	3
Marenco S LED B217 5000lm T857	635x635x66	5000	5700	>80	51	3
Marenco S LED B151 2x2140lm T840	220x1245x66	4280	4000	>80	46	3
Marenco S LED B151 2x2250lm T857	220x1245x66	4500	5700	>80	46	3
Marenco S LED B152 2x2140lm T840	360x1245x66	4280	4000	>80	46	3,2
Marenco S LED B152 2x2250lm T857	360x1245x66	4500	5700	>80	46	3,2
Marenco S LED B153 3x2140lm T840	360x1245x66	6420	4000	>80	69	3,5
Marenco S LED B153 3x2250lm T857	360x1245x66	6750	5700	>80	69	3,5

Options available on request:

STB- 5 way terminal block for loop feed and ease of wiring

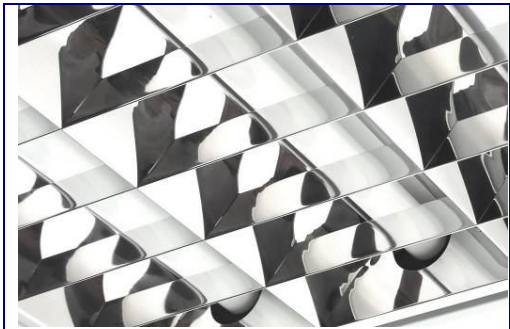
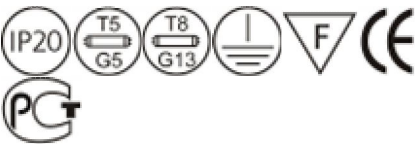
SPORT- a special white painted steel protective grid

#### MARENCO S LED B150 4X950LM T840



# BREEZE

## T5 & T8 Surface Luminaire with Glossy Parabolic Louvre and Mirror Cross Blades



Breeze 418 B33



Breeze 418 B33 9CR



Breeze 418 B33 11CR



Breeze 218 D13



Breeze 236 D14

Type:	Bestselling surface mounted T8 luminaire with a modern low profile body and optional number of mirror cross blades. Premium quality at competitive prices.
Specification:	<p>Shiny parabolic louvre with cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement.</p> <p>Number of cross blades is optional from 5 up to 11 for better glare protection.</p> <p>Fully enclosed painted steel body, wiring is concealed and not visible from ground level.</p> <p>Luminaire is plastic-wrapped and packaged in twin boxes.</p>
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Office buildings, shops and other commercial environments.



Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 218 D13	2x18 (G13)	360x635x66	2,4	42
Breeze 318 M60	3x18 (G13)	635x635x66	3,6	68
Breeze 318 M60 9CR	3x18 (G13)	635x635x66	3,6	68
Breeze 418 B33	4x18 (G13)	635x635x66	3,6	84
Breeze 418 B33 7CR	4x18 (G13)	635x635x66	3,6	84
Breeze 418 B33 9CR	4x18 (G13)	635x635x66	3,6	84
Breeze 418 B33 11CR	4x18 (G13)	635x635x66	3,6	84
Breeze 136 I42	1x36 (G13)	220x1245x66	2,8	42
Breeze 236 I43	2x36 (G13)	220x1245x66	3,3	84
Breeze 158 P12	1x58 (G13)	220x1545x66	4	67
Breeze 236 D14	2x36 (G13)	360x1245x66	4	84
Breeze 258 O40	2x58 (G13)	360x1545x66	5,5	134
Breeze 436 G76	4x36 (G13)	635x1245x66	7	168

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 214 F33	2x14 (G5)	360x635x66	2,2	31
Breeze 224 F34	2x24 (G5)	360x635x66	2,2	49
Breeze 314 J63	3x14 (G5)	635x635x66	2,8	46
Breeze 314 J63 9CR	3x14 (G5)	635x635x66	2,8	46
Breeze 324 J64	3x24 (G5)	635x635x66	2,9	73
Breeze 324 J64 9CR	3x24 (G5)	635x635x66	2,9	73
Breeze 414 F35	4x14 (G5)	635x635x66	2,9	62
Breeze 414 F35 9CR	4x14 (G5)	635x635x66	2,9	62
Breeze 424 F36	4x24 (G5)	635x635x66	3	98
Breeze 424 F36 9CR	4x24 (G5)	635x635x66	3	98
Breeze 128 J89	1x28 (G5)	220x1245x66	2,5	30
Breeze 154 J90	1x54 (G5)	220x1245x66	2,5	58
Breeze 228 J91	2x28 (G5)	220x1245x66	2,5	60
Breeze 254 J92	2x54 (G5)	220x1245x66	2,5	116
Breeze 135 P08	1x35 (G5)	220x1245x66	3	38
Breeze 149 P09	1x49 (G5)	220x1245x66	3	52
Breeze 235 P10	2x35 (G5)	220x1245x66	3	75
Breeze 249 P11	2x49 (G5)	220x1245x66	3	104
Breeze 228 F37	2x28 (G5)	360x1245x66	3,3	60
Breeze 254 F38	2x54 (G5)	360x1245x66	3,3	116
Breeze 235 O41	2x35 (G5)	360x1545x66	4	75
Breeze 249 O42	2x49 (G5)	360x1545x66	4	104
Breeze 280 O43	2x80 (G5)	360x1545x66	4,1	170
Breeze 428 F39	4x28 (G5)	360x1245x66	3,6	120
Breeze 454 F40	4x54 (G5)	360x1245x66	3,6	229
Breeze 328 O35	3x28 (G5)	635x1245x66	5,7	90
Breeze 354 O36	3x54 (G5)	635x1245x66	5,7	115
Breeze 428 O37	4x28 (G5)	635x1245x66	5,8	120
Breeze 454 O38	4x54 (G5)	635x1245x66	5,8	229
Breeze 628 P06	6x28 (G5)	635x1245x66	6	180
Breeze 654 P07	6x54 (G5)	635x1245x66	6	344

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring

MAT- Matted reflector  
 MBL- Matted cross blades  
 7CR- Louvre with 7 cross blades  
 9CR- Louvre with 9 cross blades  
 11CR- Louvre with 11 cross blades  
 24CR- Louvre with 24 cross blades (2x36/28/54W)  
 NCP- Low Power Factor  
 RIB- Ribbed cross blades

## BREEZE DPAR

### T5 & T8 Surface Luminaire with Double Parabolic Louvre



<b>Type:</b>	Surface mounted T8 luminaire with a double parabolic louvre.
<b>Specification:</b>	Shiny double parabolic louvre with 5 cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Fully enclosed painted steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Office buildings, shops and other commercial environments.

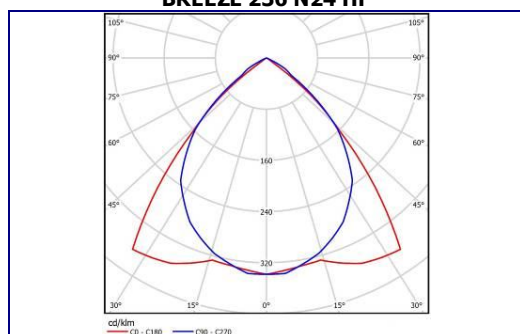
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Breeze 418 H16	4x18 (G13)	635x635x66	3,6	84
Breeze 236 N24	2x36 (G13)	360x1245x66	3,6	84
Breeze 414 N25	4x14 (G5)	635x635x66	2,8	62
Breeze 424 N26	4x24 (G5)	635x635x66	2,8	98
Breeze 228 N27	2x28 (G5)	360x1245x66	2,8	60
Breeze 254 N28	2x54 (G5)	360x1245x66	2,8	116

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballasts  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hour

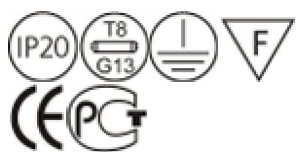
EM3- Emergency version 3 hour  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 MAT- Matted reflector  
 NCP- Low Power Factor

**BREEZE 236 N24 HF**



# MONSOON

**T8 Surface  
Luminaire  
with Glossy  
Parabolic  
Louvre and  
Ribbed Cross  
Blades**



**Monsoon 418 B08 STD**



**Monsoon 418 B08 STD 9CR**



**Monsoon 236 D16**

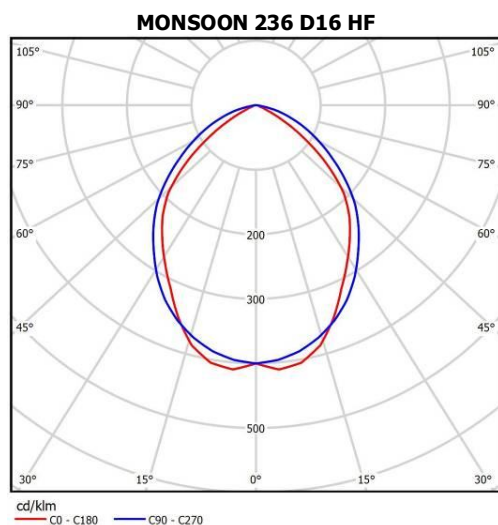
<b>Type:</b>	Traditional surface mounted T8 luminaire with a modern low profile body. Premium quality at competitive prices.
<b>Specification:</b>	Shiny parabolic louvre with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement. Number of cross blades is optional from 5 up to 11 for better glare protection. Fully enclosed painted steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Monsoon 218 D15	2x18 (G13)	360x635x66	2,4	42
Monsoon 418 B08 STD	4x18 (G13)	635x635x66	3,6	84
Monsoon 418 B08 STD 7CR	4x18 (G13)	635x635x66	3,6	84
Monsoon 418 B08 STD 9CR	4x18 (G13)	635x635x66	3,6	84
Monsoon 418 B08 STD 11CR	4x18 (G13)	635x635x66	3,6	84
Monsoon 236 D16	2x36 (G13)	360x1245x66	4	84
Monsoon 258 O44	2x58 (G13)	635x1545x66	5,5	134
Monsoon 436 G77	4x36 (G13)	635x1245x66	7	168

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 MAT- Matted reflector  
 7CR- Louvre with 7 cross blades  
 9CR- Louvre with 9 cross blades  
 11CR- Louvre with 11 cross blades  
 NCP- Low Power Factor





# PASSAT

## T8 Surface Luminaire with Glossy V-shaped Louvre



**Passat 236 A32**



**Passat 236 A33**

<b>Type:</b>	Versatile surface mounted T8 luminaire with a modern low profile body and specular V-shaped louvre. Premium quality at competitive prices.
<b>Specification:</b>	Standard V-shaped louvre with ribbed cross blades is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement. Number of cross blades is optional from 5 to 9 for better glare protection. Fully enclosed painted steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Passat 218 A31	2x18 (G13)	360x635x66	2,4	42
Passat 418 A30	4x18 (G13)	635x635x66	3,6	84
Passat 418 A30 7CR	4x18 (G13)	635x635x66	3,6	84
Passat 236 A33	2x36 (G13)	220x1245x66	3,3	84
Passat 236 A32	2x36 (G13)	360x1245x66	4	84

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block for loop feed and ease of wiring

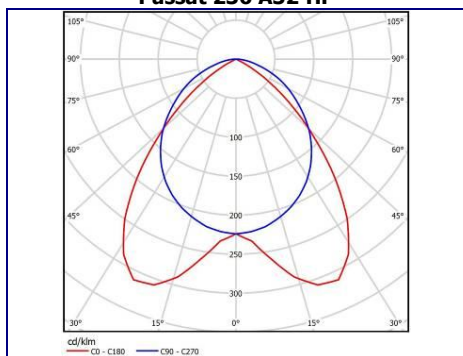
MAT- Matted reflector

7CR- Louvre with 7 cross blades

9CR- Louvre with 9 cross blades

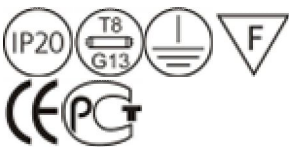
NCP- Low Power Factor

#### Passat 236 A32 HF



# SIROCCO

## T8 Surface Double Parabolic Luminaire with Glossy Perforated Inserts



Sirocco 218 A29

Type:	A premium surface mounted T8 luminaire with a modern low profile body.
Specification:	Double Parabolic louvre, with perforated inserts to give better light distribution. Louvre is fitted into the body with a locking safety clip for maximum stability. Nylon retainers enable louvre to swing down for maintenance and tube replacement. Fully enclosed white steel body, wiring is concealed and not visible from ground level. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Sirocco 218 A29	2x18 (G13)	360x635x66	2,4	50
Sirocco 418 A28	4x18 (G13)	635x635x66	3,8	84

Options available on request:			
HF-	High Frequency control gear	EM2-	Emergency version 2 hours
DIM-	Dimmable ballasts	EM3-	Emergency version 3 hours
SWITCHDIM-	Switch DIM ballast	4TB-	4 way terminal block for loop feed and ease of wiring
DALI-	DALI ballast	MAT-	Matted reflector
EMG-	Emergency version 1 hour	NCP-	Low Power Factor

# MISTRAL& Monsoon

## T8 Surface Luminaire with Unique “One-piece” V-shaped Louvre



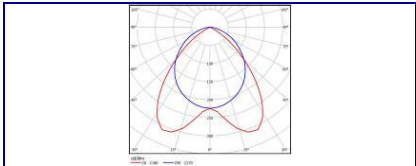
Monsoon 418 D17

Type:	Modern budget luminaire with ideal light distribution without blinding glare.
Specification:	A special patented “One-piece” “Soft Light” V-shaped louvre with 5 ribbed cross blades. Louvre is fitted to the body with a locking safety clip for maximum stability. Fully enclosed painted steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Mistral 418 A34	4x18 (G13)	635x635x66	3,6	84
Monsoon 418 D17	4x18 (G13)	635x635x66	3,6	84

Options available on request:		
HF-	High Frequency control gear	EM2- Emergency version 2 hours
DIM-	Dimmable ballasts	EM3- Emergency version 3 hours
SWITCHDIM-	Switch DIM ballast	4TB- 4 way terminal block for loop feed and ease of wiring
DALI-	DALI ballast	5TB- 5 way terminal block for loop feed and ease of wiring
EMG-	Emergency version 1 hour	NCP- Low Power Factor

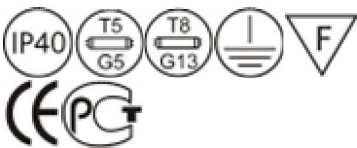
Mistral 418 A34





# LEVANTO

## T5 & T8 Surface Luminaire with Opal Diffuser



Levanto 236 A41



Levanto Sport 236 A42

Type:	Economical surface mounted T8 luminaire with a modern low profile body and opal diffuser. Premium quality at competitive prices.
Specification:	UV stable opal sheet is fitted to the body with a steel frame. LEVANTO SPORT 236 A42 is equipped with a special white painted steel protective grid for sport halls and others areas, where a high degree of protection is required. Fully enclosed painted steel body. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Office buildings, shops, sport halls and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Levanto 118 J95	1x18 (G13)	220x635x66	1,8	22
Levanto 218 J96	2x18 (G13)	220x635x66	2,2	42
Levanto 218 H75	2x18 (G13)	360x635x66	2,4	42
Levanto 318 L05	3x18 (G13)	360x635x66	2,8	64
Levanto 318 L06	3x18 (G13)	635x635x66	4	64
Levanto 418 A40	4x18 (G13)	635x635x66	4,2	84
Levanto 136 J97	1x36 (G13)	220x1245x66	3,2	42
Levanto 236 A41	2x36 (G13)	220x1245x66	3,8	84
Levanto 236 L27	2x36 (G13)	360x1245x66	4	84
Levanto 336 L03	3x36 (G13)	360x1245x66	4,6	126
Levanto Sport 236 A42	2x36 (G13)	320x1380x105	5,9	84

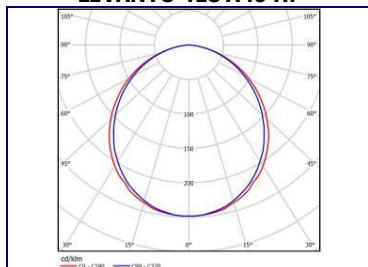
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Levanto 114 L07	1x14 (G5)	220x635x66	1,4	16
Levanto 124 L08	1x24 (G5)	220x635x66	1,4	25
Levanto 214 L09	2x14 (G5)	220x635x66	1,5	31
Levanto 224 L10	2x24 (G5)	220x635x66	1,5	49
Levanto 214 L11	2x14 (G5)	360x635x66	2,2	31
Levanto 224 L12	2x24 (G5)	360x635x66	2,2	49
Levanto 314 L13	3x14 (G5)	360x635x66	2,3	46
Levanto 324 L14	3x24 (G5)	360x635x66	2,3	73
Levanto 314 L15	3x14 (G5)	635x635x66	3,1	46
Levanto 324 L16	3x24 (G5)	635x635x66	3,1	73
Levanto 414 L17	4x14 (G5)	635x635x66	3,2	62
Levanto 424 L18	4x24 (G5)	635x635x66	3,2	98
Levanto 128 L19	1x28 (G5)	220x1245x66	2,5	30
Levanto 154 L20	1x54 (G5)	220x1245x66	2,5	58
Levanto 228 L21	2x28 (G5)	220x1245x66	2,6	60
Levanto 254 L22	2x54 (G5)	220x1245x66	2,6	116
Levanto 228 L23	2x28 (G5)	360x1245x66	3,3	60
Levanto 254 L24	2x54 (G5)	360x1245x66	3,3	116
Levanto 328 L25	3x28 (G5)	360x1245x66	3,7	90
Levanto 354 L26	3x54 (G5)	360x1245x66	3,7	174

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 NCP- Low Power Factor

#### LEVANTO 418 A40 HF



# MARENCO

## T5 & T8 Surface Luminaire with Prismatic Diffuser



Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Marenco 118 J98	1x18 (G13)	220x635x66	1,8	22
Marenco 218 J99	2x18 (G13)	220x635x66	2,2	42
Marenco 218 H76	2x18 (G13)	360x635x66	2,4	42
Marenco 318 L28	3x18 (G13)	360x635x66	2,8	64
Marenco 318 L29	3x18 (G13)	635x635x66	4	64
Marenco 418 D10	4x18 (G13)	635x635x66	4,2	84
Marenco 136 L01	1x36 (G13)	220x1245x66	3,2	42
Marenco 236 L02	2x36 (G13)	220x1245x66	3,8	84
Marenco 236 L30	2x36 (G13)	360x1245x66	4	84
Marenco 336 L04	3x36 (G13)	360x1245x66	4,6	126

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Marenco 114 L31	1x14 (G5)	220x635x66	1,4	16
Marenco 124 L32	1x24 (G5)	220x635x66	1,4	25
Marenco 214 L33	2x14 (G5)	220x635x66	1,5	31
Marenco 224 L34	2x24 (G5)	220x635x66	1,5	49
Marenco 214 L35	2x14 (G5)	360x635x66	2,2	31
Marenco 224 L36	2x24 (G5)	360x635x66	2,2	49
Marenco 314 L37	3x14 (G5)	360x635x66	2,3	46
Marenco 324 L38	3x24 (G5)	360x635x66	2,3	73
Marenco 314 L39	3x14 (G5)	635x635x66	3,1	46
Marenco 324 L40	3x24 (G5)	635x635x66	3,1	73
Marenco 414 L41	4x14 (G5)	635x635x66	3,2	62
Marenco 424 L42	4x24 (G5)	635x635x66	3,2	98
Marenco 128 L43	1x28 (G5)	220x1245x66	2,5	30
Marenco 154 L44	1x54 (G5)	220x1245x66	2,5	58
Marenco 228 L45	2x28 (G5)	220x1245x66	2,6	60
Marenco 254 L46	2x54 (G5)	220x1245x66	2,6	116
Marenco 228 L47	2x28 (G5)	360x1245x66	3,3	60
Marenco 254 L48	2x54 (G5)	360x1245x66	3,3	116
Marenco 328 L49	3x28 (G5)	360x1245x66	3,7	90
Marenco 354 L50	3x54 (G5)	360x1245x66	3,7	174

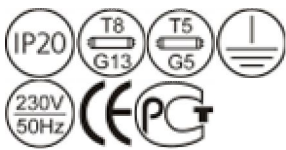
Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 NCP- Low Power Factor

# JETTA

## T8/T5 Surface Indirect Luminaire of Seagull Shape



<b>Type:</b>	A decorative surface mounted luminaire of seagull shape for a pleasing glare-free lighting effect and excellent light distribution.
<b>Specification:</b>	Parabolic indirect reflection design with a pure aluminum perforated cover. UV stable opal film. Fully enclosed white painted steel body. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Office buildings, showrooms and other commercial environments.

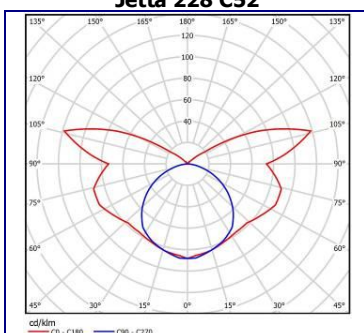
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Jetta 236 C54	2x36 (G13)	1248x460x130	8,25	84
Jetta 336 C55	3x36 (G13)	1248x460x130	8,75	126
Jetta 228 C52	2x28 (G5)	1198x460x130	7,85	60
Jetta 328 C53	3x28 (G5)	1198x460x130	8,15	90
Jetta 254 D85	2x54 (G5)	1198x460x130	7,85	116
Jetta 354 D86	3x54 (G5)	1198x460x130	8,15	174

Options available on request:

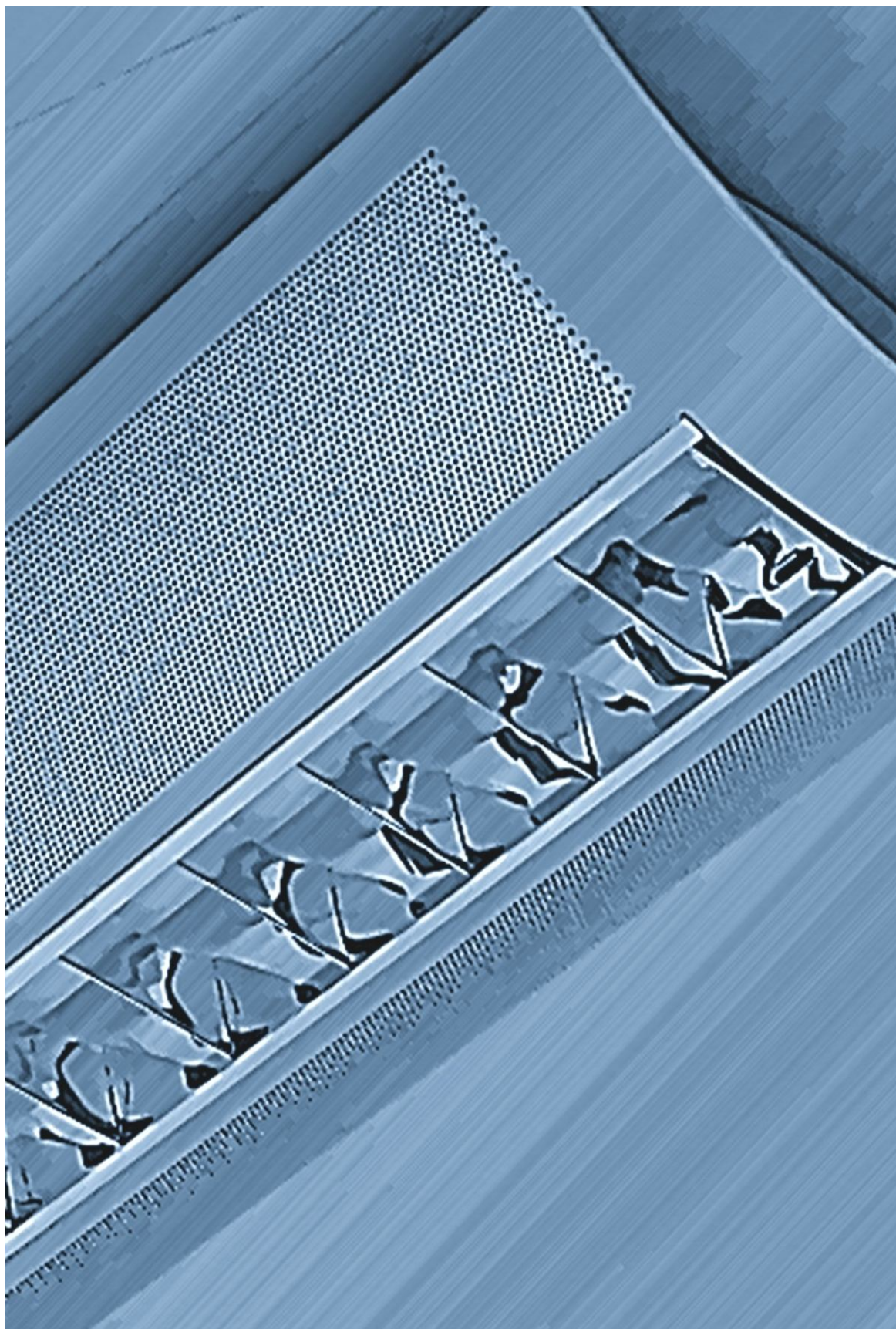
- HF- High Frequency control gear
- DIM- Dimmable ballast
- SWITCHDIM- Switch DIM ballast
- DALI- DALI ballast
- EMG- Emergency version 1 hour

- EM2- Emergency version 2 hours
- EM3- Emergency version 3 hours
- 4TB- 4 way terminal block for loop feed and ease of wiring
- 5TB- 5 way terminal block for loop feed and ease of wiring
- NCP- Low Power Factor

Jetta 228 C52







# SUSPENDED

[www.northcliffe.org](http://www.northcliffe.org)

## BORA REF

### T8 Surface/Suspended Indirect Luminaire with Perforated Cover



<b>Type:</b>	Batten type luminaire with central perforated cover to create ideal light distribution without blinding glare.
<b>Specification:</b>	Perforated white painted cover with symmetrical reflector. Fully enclosed white painted <b>body</b> . Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended.
<b>Application:</b>	Office buildings, shops and other commercial environments.

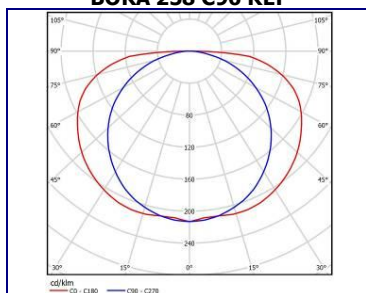
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Bora 136 C93 REF	1x36 (G13)	1232x206x92	2,9	42
Bora 158 C94 REF	1x58 (G13)	1534x206x92	3,7	67
Bora 236 C95 REF	2x36 (G13)	1232x206x92	3,4	84
Bora 258 C96 REF	2x58 (G13)	1534x206x92	5	134

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast

EMG- Emergency version 1 hour  
EM2- Emergency version **2 hours**  
EM3- Emergency version **3 hours**  
NCP- Low Power Factor

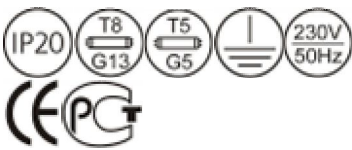
#### BORA 258 C96 REF





# JETTA

## T8/T5 Suspended Direct/Indirect Luminaire



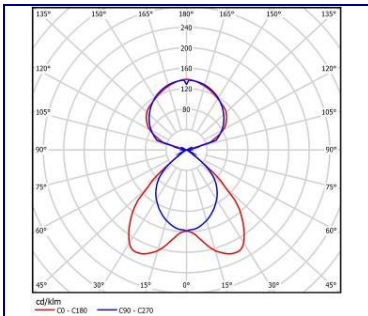
Type:	Suspended luminaire with a combination of curved perforated reflector for indirect light and a double parabolic glossy aluminum reflector for direct light projection.
Specification:	Double parabolic mirror aluminum louvre with cross blades is fitted into the body with a locking safety clip for maximum stability. Fully enclosed white painted body. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suspended mounting. Supplied with 1.5 m suspension kit and flexible power cable.
Application:	Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Jetta 328 D83	3x28 (G5)	285x1335x66	5,4	90
Jetta 354 D84	3x54 (G5)	285x1335x66	5,4	174
Jetta 335 P13	3x35 (G5)	285x1635x66	6,7	113
Jetta 349 P14	3x49 (G5)	285x1635x66	6,7	157

Options available on request:  
HF- High Frequency control gear  
DIM- Dimmable ballasts  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballasts

EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
NCP- Low Power Factor

JETTA 328 D83



# SERPENS

T5 Recessed  
Luminaire  
for in-line  
connection  
without gap

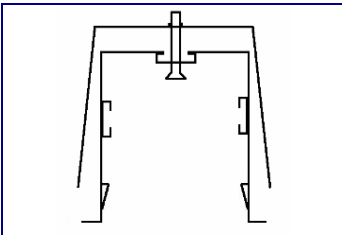


Serpens 128 M75 PRZ



Serpens 128 M75 OP

Type:	Recessed luminaire for in-line connection without gaps.
Specification:	Three different types of louvre are optional: PAR- double parabolic reflector made of mirror aluminum with four spring locks PRZ- extruded prismatic diffuser made of UV stable polycarbonate OP- extruded opal diffuser made of UV stable polycarbonate Deluxe version louvres are manufactured using Alanod MIRO® aluminum with 95% reflectiveness. Body made of extruded aluminum profile powder painted in textured RAL 9003. Aluminum end caps fixed by two screws. Luminaire with an option "L" for in-line connection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Fits 15-24mm exposed T-Bar ceilings and/or plasterboard ceilings. When the luminaire is fitted into a plasterboard ceiling, support brackets should be ordered (see option list).
Application:	Office buildings, shops and other commercial environments.



Supports brackets (2 pcs) for installation into a plasterboard ceiling available on request.



Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Serpens 114 M73	1x14 (G5)	595x80x70	1,25	15
Serpens 124 M74	1x24 (G5)	595x80x70	1,25	25
Serpens 128 M75	1x28 (G5)	1195x80x70	2	30
Serpens 135 M76	1x35 (G5)	1495x80x70	2,4	38
Serpens 149 M77	1x49 (G5)	1495x80x70	2,4	53
Serpens 154 M78	1x54 (G5)	1195x80x70	2	58
Serpens 180 M79	1x80 (G5)	1495x80x70	2,5	85
Serpens 2x114 M94	2x1x14 (G5)	1170x80x70	2,5	30
Serpens 2x124 M95	2x1x24 (G5)	1170x80x70	2,5	50
Serpens 2x128 M96	2x1x28 (G5)	2370x80x70	4	60
Serpens 2x135 M97	2x1x35 (G5)	2970x80x70	4,8	76
Serpens 2x149 M98	2x1x49 (G5)	2970x80x70	4,8	106
Serpens 2x154 M99	2x1x54 (G5)	2370x80x70	4	116
Serpens 2x180 N01	2x1x80 (G5)	2970x80x70	5,0	170

3 in one (4445 mm) and 4 in one (5920 mm) versions are available **on request**.

Options available on request:

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version **2 hours**

EM3- Emergency version **3 hours**

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

PAR- Double parabolic reflector

MRO- Mirror reflector Deluxe (subject to minimum order)

OP- Opal cover

PRZ- Micro prismatic cover

SB- Support brackets for installation into a plasterboard ceiling

L- Designed for in-line connecting without gap

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks

RAL- Painted RAL colour





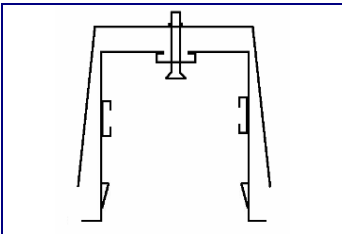
# SERPENS D

## T5 Recessed Luminaire for in-line connection without gap



SERPENS 228 P59 OP

Type:	Recessed luminaire for in-line connection without gaps.
Specification:	Three different types of louver are optional: PAR- double parabolic reflector made of mirror aluminum with four spring locks PRZ- extruded prismatic diffuser made of UV stable polycarbonate OP- extruded opal diffuser made of UV stable polycarbonate Deluxe version louvers are manufactured using Alanod MIRO® aluminum with 95% reflectiveness. Body made of extruded aluminum profile powder painted in textured RAL 9003. Aluminum end caps fixed by two screws. Luminaire with an option "L" for in-line connection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Fits 15-24mm exposed T-Bar ceilings and/or plasterboard ceilings. When the luminaire is fitted into a plasterboard ceiling, support brackets should be ordered (see option list).
Application:	Office buildings, shops and other commercial environments.



Supports brackets (**SERPENS D BR2**) for installation into a plasterboard ceiling available on request.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Serpens 214 P57	2x14 (G5)	595x130x70	1,40	31
Serpens 224 P58	2x24 (G5)	595x130x70	1,40	49
Serpens 228 P59	2x28 (G5)	1195x130x70	2,15	60
Serpens 235 P60	2x35 (G5)	1495x130x70	2,65	76
Serpens 249 P61	2x49 (G5)	1495x130x70	2,65	105
Serpens 254 P62	2x54 (G5)	1195x130x70	2,15	116
Serpens 280 P63	2x80 (G5)	1495x130x70	2,75	170
Serpens 2x214 P64	2x2x14 (G5)	1170x130x70	2,80	62
Serpens 2x224 P65	2x2x24 (G5)	1170x130x70	2,80	98
Serpens 2x228 P66	2x2x28 (G5)	2370x130x70	4,3	120
Serpens 2x235 P67	2x2x35 (G5)	2970x130x70	5,3	152
Serpens 2x249 P68	2x2x49 (G5)	2970x130x70	5,3	210
Serpens 2x254 P69	2x2x54 (G5)	2370x130x70	4,3	232
Serpens 2x280 P70	2x2x80 (G5)	2970x130x70	5,5	340

3 in one (4445 mm) and 4 in one (5920 mm) versions are available **on request**.

Options available on request:

DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast

DALI- DALI ballast  
 EMG- Emergency version 1 hour

EM2- Emergency version **2 hours**

EM3- Emergency version **3 hours**

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

PAR- Double parabolic reflector

MRO- Mirror reflector Deluxe (subject to minimum order)

OP- Opal cover

PRZ- Micro prismatic cover

SB- Support brackets for installation into a plasterboard ceiling

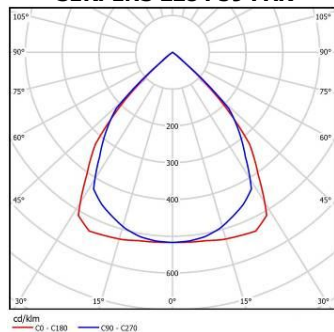
M- Designed for in-line connecting without gap

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks

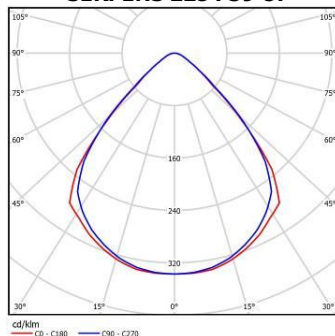
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks

RAL- Painted RAL colour

**SERPENS 228 P59 PAR**



**SERPENS 228 P59 OP**





DECOR

Surface/Suspended  
Luminaire for in-line  
connection



Decor 128 M82 OP



Decor 128 M82 PRZ

Type:	Surface or suspended mounted luminaire for in-line connection.
Specification:	Three different types of louvre are optional: PAR- double parabolic reflector made of mirror aluminum with four spring locks PRZ- prismatic diffuser made of UV stable polycarbonate OP- opal diffuser made of UV stable extruded polycarbonate Deluxe version louvres are manufactured using Alanod MIRO® aluminum with 95% reflectiveness. Body made of extruded aluminum profile powder painted in textured RAL 9006. Aluminum end caps fixed by two screws. Luminaire with an option "L" is used for in-line connection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Surface luminaire designed to be fixed to ceilings of any type or suspended. Wire suspension set available on request (see option list).
Application:	Office buildings, shops and other commercial environments.



Wire suspension set (**SUS2**) and plastic cap with spiral cable (**CAPW**) are available on request. For more information see in Option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor 114 M80	1x14 (G5)	576x60x70	1,2	15
Decor 124 M81	1x24 (G5)	576x60x70	1,2	25
Decor 128 M82	1x28 (G5)	1176x60x70	1,9	30
Decor 135 M83	1x35 (G5)	1476x60x70	2,3	38
Decor 149 M84	1x49 (G5)	1476x60x70	2,3	53
Decor 154 M85	1x54 (G5)	1176x60x70	1,9	58
Decor 180 M86	1x80 (G5)	1476x60x70	2,4	85
Decor 2x114 N02	2x1x14 (G5)	1151x60x70	2,4	30
Decor 2x124 N03	2x1x24 (G5)	1151x60x70	2,4	50
Decor 2x128 N04	2x1x28 (G5)	2351x60x70	3,8	60
Decor 2x135 N05	2x1x35 (G5)	2951x60x70	4,6	76
Decor 2x149 N06	2x1x49 (G5)	2951x60x70	4,6	106
Decor 2x154 N07	2x1x54 (G5)	2351x60x70	3,8	116
Decor 2x180 N08	2x1x80 (G5)	2951x60x70	4,8	170

3 in one (4426 mm) and 4 in one (5901 mm) versions are available on request

Options available on request:

DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 PULLSWITCH- Pull switch device

EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 STB- 5 way terminal block with two holes (for in and out going cable)  
 MAT- Matted reflector (subject to minimum order)

PAR- Double parabolic reflector  
 MRO- MIRO® reflector Deluxe (subject to minimum order)  
 OP- Opal cover  
 PRZ- Prismatic cover  
 L- Designed for in-line connection without gap (for OP/PRZ versions)  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks  
 RAL- Painted RAL colour



**DÉCOR SENSE&SOLO** series with 30 cm closed profile and designed to fulfil the needs for easy-to-use, energy saving lighting control. The basic functions are pre-programmed and are fully adjustable to meet all requirements. More information see on page 10.



ON: Auto  
 OFF: Auto



15 min. → 20%  
 30 sec. → Off



Bright  
 out

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor 114 P36 SENSE&SOLO	1x14 (G5)	876x60x70	1,5	15
Decor 124 P37 SENSE&SOLO	1x24 (G5)	876x60x70	1,5	25
Decor 128 P38 SENSE&SOLO	1x28 (G5)	1476x60x70	2,2	30
Decor 135 P39 SENSE&SOLO	1x35 (G5)	1776x60x70	2,6	38
Decor 149 P40 SENSE&SOLO	1x49 (G5)	1776x60x70	2,6	53
Decor 154 P41 SENSE&SOLO	1x54 (G5)	1476x60x70	2,2	58
Decor 180 P42 SENSE&SOLO	1x80 (G5)	1776x60x70	2,7	85



Décor fittings have been designed for connection in modern lighting systems with wide choice of join accessories. Thanks to interesting design and wide choice of optics, they comply with the highest lighting standards and act as an interesting element of interior design.

**I-JOIN**- "I" join element

**T-JOIN**- "T" join element

**L-JOIN**- "L" join element

**X-JOIN**- "X" join element

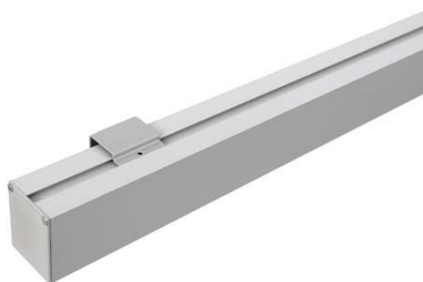


Fittings with 250mm closed profile from both ends are designed for connection into the lighting systems. Please add join elements ("I", "L", "T" or "X" type to the order).

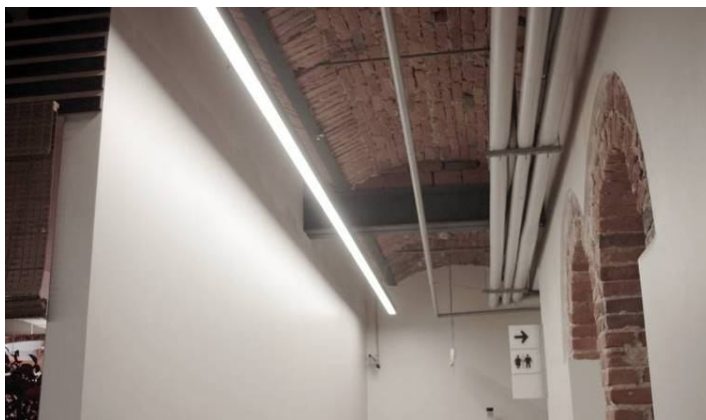
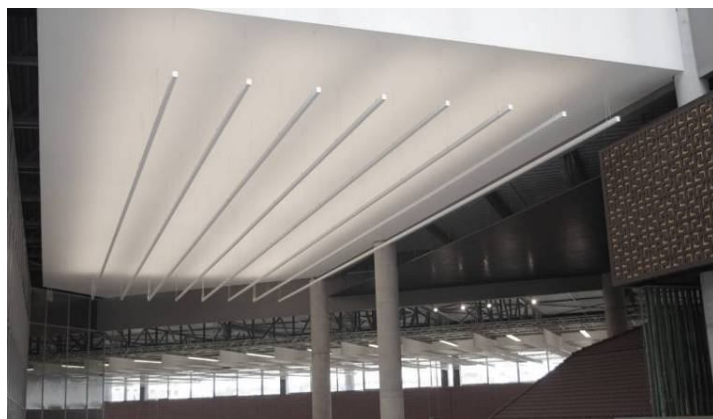
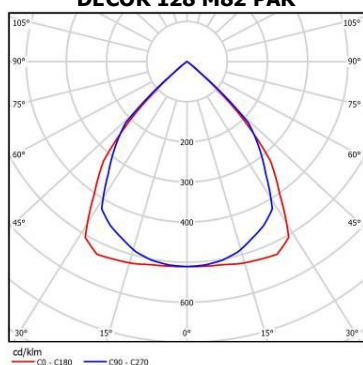
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor 114 P43	1x14 (G5)	1070x60x70	1,2	15
Decor 124 P44	1x24 (G5)	1070x60x70	1,2	25
Decor 128 P45	1x28 (G5)	1670x60x70	1,9	30
Decor 135 P46	1x35 (G5)	1970x60x70	2,3	38
Decor 149 P47	1x49 (G5)	1970x60x70	2,3	53
Decor 154 P48	1x54 (G5)	1670x60x70	1,9	58
Decor 180 P49	1x80 (G5)	1970x60x70	2,4	85
Decor 2x114 P50	2x1x14 (G5)	1640x60x70	2,4	30
Decor 2x124 P51	2x1x24 (G5)	1640x60x70	2,4	50
Decor 2x128 P52	2x1x28 (G5)	2840x60x70	3,8	60
Decor 2x135 P53	2x1x35 (G5)	3440x60x70	4,6	76
Decor 2x149 P54	2x1x49 (G5)	3440x60x70	4,6	106
Decor 2x154 P55	2x1x54 (G5)	2840x60x70	3,8	116
Decor 2x180 P56	2x1x80 (G5)	3440x60x70	4,8	170
DÉCOR I-JOIN		60x60x70	0,3	
DÉCOR L-JOIN		60x60x70	0,3	
DÉCOR T-JOIN		60x60x70	0,3	
DÉCOR X-JOIN		60x60x70	0,3	



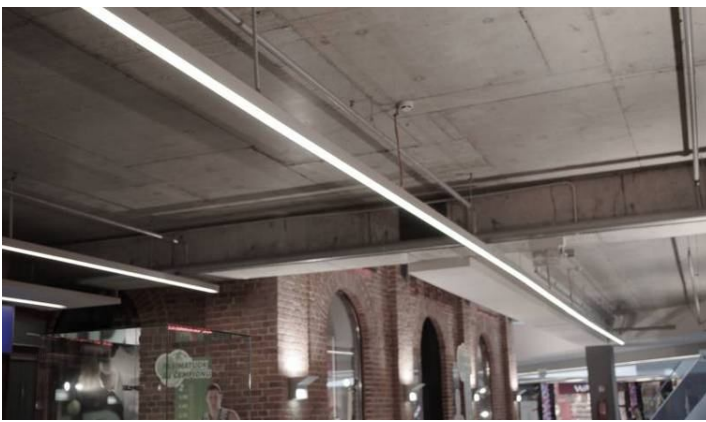
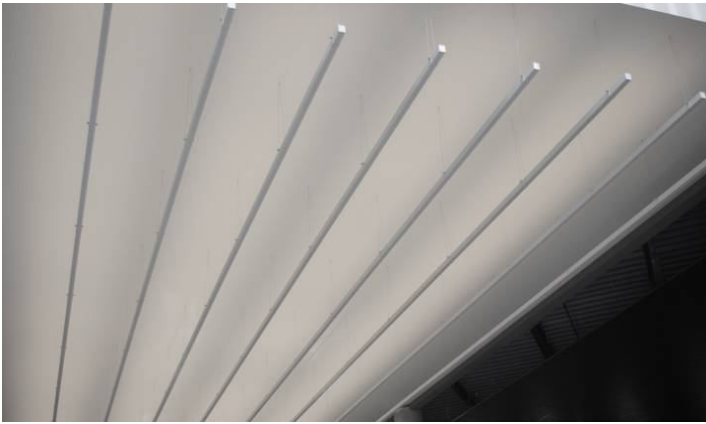
Brackets set (**DÉCOR WALL BR2**) for DÉCOR series mounting directly to the wall with up or down lighting.



**DECOR 128 M82 PAR**







# DECOR D

## Surface/Suspended Luminaire for in-line connection



Decor D 228 M89 OP



Decor D 228 M89 PRZ


Type:	Surface or suspended mounted luminaire for in-line connection.
Specification:	PAR- double parabolic reflector made of mirror aluminum with four spring locks. Deluxe version louvres are manufactured using Alanod MIRO® aluminum with 95% reflectiveness. Body made from extruded aluminum profile powder painted in textured RAL 9006. Aluminum end caps fixed by two screws. Luminaire with an option "L" for in-line connection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Surface luminaire designed to be fixed to ceilings of any type or suspended. Wire suspension set available on request (see option list).
Application:	Office buildings, shops and other commercial environments.




Wire suspension set (**SUS2**) and plastic cap with spiral cable (**CAPW**) are available on request. For more information see in Option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor D 214 M87	2x14 (G5)	576x110x70	1,40	31
Decor D 224 M88	2x24 (G5)	576x110x70	1,40	49
Decor D 228 M89	2x28 (G5)	1176x110x70	2,15	60
Decor D 235 M90	2x35 (G5)	1476x110x70	2,65	76
Decor D 249 M91	2x49 (G5)	1476x110x70	2,65	105
Decor D 254 M92	2x54 (G5)	1176x110x70	2,15	116
Decor D 280 M93	2x80 (G5)	1476x110x70	2,75	170
Decor D 2x214 N09	2x2x14 (G5)	1151x110x70	2,80	62
Decor D 2x224 N10	2x2x24 (G5)	1151x110x70	2,80	98
Decor D 2x228 N11	2x2x28 (G5)	2351x110x70	4,3	120
Decor D 2x235 N12	2x2x35 (G5)	2951x110x70	5,3	152
Decor D 2x249 N13	2x2x49 (G5)	2951x110x70	5,3	210
Decor D 2x254 N14	2x2x54 (G5)	2351x110x70	4,3	232
Decor D 2x280 N15	2x2x80 (G5)	2951x110x70	5,5	340


3 in one (4426 mm) and 4 in one (5901 mm) versions are available on request




**DÉCOR D SENSE&SOLO** series with 30 cm closed profile and designed to fulfil the needs for easy-to-use, energy saving lighting control. The basic functions are pre-programmed and are fully adjustable to meet all requirements. More information see on page 10.



ON: Auto  
OFF: Auto



15 min. → 20%  
30 sec. → Off



Bright out

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor D 214 P29 SENSE&SOLO	2x14 (G5)	876x110x70	1,70	31
Decor D 224 P30 SENSE&SOLO	2x24 (G5)	876x110x70	1,70	49
Decor D 228 P31 SENSE&SOLO	2x28 (G5)	1476x110x70	2,45	60
Decor D 235 P32 SENSE&SOLO	2x35 (G5)	1776x110x70	2,95	76
Decor D 249 P33 SENSE&SOLO	2x49 (G5)	1776x110x70	2,95	105
Decor D 254 P34 SENSE&SOLO	2x54 (G5)	1476x110x70	2,45	116
Decor D 280 P35 SENSE&SOLO	2x80 (G5)	1776x110x70	3,05	170

Options available on request:

DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

PULLSWITCH- Pull switch device

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

STB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

LG3- LG3 option

PAR- Double parabolic reflector

MRO- MIRO® reflector Deluxe (subject to minimum order)

OP- Opal cover

PRZ- Prismatic cover

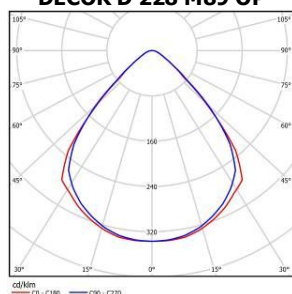
L- Designed for in-line connection without gap (for OP/PRZ versions)

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks

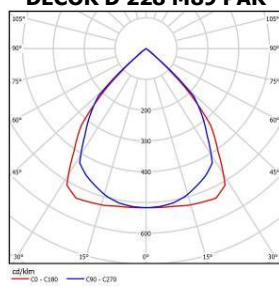
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks

RAL- Painted RAL colour

**DECOR D 228 M89 OP**

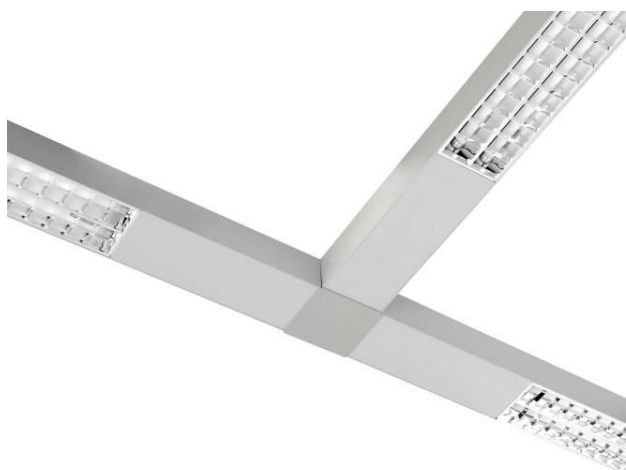
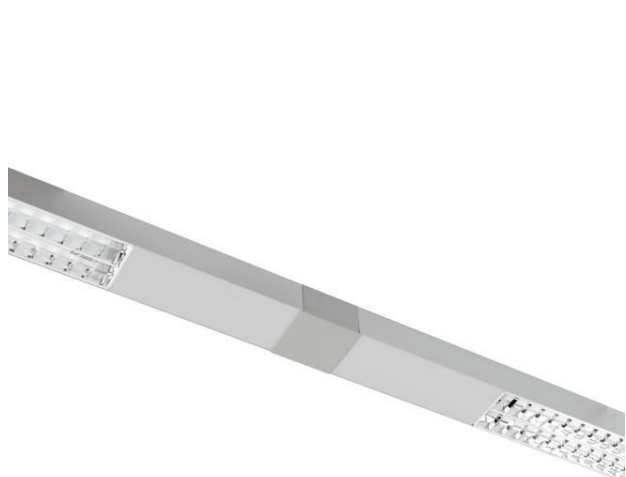


**DECOR D 228 M89 PAR**





Décor D fittings have been designed for connection in modern lighting systems with wide choice of join accessories. Thanks to interesting design and wide choice of optics, they comply with the highest lighting standards and act as an interesting element of interior design.



**I-JOIN-** "I" join element

**T-JOIN-** "T" join element



**L-JOIN-** "L" join element

**X-JOIN-** "X" join element







Fittings with 250mm closed profile from both ends are designed for connection into the lighting systems. Please add join elements ("I", "L", "T" or "X" type to the order).

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Decor D 214 P15	2x14 (G5)	1070x110x70	2,0	31
Decor D 224 P16	2x24 (G5)	1070x110x70	2,0	49
Decor D 228 P17	2x28 (G5)	1670x110x70	2,75	60
Decor D 235 P18	2x35 (G5)	1970x110x70	3,25	76
Decor D 249 P19	2x49 (G5)	1970x110x70	3,25	105
Decor D 254 P20	2x54 (G5)	1670x110x70	2,75	116
Decor D 280 P21	2x80 (G5)	1970x110x70	3,35	170
Decor D 2x214 P22	2x2x14 (G5)	1640x110x70	3,4	62
Decor D 2x224 P23	2x2x24 (G5)	1640x110x70	3,4	98
Decor D 2x228 P24	2x2x28 (G5)	2840x110x70	4,9	120
Decor D 2x235 P25	2x2x35 (G5)	3440x110x70	5,9	152
Decor D 2x249 P26	2x2x49 (G5)	3440x110x70	5,9	210
Decor D 2x254 P27	2x2x54 (G5)	2840x110x70	4,9	232
Decor D 2x280 P28	2x2x80 (G5)	3440x110x70	6,1	340
DÉCOR D I-JOIN		110x110x70	0,4	
DÉCOR D L-JOIN		110x110x70	0,4	
DÉCOR D T-JOIN		110x110x70	0,4	
DÉCOR D X-JOIN		110x110x70	0,4	

*Other lengths or custom made products are available on request (according to the drawing).*

Options available on request:

DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast

PULLSWITCH- Pull switch device

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

LG3- LG3 option

PAR- Double parabolic reflector

MRO- MIRO® reflector Deluxe (subject to minimum order)

OP- Opal cover

PRZ- Prismatic cover

L- Designed for in-line connection without gap (for OP/PRZ versions)

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks

RAL- Painted RAL colour

# TUCANA

## T5 Surface/ Suspended Double Parabolic Luminaire



Type:	Suspended or surface T5 luminaire for maximum efficiency and quality of light.
Specification:	Double parabolic louvre made of mirror aluminum. The louvre is fitted into the body with six spring locks for maximum stability. Deluxe version louvres are manufactured using Alanod MIRO aluminum with 95% reflection. Fully enclosed white steel body with plastic end caps. Luminaire is plastic-wrapped and boxed individually.
Installation:	Surface luminaire designed to be fixed to ceilings of any type or suspended.
Application:	Office buildings, shops and other commercial environments.



Wire suspension set (**SUS2**) and plastic cap with spiral cable (**CAPW**) are available on request. For more information see in Option list.



**LG3** – Luminaire fit LG3 requirements (with 30% light distribution to the ceiling and 70% to the floor). Available on request.



Pull switch version (to switch on/off) available on request. For more information see in Option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Tucana 128 J75	1x28 (G5)	1265x175x55	3	30
Tucana 228 J76	2x28 (G5)	1265x175x55	3,1	60
Tucana 135 J77	1x35 (G5)	1565x175x55	3,7	38
Tucana 235 J78	2x35 (G5)	1565x175x55	3,8	75
Tucana 149 J79	1x49 (G5)	1565x175x55	3,7	53
Tucana 249 J80	2x49 (G5)	1565x175x55	3,8	104
Tucana 154 J81	1x54 (G5)	1265x175x55	3,0	58
Tucana 254 J82	2x54 (G5)	1265x175x55	3,1	115
Tucana 180 J83	1x80 (G5)	1565x175x55	3,8	85
Tucana 280 J84	2x80 (G5)	1565x175x55	3,9	170

Options available on request:

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

PULLSWITCH- Pull switch device

EMG- Emergency version 1 hour

EM2- Emergency version **2 hours**

EM3- Emergency version **3 hours**

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

MRO- MIRO® reflector Deluxe (subject to minimum order)

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks

RAL- Painted RAL colour

LG3- LG3 option

SUS2- Suspension wires set (2 pcs)

CAPW- White suspension cap with spiral cable 3x1mm<sup>2</sup>



**TUCANA SENSE&SOLO** series with 30 cm closed profile and designed to fulfil the needs for easy-to-use, energy saving lighting control. The basic functions are pre-programmed and are fully adjustable to meet all requirements. More information see on page 10.



ON: Auto  
OFF: Auto



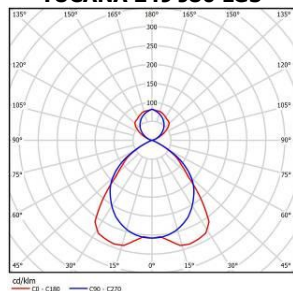
15 min. → 20%  
30 sec. → Off



Bright  
out

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Tucana 128 J75 Sense&Solo	1x28 (G5)	1265x175x55	3	30
Tucana 228 J76 Sense&Solo	2x28 (G5)	1265x175x55	3,1	60
Tucana 135 J77 Sense&Solo	1x35 (G5)	1565x175x55	3,7	38
Tucana 235 J78 Sense&Solo	2x35 (G5)	1565x175x55	3,8	75
Tucana 149 J79 Sense&Solo	1x49 (G5)	1565x175x55	3,7	53
Tucana 249 J80 Sense&Solo	2x49 (G5)	1565x175x55	3,8	104
Tucana 154 J81 Sense&Solo	1x54 (G5)	1265x175x55	3,0	58
Tucana 254 J82 Sense&Solo	2x54 (G5)	1265x175x55	3,1	115
Tucana 180 J83 Sense&Solo	1x80 (G5)	1565x175x55	3,8	85
Tucana 280 J84 Sense&Solo	2x80 (G5)	1565x175x55	3,9	170

**TUCANA 249 J80 LG3**





Fitting for in-line connection can be ordered on request. Please add "I" join element (**TUCANA I-JOIN**).



TUCANA versions with up and down independent tubes and control gears. Can be supplied with PullSwitch.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Tucana 128128 P71	1x28+1x28 (G5)	1265x175x85	4	30
Tucana 228128 P72	2x28+1x28 (G5)	1265x175x85	4,1	60
Tucana 135135 P73	1x35+1x35 (G5)	1565x175x85	4,7	38
Tucana 235135 P74	2x35+1x35 (G5)	1565x175x85	4,8	75
Tucana 149149 P76	1x49+1x49 (G5)	1565x175x85	4,7	53
Tucana 249149 P77	2x49+1x49 (G5)	1565x175x85	4,8	104
Tucana 154154 P78	1x54+1x54 (G5)	1265x175x85	4,0	58
Tucana 254154 P79	2x54+1x54 (G5)	1265x175x85	4,1	115
Tucana 180180 P80	1x80+1x80 (G5)	1565x175x85	4,8	85
Tucana 280180 P81	2x80+1x80 (G5)	1565x175x85	4,9	170

Options available on request:

DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 PULLSWITCH- Pull switch device  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)  
 MRO- MIRO® reflector Deluxe (subject to minimum order)  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminal blocks  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminal blocks  
 RAL- Painted RAL colour  
 LG3- LG3 option  
 SUS2- Suspension wires set (2 pcs)  
 CAPW- White suspension cap with spiral cable 3x1mm<sup>2</sup>





# BATTENS

[www.northcliffe.org](http://www.northcliffe.org)

# BORA

## Slim T8 Batten Luminaire



Bora 136 A73

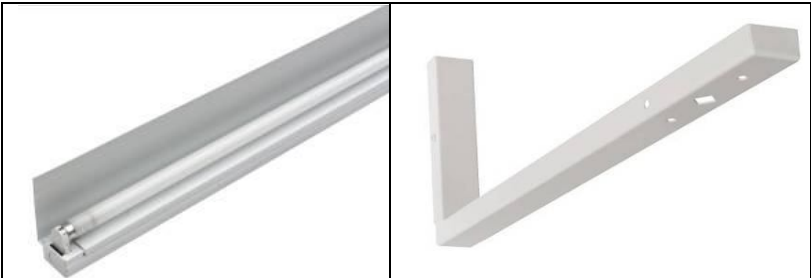


Bora 236 A77



Bora 136 A75

Type:	Slim T8 fluorescent batten luminaire at competitive prices. Suitable for retail and commercial applications.
Specification:	White symmetrical and asymmetrical reflectors are available. Glossy aluminum reflector for Deluxe version. Body in white steel. Luminaire is plastic-wrapped and packaged in boxes (6-12 per box, depending on model). Reflectors are packaged separately.
Installation:	Designed to be fixed to ceilings of any type or suspended.
Application:	Warehouses, factories, supermarkets, other commercial environments.



Suspension brackets for mounting of asymmetric reflector batten can be ordered on request (**BR2**).



Versions with 3 or 5 poles type connectors are available on request. See Option list (\***CBF3x1,5** \*\***CON3**), there:

\*- length of the flexcable

\*\*- M or F (M- mother type or F- father type connector)



Through wired version for 1 or 3 phase connection available on request. See Option list (**1LIN**, **3LIN**, **1LIN2,5** or **3LIN2,5**).

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Bora 118 A67	No reflector	1x18 (G13)	620x53x79	1	26
Bora 118 A68	Symmetrical white reflector	1x18 (G13)	620x173x79	1,4	26
Bora 118 A69	Asymmetrical white reflector	1x18 (G13)	620x113x150	1,2	26
Bora 136 A73	No reflector	1x36 (G13)	1230x53x79	1,3	42
Bora 136 A74	Symmetrical white reflector	1x36 (G13)	1230x173x79	2	42
Bora 136 A75	Asymmetrical white reflector	1x36 (G13)	1230x113x150	1,7	42
Bora 158 A79	No reflector	1x58 (G13)	1536x53x79	2,1	67
Bora 158 A80	Symmetrical white reflector	1x58 (G13)	1536x173x79	2,9	67
Bora 158 A81	Asymmetrical white reflector	1x58 (G13)	1536x113x150	2,5	67
Bora 218 A70	No reflector	2x18 (G13)	620x102x79	1	42
Bora 218 A71	Symmetrical white reflector	2x18 (G13)	620x173x79	1,4	42
Bora 218 A72	Asymmetrical white reflector	2x18 (G13)	620x138x150	1,2	42
Bora 236 A76	No reflector	2x36 (G13)	1230x102x79	1,9	84
Bora 236 A77	Symmetrical white reflector	2x36 (G13)	1230x173x79	2,9	84
Bora 236 A78	Asymmetrical white reflector	2x36 (G13)	1230x138x150	2,3	84
Bora 258 A82	No reflector	2x58 (G13)	1536x102x79	3,4	134
Bora 258 A83	Symmetrical white reflector	2x58 (G13)	1536x173x79	4,2	134
Bora 258 A84	Asymmetrical white reflector	2x58 (G13)	1536x138x150	3	134

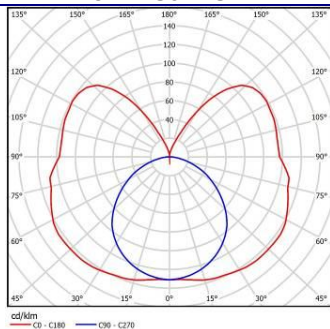
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Bora 118 A68 Deluxe	Symmetrical aluminum reflector	1x18 (G13)	620x170x95	1,3	26
Bora 136 A74 Deluxe	Symmetrical aluminum reflector	1x36 (G13)	1230x170x95	1,9	42
Bora 158 A80 Deluxe	Symmetrical aluminum reflector	1x58 (G13)	1536x170x95	2,8	67
Bora 218 A71 Deluxe	Symmetrical aluminum reflector	2x18 (G13)	620x170x95	1,3	42
Bora 236 A77 Deluxe	Symmetrical aluminum reflector	2x36 (G13)	1230x170x95	2,7	84
Bora 258 A83 Deluxe	Symmetrical aluminum reflector	2x58 (G13)	1536x170x95	4	134

Options available on request:

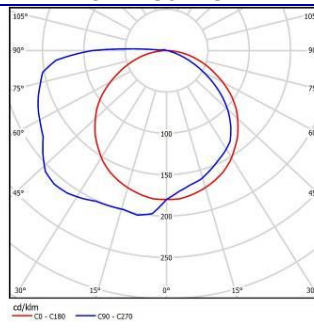
HF- High Frequency control gear  
 DALI- DALI ballast  
 SWITCHDIM- Switch DIM ballast  
 DIM- Dimmable ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 Deluxe- Symmetrical aluminum reflector  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals  
 RAL- Painted in RAL color

\*CBF3x1,5- Outgoing flexcable 3x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x1,5- Outgoing flexcable 5x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF3x2,5- Outgoing flexcable 3x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x2,5- Outgoing flexcable 5x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 NAC31S.W- ENSTO NET connector  
 NAC32S.W- ENSTO NET connector  
 NAC51S.W- ENSTO NET connector  
 NAC52S.W- ENSTO NET connector  
 \*\*CON3/5- 3 or 5 poles connector (\*- mother (M) and father (F) type)  
 BR2- Set of wall mounting brackets (2 pcs)  
 5TB- 5 way terminal block with two holes (for in and out going cable)  
 WIE- 3- poles connector (subject to minimum order)  
 NCP- Low Power Factor

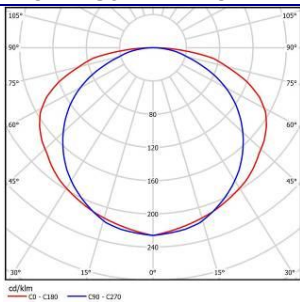
**BORA 136 A73 HF**



**BORA 136 A75 HF**



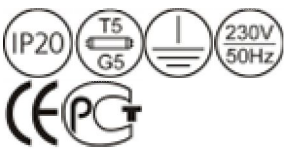
**BORA 236 A77 DELUXE HF**





ALCOR

Slim T5 Batten  
Luminaire

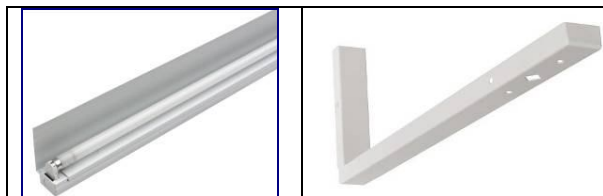


Alcor 128 A56



Alcor 128 A55

Type:	Slim T5 batten luminaire incorporating high frequency control gear, giving maximum efficiency and quality of light. Suitable for retail and commercial applications.
Specification:	White symmetrical and asymmetrical reflectors are available. Specular aluminum reflector for Deluxe version. Body in white steel. Luminaire is plastic-wrapped and packaged in boxes (6-12 per box, depending on model). Reflectors are packaged separately.
Installation:	Designed to be fixed to ceilings of any type or suspended.
Application:	Warehouses, factories, supermarkets, other commercial environments.



Suspension brackets for mounting of asymmetric reflector batten can be ordered on request (**BR2**). See option list.



Versions with 3 or 5 poles type connectors are available on request. See Option list (\***CBF3x1,5** \*\***CON3**), there:

\*- length of the flexcable

\*\* - M or F (M- mother type or F- father type connector)

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Alcor 114 B46	No reflector	1x14 (G5)	575x45x64	0,5	16
Alcor 114 B47	Symmetrical white reflector	1x14 (G5)	575x137x79	1,1	16
Alcor 114 B48	Asymmetrical white reflector	1x14 (G5)	575x56x107	0,8	16
Alcor 128 A55	No reflector	1x28 (G5)	1175x45x64	0,9	30
Alcor 128 A56	Symmetrical white reflector	1x28 (G5)	1175x137x79	1,8	30
Alcor 128 A57	Asymmetrical white reflector	1x28 (G5)	1175x56x107	1,4	30
Alcor 135 B09	No reflector	1x35 (G5)	1470x45x64	1,1	38
Alcor 135 B10	Symmetrical white reflector	1x35 (G5)	1470x137x79	2,2	38
Alcor 135 D24	Asymmetrical white reflector	1x35 (G5)	1470x56x107	1,8	38
Alcor 149 D25	No reflector	1x49 (G5)	1470x45x64	1,1	53
Alcor 149 D26	Symmetrical white reflector	1x49 (G5)	1470x137x79	2,2	53
Alcor 149 D27	Asymmetrical white reflector	1x49 (G5)	1470x56x107	1,8	53
Alcor 154 A61	No reflector	1x54 (G5)	1175x45x64	0,9	58
Alcor 154 A62	Symmetrical white reflector	1x54 (G5)	1175x137x79	1,8	58
Alcor 154 A63	Asymmetrical white reflector	1x54 (G5)	1175x56x107	1,4	58
Alcor 180 D28	No reflector	1x80 (G5)	1470x45x64	1,1	85
Alcor 180 D29	Symmetrical white reflector	1x80 (G5)	1470x137x79	2,2	85
Alcor 180 D30	Asymmetrical white reflector	1x80 (G5)	1470x56x107	1,8	85
Alcor 214 B49	No reflector	2x14 (G5)	575x70x64	0,6	31
Alcor 214 B50	Symmetrical white reflector	2x14 (G5)	575x137x79	1,2	31
Alcor 214 B51	Asymmetrical white reflector	2x14 (G5)	575x115x107	0,9	31
Alcor 228 A58	No reflector	2x28 (G5)	1175x70x64	1	60
Alcor 228 A59	Symmetrical white reflector	2x28 (G5)	1175x137x79	1,9	60
Alcor 228 A60	Asymmetrical white reflector	2x28 (G5)	1175x115x107	1,5	60
Alcor 235 D31	No reflector	2x35 (G5)	1470x70x64	1,3	75
Alcor 235 D32	Symmetrical white reflector	2x35 (G5)	1470x137x79	2,4	75
Alcor 235 D33	Asymmetrical white reflector	2x35 (G5)	1470x115x107	2	75
Alcor 249 D34	No reflector	2x49 (G5)	1470x70x64	1,3	104
Alcor 249 D35	Symmetrical white reflector	2x49 (G5)	1470x137x79	2,4	104
Alcor 249 D36	Asymmetrical white reflector	2x49 (G5)	1470x115x107	2	104
Alcor 254 A64	No reflector	2x54 (G5)	1175x70x64	1	116
Alcor 254 A65	Symmetrical white reflector	2x54 (G5)	1175x137x79	1,9	116
Alcor 254 A66	Asymmetrical white reflector	2x54 (G5)	1175x115x107	1,5	116
Alcor 280 D37	No reflector	2x80 (G5)	1470x70x64	1,5	170
Alcor 280 D38	Symmetrical white reflector	2x80 (G5)	1470x137x79	2,6	170
Alcor 280 D39	Asymmetrical white reflector	2x80 (G5)	1470x115x107	2,2	170

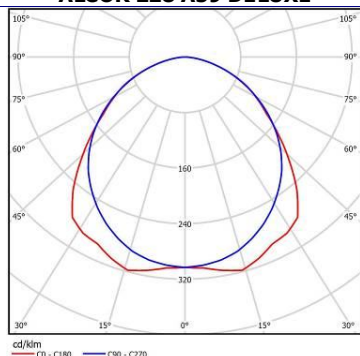
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Alcor 114 B47 Deluxe	Symmetrical aluminum reflector	1x14 (G5)	578x146x76	0,9	16
Alcor 128 A56 Deluxe	Symmetrical aluminum reflector	1x28 (G5)	1178x146x76	1,6	30
Alcor 135 B10 Deluxe	Symmetrical aluminum reflector	1x35 (G5)	1473x146x76	2	38
Alcor 149 D26 Deluxe	Symmetrical aluminum reflector	1x49 (G5)	1473x146x76	2	53
Alcor 154 A62 Deluxe	Symmetrical aluminum reflector	1x54 (G5)	1178x146x76	1,6	58
Alcor 180 D29 Deluxe	Symmetrical aluminum reflector	1x80 (G5)	1473x146x76	2	85
Alcor 214 B50 Deluxe	Symmetrical aluminum reflector	2x14 (G5)	578x146x76	1	31
Alcor 228 A59 Deluxe	Symmetrical aluminum reflector	2x28 (G5)	1178x146x76	1,9	60
Alcor 235 D32 Deluxe	Symmetrical aluminum reflector	2x35 (G5)	1473x146x76	2,4	75
Alcor 249 D35 Deluxe	Symmetrical aluminum reflector	2x49 (G5)	1473x146x76	2,4	104
Alcor 254 A65 Deluxe	Symmetrical aluminum reflector	2x54 (G5)	1178x146x76	1,9	116
Alcor 280 D38 Deluxe	Symmetrical aluminum reflector	2x80 (G5)	1473x146x76	2,6	170

Options available on request:

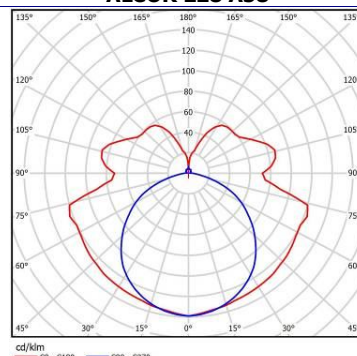
DALI- DALI ballast  
 SWITCHDIM- Switch DIM ballast  
 DIM- Dimmable ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 Deluxe- Symmetrical aluminum reflector  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals  
 RAL- Painted in RAL color

\*CBF3x1,5- Outgoing flexcable 3x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x1,5- Outgoing flexcable 5x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF3x2,5- Outgoing flexcable 3x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x2,5- Outgoing flexcable 5x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 NAC31S.W- ENSTO NET connector  
 NAC32S.W- ENSTO NET connector  
 NAC51S.W- ENSTO NET connector  
 NAC52S.W- ENSTO NET connector  
 \*\*CON3/5- 3 or 5 poles connector (\*\*- mother (M) and father (F) type)  
 BR2- Set of wall mounting brackets (2 pcs)  
 5TB- 5 way terminal block with two holes (for in and out going cable)

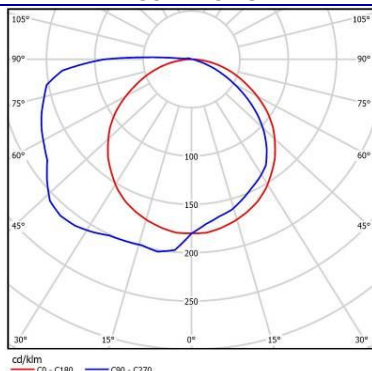
**ALCOR 228 A59 DELUXE**



**ALCOR 228 A58**



**ALCOR 128 A57**



## HOLDER BR or BR2

for asymmetrical BORA &  
ALCOR



<b>Type:</b>	Universal holder for battens (Bora and Alcor type) with asymmetrical reflector for effective wall washing in schools, display and retail areas.
<b>Specification:</b>	Body in white steel.
<b>Installation:</b>	Designed to be fixed to walls of any type.



- BR-** Wall mounting bracket 1 pcs (then sold separately)  
**BR2-** Set of wall mounting brackets (2pcs)



## ALCOR DELUXE

### Double T5 Batten Luminaire with Adjustable Arm



<b>Type:</b>	Double T5 batten luminaire with adjustable arm for mounting on MECA type profiles.
<b>Specification:</b>	Specular aluminum reflector. Body and adjustable arms in white steel. Luminaire body is plastic-wrapped and boxed individually. Reflectors <b>are</b> packaged separately (16 pcs per box).
<b>Installation:</b>	Designed to be mounted on MECA type profiles.
<b>Application:</b>	Warehouses, factories, supermarkets, other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Alcor 2x228 K18 Deluxe	2x2x28 (G5)	3000-2450x146x76	5,8	120
Alcor 2x254 K19 Deluxe	2x2x54 (G5)	3000-2450x146x76	5,8	232
Alcor 2x235 K20 Deluxe	2x2x35 (G5)	3600-3050x146x76	6,8	150
Alcor 2x249 K21 Deluxe	2x2x49 (G5)	3600-3050x146x76	6,8	208

Options available on request:

DALI- DALI ballast  
 SWITCHDIM- Switch DIM ballast  
 DIM- Dimmable ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version **2 hours**  
 EM3- Emergency version **3 hours**  
 Deluxe- Symmetrical aluminum reflector  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

\*CBF3x1,5- Outgoing flexcable 3x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x1,5- Outgoing flexcable 5x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF3x2,5- Outgoing flexcable 3x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x2,5- Outgoing flexcable 5x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 NAC31S.W- ENSTO NET connector  
 NAC32S.W- ENSTO NET connector  
 NAC51S.W- ENSTO NET connector  
 NAC52S.W- ENSTO NET connector  
 \*\*CON3/5- 3 or 5 poles connector (\*\*- mother (M) and father (F) type)  
 5TB- 5 way terminal block with two holes (for in and out going cable)

## SHOP

### T5 Batten Luminaire for in-line connection



<b>Type:</b>	T5 batten luminaire for in-line connection.
<b>Specification:</b>	Specular aluminum reflector. Body made of extruded aluminum profile powder painted in textured RAL 9006. Aluminum end caps fixed by two screws. Luminaire with an option "L" for in-line connection. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended. Wire suspension set available on request (see option list).
<b>Application:</b>	Warehouses, factories, supermarkets, other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Shop 114 N43	1x14 (G5)	576x110x70	1,40	15
Shop 124 N44	1x24 (G5)	576x110x70	1,40	25
Shop 128 N45	1x28 (G5)	1176x110x70	2,15	30
Shop 135 N46	1x35 (G5)	1476x110x70	2,65	38
Shop 149 N47	1x49 (G5)	1476x110x70	2,65	53
Shop 154 N48	1x54 (G5)	1176x110x70	2,15	58
Shop 180 N49	1x80 (G5)	1476x110x70	2,75	85
Shop 2x114 N50	2x1x14 (G5)	1151x110x70	2,80	30
Shop 2x124 N51	2x1x24 (G5)	1151x110x70	2,80	50
Shop 2x128 N52	2x1x28 (G5)	2351x110x70	4,3	60
Shop 2x135 N53	2x1x35 (G5)	2951x110x70	5,3	76
Shop 2x149 N54	2x1x49 (G5)	2951x110x70	5,3	106
Shop 2x154 N55	2x1x54 (G5)	2351x110x70	4,3	116
Shop 2x180 N56	2x1x80 (G5)	2951x110x70	5,5	170
Shop 214 N29	2x14 (G5)	576x110x70	1,40	31
Shop 224 N30	2x24 (G5)	576x110x70	1,40	49
Shop 228 N31	2x28 (G5)	1176x110x70	2,15	60
Shop 235 N32	2x35 (G5)	1476x110x70	2,65	76
Shop 249 N33	2x49 (G5)	1476x110x70	2,65	105
Shop 254 N34	2x54 (G5)	1176x110x70	2,15	116
Shop 280 N35	2x80 (G5)	1476x110x70	2,75	170
Shop 2x214 N36	2x2x14 (G5)	1151x110x70	2,80	62
Shop 2x224 N37	2x2x24 (G5)	1151x110x70	2,80	98
Shop 2x228 N38	2x2x28 (G5)	2351x110x70	4,3	120
Shop 2x235 N39	2x2x35 (G5)	2951x110x70	5,3	152
Shop 2x249 N40	2x2x49 (G5)	2951x110x70	5,3	210
Shop 2x254 N41	2x2x54 (G5)	2351x110x70	4,3	232
Shop 2x280 N42	2x2x80 (G5)	2951x110x70	5,5	340

3 in one (4426 mm) and 4 in one (5901 mm) versions are available **on request**

Options available on request:

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block with two holes (for in and out going cable)

MAT- Matted reflector (subject to minimum order)

PAR- Double parabolic reflector

MRO- MIRO® reflector Deluxe (subject to minimum order)

L- Designed for in-line connecting without gap

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

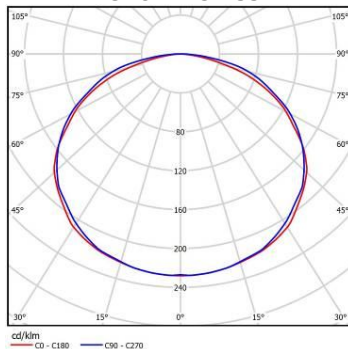
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

RAL- Painted RAL colour

### SHOP 249 N33



## Negara T8

### IP65 Batten for humid&dusty rooms



Negara 158 H05

<b>Type:</b>	Water and dust resistant IP 65 batten type luminaire for use in adverse conditions.
<b>Specification:</b>	Injection molded glass fiber reinforced housing and cover with quick locking system. Grey finished. Luminaire can be fitted with white painted steel reflector and protection tubes on request (see Option list). Starters are accessible from outside. Luminaire is boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended.
<b>Application:</b>	Suitable for farms and other aggressive atmospheres with salts, acids and mineral oils.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Negara 118 H01	1x18 (G13)	661x66x115	1,25	26
Negara 218 H02	2x18 (G13)	661x117x115	1,35	42
Negara 136 H03	1x36 (G13)	1271x66x115	1,8	42
Negara 236 H04	2x36 (G13)	1271x117x115	2,6	84
Negara 158 H05	1x58 (G13)	1571x66x115	2,3	67
Negara 258 H06	2x58 (G13)	1571x117x115	3,35	134

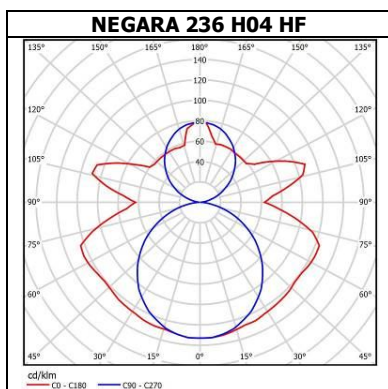


Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Negara 114 L82	1x14 (G5)	661x66x115	1	15
Negara 124 L83	1x24 (G5)	661x66x115	1	25
Negara 128 L84	1x28 (G5)	1271x66x115	1,7	30
Negara 135 L85	1x35 (G5)	1571x66x115	2,1	38
Negara 149 L86	1x49 (G5)	1571x66x115	2,1	53
Negara 154 L87	1x54 (G5)	1271x66x115	1,7	58
Negara 180 L88	1x80 (G5)	1571x66x115	2,1	85
Negara 214 L89	2x14 (G5)	661x117x115	1,1	31
Negara 224 L90	2x24 (G5)	661x117x115	1,1	50
Negara 228 L91	2x28 (G5)	1271x117x115	1,8	60
Negara 235 L92	2x35 (G5)	1571x117x115	2,2	75
Negara 249 L93	2x49 (G5)	1571x117x115	2,2	104
Negara 254 L94	2x54 (G5)	1271x117x115	1,8	116
Negara 280 L95	2x80 (G5)	1571x117x115	2,2	170

Options available on request:

DALI- DALI ballast  
 SWITCHDIM- Switch DIM ballast  
 DIM- Dimmable ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 TUBE- PMMA protection tube  
 RFL- White symmetrical reflector  
 SPORT- White painted protection grid

5TB- 5 way terminal block with two holes  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals  
 \*CBF3x1,5- Outgoing flexcable 3x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x1,5- Outgoing flexcable 5x1,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF3x2,5- Outgoing flexcable 3x2,5mm<sup>2</sup> ready for connection (\*-length, m)  
 \*CBF5x2,5- Outgoing flexcable 5x2,5mm<sup>2</sup> ready for connection (\*-length, m)



# PLASTIC LIGHTS

[www.northcliffe.org](http://www.northcliffe.org)

PUPIS

## IP54 Oval Luminaire



**Pupis 1E27 J45 GST**

**Type:** Surface-mounted luminaire with oval profile.

**Specification:** Transparent glass IP54 diffuser with screw lock.  
Grey thermoplastic body with protection grid. Aluminum reflector.  
GST version with chrome plated steel grid.  
Luminaire is boxed 12 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Pupis 1E27 J45	max.60W (E27)	IP54	170x125x115	0,4	-
Pupis 1E27 J45 GST	max.60W (E27)	IP54	170x125x115	0,4	-

Options available on request:  
GST- Chrome plated steel grid

## SAUNA R OP

### IP54 Luminaire for hot environment



**Sauna RO 1E27 N21 GST OP**

**Sauna OV 1E27 N22 GST**

**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Glass IP54 diffuser fixed with two screws. GST version with chrome plated steel grid. White body made of high temperature resistant bakelite. Aluminum reflector. Luminaire is boxed 5 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for use in hot industrial areas and saunas.

Type	Description	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Sauna RO 1E27 N21 OP	Round	max.100W (E27)	IP54	Ø245x105	0,95	-
Sauna RO 1E27 N21 GST OP	Round	max.100W (E27)	IP54	Ø245x105	0,95	-
Sauna OV 1E27 N22 GST	Oval	max.100W (E27)	IP54	135x195x115	0,85	-

Options available on request:

RO- Round bakelite body  
 OV- Oval bakelite body  
 OP- Frosted glass diffuser

CLR- Clear glass diffuser  
 GST- Chrome plated steel grid



## CIRCUS CAP CLR or OP

### IP44 Rounded Profile Luminaire



Circus 1E27 J49 CAP OP



Circus 1E27 J49 CAP CLR

**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Transparent or frosted glass IP44 diffuser with quick fix lock.  
White thermoplastic body with aluminum reflector.  
Luminaire is boxed 5 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

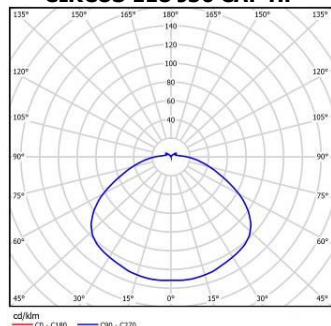
Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Circus 1E27 J49 CAP CLR	max. 100W (E27)	IP44	Ø245x105	0,95	-
Circus 209 M20 CAP CLR	2x9 (TC-S, G23)	IP44	Ø245x105	1,4	32
Circus 113 J53 CAP CLR	1x13 (G24d-1)	IP44	Ø245x105	1,4	19
Circus 118 J50 CAP CLR	1x18 (G24d-2)	IP44	Ø245x105	1,45	26
Circus 126 J51 CAP CLR	1x26 (G24d-3)	IP44	Ø245x105	1,5	34
Circus 1E27 J49 CAP OP	max. 100W (E27)	IP44	Ø245x105	0,95	-
Circus 209 M20 CAP OP	2x9 (TC-S, G23)	IP44	Ø245x105	1,4	32
Circus 113 J53 CAP OP	1x13 (G24d-1)	IP44	Ø245x105	1,4	19
Circus 118 J50 CAP OP	1x18 (G24d-2)	IP44	Ø245x105	1,45	26
Circus 126 J51 CAP OP	1x26 (G24d-3)	IP44	Ø245x105	1,5	34
Circus 114 P86 OP HF	1x14 (GR14Q-1)	IP44	Ø245x105	1,5	17
Circus 116 P83 CAP OP HF	1x16 (GR10Q)	IP44	Ø245x105	1,45	17

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
DALI- DALI ballast  
OP- Frosted glass diffuser

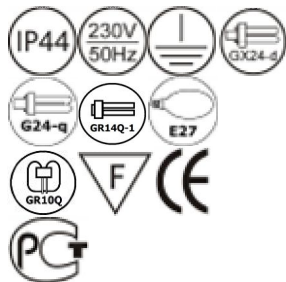
CLR- Clear glass diffuser  
PIR- PIR sensor  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor

#### CIRCUS 118 J50 CAP HF



## CIRCUS OP or CLR

### IP44 Rounded Profile Luminaire



Circus 1E27 J49 OP

Circus 1E27 J49 CLR

**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Transparent or frosted glass IP44 diffuser with quick fix lock.  
White thermoplastic body with reflector.  
Luminaire is boxed 5 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Circus 1E27 J49 CLR	max. 100W (E27)	IP44	Ø245x95	0,8	-
Circus 209 M20 CLR	2x9 (TC-S, G23)	IP44	Ø245x95	1,2	32
Circus 113 J53 CLR	1x13 (G24d-1)	IP44	Ø245x95	1,2	19
Circus 118 J50 CLR	1x18 (G24d-2)	IP44	Ø245x95	1,25	26
Circus 1E27 J49 OP	max. 100W (E27)	IP44	Ø245x95	0,8	-
Circus 209 M20 OP	2x9 (TC-S, G23)	IP44	Ø245x95	1,2	32
Circus 113 J53 OP	1x13 (G24d-1)	IP44	Ø245x95	1,2	19
Circus 118 J50 OP	1x18 (G24d-2)	IP44	Ø245x95	1,25	26
Circus 126 J51 OP	1x26 (G24d-3)	IP44	Ø245x95	1,3	34
Circus 114 P86 OP HF	1x14 (GR14Q-1)	IP44	Ø245x95	1,3	17
Circus 116 P83 OP HF	1x16 (GR10Q)	IP44	Ø245x95	1,25	17

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
DALI- DALI ballast  
OP- Frosted glass diffuser

CLR- Clear glass diffuser  
PIR- PIR sensor  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor

## CETUS CAP CLR or OP

### IP44 Rounded Profile Luminaire



Cetus 1E27 J46 CAP OP



Cetus 1E27 J46 CAP CLR

**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Transparent or frosted glass IP44 diffuser with quick fix lock.  
White thermoplastic body with reflector.  
Luminaire is boxed 5 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Cetus 1E27 J46 CAP CLR	max. 100W (E27)	IP44	Ø245x95	0,9	-
Cetus 209 M21 CAP CLR	2x9 (TC-S, G23)	IP44	Ø245x95	1,35	32
Cetus 113 J52 CAP CLR	1x13 (G24d-1)	IP44	Ø245x95	1,35	19
Cetus 118 J47 CAP CLR	1x18 (G24d-2)	IP44	Ø245x95	1,4	26
Cetus 1E27 J46 CAP OP	max. 100W (E27)	IP44	Ø245x95	0,9	-
Cetus 209 M21 CAP OP	2x9 (TC-S, G23)	IP44	Ø245x95	1,35	32
Cetus 113 J52 CAP OP	1x13 (G24d-1)	IP44	Ø245x95	1,35	19
Cetus 118 J47 CAP OP	1x18 (G24d-2)	IP44	Ø245x95	1,4	26
Cetus 126 J48 CAP OP	1x26 (G24d-3)	IP44	Ø245x95	1,45	34
Cetus 114 P87 CAP OP HF	1x14 (GR14Q-1)	IP44	Ø245x95	1,4	17
Cetus 116 P84 CAP OP HF	1x16 (GR10Q)	IP44	Ø245x95	1,4	17

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
DALI- DALI ballast  
OP- Frosted glass diffuser

CLR- Clear glass diffuser  
PIR- PIR sensor  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Cetus LED B108 950lm T830 CAP OP	Ø245x95	950	3000	>80	11	1
Cetus LED B108 950lm T840 CAP OP	Ø245x95	950	4000	>80	11	1
Cetus LED B108 1000lm T857 CAP OP	Ø245x95	1000	5700	>80	11	1

## CETUS OP or CLR

### IP44 Rounded Profile Luminaire



Cetus 1E27 J46 OP



Cetus 1E27 J46 CLR

**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Transparent or frosted glass IP44 diffuser with quick fix lock.  
White thermoplastic body with reflector.  
Luminaire is boxed 5 pcs/box.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Cetus 1E27 J46 CLR	max. 100W (E27)	IP44	Ø245x85	0,75	-
Cetus 209 M21 CLR	2x9 (TC-S, G23)	IP44	Ø245x85	1,15	32
Cetus 113 J52 CLR	1x13 (G24d-1)	IP44	Ø245x85	1,15	19
Cetus 118 J47 CLR	1x18 (G24d-2)	IP44	Ø245x85	1,2	26
Cetus 126 J48 CLR	1x26 (G24d-3)	IP44	Ø245x85	1,25	34
Cetus 1E27 J46 OP	max. 100W (E27)	IP44	Ø245x85	0,75	-
Cetus 209 M21 OP	2x9 (TC-S, G23)	IP44	Ø245x85	1,15	32
Cetus 113 J52 OP	1x13 (G24d-1)	IP44	Ø245x85	1,15	19
Cetus 118 J47 OP	1x18 (G24d-2)	IP44	Ø245x85	1,2	26
Cetus 126 J48 OP	1x26 (G24d-3)	IP44	Ø245x85	1,25	34
Cetus 114 P87	1x14 (GR14Q-1)	IP44	Ø245x85	1,25	17
Cetus 116 P84 OP HF	1x16 (GR10Q)	IP44	Ø245x85	1,2	17

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
DALI- DALI ballast  
OP- Frosted glass diffuser

CLR- Clear glass diffuser  
PIR- PIR sensor  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Cetus LED B108 950lm T830 OP	Ø245x85	950	3000	>80	11	1,1
Cetus LED B108 950lm T840 OP	Ø245x85	950	4000	>80	11	1,1
Cetus LED B108 1000lm T857 OP	Ø245x85	1000	5700	>80	11	1,1



# MUSCA

## IP44 Luminaire with Decorative Cover



<b>Type:</b>	Wall-mounted fluorescent luminaire with decorative cover.
<b>Specification:</b>	Frosted glass IP44 diffuser with quick fix lock. White thermoplastic body with decorative cover. Aluminum reflector. Luminaire is boxed 7 pcs/box.
<b>Installation:</b>	Designed to be fixed onto walls.
<b>Application:</b>	Ideal for corridors.

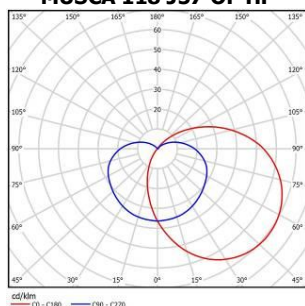
Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Musca 1E27 J55 OP	max. 100W (E27)	IP44	Ø245x90	0,8	max. 100W
Musca 209 M22 OP	2x9 (TC-S, G23)	IP44	Ø245x90	1,2	32
Musca 113 J56 OP	1x13 (G24d-1)	IP44	Ø245x90	1,2	19
Musca 118 J57 OP	1x18 (G24d-2)	IP44	Ø245x90	1,25	26
Musca 126 J58 OP	1x26 (G24d-3)	IP44	Ø245x90	1,3	34
Musca 114 P85 OP HF	1x14 (GR14Q-1)	IP44	Ø245x90	1,3	17
Musca 116 P82 OP HF	1x16 (GR10Q)	IP44	Ø245x90	1,25	17

Options available on request:

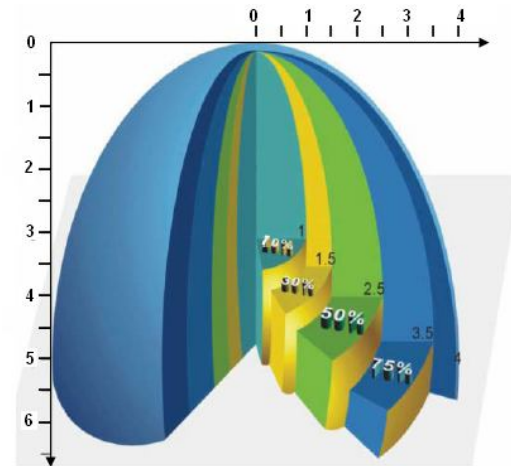
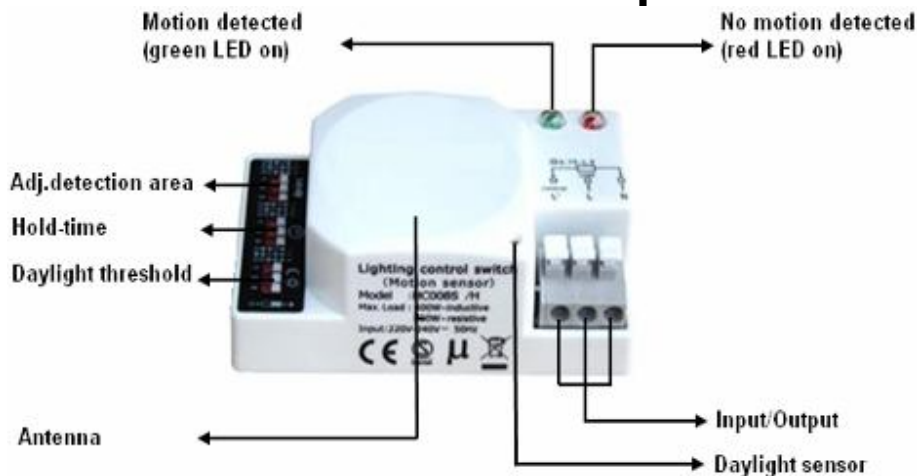
HF-	High Frequency control gear	CLR-	Clear glass diffuser
DIM-	Dimmable ballast	PIR-	PIR sensor
DALI-	DALI ballast	5TB-	5 way terminal block for loop feed and ease of wiring
OP-	Frosted glass diffuser	NCP-	Low Power Factor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Musca LED B180 950lm T830 OP	Ø245x90	950	3000	>80	11	1
Musca LED B180 950lm T840 OP	Ø245x90	950	4000	>80	11	1
Musca LED B180 1000lm T857 OP	Ø245x90	1000	5700	>80	11	1

MUSCA 118 J57 OP HF



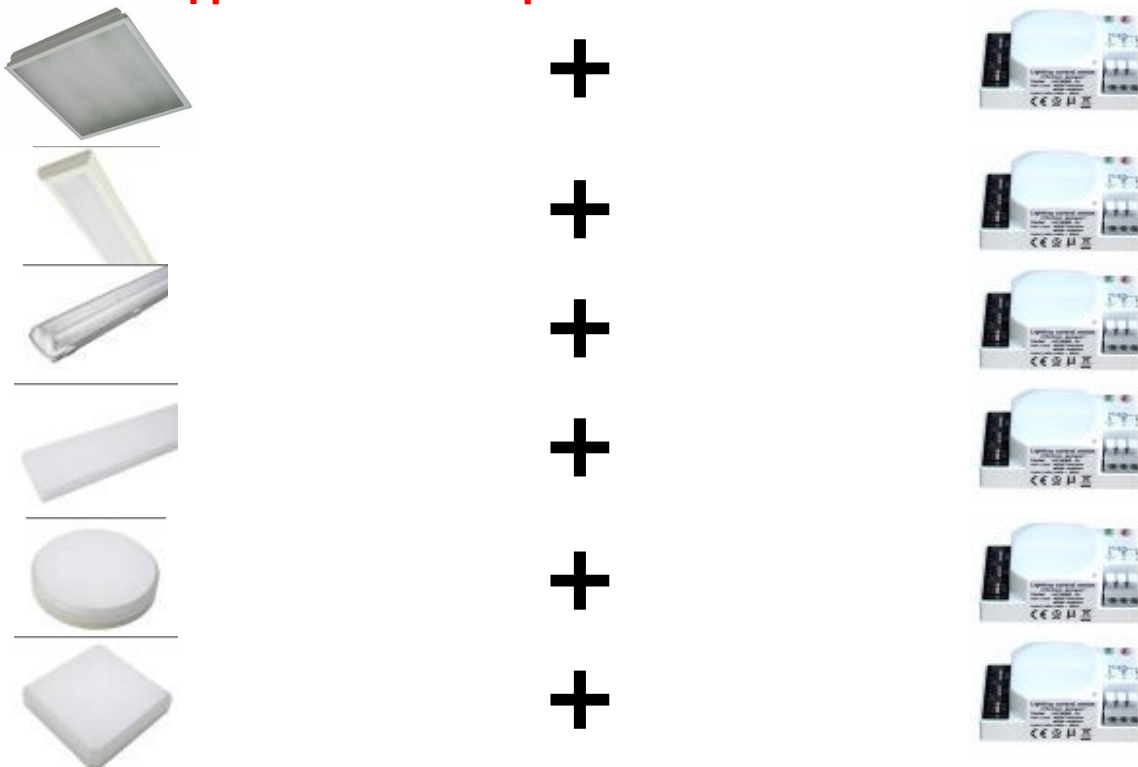
## PIR (Economy version) sensor can be mounted in any luminaire with a plastic diffuser



Economy version is simplified economy model designed to be built into lighting fixtures for indoor use

- Ambient temperature  $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Max mounting height 5m
- Compact size
- 50 000 service hours

## Applications with a plastic diffuser luminaires



## PIR fittings illustrations



**Slim indoor use fitting INDUS equipped with PIR sensor**



**IP 66 indoor/outdoor use fitting BARAT equipped with PIR sensor**

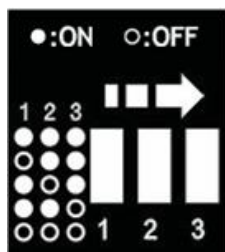
## Functions and options

### A: switch on/off function

The sensor can switch on/off halogen transformers, electronic ballasts, LED drivers. There is a limit of max load 400W for one sensor.

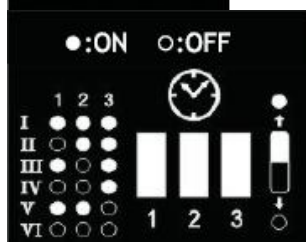
### B: detection area

Detection area can be adjusted by selecting combination of DIP switches to fit precisely for each specific application.



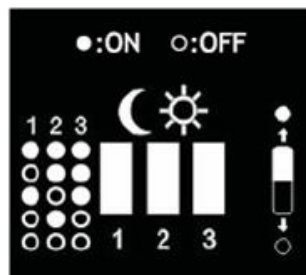
### C: hold-time

Hold time means the time period for which lamp should be kept on 100% after moving object has left detection area.



### D: daylight sensor

The sensor contains a daylight sensor in order to allow the on/off function only at certain brightness threshold.



	1	2	3	
I	●	●	●	100%
II	○	●	●	75%
III	●	○	●	50%
IV	●	●	○	30%
V	○	○	○	10%

	1	2	3	
I	●	●	●	5s
II	○	●	●	30s
III	●	○	●	3min.
IV	○	○	●	5min.
V	●	●	○	15min
VI	○	○	○	25min

	1	2	3	
I	●	●	●	2Lux
II	○	●	●	5Lux
III	●	○	●	20Lux
IV	○	●	○	30Lux
V	○	○	○	Disable

**\*\*Disabled\*\*** means sensor will work even in bright daylight

**PIR IP65 sensor enclosure can be used with high mounted luminaires**



PIR IP65 sensor enclosure (PIR BOX) could be used for PIR and PIR 20 sensors, where IP protection is needed. PIR 20 together with IP65 PIR BOX enclosure could be used outdoors as well even in winter times, as long as temperatures do not fall below -35°C.



+



+



+



+





# PAVO

## IP40 Rounded Profile Luminaire



**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Durable opal PMMA IP40 diffuser with quick fix lock.  
White polycarbonate body.  
Luminaire is boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Pavo 1E27 J34	max. 20W (E27)	IP40	Ø275x105	0,8	-
Pavo 209 M42	2x9 (TC-S, G23)	IP40	Ø275x105	1,1	32
Pavo 113 M46	1x13 (G24d-1)	IP40	Ø275x105	1,1	19
Pavo 118 J35	1x18 (G24d-2)	IP40	Ø275x105	1,1	26
Pavo 126 J36	1x26 (G24d-3)	IP40	Ø275x105	1,2	34
Pavo 122 H49	1x22 (T9 C, G10Q)	IP40	Ø275x105	1,1	30
Pavo 122 H51 HF	1x22 (T5 FC, 2Gx13)	IP40	Ø275x105	0,9	25
Pavo 114 P91 HF	1x14 (GR14Q-1)	IP40	Ø275x105	0,9	17
Pavo 117 P92 HF	1x17 (GR14Q-1)	IP40	Ø275x105	0,9	19
Pavo 116 P88 HF	1x16 (GR10Q)	IP40	Ø275x105	0,9	17
Pavo 2E27 M47	2x max. 20W (E27)	IP40	Ø375x115	1,0	-
Pavo 213 M43	2x13 (G24d-1)	IP40	Ø375x115	1,4	38
Pavo 218 M44	2x18 (G24d-2)	IP40	Ø375x115	1,4	52
Pavo 226 M45	2x26 (G24d-3)	IP40	Ø375x115	1,7	68
Pavo 132 H50	1x32 (T9 C, G10Q)	IP40	Ø375x115	1,5	40
Pavo 140 H52 HF	1x40 (T5 FC, 2Gx13)	IP40	Ø375x115	1,1	44
Pavo 155 H53 HF	1x55 (T5 FC, 2Gx13)	IP40	Ø375x115	1,1	60
Pavo 214 P93 HF	2x14 (GR14Q-1)	IP40	Ø375x115	1,1	33
Pavo 217 P94 HF	2x17 (GR14Q-1)	IP40	Ø375x115	1,1	40
Pavo 128 P89 HF	1x28 (GR10Q)	IP40	Ø375x115	1,1	29
Pavo 138 P90 HF	1x38 (GR10Q)	IP40	Ø375x115	1,1	38
Pavo 232 O49 HF	2x32 (G24q-3)	IP40	Ø475x125	1,5	64
Pavo 242 O50 HF	2x42 (G24q-4)	IP40	Ø475x125	1,5	85

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour

EM2- Emergency version **2 hours**  
EM3- Emergency version **3 hours**  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
PIR- PIR sensor

# INDUS

## IP54 Plastic Luminaire



**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Opal PC IP54 diffuser with quick lock system.  
White thermoplastic body with steel reflector.  
Luminaire is boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Indus 1E27 M23	max. 100W (E27)	IP54	Ø300x120	0,8	-
Indus 209 M24	2x9 (TC-S, G23)	IP54	Ø300x120	1,1	32
Indus 113 M25	1x13 (G24d-1)	IP54	Ø300x120	1,1	19
Indus 118 M26	1x18 (G24d-2)	IP54	Ø300x120	1,15	26
Indus 126 M27	1x26 (G24d-3)	IP54	Ø300x120	1,2	34
Indus 213 M28	2x13 (G24d-1)	IP54	Ø300x120	1,45	38
Indus 218 M29	2x18 (G24d-2)	IP54	Ø300x120	1,5	52
Indus 122 M30	1x22 (T9 C, G10Q)	IP54	Ø300x120	1,25	30
Indus 122 M31 HF	1x22 (T5 FC, 2Gx13)	IP54	Ø300x120	0,95	25
Indus 114 P97 HF	1x14 (GR14Q-1)	IP54	Ø300x120	0,95	17
Indus 117 P98 HF	1x17 (GR14Q-1)	IP54	Ø300x120	0,95	19
Indus 214 P99 HF	2x14 (GR14Q-1)	IP54	Ø300x120	1	33
Indus 116 P95 HF	1x16 (GR10Q)	IP54	Ø300x120	0,95	17
Indus 128 P96 HF	1x28 (GR10Q)	IP54	Ø300x120	1	29

Options available on request:

HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour

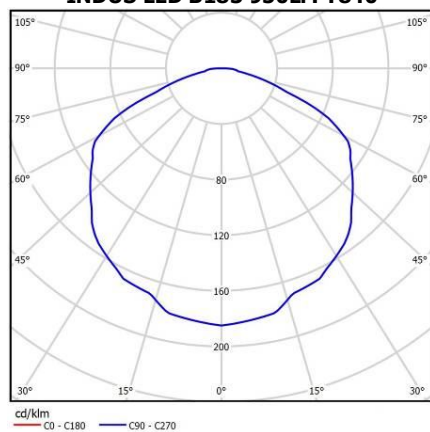
EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
PIR- PIR sensor



**INDUS LED B184 950LM T840 PIR**

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Indus LED B183 950lm T840	Ø300x120	950	4000	>80	11	0,9
Indus LED B183 1000lm T857	Ø300x120	1000	5700	>80	11	0,9
Indus LED B184 950lm T840 PIR	Ø300x120	950	4000	>80	11	0,9
Indus LED B184 1000lm T857 PIR	Ø300x120	1000	5700	>80	11	0,9

**INDUS LED B183 950LM T840**



# COLUMBA

## IP65 Plastic Luminaire



**Type:** Surface-mounted fluorescent luminaire with rounded profile.

**Specification:** Opal PC IP65 diffuser with screws fixing.  
White thermoplastic body with steel reflector.  
Luminaire is boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Columba E27 M32	max. 23W (E27)	IP65	Ø335x130	1,1	-
Columba 209 M41	2x9 (TC-S, G23)	IP65	Ø335x130	1,35	32
Columba 113 M33	1x13 (G24d-1)	IP65	Ø335x130	1,35	19
Columba 118 M34	1x18 (G24d-2)	IP65	Ø335x130	1,4	26
Columba 126 M35	1x26 (G24d-3)	IP65	Ø335x130	1,45	34
Columba 213 M36	2x13 (G24d-1)	IP65	Ø335x130	1,7	38
Columba 218 M37	2x18 (G24d-2)	IP65	Ø335x130	1,7	52
Columba 226 M38	2x26 (G24d-3)	IP65	Ø335x130	1,95	68
Columba 122 M39	1x22 (T9 C, G10Q)	IP65	Ø335x130	1,5	30
Columba 122 M40 HF	1x22 (T5 FC, 2Gx13)	IP65	Ø335x130	1,2	25
Columba 114 Q01 HF	1x14 (GR14Q-1)	IP65	Ø335x130	1,2	17
Columba 117 Q02 HF	1x17 (GR14Q-1)	IP65	Ø335x130	1,2	19
Columba 214 Q03 HF	2x14 (GR14Q-1)	IP65	Ø335x130	1,25	33
Columba 217 Q04 HF	2x17 (GR14Q-1)	IP65	Ø335x130	1,25	40
Columba 116 Q05 HF	1x16 (GR10Q)	IP65	Ø335x130	1,2	17
Columba 128 Q06 HF	1x28 (GR10Q)	IP65	Ø335x130	1,25	29
Columba 138 Q07 HF	1x38 (GR10Q)	IP65	Ø335x130	1,25	38

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2-

Emergency version 2 hours

EM3-

Emergency version 3 hours

5TB-

5 way terminal block for loop feed and ease of wiring

NCP-

Low Power Factor

PIR-

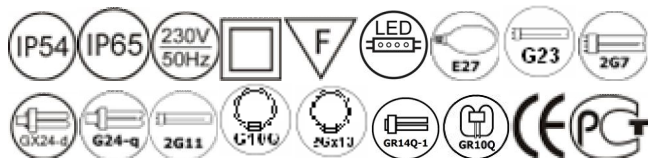
PIR sensor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Columba LED B185 950lm T840	Ø335x130	950	4000	>80	11	1,1
Columba LED B185 1000lm T857	Ø335x130	1000	5700	>80	11	1,1
Columba LED B185 950lm T840 PIR	Ø335x130	950	4000	>80	11	1,1
Columba LED B185 1000lm T857 PIR	Ø335x130	1000	5700	>80	11	1,1



# DORADO

## IP54/65 Square Luminaire



**Type:** Surface-mounted square fluorescent luminaire with slim profile.

**Specification:** Durable opal PMMA diffuser with outstanding resistance to chemical influences.  
White polycarbonate body. Sealing gasket in IP65 version.  
Luminaire is boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, swimming pools, bathrooms and etc.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Dorado 109 H27	1x9 (TC-S, G23)	IP54	200x200x58	1,1	16
Dorado 209 H28	2x9 (TC-S, G23)	IP54	200x200x58	1,2	32
Dorado 116 Q08	1x16 (GR10Q)	IP54	200x200x58	1	17
Dorado B 1E27 O39	max. 25W (E27)	IP65	300x300x83	1,6	-
Dorado B 211 H29	2x11 (TC-S, G23)	IP65	300x300x83	2	36
Dorado B 218 H30	2x18 (TC-L, 2G11)	IP65	300x300x83	2	52
Dorado B 122 H31	1x22 (T9 C, G10Q)	IP65	300x300x83	2	30
Dorado B 211 H32 HF	2x11 (TC-SE, 2G7)	IP65	300x300x83	1,7	20
Dorado B 218 H33 HF	2x18 (TC-L, 2G11)	IP65	300x300x83	1,7	28
Dorado B 122 H34 HF	1x22 (T5 FC, 2Gx13)	IP65	300x300x83	1,7	25
Dorado B 218 Q11	2x18 (G24d-2)	IP65	300x300x83	2	52
Dorado B 226 M61	2x26 (G24d-3)	IP65	300x300x83	2,2	68
Dorado B 214 Q12 HF	2x14 (GR14Q-1)	IP65	300x300x83	1,7	33
Dorado B 217 Q13 HF	2x17 (GR14Q-1)	IP65	300x300x83	1,7	40
Dorado B 128 Q09 HF	1x28 (GR10Q)	IP65	300x300x83	1,7	29
Dorado B 138 Q10 HF	1x38 (GR10Q)	IP65	300x300x83	1,7	38

Options available on request:

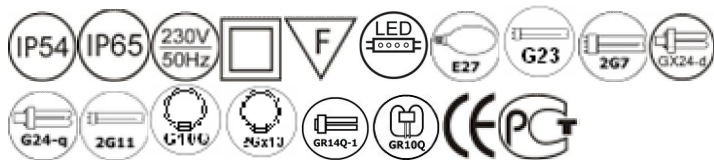
HF- High Frequency control gear  
SWITCHDIM- Switch DIM ballast  
DIM- Dimmable ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
4TB- 4 way terminal block for loop feed and ease of wiring  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
PC- Polycarbonate diffuser  
PIR- PIR sensor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Dorado LED B110 950lm T840	200x200x58	950	4000	>80	11	0,9
Dorado LED B110 1000lm T857	200x200x58	1000	5700	>80	11	0,9
Dorado B LED B111 1180lm T840	300x300x83	950	4000	>80	13	1,7
Dorado B LED B111 1250lm T857	300x300x83	1000	5700	>80	13	1,7

# POLLUX

## IP 54/65 Circular Luminaire



**Type:** Surface-mounted circular fluorescent luminaire with slim profile.

**Specification:** Durable opal PMMA diffuser with outstanding resistance to chemical influences.  
White polycarbonate body. Sealing gasket in IP65 version.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	IP level	Overall dimensions, mm	Weight, kg	Total wattage, W
Pollux 109 H35	1x 9 (TC-S, G23)	IP54	Ø260x58	1,1	16
Pollux 209 H36	2x9 (TC-S, G23)	IP54	Ø260x58	1,2	32
Pollux 118 H38	1x18 (G24d-2)	IP54	Ø260x58	1,2	26
Pollux 109 H37 HF	1x9 (TC-SE, 2G7)	IP54	Ø260x58	0,9	10
Pollux 116 Q14 HF	1x16 (GR10Q)	IP54	Ø260x58	0,9	17
Pollux B 211 H39	2x11 (TC-S, G23)	IP65	Ø360x83	2	20
Pollux B 218 H40	2x18 (TC-L, 2G11)	IP65	Ø360x83	2	28
Pollux B 122 H41	1x22 (T9 C, G10Q)	IP65	Ø360x83	2	30
Pollux B 132 H42	1x32 (T9 C, G10Q)	IP65	Ø360x83	2	40
Pollux B 211 H43 HF	2x11 (TC-SE, 2G7)	IP65	Ø360x83	1,7	20
Pollux B 218 H44 HF	2x18 (TC-L, 2G11)	IP65	Ø360x83	1,7	28
Pollux B 122 H45 HF	1x22 (T5 FC, 2Gx13)	IP65	Ø360x83	1,7	25
Pollux B 140 H46 HF	1x40 (T5 FC, 2Gx13)	IP65	Ø360x83	1,7	44
Pollux B 155 H47 HF	1x55 (T5 FC, 2Gx13)	IP65	Ø360x83	1,7	60
Pollux B 218 Q17	2x18 (G24d-2)	IP65	Ø360x83	2	52
Pollux B 226 Q18	2x26 (G24d-3)	IP65	Ø360x83	2	68
Pollux B 214 Q19 HF	2x14 (GR14Q-1)	IP65	Ø360x83	1,7	33
Pollux B 217 Q20 HF	2x17 (GR14Q-1)	IP65	Ø360x83	1,7	40
Pollux B 128 Q15 HF	1x28 (GR10Q)	IP65	Ø360x83	1,7	29
Pollux B 138 Q16 HF	1x38 (GR10Q)	IP65	Ø360x83	1,7	38

Options available on request:

HF- High Frequency control gear  
SWITCHDIM- Switch DIM ballast  
DIM- Dimmable ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
4TB- 4 way terminal block for loop feed and ease of wiring  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
PC- Polycarbonate diffuser  
PIR- PIR sensor

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Pollux LED B109 950lm T840	Ø260x58	950	4000	>80	11	0,9
Pollux LED B109 1000lm T857	Ø260x58	1000	5700	>80	11	0,9

# CABINET

## Single Batten with a Prismatic Diffuser

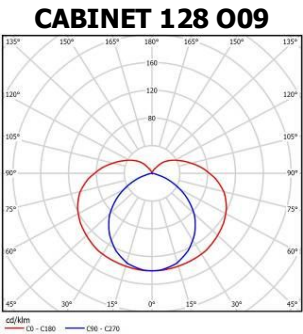


Type:	A range of single batten with a plastic diffuser for fast continuous mounting installation with slim profile.
Specification:	Clear prismatic diffuser made of UV stabilized polycarbonate. White polycarbonate body and end caps. Luminaire is plastic-wrapped and boxed individually.
Installation:	Surface luminaire designed to be fixed to ceilings and walls of any type. Effective solution for interconnecting a number of battens.
Application:	Ideal for industrial, retail, furniture and education applications.



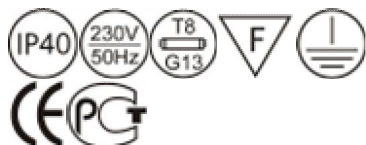
Supplied with close connector, start lead, link lead and wall&ceiling mounting kit for easy installation. Switch on/off button mounted on the side of the body.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Cabinet 113 O07	1x13 (G5)	22x45x585	0,2	15
Cabinet 121 O08	1x21 (G5)	22x45x905	0,3	23
Cabinet 128 O09	1x28 (G5)	22x45x1205	0,4	30



# COMA

## Front Mirror Luminaire with a Prismatic Diffuser



<b>Type:</b>	A range of front mirror luminaires with a plastic diffuser.
<b>Specification:</b>	Prismatic diffuser made of PMMA. White aluminium body and thermoplastic end caps. Supplied with two sockets and switch on/off button mounted on the front side of the body. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to walls of any type.
<b>Application:</b>	Ideal for bathrooms, hotels, dressing rooms and other applications.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Coma 118 Q35	1x18 (G13)	765x65x85	1,2	26
Coma 130 Q36	1x30 (G13)	1060x65x85	1,6	36
Coma 136 Q37	1x36 (G13)	1365x65x85	2	42

Options available on request:

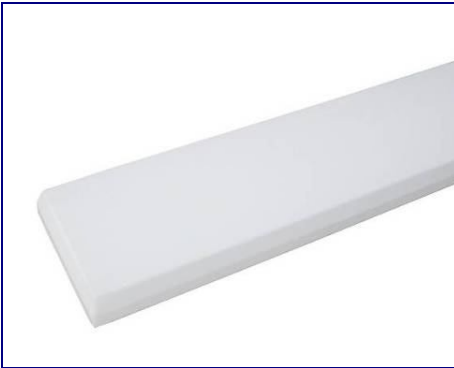
HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast

EMG- Emergency version 1 hour  
EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
5TB- 5 way terminal block for loop feed and ease of wiring

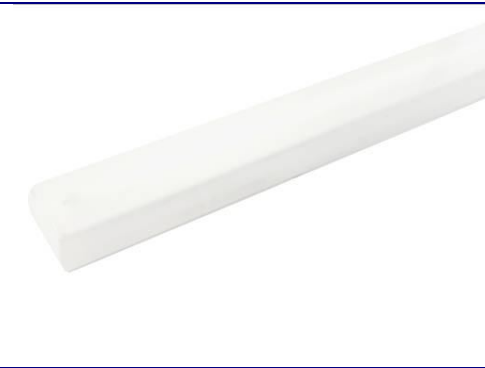


EUROS

Surface  
Plastic  
Luminaire



EUROS 236 H10 OP HF



EUROS 158 H11 OP HF



EUROS 158 H11 PRZ HF

Type:	A range of surface fluorescent luminaires with low modern profile, meeting the stringent requirements of educational establishments and healthcare applications.
Specification:	Prismatic and Opal diffusers made of PMMA. Gear tray in white finish. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire designed to be fixed to ceilings of any type.
Application:	Ideal for common areas in hospitals, colleges and other similar institutions.



Version with IP44 protection level or with an aluminum reflector inside can be made on request. See option list for detailed information (IP44 & PAR).

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Euros 118 H07	1x18 (G13)	665x110x65	1,2	26
Euros 218 H08	2x18 (G13)	665x195x65	1,7	42
Euros 136 H09	1x36 (G13)	1270x110x65	2	42
Euros 236 H10	2x36 (G13)	1270x195x65	3,3	84
Euros 158 H11	1x58 (G13)	1570x110x65	2,7	67
Euros 258 H12	2x58 (G13)	1570x195x65	4,5	134

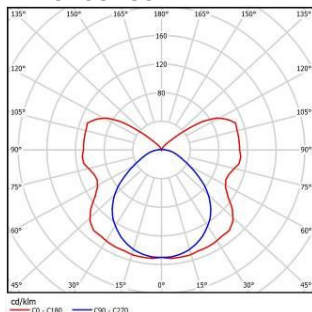
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Euros 114 H13	1x14 (G5)	665x110x65	0,9	16
Euros 214 H14	2x14 (G5)	665x195x65	1,3	31
Euros 124 H15	1x24 (G5)	665x110x65	0,9	25
Euros 224 H16	2x24 (G5)	665x195x65	1,3	49
Euros 128 H17	1x28 (G5)	1270x110x65	1,7	30
Euros 228 H18	2x28 (G5)	1270x195x65	2,4	60
Euros 135 H19	1x35 (G5)	1570x110x65	2	38
Euros 235 H20	2x35 (G5)	1570x195x65	2,8	76
Euros 149 H21	1x49 (G5)	1570x110x65	2	53
Euros 249 H22	2x49 (G5)	1570x195x65	2,8	105
Euros 154 H23	1x54 (G5)	1270x110x65	1,7	58
Euros 254 H24	2x54 (G5)	1270x195x65	2,4	116
Euros 180 H25	1x80 (G5)	1570x110x65	2	85
Euros 280 H26	2x80 (G5)	1570x195x65	3,2	170

Options available on request:

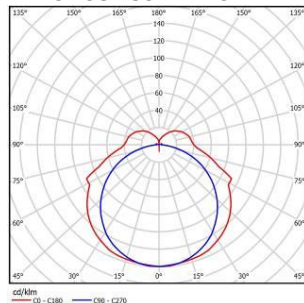
PRZ- Prismatic diffuser  
OP- Diffuser in opal execution  
HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
SPORT- White painted protection grid  
IP44- Protection level  
PAR- Aluminum reflector inside

**EUROS 158 H11 PRZ HF**



**EUROS 258 H12 OP HF**



Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Euros LED B112 1x950lm T840 OP	665x110x65	950	4000	>80	11	1,5
Euros LED B112 1x1000lm T857 OP	665x110x65	1000	5700	>80	11	1,5
Euros LED B113 2x950lm T840 OP	665x195x65	1900	4000	>80	21	2,2
Euros LED B113 2x1000lm T857 OP	665x195x65	2000	5700	>80	21	2,2
Euros LED B114 1x2370lm T840 OP	1270x110x65	2370	4000	>80	26	2,4
Euros LED B114 1x2500lm T857 OP	1270x110x65	2500	5700	>80	26	2,4
Euros LED B115 2x2370lm T840 OP	1270x195x65	4740	4000	>80	51	3,7
Euros LED B115 2x2500lm T857 OP	1270x195x65	5000	5700	>80	51	3,7
Euros LED B116 1x2850lm T840 OP	1570x110x65	2850	4000	>80	31	3,1
Euros LED B116 1x3000lm T857 OP	1570x110x65	3000	5700	>80	31	3,1
Euros LED B117 2x2850lm T840 OP	1570x195x65	5700	4000	>80	61	4,9
Euros LED B117 2x3000lm T857 OP	1570x195x65	6000	5700	>80	61	4,9

# STAR

## Surface T8 Plastic Luminaire



<b>Type:</b>	A range of surface fluorescent luminaires with low modern profile.
<b>Specification:</b>	Prismatic diffusers made of UV stabilized polystyrene. Gear tray in white finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Star 236 O01 PRZ	2x36 (G13)	1250x155x65	3	84
Star 236 O01 PRZ HF	2x36 (G13)	1250x155x65	2,1	71

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours

EM3- Emergency version 3 hours  
 4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 PRZ- Prismatic diffuser  
 NCP- Low Power Factor  
 SPORT- White painted protection grid

# CARINA

## Surface T5 Plastic Luminaire



**Carina 228 O56 OP**



**Carina 128 O55 OP**



**Carina 128 O55 PRZ**

<b>Type:</b>	A range of surface fluorescent <b>luminaires</b> with low modern profile.
<b>Specification:</b>	Prismatic or opalized diffusers made of UV stabilized polycarbonate. Gear tray in white finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type.
<b>Application:</b>	Ideal for common areas in hospitals, colleges and other similar institutions.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Carina 114 O51 PRZ	1x14 (G5)	595x90x85	0,9	16
Carina 214 O52 PRZ	2x14 (G5)	595x150x60	1,3	31
Carina 124 O53 PRZ	1x24 (G5)	595x90x85	0,9	25
Carina 224 O54 PRZ	2x24 (G5)	595x150x60	1,3	49
Carina 128 O55 PRZ	1x28(G5)	1195x90x85	1,7	30
Carina 228 O56 PRZ	2x28 (G5)	1195x150x60	2,4	60
Carina 154 O57 PRZ	1x54(G5)	1195x90x85	1,7	58
Carina 254 O58 PRZ	2x54 (G5)	1195x150x60	2,4	116
Carina 135 O59 PRZ	1x35 (G5)	1495x90x85	2	38
Carina 235 O60 PRZ	2x35 (G5)	1495x150x60	2,8	76
Carina 149 O61 PRZ	1x49(G5)	1495x90x85	2	53
Carina 249 O62 PRZ	2x49 (G5)	1495x150x60	2,8	105



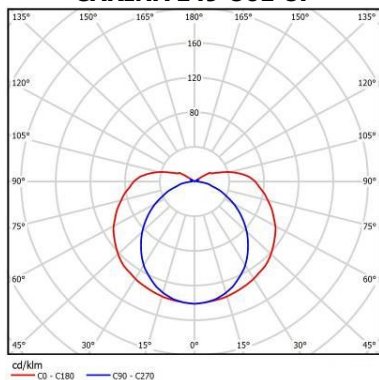
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Carina 114 O51 OP	1x14 (G5)	595x90x85	0,9	16
Carina 214 O52 OP	2x14 (G5)	595x150x60	1,3	31
Carina 124 O53 OP	1x24 (G5)	595x90x85	0,9	25
Carina 224 O54 OP	2x24 (G5)	595x150x60	1,3	49
Carina 128 O55 OP	1x28(G5)	1195x90x85	1,7	30
Carina 228 O56 OP	2x28 (G5)	1195x150x60	2,4	60
Carina 154 O57 OP	1x54(G5)	1195x90x85	1,7	58
Carina 254 O58 OP	2x54 (G5)	1195x150x60	2,4	116
Carina 135 O59 OP	1x35 (G5)	1495x90x85	2	38
Carina 235 O60 OP	2x35 (G5)	1495x150x60	2,8	76
Carina 149 O61 OP	1x49(G5)	1495x90x85	2	53
Carina 249 O62 OP	2x49 (G5)	1495x150x60	2,8	105

Options available on request:

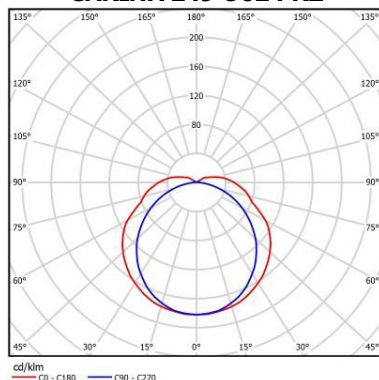
DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 OP- Opalized diffuser  
 PRZ- Prismatic diffuser  
 SPORT- White painted protection grid

**CARINA 149 O61 OP**



**CARINA 249 O62 PRZ**



# DOCTOR

## Surface Plastic Luminaire



<b>Type:</b>	A range of surface fluorescent <b>luminaires</b> with low modern profile, for use in locations, where industrial solutions are aesthetically not acceptable.
<b>Specification:</b>	Blown moulded prismatic PMMA diffuser in clean or opal execution. Stainless steel diffuser clips are inside the luminaire. Housing made of glass fibre reinforced polyester. White colour. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.
<b>Application:</b>	Ideal for common areas in humid dusty rooms, swimming pools, bathrooms, hospitals and other similar institutions.



Two cable entries on the back side for easy lead through of on outside connecting wire are provided.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Doctor 118 G79 PRZ	1x18 (G13)	672x155x81	1,9	26
Doctor 218 G02 PRZ	2x18 (G13)	672x155x81	1,95	42
Doctor 136 G52 PRZ	1x36 (G13)	1282x155x81	2,95	42
Doctor 236 G03 PRZ	2x36 (G13)	1282x155x81	3,6	84
Doctor 158 G80 PRZ	1x58 (G13)	1582x155x81	3,85	67
Doctor 258 G04 PRZ	2x58 (G13)	1582x155x81	4,75	134

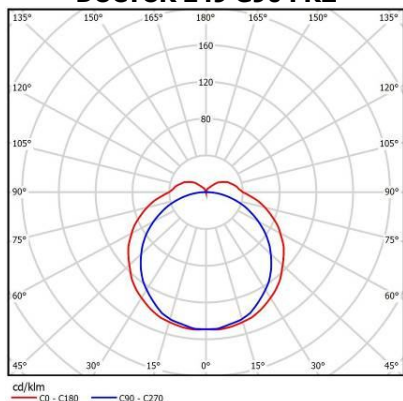
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Doctor 114 G81 PRZ	1x14 (G5)	672x155x81	1,5	16
Doctor 214 G82 PRZ	2x14 (G5)	672x155x81	1,6	31
Doctor 124 G83 PRZ	1x24 (G5)	672x155x81	1,5	25
Doctor 224 G84 PRZ	2x24 (G5)	672x155x81	1,6	49
Doctor 128 G85 PRZ	1x28(G5)	1282x155x81	2,55	30
Doctor 228 G86 PRZ	2x28 (G5)	1282x155x81	2,6	60
Doctor 135 G87 PRZ	1x35 (G5)	1582x155x81	3,05	38
Doctor 235 G88 PRZ	2x35 (G5)	1582x155x81	3,1	76
Doctor 149 G89 PRZ	1x49(G5)	1582x155x81	3,05	53
Doctor 249 G90 PRZ	2x49 (G5)	1582x155x81	3,1	105
Doctor 154 G91 PRZ	1x54(G5)	1282x155x81	2,55	58
Doctor 254 G92 PRZ	2x54 (G5)	1282x155x81	2,6	116
Doctor 180 G93 PRZ	1x80(G5)	1582x155x81	3,05	85
Doctor 280 G94 PRZ	2x80 (G5)	1582x155x81	3,4	170

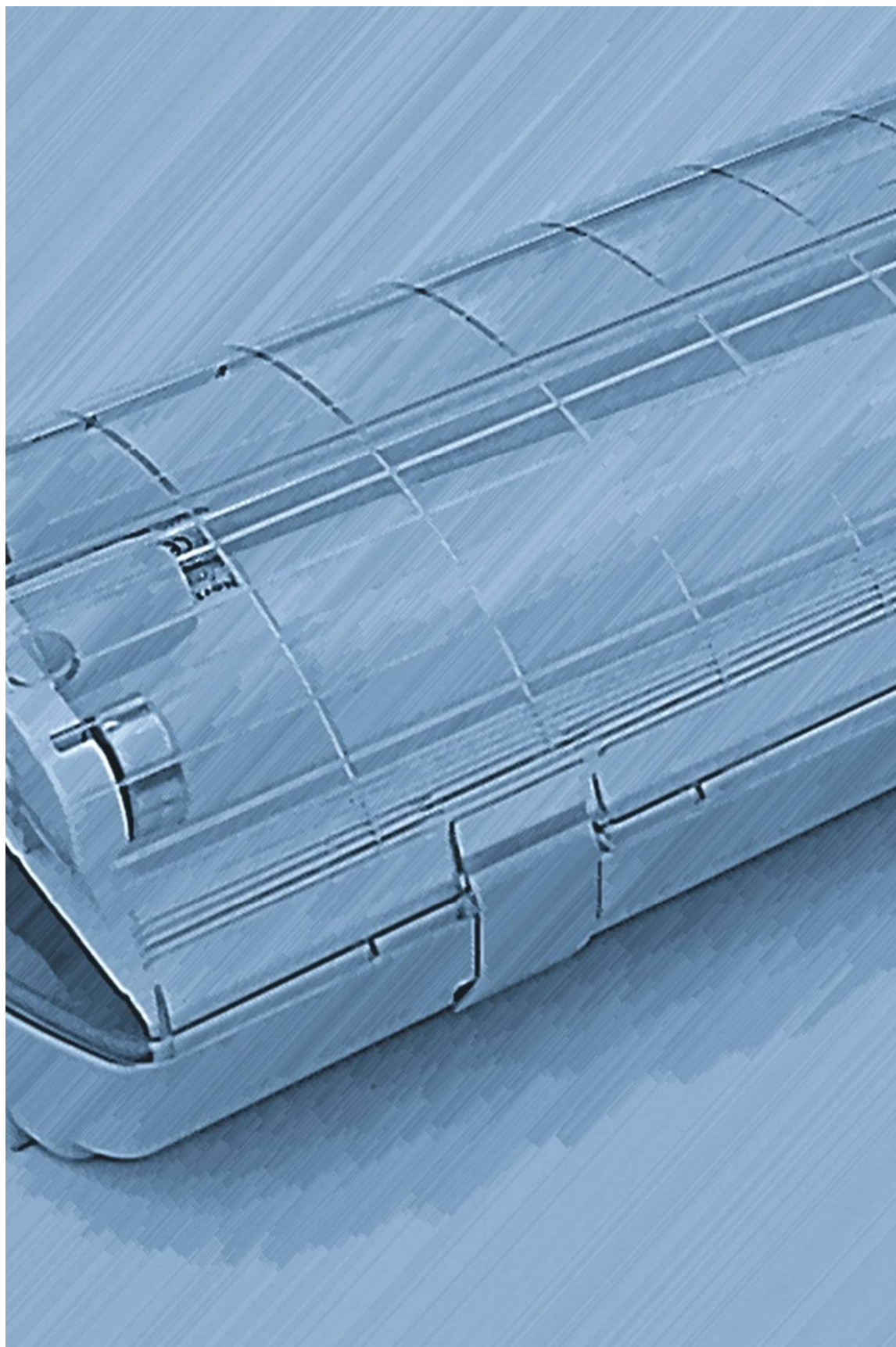
Options available on request:

PRZ- Prismatic diffuser  
HF- High Frequency control gear  
SWITCHDIM- Switch DIM ballast  
DIM- Dimmable ballasts  
DALI- DALI ballasts  
EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
4TB- 4 way terminal block for loop feed and ease of wiring  
5TB- 5 way terminal block for loop feed and ease of wiring  
NCP- Low Power Factor  
SPORT- White painted protection grid

#### DOCTOR 249 G90 PRZ





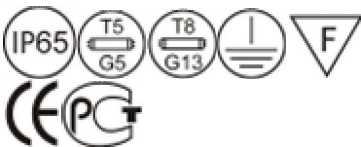
# IP65 SURFACE

[www.northcliffe.org](http://www.northcliffe.org)



# CYCLONE T8/T5

## IP65 Surface Luminaire



Type:	Dust and moisture proof IP65 with clear polycarbonate diffuser for maximum protection for use in adverse conditions.
Specification:	<b>Luminaires</b> are available with injection moulded UV stabilized polycarbonate diffuser for high impact resistance. White painted steel reflector. Injection molded polycarbonate canopy, grey finished. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire is designed to be fixed to ceilings of any type or suspended.
Application:	Dust and moisture proof luminaries, ideal for environments subject to high humidity and excessive dust.



Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Cyclone 118 A49	1x18 (G13)	670x170x95	1,7	26
Cyclone 218 A50	2x18 (G13)	670x170x95	1,8	42
Cyclone 136 A51	1x36 (G13)	1280x170x95	2,5	42
Cyclone 236 A52	2x36 (G13)	1280x170x95	3,1	84
Cyclone 158 A53	1x58 (G13)	1580x170x95	4	67
Cyclone 258 A54	2x58 (G13)	1580x170x95	5,4	134
Cyclone 218 A50 Deluxe HF	2x18 (G13)	670x170x95	1,5	36
Cyclone 236 A52 Deluxe HF	2x36 (G13)	1280x170x95	2,4	70
Cyclone 258 A54 Deluxe HF	2x58 (G13)	1580x170x95	2,9	108

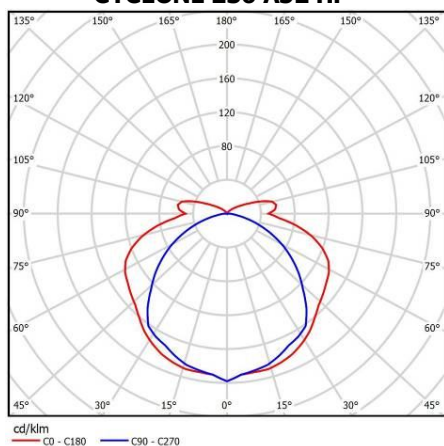
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Cyclone 114 D18	1x14 (G5)	670x170x95	1,5	16
Cyclone 214 D19	2x14 (G5)	670x170x95	1,6	31
Cyclone 128 A43	1x28 (G5)	1280x170x95	2,5	30
Cyclone 228 A44	2x28 (G5)	1280x170x95	2,6	60
Cyclone 154 A45	1x54 (G5)	1280x170x95	2,5	58
Cyclone 254 A46	2x54 (G5)	1280x170x95	2,6	116
Cyclone 135 D20	1x35 (G5)	1580x170x95	3	38
Cyclone 235 D21	2x35 (G5)	1580x170x95	3,1	75
Cyclone 149 D22	1x49 (G5)	1580x170x95	3	53
Cyclone 249 D23	2x49 (G5)	1580x170x95	3,1	104
Cyclone 180 A47	1x80 (G5)	1580x170x95	3	85
Cyclone 280 A48	2x80 (G5)	1580x170x95	3,1	170

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

IC- Stainless steel clips  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

#### CYCLONE 236 A52 HF



## Pali T8

### IP65 for aggressive environment



<b>Type:</b>	Water and dust resistant IP 65 luminaire with PMMA diffuser for use in environments containing potentially corrosive chemicals and areas where specialised cleaning agents are used.
<b>Specification:</b>	<p>Luminaires are available with injection moulded Acrylic diffuser for exposure to severe atmospheric conditions. White painted steel reflector.</p> <p>Injection molded glass fiber reinforced canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance</p> <p>Luminaire is plastic-wrapped and boxed individually.</p>
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended. Two fixing brackets for easy installation and accessories for chain and wire suspension available on request.
<b>Application:</b>	Dust and moisture proof luminaries, ideal for environments subject to high humidity and excessive dust. Suits well food processing areas, farms and other aggressive atmospheres with salts, acids and mineral oils.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Pali 118 Q66 PMMA	1x18 (G13)	669x90x95	1,9	26
Pali 218 Q67 PMMA	2x18 (G13)	669x116x99	2,4	42
Pali 136 Q68 PMMA	1x36 (G13)	1277x90x95	2,8	42
Pali 236 Q69 PMMA	2x36 (G13)	1277x116x99	3,6	84
Pali 158 Q70 PMMA	1x58 (G13)	1577x90x95	3,5	67
Pali 258 Q71 PMMA	2x58 (G13)	1577x116x99	4,6	134

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Pali 114 Q52 PMMA	1x14 (G5)	669x90x95	1	16
Pali 214 Q53 PMMA	2x14 (G5)	669x116x99	1,7	31
Pali 124 Q54 PMMA	1x24 (G5)	669x90x95	1	25
Pali 224 Q55 PMMA	2x24 (G5)	669x116x99	1,7	49
Pali 128 Q56 PMMA	1x28 (G5)	1277x90x95	1,8	30
Pali 228 Q57 PMMA	2x28 (G5)	1277x116x99	2,7	60
Pali 135 Q58 PMMA	1x54 (G5)	1577x90x95	2,3	38
Pali 235 Q59 PMMA	2x54 (G5)	1577x116x99	3,7	75
Pali 149 Q60 PMMA	1x35 (G5)	1577x90x95	1,8	53
Pali 249 Q61 PMMA	2x35 (G5)	1577x116x99	2,7	104
Pali 154 Q62 PMMA	1x49 (G5)	1277x90x95	2,3	58
Pali 254 Q63 PMMA	2x49 (G5)	1277x116x99	3,7	116
Pali 180 Q64 PMMA	1x80 (G5)	1577x90x95	2,3	85
Pali 280 Q65 PMMA	2x80 (G5)	1577x116x99	2,8	170

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

5TB- 5 way terminal block for loop feed and ease of wiring

PMMA- Diffuser made from acrylic plastic

PC- Diffuser made from polycarbonate plastic

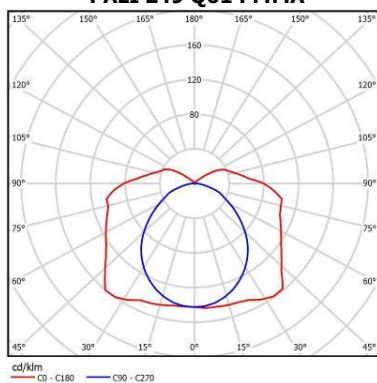
1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

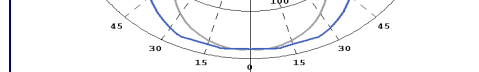
1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

#### PALI 249 Q61 PMMA







# Typhoon T8

## IP65 Surface Luminaire



<b>Type:</b>	General purpose water and dust resistant IP 65 luminaire for use in adverse conditions.
<b>Specification:</b>	Luminaries are available with injection moulded UV stabilized polystyrene transparent diffuser. Steel white painted reflector. Injection molded acrylonitrile butadiene styrene canopy, grey finished. Diffuser retaining clips, diffuser hinges from the end of the body for easy maintenance. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended.
<b>Application:</b>	Dust and moisture proof luminaries, ideal for environments subject to high humidity and excessive dust.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Typhoon 236 N99 ABS/PS	2x36 (G13)	1270x130x93	3,4	84
Typhoon 236 N99 ABS/PS HF	2x36 (G13)	1270x130x93	2,5	71

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballasts

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring

5TB- 5 way terminal block for loop feed and ease of wiring

ABS/PS- Body made from acrylonitrile butadiene styrene and diffuser from polystyrene plastic

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

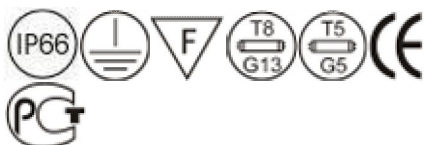
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

## BARAT T8/T5

**IP66 for  
humid&dusty rooms**



**Barat 136 I16 PC/PMMA IC**

<b>Type:</b>	Dust and moisture proof IP66 fixture for humid&dusty rooms.
<b>Specification:</b>	Luminaires are available with injection molded UV stabilized PMMA diffuser. White powder coated gear tray. Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for use in factories, warehouses, garages, halls and many others commercial applications.



Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.



Through wired version for 1 or 3 phase connection available on request. See Option list (**1LIN, 3LIN, 1LIN2,5 or 3LIN2,5**).

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 118 I14 PC/PMMA	1x18 (G13)	662x96x111	1,5	26
Barat 218 I15 PC/PMMA	2x18 (G13)	662x146x111	2,2	42
Barat 136 I16 PC/PMMA	1x36 (G13)	1272x96x111	2,4	42
Barat 236 I17 PC/PMMA	2x36 (G13)	1272x146x111	3,7	84
Barat 158 I18 PC/PMMA	1x58 (G13)	1572x96x111	3,1	67
Barat 258 I19 PC/PMMA	2x58 (G13)	1572x146x111	4,9	134

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 114 I97 PC/PMMA	1x14 (G5)	662x96x111	1	16
Barat 214 I98 PC/PMMA	2x14 (G5)	662x146x111	1,7	31
Barat 124 I99 PC/PMMA	1x24 (G5)	662x96x111	1	25
Barat 224 F01 PC/PMMA	2x24 (G5)	662x146x111	1,7	49
Barat 128 I66 PC/PMMA	1x28 (G5)	1272x96x111	1,8	30
Barat 228 I67 PC/PMMA	2x28 (G5)	1272x146x111	2,7	60
Barat 135 I68 PC/PMMA	1x54 (G5)	1572x96x111	2,3	38
Barat 235 I69 PC/PMMA	2x54 (G5)	1572x146x111	3,7	75
Barat 149 I70 PC/PMMA	1x35 (G5)	1572x96x111	1,8	53
Barat 249 I71 PC/PMMA	2x35 (G5)	1572x146x111	2,7	104
Barat 154 I73 PC/PMMA	1x49 (G5)	1272x96x111	2,3	58
Barat 254 I74 PC/PMMA	2x49 (G5)	1272x146x111	3,7	116
Barat 180 I75 PC/PMMA	1x80 (G5)	1572x96x111	2,3	85
Barat 280 I76 PC/PMMA	2x80 (G5)	1572x146x111	2,8	170

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

IC- Stainless steel clips

5TB- 5 way terminal block for easy wiring

II- Electric shock protection class II

ABS/PMMA- Body made of acrylonitrile butadiene styrene and diffuser from acrylic

ABS/PC- Body made of acrylonitrile butadiene styrene and diffuser from polycarbonate plastic

PC/PMMA- Body made of polycarbonate plastic and diffuser from acrylic

PC/PC- Body and diffuser made of polycarbonate plastic

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

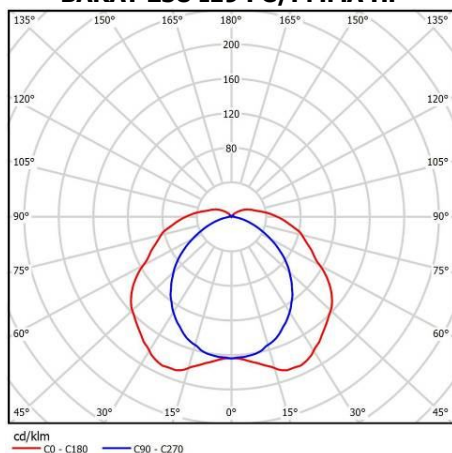
1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

AS- Asymmetric aluminium

PIR- PIR sensor

#### BARAT 258 I19 PC/PMMA HF



## Barat T8/T5

### IP66 for High impact resistance



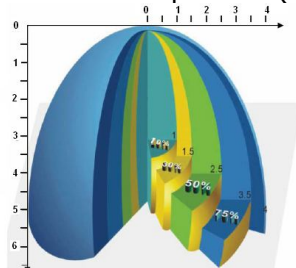
<b>Type:</b>	Dust and moisture proof IP66 fixture for high impact resistance.
<b>Specification:</b>	Luminaires are available with injection molded UV stabilized polycarbonate diffuser. White powder coated gear tray. This version is in compliance with Glow wire 850°C requirements. Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for use in factories, warehouses, garages, halls and many others commercial applications.



Protection grid white powder coated available on request. See option list (**SPORT**).



T5 BARAT series can be equipped with PIR sensor for energy saving solutions. See option list (**PIR**).





Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 118 I14 PC/PC	1x18 (G13)	662x96x111	1,5	26
Barat 218 I15 PC/PC	2x18 (G13)	662x146x111	2,2	42
Barat 136 I16 PC/PC	1x36 (G13)	1272x96x111	2,4	42
Barat 236 I17 PC/PC	2x36 (G13)	1272x146x111	3,7	84
Barat 158 I18 PC/PC	1x58 (G13)	1572x96x111	3,1	67
Barat 258 I19 PC/PC	2x58 (G13)	1572x146x111	4,9	134



Asymmetric reflector made from specular aluminum, can be installed in both single and double tube versions. See option list (**AS**).



Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 114 I97 PC/PC	1x14 (G5)	662x96x111	1	16
Barat 214 I98 PC/PC	2x14 (G5)	662x146x111	1,7	31
Barat 124 I99 PC/PC	1x24 (G5)	662x96x111	1	25
Barat 224 F01 PC/PC	2x24 (G5)	662x146x111	1,7	49
Barat 128 I66 PC/PC	1x28 (G5)	1272x96x111	1,8	30
Barat 228 I67 PC/PC	2x28 (G5)	1272x146x111	2,7	60
Barat 135 I68 PC/PC	1x35 (G5)	1572x96x111	2,3	38
Barat 235 I69 PC/PC	2x35 (G5)	1572x146x111	3,7	75
Barat 149 I70 PC/PC	1x49 (G5)	1272x96x111	1,8	53
Barat 249 I71 PC/PC	2x49 (G5)	1272x146x111	2,7	104
Barat 154 I73 PC/PC	1x54 (G5)	1572x96x111	2,3	58
Barat 254 I74 PC/PC	2x54 (G5)	1572x146x111	3,7	116
Barat 180 I75 PC/PC	1x80 (G5)	1572x96x111	2,3	85
Barat 280 I76 PC/PC	2x80 (G5)	1572x146x111	2,8	170

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

IC- Stainless steel clips

STB- 5 way terminal block for easy wiring

II-

PC/PC-

1LIN-

3LIN-

1LIN2,5-

3LIN2,5-

AS-

PIR-

SPORT-

Electric shock protection class II

Body and diffuser made of polycarbonate plastic

Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

Asymmetric aluminium

PIR sensor

Protection grid white painted

## Barat LED

### IP66 for High impact resistance with opalized diffuser



<b>Type:</b>	Dust and moisture proof IP66 LED fixture for high impact resistance.
<b>Specification:</b>	Opal UV stabilized polycarbonate diffuser. White powder coated gear tray. Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for use in factories, warehouses, garages, halls and many other commercial applications.



Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Barat LED B101 1x950lm T840 OP	662x96x111	950	4000	>80	11	1,5
Barat LED B101 1x1000lm T857 OP	662x96x111	1000	5700	>80	11	1,5
Barat LED B102 2x950lm T840 OP	662x146x111	1900	4000	>80	21	2,2
Barat LED B102 2x1000lm T857 OP	662x146x111	2000	5700	>80	21	2,2
Barat LED B103 1x2140lm T840 OP	1272x96x111	2140	4000	>80	24	2,4
Barat LED B103 1x2250lm T857 OP	1272x96x111	2250	5700	>80	24	2,4
Barat LED B104 2x2140lm T840 OP	1272x146x111	4280	4000	>80	46	3,7
Barat LED B104 2x2250lm T857 OP	1272x146x111	4500	5700	>80	46	3,7
Barat LED B204 2x2375lm T840 OP	1272x146x111	4750	4000	>80	51	3,7
Barat LED B204 2x2500lm T857 OP	1272x146x111	5000	5700	>80	51	3,7
Barat LED B105 1x2850lm T840 OP	1572x96x111	2850	4000	>80	31	3,1
Barat LED B105 1x3000lm T857 OP	1572x96x111	3000	5700	>80	31	3,1
Barat LED B106 2x2850lm T840 OP	1572x146x111	5700	4000	>80	61	4,9
Barat LED B106 2x3000lm T857 OP	1572x146x111	6000	5700	>80	61	4,9
Barat LED B205 2x3320lm T840 OP	1572x146x111	6650	4000	>80	71	5
Barat LED B205 2x3500lm T857 OP	1572x146x111	7000	5700	>80	71	5

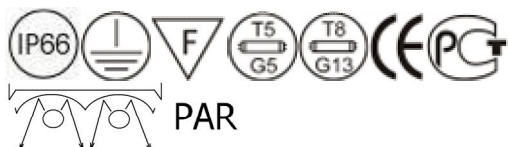
Options available on request:

IC- Stainless steel clips  
OP- Opal UV stabilized polycarbonate diffuser  
STB- 5 way terminal block for easy wiring  
PIR- PIR sensor

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

## Barat T8

### IP66 for high mounting applications



Barat 249 I71 PC/PC PAR



Barat 236 I17 PC/PMMA PAR IC



Barat 236 I17 PC/PMMA PAR IC

<b>Type:</b>	Dust and moisture proof IP66 fixture for high mounting applications. High performance.
<b>Specification:</b>	<p>Luminaires are available with injection molded UV stabilized polycarbonate (or PMMA) diffuser for high impact resistance. Specular aluminum parabolic reflector.</p> <p>Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance.</p> <p>Luminaire is plastic-wrapped and boxed individually.</p>
<b>Installation:</b>	Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for installations higher than 5 meters. For use in factories, warehouses, garages, halls and many others commercial applications.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 136 I16 PC/PMMA PAR	1x36 (G13)	1272x96x111	2,6	42
Barat 236 I17 PC/PMMA PAR	2x36 (G13)	1272x146x111	3,9	84
Barat 158 I18 PC/PMMA PAR	1x58 (G13)	1572x96x111	3,3	67
Barat 258 I19 PC/PMMA PAR	2x58 (G13)	1572x146x111	5,1	134
Barat 136 I16 PC/PC PAR	1x36 (G13)	1272x96x111	2,6	42
Barat 236 I17 PC/PC PAR	2x36 (G13)	1272x146x111	3,9	84
Barat 158 I18 PC/PC PAR	1x58 (G13)	1572x96x111	3,3	67
Barat 258 I19 PC/PC PAR	2x58 (G13)	1572x146x111	5,1	134

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 128 I66 PC/PC PAR	1x28 (G5)	1272x96x111	2	30
Barat 228 I67 PC/PC PAR	2x28 (G5)	1272x146x111	2,9	60
Barat 135 I68 PC/PC PAR	1x35 (G5)	1572x96x111	2,5	38
Barat 235 I69 PC/PC PAR	2x35 (G5)	1572x146x111	3,9	75
Barat 149 I70 PC/PC PAR	1x49 (G5)	1572x96x111	2,5	53
Barat 249 I71 PC/PC PAR	2x49 (G5)	1572x146x111	3,9	104
Barat 154 I73 PC/PC PAR	1x54 (G5)	1272x96x111	2	58
Barat 254 I74 PC/PC PAR	2x54 (G5)	1272x146x111	2,9	116
Barat 180 I75 PC/PC PAR	1x80 (G5)	1572x96x111	2,6	85
Barat 280 I76 PC/PC PAR	2x80 (G5)	1572x146x111	4	170



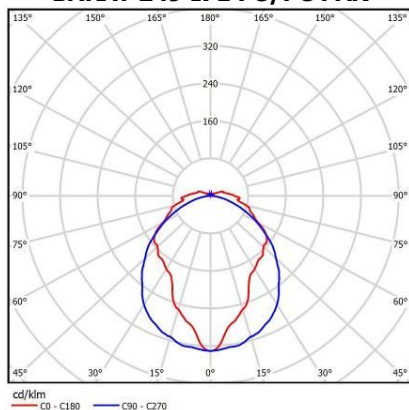
Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 IC- Stainless steel clips  
 5TB- 5 way terminal block for easy wiring  
 II- Electric shock protection class II

PIR- PIR sensor  
 PC/PMMA- Body made of polycarbonate plastic and diffuser from acrylic  
 PC/PC- Body and diffuser made of polycarbonate plastic  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals  
 AS- Asymmetric aluminium  
 PAR- Specular aluminum parabolic reflector

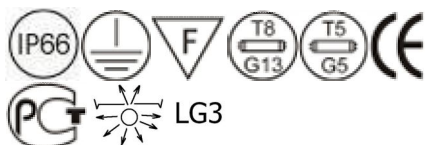
#### BARAT 249 I71 PC/PC PAR





## Barat T8/T5

**IP66 for  
direct/indirect light  
distribution**



<b>Type:</b>	Dust and moisture proof IP66 fixture for direct/indirect illumination.
<b>Specification:</b>	<p>Luminaires are available with injection molded UV stabilized polycarbonate (or PMMA) diffuser for high impact resistance. White perforated (or slim) gear tray.</p> <p>Injection molded polycarbonate canopy, transparent. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance.</p> <p>Luminaire is plastic-wrapped and boxed individually.</p>
<b>Installation:</b>	Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for installations where ceiling should be illuminated.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 136 I16 PC/PMMA LG3	1x36 (G13)	1272x96x111	2,4	42
Barat 236 I17 PC/PMMA LG3	2x36 (G13)	1272x146x111	3,7	84
Barat 158 I18 PC/PMMA LG3	1x58 (G13)	1572x96x111	3,1	67
Barat 258 I19 PC/PMMA LG3	2x58 (G13)	1572x146x111	4,9	134
Barat 136 I16 PC/PC LG3	1x36 (G13)	1272x96x111	2,4	42
Barat 236 I17 PC/PC LG3	2x36 (G13)	1272x146x111	3,7	84
Barat 158 I18 PC/PC LG3	1x58 (G13)	1572x96x111	3,1	67
Barat 258 I19 PC/PC LG3	2x58 (G13)	1572x146x111	4,9	134

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 128 I66 PC/PMMA LG3	1x28 (G5)	1272x96x111	1,8	30
Barat 228 I67 PC/PMMA LG3	2x28 (G5)	1272x146x111	2,7	60
Barat 135 I68 PC/PMMA LG3	1x35 (G5)	1572x96x111	2,3	38
Barat 235 I69 PC/PMMA LG3	2x35 (G5)	1572x146x111	3,7	75
Barat 149 I70 PC/PMMA LG3	1x49 (G5)	1572x96x111	2,3	53
Barat 249 I71 PC/PMMA LG3	2x49 (G5)	1572x146x111	3,7	104
Barat 154 I73 PC/PMMA LG3	1x54 (G5)	1272x96x111	1,8	58
Barat 254 I74 PC/PMMA LG3	2x54 (G5)	1272x146x111	2,7	116
Barat 180 I75 PC/PMMA LG3	1x80 (G5)	1572x96x111	2,4	85
Barat 280 I76 PC/PMMA LG3	2x80 (G5)	1572x146x111	3,8	170
Barat 128 I66 PC/PC LG3	1x28 (G5)	1272x96x111	1,8	30
Barat 228 I67 PC/PC LG3	2x28 (G5)	1272x146x111	2,7	60
Barat 135 I68 PC/PC LG3	1x35 (G5)	1572x96x111	2,3	38
Barat 235 I69 PC/PC LG3	2x35 (G5)	1572x146x111	3,7	75
Barat 149 I70 PC/PC LG3	1x49 (G5)	1572x96x111	2,3	53
Barat 249 I71 PC/PC LG3	2x49 (G5)	1572x146x111	3,7	104
Barat 154 I73 PC/PC LG3	1x54 (G5)	1272x96x111	1,8	58
Barat 254 I74 PC/PC LG3	2x54 (G5)	1272x146x111	2,7	116
Barat 180 I75 PC/PC LG3	1x80 (G5)	1572x96x111	2,4	85
Barat 280 I76 PC/PC LG3	2x80 (G5)	1572x146x111	3,8	170

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3- Emergency version 3 hours

IC- Stainless steel clips

STB- 5 way terminal block for easy wiring

II- Electric shock protection class II

PIR- PIR sensor

PC/PMMA- Body made of polycarbonate plastic and diffuser from acrylic

PC/PC- Body and diffuser made of polycarbonate plastic

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

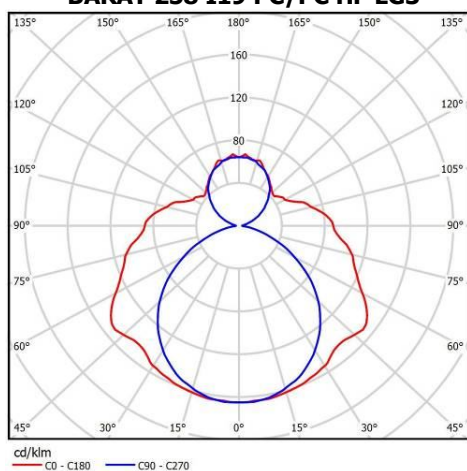
3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

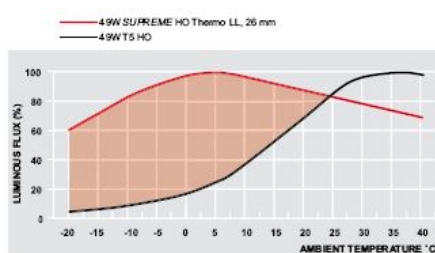
LG3- 30% light up & 70% light down

#### BARAT 258 I19 PC/PC HF LG3



## NORD T8/T5

### IP66 for low temperature applications



The special thermally insulated lamps should be used to obtain reliable operation in ambient temperatures  $-30^{\circ}\text{C}$  to  $+25^{\circ}\text{C}$  and reach up to five times more light than standard lamps under the same ambient temperature conditions. The unique construction with the outer glass tube provides a thermal insulation which results in excellent light output at low temperature.

**Type:** Water and dust resistant IP 66 luminaire with PC diffuser for use in cold stores and other low temperature environments.

**Specification:** Luminaires are available with injection molded UV stabilized polycarbonate diffuser for high impact resistance. White painted steel reflector. Stainless steel clips.  
Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

**Application:** Dust and moisture proof luminaires, ideal for low ambient temperatures down to  $-30^{\circ}\text{C}$ .

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Nord 118 J43 IC tmin-40	1x18 (G13)	662x96x111	1,5	26
Nord 218 J44 IC tmin-40	2x18 (G13)	662x146x111	2,2	42
Nord 136 I82 IC tmin-40	1x36 (G13)	1277x90x95	2,8	42
Nord 236 I83 IC tmin-40	2x36 (G13)	1277x116x99	3,6	84
Nord 158 I84 IC tmin-40	1x58 (G13)	1577x90x95	3,5	67
Nord 258 I85 IC tmin-40	2x58 (G13)	1577x116x99	4,6	134
Nord 118 J43 HF IC tmin-25	1x18 (G13)	662x96x111	1	19
Nord 218 J44 HF IC tmin-25	2x18 (G13)	662x146x111	1,7	36
Nord 136 I82 HF IC tmin-25	1x36 (G13)	1277x90x95	1,8	36
Nord 236 I83 HF IC tmin-25	2x36 (G13)	1277x116x99	2,7	70
Nord 158 I84 HF IC tmin-25	1x58 (G13)	1577x90x95	2,3	56
Nord 258 I85 HF IC tmin-25	2x58 (G13)	1577x116x99	3,7	108

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Nord 136 I82 HF IC tmin-30	1x36 (G13)	1277x90x95	1,9	36
Nord 236 I83 HF IC tmin-30	2x36 (G13)	1277x116x99	2,8	70
Nord 158 I84 HF IC tmin-30	1x58 (G13)	1577x90x95	2,4	56
Nord 258 I85 HF IC tmin-30	2x58 (G13)	1577x116x99	3,8	108

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Nord 149 I86 IC tmin-30	1x49 (G5)	1577x90x95	3,1	53
Nord 249 I87 IC tmin-30	2x49 (G5)	1577x116x99	3,5	104
Nord 154 I88 IC tmin-30	1x54 (G5)	1277x90x95	2,2	58
Nord 254 I89 IC tmin-30	2x54 (G5)	1277x116x99	2,8	116
Nord 180 I90 IC tmin-30	1x80 (G5)	1577x90x95	3,1	85
Nord 280 I91 IC tmin-30	2x80 (G5)	1577x116x99	3,5	170

Options available on request:

HF- High Frequency control gear

IC- Stainless steel clips

tmin-25- For use in temperatures down to -25°C

tmin-30- For use in temperatures down to -30°C

tmin-40- For use in temperatures down to -40°C

EMG tmin-25- Emergency version 1 hour for use down to -25°C

EM2 tmin-25- Emergency version 2 hours for use down to -25°C

5TB- 5 way terminal block for loop feed and ease of wiring

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

Emergency versions for use in cold stores and other low temperature environments.

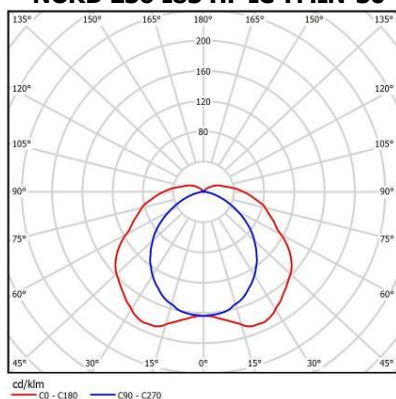
One-hour or two-hour standby operation with a recharge time of 24 hours.

Ambient temperature: -25°C to +40°C.

More information in page 161.



#### NORD 236 I83 HF IC TMIN-30





## NORD T8

### IP66 for high temperature applications



<b>Type:</b>	Water and dust resistant IP 66 luminaire for use in higher temperature environments.
<b>Specification:</b>	<p>Luminaires are available with injection molded UV stabilized polycarbonate diffuser for high impact resistance. White painted steel reflector. Stainless steel clips.</p> <p>Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance.</p> <p>Luminaire is plastic-wrapped and boxed individually.</p>
<b>Installation:</b>	Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.
<b>Application:</b>	Dust and moisture proof luminaires, ideal for higher ambient temperatures upto + 60°C.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Nord 118 J43 IC tmax60	1x18 (G13)	662x96x111	1,5	26
Nord 218 J44 IC tmax60	2x18 (G13)	662x146x111	2,2	42
Nord 136 I82 IC tmax60	1x36 (G13)	1277x90x95	2,8	42
Nord 236 I83 IC tmax60	2x36 (G13)	1277x116x99	3,6	84
Nord 158 I84 IC tmax60	1x58 (G13)	1577x90x95	3,5	67
Nord 258 I85 IC tmax60	2x58 (G13)	1577x116x99	4,6	134

Options available on request:

HF- High Frequency control gear

IC- Stainless steel clips

tmax60- For use in temperatures upto +60°C

5TB- 5 way terminal block for loop feed and ease of wiring

1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals

3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals

1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals

3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals

## Barat EX

**IP66 for areas  
with a danger of  
flammable dust or  
gas explosion**



<b>Type:</b>	Dust and moisture proof IP66 fixture for illumination of areas with a danger of flammable dust or gas explosion.
<b>Specification:</b>	Luminaires are available with injection molded UV stabilized polycarbonate. White steel sheet reflector. Injection molded polycarbonate canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire is designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension. Installed luminaires has to be protected from mechanical damage.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for areas with a danger of flammable gas, dust and vapour explosion. The above mentioned ambient correspond to the EU directive No.: 94/9/EC: Ex II 3GD Ex nA II T4-T5, Tmax.

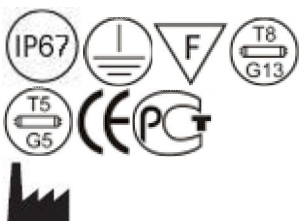
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Barat 136 I16 PC/PC HF IC Ex	1x36 (G13)	1272x96x111	2,4	42
Barat 236 I17 PC/PC HF IC Ex	2x36 (G13)	1272x146x111	3,7	84
Barat 158 I18 PC/PC HF IC Ex	1x58 (G13)	1572x96x111	3,1	67
Barat 258 I19 PC/PC HF IC Ex	2x58 (G13)	1572x146x111	4,9	134

Options available on request:

HF-	High Frequency control gear	1LIN-	Through wiring 3x1.5 mm <sup>2</sup> with two push-in terminals
IC-	Stainless steel clips	3LIN-	Through wiring 5x1.5 mm <sup>2</sup> with two push-in terminals
4TB-	4 way terminal block for ease wiring	1LIN2,5-	Through wiring 3x2.5 mm <sup>2</sup> with two push-in terminals
5TB-	5 way terminal block for ease wiring	3LIN2,5-	Through wiring 5x2.5 mm <sup>2</sup> with two push-in terminals
PC/PC-	Body and diffuser made of polycarbonate plastic		

# Proof T8/T5

## IP67 for aggressive environment



<b>Type:</b>	Water and dust resistant IP 67 luminaire with PMMA diffuser for use in environments containing potentially corrosive chemicals and areas where specialized cleaning agents are used.
<b>Specification:</b>	Luminaires are available with injection molded acrylic diffuser for exposure to severe atmospheric conditions. White painted steel reflector. Injection molded thermoplastic canopy, grey finished. Diffuser retaining clips and sealing washers from the end of the body for easy maintenance Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended. Two fixing brackets for easy installation and accessories for chain and wire suspension available on request.
<b>Application:</b>	Dust and moisture proof luminaires, ideal for environments subject to high humidity and excessive dust. Suits well in food production areas, farms and other aggressive atmospheres with salts, acids and mineral oils.



Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Proof 136 G61 AC IC	1x36 (G13)	1272x96x111	2,4	42
Proof 236 G62 AC IC	2x36 (G13)	1272x146x111	3,7	84
Proof 158 G63 AC IC	1x58 (G13)	1572x96x111	3,1	67
Proof 258 G64 AC IC	2x58 (G13)	1572x146x111	4,9	134

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Proof 128 I56 AC IC	1x28 (G5)	1272x96x111	1,8	30
Proof 228 I57 AC IC	2x28 (G5)	1272x146x111	2,7	60
Proof 135 I58 AC IC	1x35 (G5)	1572x96x111	2,3	38
Proof 235 I59 AC IC	2x35 (G5)	1572x146x111	3,7	75
Proof 149 I60 AC IC	1x49 (G5)	1572x96x111	2,3	53
Proof 249 I61 AC IC	2x49 (G5)	1572x146x111	3,7	104
Proof 154 I62 AC IC	1x54 (G5)	1272x96x111	1,8	58
Proof 254 I63 AC IC	2x54 (G5)	1272x146x111	2,7	116
Proof 180 I64 AC IC	1x80 (G5)	1572x96x111	2,4	85
Proof 280 I65 AC IC	2x80 (G5)	1572x146x111	3,8	170

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 IC- Stainless steel clips  
 5TB- 5 way terminal block for easy wiring

II- Electric shock protection class II  
 PIR- PIR sensor  
 1LIN- Through wiring 3x1.5 mm<sup>2</sup> with two push-in terminals  
 3LIN- Through wiring 5x1.5 mm<sup>2</sup> with two push-in terminals  
 1LIN2,5- Through wiring 3x2.5 mm<sup>2</sup> with two push-in terminals  
 3LIN2,5- Through wiring 5x2.5 mm<sup>2</sup> with two push-in terminals  
 AS- Asymmetric aluminium  
 PAR- Specular aluminum parabolic reflector

Chemical resistances of Proof series to chemicals see in page 260.

Chemical resistance of PROOF series parts made of thermoplasts						
Environment	Max. depth (mm)	PROOF diffuser resistant		PROOF body resistant		
		ISO	ISO 11731	ISO	ISO 11731	
Acid (HCl/H <sub>2</sub> SO <sub>4</sub> )						
Alcohol						
Ammonia	25%	+	+	+	+	
Acetone and Benzene						
Acetic acid	25%	+	+	+	+	
Aliphatic hydrocarbons	25%	+	+	+	+	
Aliphatic aromatic hydrocarbons	25%	+	+	+	+	
Aliphatic ketones	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic esters	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	
Aliphatic aldehydes	25%	+	+	+	+	
Aliphatic carboxylic acids	25%	+	+	+	+	
Aliphatic amines	25%	+	+	+	+	
Aliphatic alcohols	25%	+	+	+	+	
Aliphatic ethers	25%	+	+	+	+	
Aliphatic halogenated hydrocarbons	25%	+	+	+	+	
Aliphatic nitriles	25%	+	+	+	+	
Aliphatic amides	25%	+	+	+	+	



## HERCULES T8

### Aluminium IP65 luminaire for humid&dusty rooms



<b>Type:</b>	Dust and moisture proof IP65 fixture made from aluminium profile.
<b>Specification:</b>	Hardened safety glass is fixed to the body with stainless steel clips. Glossy aluminium reflector. The body made from extruded aluminium profile, light grey finished. Brass cable gland and silicone rubber sealing provide reliable IP protection. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface luminaire designed to be fixed to ceilings of any type or suspended. Supplied with two fixing brackets for easy installation and sealing washer.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for use in agricultural buildings, factories, warehouses, garages and also in corrosive environment.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hercules 118 Q21	1x18 (G13)	670x140x90	3,1	26
Hercules 218 Q22	2x18 (G13)	670x140x90	3,4	42
Hercules 136 Q23	1x36 (G13)	1280x140x90	4,5	42
Hercules 236 Q24	2x36 (G13)	1280x140x90	4,9	84
Hercules 158 Q25	1x58 (G13)	1580x140x90	6,7	67
Hercules 258 Q26	2x58 (G13)	1580x140x90	7,3	134

Options available on request:

HF-	High Frequency control gear	EM3-	Emergency version 3 hours
DIM-	Dimmable ballast	5TB-	5 way terminal block for easy wiring
SWITCHDIM-	Switch DIM ballast	1LIN-	Through wiring 3x1.5 mm <sup>2</sup> with two push-in terminals
DALI-	DALI ballast	3LIN-	Through wiring 5x1.5 mm <sup>2</sup> with two push-in terminals
EMG-	Emergency version 1 hour	1LIN2,5-	Through wiring 3x2.5 mm <sup>2</sup> with two push-in terminals
EM2-	Emergency version 2 hours	3LIN2,5-	Through wiring 5x2.5 mm <sup>2</sup> with two push-in terminals

# HERMETIC

## T5 Recessed & Surface Luminaire for use in sterile areas



**Hermetic 418 K58 OP HF**



**Hermetic 418 K58 PAR HF**

<b>Type:</b>	A range of IP54 rated recessed and surface luminaires provides an ideal solution for food processing, pharmaceutical or medical applications. Outstanding design and look.
<b>Specification:</b>	Luminaires are available with opal, prismatic diffuser fastened in a steel frame for exposure to severe atmospheric conditions. Double parabolic louvre version with transparent diffuser can be ordered on request. The frame is fitted into the body with a four spring locks for maximum stability. Steel luminaire housing, white powder painted. Luminaire is plastic-wrapped and packaged in twin boxes.
<b>Installation:</b>	Luminaire is designed to be fixed to ceilings of any type or recessed version for T-Bar ceilings
<b>Application:</b>	For use in pharmaceutical, medical or other sterile areas.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hermetic R 318 L96	recessed	3x18 (G13)	595x595x85	5,30	68
Hermetic R 418 K58	recessed	4x18 (G13)	595x595x85	5,40	84
Hermetic R 236 Q30	recessed	2x36 (G13)	295x1195x85	5,40	84
Hermetic R 336 Q31	recessed	3x36 (G13)	595x1195x85	9,80	126
Hermetic R 436 Q31	recessed	4x36 (G13)	595x1195x85	10,40	168

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hermetic R 314 L97	recessed	3x14 (G5)	595x595x85	4,50	46
Hermetic R 324 L98	recessed	3x24 (G5)	595x595x85	4,50	73
Hermetic R 414 K04	recessed	4x14 (G5)	595x595x85	4,50	62
Hermetic R 424 K05	recessed	4x24 (G5)	595x595x85	4,50	97

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hermetic R 228 K06	recessed	2x28 (G5)	295x1195x85	4,5	60
Hermetic R 254 K07	recessed	2x54 (G5)	295x1195x85	4,5	116
Hermetic R 328 K18	recessed	3x28 (G5)	595x1195x85	8,9	90
Hermetic R 354 K19	recessed	3x54 (G5)	595x1195x85	8,9	174
Hermetic R 428 K08	recessed	4x28 (G5)	595x1195x85	9,0	120
Hermetic R 454 K09	recessed	4x54 (G5)	595x1195x85	9,0	232
Hermetic R 235 Q27	recessed	2x35 (G5)	295x1495x85	5,8	75
Hermetic R 249 Q28	recessed	2x49 (G5)	295x1495x85	5,8	104
Hermetic R 280 Q29	recessed	2x80 (G5)	295x1495x85	5,9	170



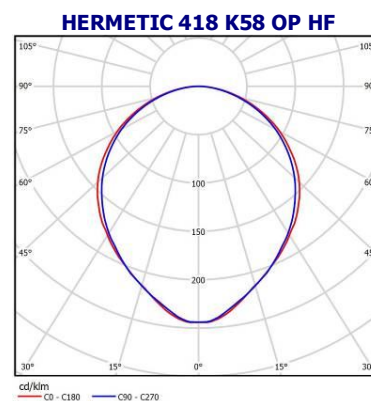
Hermetic T8/T5 surface mounted series

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hermetic S 318 L99	surface	3x18 (G13)	635x600x85	5,50	68
Hermetic S 418 K60	surface	4x18 (G13)	635x600x85	5,60	84
Hermetic S 236 Q32	surface	2x36 (G13)	1235x300x85	5,60	84
Hermetic S 336 Q33	surface	3x36 (G13)	1235x600x85	10,0	126
Hermetic S 436 Q34	surface	4x36 (G13)	1235x600x85	10,6	168

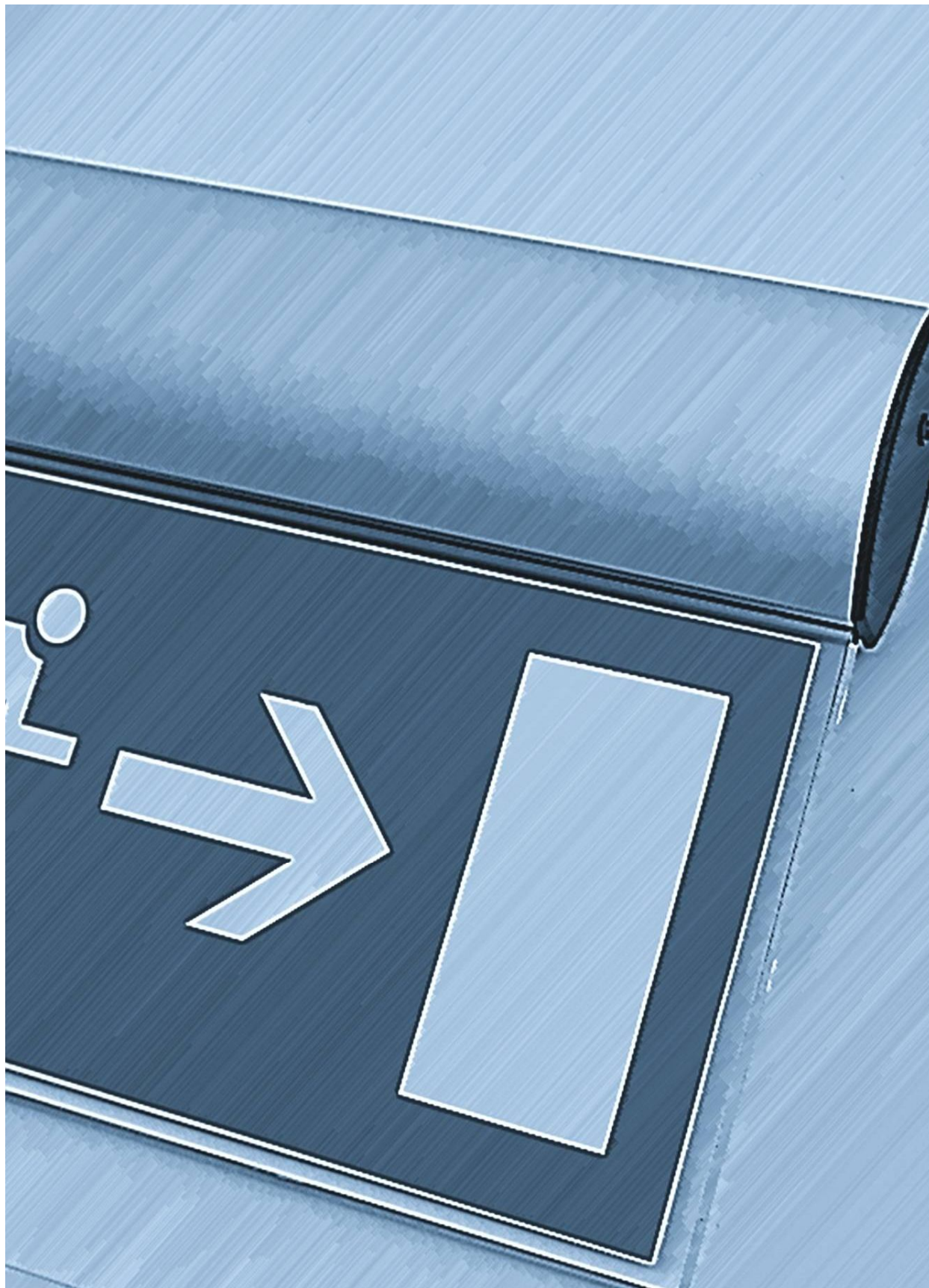
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Hermetic S 314 M01	surface	3x14 (G5)	635x600x85	4,70	46
Hermetic S 324 M02	surface	3x24 (G5)	635x600x85	4,70	73
Hermetic S 414 K12	surface	4x14 (G5)	635x600x85	4,70	62
Hermetic S 424 K13	surface	4x24 (G5)	635x600x85	4,70	97
Hermetic S 228 K14	surface	2x28 (G5)	1235x300x85	4,70	60
Hermetic S 254 K15	surface	2x54 (G5)	1235x300x85	4,70	116
Hermetic S 328 K20	surface	3x28 (G5)	1235x600x85	9,1	90
Hermetic S 354 K21	surface	3x54 (G5)	1235x600x85	9,1	174
Hermetic S 428 K16	surface	4x28 (G5)	1235x600x85	9,2	120
Hermetic S 454 K17	surface	4x54 (G5)	1235x600x85	9,2	232

Options available on request:

- HF- High Frequency control gear
- DIM- Dimmable ballast
- SWITCHDIM- Switch DIM ballast
- DALI- DALI ballast
- EMG- Emergency version 1 hour
- EM2- Emergency version 2 hours
- EM3- Emergency version 3 hours
- IP65- IP65 version with screws fixing
- OP- Opal diffuser
- PRZ- Prismatic diffuser
- PAR- Clear diffuser with PAR reflector
- STB- 5 way terminal block with two holes
- MAT- Matted reflector (subject to minimum order)
- MRO- Reflector Deluxe
- GLASSPAR- Tempered glass diffuser with PAR reflector
- GLASSOP- Frosted tempered glass diffuser







# EMERGENCY



# EMERGENCY MONITORING SYSTEM



- Description:** In buildings where there is a need for installing a large number of independent emergency lighting fittings, there is always a problem related to the process of controlling the condition of the fittings. Manual controlling of the fittings condition requires a lot of time and may sometimes disturb the regular use of the premises. Emergency monitoring system, designed to monitor the operation of emergency fittings with independent power sources, was created to solve this problem. Modern solutions of the system allow the configuration and control of the fittings condition from one place.
- 
- Specification:** Standard monitoring of 250 fittings with the possibility of extension up to 10 000 fittings. LCD monitor and 3 LED diodes signal the condition of the system.  
White polycarbonate body.
- 
- Installation:** Communication is run through a screened cable 2x0,5mm<sup>2</sup>. Distance between the control unit and the furthest fitting – 1200 m, with possibility of extending the communication cables distance by another 1200m using the signal amplifier.
- 
- Application:** For informational purposes when electricity supply fails.

## Components of the system:



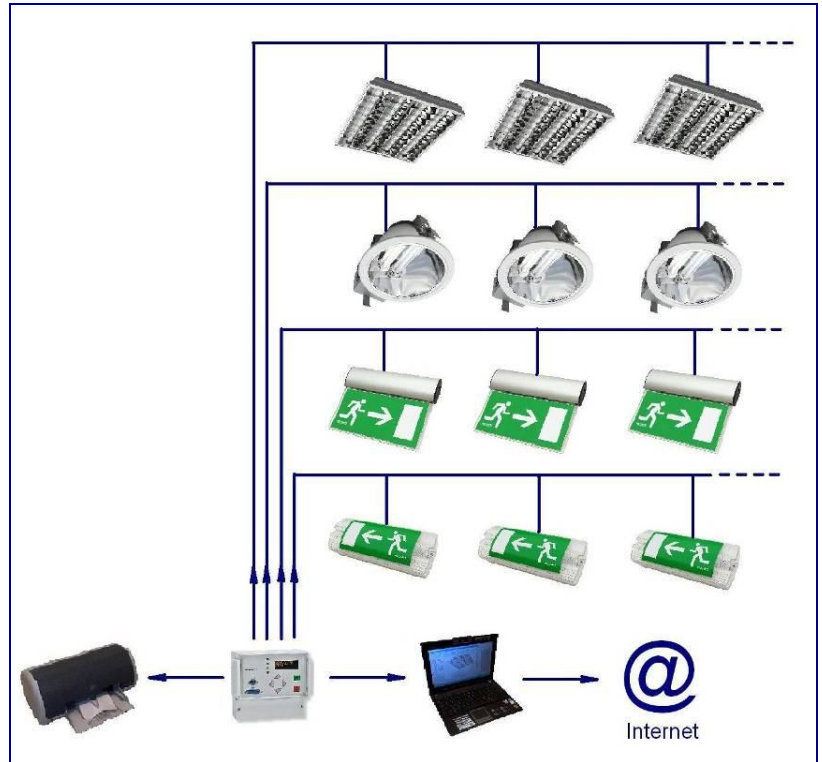
Addressing emergency modules programmer with independent power supply.



Nova EMS addressing emergency modules with unique address for magnetic and electronic ballasts. One-hour or three-hour standby operation with a recharge time of 24 hours.  
Green diode signals correct battery charge  
Red diode signals abnormal functioning of the fitting  
Ambient temperature: 0°C to +40°C  
Nova ES addressing emergency modules can be factory pre-programmed, in this case a programmer is not needed.

### Functions of the system:

- Constant communication between the central unit and the lighting fittings
- Running auto tests
- Running manual tests
- Registering test results (memory of central unit – minimum 1 year)
- Printing test results using an external printer
- Emergency operation blockade
- Dividing the monitored fittings into groups
- Reporting any abnormalities
- Connecting with a PC computer through an interface and creating visual presentations with the help of a special software
- Control of the system from any place through internet links
- Test calendar configured to suit individual needs



Lighting fittings working under the system have unique addresses and are connected to Emergency system control unit with a communication cable. The fittings communicate with the central unit reporting any abnormalities which are signaled on the central unit display with LED diodes placed on the central unit panel. Each fitting connected to the system may have an individual description in the control unit. When abnormalities, related to the operation of a fitting, occur, information about the type of abnormality and the location of the fitting appears on the display of the control unit. The system allows manual testing of a single fitting. Central unit's software allows dividing the fittings into groups which enables one to run tests only chosen groups of fittings. Apart from manual tests, the following auto-tests are carried out:

**Test A** – a short test, recommended every 30 days (PN-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for 5 minutes
- Control of battery power discharge
- Control of minimum voltage of battery

**Test B** – a long test recommended every 360 days (PN-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for the time programmed for each fitting (1, 2, 3 h)
- Control of battery power discharge
- Control of minimum voltage of battery
- Control of the condition of battery

The frequency of running tests A and B may be programmed according to the needs of the user. There is a possibility of programming the tests with exact dates, when they should be carried out. Long tests B should be run when the premises are not ~~to be~~ used within 24 hours after finishing the test. This time is needed for the recharging of the batteries discharged during the long test.

Test results are stored in the memory of the central unit and may be viewed on the central unit's display. Test reports may be printed with any printer.

# NOVA

## Emergency Conversion Kit



<b>Type:</b>	A range of Conversion kits for magnetic and electronic ballasts. One-hour or three-hour standby operation with a recharge time of 24 hours. Ambient temperature: 0°C to +40°C.
<b>Specification:</b>	White polycarbonate body with LED status sensor. High- temperature nickel-cadmium batteries. Luminaire is boxed individually.
<b>Installation:</b>	Designed to be fixed into fluorescent lighting fixtures.
<b>Application:</b>	For informational purposes when electricity supply fails.

Type	Description	Battery type	Overall dimensions, mm	Weight, kg
NOVA L36/1	for magnetic ballasts 8-36 W 1h	3,6V 1,5Ah	42x36x157	0,35
NOVA L36/2	for magnetic ballasts 8-36 W 2h	3,6V 2,5Ah	42x36x157	0,5
NOVA L36/3	for magnetic ballasts 8-36 W 3h	3,6V 4Ah	42x36x157	0,75
NOVA L58/1	for magnetic ballasts 36-58 W 1h	4,8V 1,5Ah	42x36x157	0,45
NOVA L58/2	for magnetic ballasts 36-58 W 2h	4,8V 2,5Ah	42x36x157	0,6
NOVA L58/3	for magnetic ballasts 36-58 W 3h	4,8V 4Ah	42x36x157	0,85
NOVA L80/1	for magnetic ballasts 58-80 W 1h	6,0V 1,5Ah	42x36x157	0,5
NOVA L80/2	for magnetic ballasts 58-80 W 2h	6,0V 2,5Ah	42x36x157	0,65
NOVA L80/3	for magnetic ballasts 58-80 W 3h	6,0V 4Ah	42x36x157	0,95
NOVA LE36/1	for electronic ballasts 8-36 W 1h	3,6V 1,5Ah	42x36x157	0,35
NOVA LE36/2	for electronic ballasts 8-36 W 2h	3,6V 2,5Ah	42x36x157	0,5
NOVA LE36/3	for electronic ballasts 8-36 W 3h	3,6V 4Ah	42x36x157	0,75
NOVA LE58/1	for electronic ballasts 36-58 W 1h	4,8V 1,5Ah	42x36x157	0,45
NOVA LE58/2	for electronic ballasts 36-58 W 2h	4,8V 2,5Ah	42x36x157	0,6
NOVA LE58/3	for electronic ballasts 36-58 W 3h	4,8V 4Ah	42x36x157	0,85
NOVA LE80/1	for electronic ballasts 58-80 W 1h	6,0V 1,5Ah	42x36x157	0,5
NOVA LE80/2	for electronic ballasts 58-80 W 2h	6,0V 2,5Ah	42x36x157	0,65
NOVA LE80/3	for electronic ballasts 58-80 W 3h	6,0V 4Ah	42x36x157	0,95

Options available on request:

- AUT- The fitting is equipped with an autonomous testing system
- EMS- The emergency monitoring system

# NOVA tmin-25

## Emergency Conversion Kit for low temperature applications



- Type:**

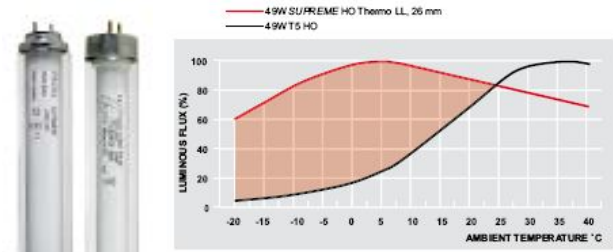
A range of Conversion kits for use in cold stores and other low temperature environments. One-hour or two-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: -25°C to +55°C.
- Specification:**

White polycarbonate body with LED status sensor. High- temperature nickel-cadmium batteries.  
Conversion kit is boxed individually.
- Installation:**

Designed to be mounted inside fluorescent lighting fixtures.
- Application:**

For informational purposes when electricity supply fails. Ideal for low ambient temperatures down to -25°C.

Type	Description	Battery type	Overall dimensions, mm	Weight, kg
Nova L36/1 tmin-25	for magnetic ballasts 8-36 W 1h	4V 2,5 Ah	42x36x157	0,35
Nova L36/2 tmin-25	for magnetic ballasts 8-36 W 2h	4V 5,0 Ah	42x36x157	0,5
Nova L58/1 tmin-25	for magnetic ballasts 36-58 W 1h	6V 2,5 Ah	42x36x157	0,45
Nova L58/2 tmin-25	for magnetic ballasts 36-58 W 2h	6V 5,0 Ah	42x36x157	0,6
Nova LE36/1 tmin-25	for electronic ballasts 8-36 W 1h	4V 2,5 Ah	42x36x157	0,35
Nova LE36/2 tmin-25	for electronic ballasts 8-36 W 2h	4V 5,0 Ah	42x36x157	0,5
Nova LE58/1 tmin-25	for electronic ballasts 36-58 W 1h	6V 2,5 Ah	42x36x157	0,45
Nova LE58/2 tmin-25	for electronic ballasts 36-58 W 2h	6V 5,0 Ah	42x36x157	0,6



The special thermally insulated lamps should be used to obtain reliable operation in ambient temperatures -25°C and reach up to five times more light than standard lamps under the same ambient temperature conditions. The unique construction with the outer glass tube provides a thermal insulation which results in excellent light output at low temperature



Type	T8				T5									CFL (G24d-2, G24d-3, G24q-2, G24q-3, 2G11)			
Conversion kit/ Power	18W	36W	38W	58W	14W	24W	21W	39W	28W	54W	35W	49W	80W	13W	18W	26W	55W
NOVA L36/1	+	+												+	+	+	
NOVA L36/3	+	+												+	+	+	
NOVA L58/1	+	+	+	+										+	+	+	
NOVA L58/3	+	+	+	+										+	+	+	
NOVA L80/1	+	+	+	+										+	+	+	
NOVA L80/3	+	+	+	+										+	+	+	
NOVA LE36/1*	+	+			+	+	+							+	+	+	
NOVA LE36/3*	+	+			+	+	+							+	+	+	
NOVA LE58/1*	+	+	+	+	+	+	+	+	+		+			+	+	+	
NOVA LE58/3*	+	+	+	+	+	+	+	+	+		+			+	+	+	
NOVA LE80/1*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
NOVA LE80/3*	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

\*- should be used in electronic versions

One-hour or three-hour standby operation Emergency conversion kits can be factory fitted. See Products descriptions in Option list below.



**PASSAT**  
**T8**  
**Recessed**  
**Luminaire**  
**with**  
**Glossy V-**  
**shaped**  
**Louvre**

**Types:** Traditional recessed T8 luminaire with glossy V-shaped louvre. A classic design for general commercial lighting.

**Specifications:** A glossy V-shaped louvre with ribbed cross blades. Louvre is fitted into the body with a locking safety clip for maximum stability. Number of cross blades is optional from 5 upto 11 for better glare protection. Two types of fully enclosed white painted steel bodies to choose from: standard (Passat 418 A07 RGD) or economic (Passat 418 A06). Wiring is concealed and not visible from ground level.

**Installation:** Luminaire is plastic-wrapped and packaged in twin boxes. Fits 15-24mm exposed T-bar ceilings 600x60mm.

**Application:** Office buildings, shops and other commercial environments.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Passat 218 D75	2x18 (G13)	598x299x85	2,4	42
Passat 418 A06	4x18 (G13)	595x595x72	2,6	84
Passat 418 A07 RGD	4x18 (G13)	595x595x72	3,7	84
Passat 236 D76	2x36 (G13)	1234x299x85	3,9	84
Passat 436 D77	4x36 (G13)	1234x598x85	7,2	168

**Options available on request:**

- HF- High Frequency control gear
- DM- Dimmable ballasts
- EM1- Emergency version 1 hour
- EM2- Emergency version 2 hour
- EM3- Emergency version 3 hour
- 4TB- 4 way terminal block for loop feed and ease of wiring
- 5TB- 5 way terminal block for loop feed and ease of wiring
- MAT- Matt reflector
- 7CR- Louvre with 7 cross blades
- 9CR- Louvre with 9 cross blades
- 11CR- Louvre with 11 cross blades
- WIE- 3-pole connector (subject to minimum order)
- NCP- Low Power Factor

**Passat 418 A06**  
Factory of reflection Ceiling/Wall/Floor, %

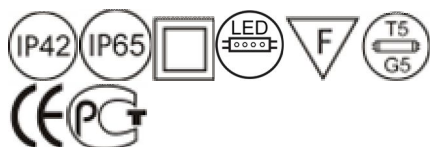
Beam index	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°
0.5	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
0.8	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152
0.95	49	58	67	76	85	94	103	112	121	130	139	148	157	166	175
1	53	63	73	83	93	103	113	123	133	143	153	163	173	183	193
1.5	61	72	83	94	105	116	127	138	149	160	171	182	193	204	215
2	68	80	92	104	116	128	140	152	164	176	188	200	212	224	236

**Passat 418 A06**  
Factory of reflection Ceiling/Wall/Floor, %

24

# APOLLO T5

## IP42/65 Emergency Luminaire



**Type:** A range of IP42/IP65 Emergency luminaires for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 25 m.

**Specification:** Durable transparent polycarbonate IP42 or IP65 diffuser.  
White polycarbonate body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
APOLLO 1H18 B85	1x8 (T5, G5)	1	IP42	Non-maintained	356x136x79	0,99
APOLLO 2H18 B86	1x8 (T5, G5)	2	IP42	Non-maintained	356x136x79	1,08
APOLLO 3H18 B87	1x8 (T5, G5)	3	IP42	Non-maintained	356x136x79	1,14
APOLLO 1P18 B88	1x8 (T5, G5)	1	IP42	Maintained	356x136x79	1,36
APOLLO 2P18 B89	1x8 (T5, G5)	2	IP42	Maintained	356x136x79	1,45
APOLLO 3P18 B90	1x8 (T5, G5)	3	IP42	Maintained	356x136x79	1,5
APOLLO 1H18 B91	1x8 (T5, G5)	1	IP65	Non-maintained	356x136x79	1
APOLLO 2H18 B92	1x8 (T5, G5)	2	IP65	Non-maintained	356x136x79	1,1
APOLLO 3H18 B93	1x8 (T5, G5)	3	IP65	Non-maintained	356x136x79	1,15
APOLLO 1P18 B94	1x8 (T5, G5)	1	IP65	Maintained	356x136x79	1,4
APOLLO 2P18 B95	1x8 (T5, G5)	2	IP65	Maintained	356x136x79	1,5
APOLLO 3P18 B96	1x8 (T5, G5)	3	IP65	Maintained	356x136x79	1,55

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
APOLLO 1H G21 OP	LED	1	IP42	Non-maintained	356x136x79	0,99
APOLLO 2H G22 OP	LED	2	IP42	Non-maintained	356x136x79	1,08
APOLLO 3H G23 OP	LED	3	IP42	Non-maintained	356x136x79	1,14
APOLLO 1P G24 OP	LED	1	IP42	Maintained	356x136x79	1,36
APOLLO 2P G25 OP	LED	2	IP42	Maintained	356x136x79	1,45
APOLLO 3P G26 OP	LED	3	IP42	Maintained	356x136x79	1,5
APOLLO 1H G27 OP	LED	1	IP65	Non-maintained	356x136x79	1
APOLLO 2H G28 OP	LED	2	IP65	Non-maintained	356x136x79	1,1
APOLLO 3H G29 OP	LED	3	IP65	Non-maintained	356x136x79	1,15
APOLLO 1P G30 OP	LED	1	IP65	Maintained	356x136x79	1,4
APOLLO 2P G31 OP	LED	2	IP65	Maintained	356x136x79	1,5
APOLLO 3P G32 OP	LED	3	IP65	Maintained	356x136x79	1,55

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

# SCORPIUS T5

## IP42/IP65 Emergency Luminaire with Opal Diffuser



<b>Type:</b>	Surface-mounted/suspended double-sided exit box for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours. Ambient temperature: 0°C to +40°C. Recognition distance 25 m.
<b>Specification:</b>	Durable polycarbonate IP42/IP65 opal diffuser. White polycarbonate body with LED status sensor. High-temperature nickel-cadmium batteries. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Designed to be fixed onto ceilings of any type, including flammable surfaces, or suspended.
<b>Application:</b>	For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
SCORPIUS 1H18 C04	1x8 (T5, G5)	1	IP42	Non-maintained	356x136x219	1,31
SCORPIUS 2H18 C05	1x8 (T5, G5)	2	IP42	Non-maintained	356x136x219	1,41
SCORPIUS 3H18 C06	1x8 (T5, G5)	3	IP42	Non-maintained	356x136x219	1,45
SCORPIUS 1P18 C07	1x8 (T5, G5)	1	IP42	Maintained	356x136x219	1,68
SCORPIUS 2P18 C08	1x8 (T5, G5)	2	IP42	Maintained	356x136x219	1,78
SCORPIUS 3P18 C09	1x8 (T5, G5)	3	IP42	Maintained	356x136x219	1,84
SCORPIUS 1H18 C10	1x8 (T5, G5)	1	IP65	Non-maintained	356x136x219	1,32
SCORPIUS 2H18 C11	1x8 (T5, G5)	2	IP65	Non-maintained	356x136x219	1,42
SCORPIUS 3H18 C12	1x8 (T5, G5)	3	IP65	Non-maintained	356x136x219	1,46
SCORPIUS 1P18 C13	1x8 (T5, G5)	1	IP65	Maintained	356x136x219	1,69
SCORPIUS 2P18 C14	1x8 (T5, G5)	2	IP65	Maintained	356x136x219	1,79
SCORPIUS 3P18 C15	1x8 (T5, G5)	3	IP65	Maintained	356x136x219	1,85



Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
SCORPIUS 1H G33 OP	LED	1	IP42	Non-maintained	356x136x219	1,31
SCORPIUS 2H G34 OP	LED	2	IP42	Non-maintained	356x136x219	1,41
SCORPIUS 3H G35 OP	LED	3	IP42	Non-maintained	356x136x219	1,45
SCORPIUS 1P G36 OP	LED	1	IP42	Maintained	356x136x219	1,68
SCORPIUS 2P G37 OP	LED	2	IP42	Maintained	356x136x219	1,78
SCORPIUS 3P G38 OP	LED	3	IP42	Maintained	356x136x219	1,84
SCORPIUS 1H G39 OP	LED	1	IP65	Non-maintained	356x136x219	1,32
SCORPIUS 2H G40 OP	LED	2	IP65	Non-maintained	356x136x219	1,42
SCORPIUS 3H G41 OP	LED	3	IP65	Non-maintained	356x136x219	1,46
SCORPIUS 1P G42 OP	LED	1	IP65	Maintained	356x136x219	1,69
SCORPIUS 2P G43 OP	LED	2	IP65	Maintained	356x136x219	1,79
SCORPIUS 3P G44 OP	LED	3	IP65	Maintained	356x136x219	1,85

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with an electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

## VEGA T5

### Slim Line IP42 Emergency Luminaire



**Type:** A range of IP42 Emergency luminaires with Class A High Frequency Control gear for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours. Ambient temperature: 0°C to +40°C. Recognition distance 20 m.

**Specification:** Durable transparent polycarbonate IP42 diffuser. White polycarbonate body with corrugated plastic parabolic reflector. LED status sensor. High-temperature nickel-cadmium batteries. Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
VEGA 1H18 B73	1x8 (T5, G5)	1	IP42	Non-maintained	350x144x50	0,72
VEGA 2H18 B74	1x8 (T5, G5)	2	IP42	Non-maintained	350x144x50	0,85
VEGA 3H18 B75	1x8 (T5, G5)	3	IP42	Non-maintained	350x144x50	0,9
VEGA 1P18 B76	1x8 (T5, G5)	1	IP42	Maintained	350x144x50	0,77
VEGA 2P18 B77	1x8 (T5, G5)	2	IP42	Maintained	350x144x50	0,9
VEGA 3P18 B78	1x8 (T5, G5)	3	IP42	Maintained	350x144x50	0,95

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with an electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

## ARIAS T5

### IP65 Emergency Luminaire



<b>Type:</b>	A range of IP42/IP65 Emergency luminaires for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours. Ambient temperature: 0°C to +40°C. Recognition distance 25 m.
<b>Specification:</b>	Durable transparent polycarbonate IP42 or IP65 diffuser. White polycarbonate body with LED status sensor. High-temperature nickel-cadmium batteries. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.
<b>Application:</b>	For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
ARIAS 1H28 G53	2x8 (T5, G5)	1	IP65	Non-maintained	400x160x100	1,21
ARIAS 2H28 G54	2x8 (T5, G5)	2	IP65	Non-maintained	400x160x100	1,3
ARIAS 3H28 G55	2x8 (T5, G5)	3	IP65	Non-maintained	400x160x100	1,47
ARIAS 1P28 G56	2x8 (T5, G5)	1	IP65	Maintained	400x160x100	1,9
ARIAS 2P28 G57	2x8 (T5, G5)	2	IP65	Maintained	400x160x100	1,94
ARIAS 3P28 G58	2x8 (T5, G5)	3	IP65	Maintained	400x160x100	2,1

Options available on request:

AUT-	The fitting is equipped with an autonomous testing system
NET-	The fitting is operating with regular power 230V 50Hz is not equipped with emergency function
CEB-	The fitting is equipped with electronic AC/DC ballast compatible with any central battery system
EMS-	The emergency monitoring system

## TAURUS Deluxe

### LED Emergency Exit Sign



**Type:** Surface/suspended double-sided LED exit sign for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 25 m.

**Specification:** Durable transparent polycarbonate IP20 diffuser.  
Extruded aluminum body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings of any type, including flammable surfaces, or suspended.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend ("Exit", "Left" and "Right") and ceiling (+ wall) mounting kits



Arrow Exit



Arrow Left



Arrow Right




Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
TAURUS 1H G05 Deluxe	LED	1	IP20	Non-maintained	315x43x243	0,95
TAURUS 2H G06 Deluxe	LED	2	IP20	Non-maintained	315x43x244	1,05
TAURUS 3H G07 Deluxe	LED	3	IP20	Non-maintained	315x43x245	1,15
TAURUS 1P G08 Deluxe	LED	1	IP20	Maintained	315x43x246	1,45
TAURUS 2P G09 Deluxe	LED	2	IP20	Maintained	315x43x247	1,5
TAURUS 3P G10 Deluxe	LED	3	IP20	Maintained	315x43x248	1,55

Options available on request:

IP54- Version available on request

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with  electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system



## CAPELLA

### LED Double-sided Emergency Exit Sign



**Type:** Recessed double-sided LED exit sign for both mains and emergency operations. Three-hour standby operation with a recharge time of 12 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 25 m.

**Specification:** Durable transparent polycarbonate IP20 diffuser.  
Silver painted steel body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for plasterboard or similar types of ceilings, requires a cut-out.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

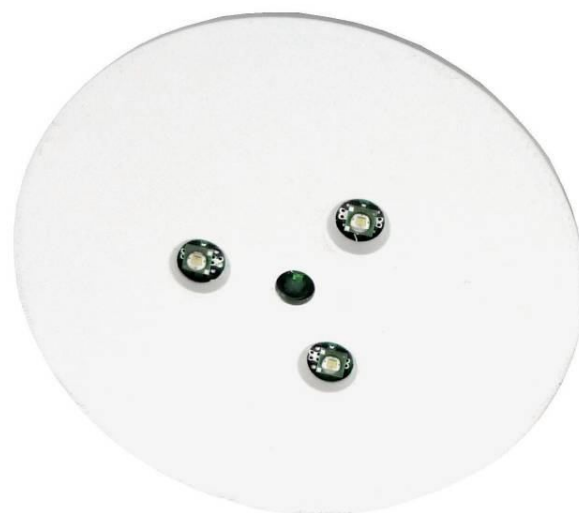
Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
CAPELLA 1H G17	LED	1	IP20	Non-maintained	355x110x210	1,4
CAPELLA 2H G18	LED	2	IP20	Non-maintained	355x110x210	1,5
CAPELLA 3H C24	LED	3	IP20	Non-maintained	355x110x210	1,6
CAPELLA 1P G19	LED	1	IP20	Maintained	355x110x210	1,9
CAPELLA 2P G20	LED	2	IP20	Maintained	355x110x210	1,95
CAPELLA 3P C25	LED	3	IP20	Maintained	355x110x210	2

Options available on request:

- AUT- The fitting is equipped with an autonomous testing system
- NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function
- CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system
- EMS- The emergency monitoring system

ARA

## LED Emergency Lighting Fitting



**Type:** Recessed LED emergency lighting luminaire for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.

**Specification:** White painted steel body with LED status sensor. High-temperature nickel-cadmium batteries. Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be recessed mounted into plasterboard ceilings.

**Application:** For emergency escape routes and open areas.

Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
Ara 1HLED J01	LED	1	IP20	Non-maintained	Ø70x45	0,95
Ara 2HLED J02	LED	2	IP20	Non-maintained	Ø70x45	1,05
Ara 3HLED J03	LED	3	IP20	Non-maintained	Ø70x45	1,15
Ara 1PLED J04	LED	1	IP20	Maintained	Ø70x45	1,45
Ara 2PLED J05	LED	2	IP20	Maintained	Ø70x45	1,5
Ara 3PLED J06	LED	3	IP20	Maintained	Ø70x45	1,55

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

### Escape route illumination

Height, m	Mounting distance from the wall, m (1lx)	Mounting distance between the fittings, m (1lx)
2,5	4	9
3	3,5	8
3,5	3,5	8
4	3,5	8
4,5	3	8
5	3	8
6	3	8
7	3	8
8	3	8

### Open area illumination

Height, m	Mounting distance from the wall, m	Mounting distance between the fittings, m
2,5	4	8
3	4	8
3,5	4	10
4	4	14
4,5	4	14
5	4	14
6	4,5	14,5
7	4,5	14,5
8	5	15

# CORRIDOR

## LED Emergency Lighting Fitting



### Corridor 1PLED J10 WIDE

**Type:** Recessed LED emergency lighting luminaire for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.

**Specification:** White thermoplastic body. Power LED 3W diodes. High-temperature nickel-metal hydride battery. Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be recessed mounted into plasterboard ceilings.

**Application:** For emergency escape routes and open areas.

Type	Application	Lamp type	Operating time, hours	Illumination modes	Overall dimensions, mm	Weight, kg
Corridor 1HLED J07	For escape route	1x3 (LED)	1	Non-maintained	95x95x48	0,95
Corridor 2HLED J08	For escape route	1x3 (LED)	2	Non-maintained	95x95x48	1,05
Corridor 3HLED J09	For escape route	1x3 (LED)	3	Non-maintained	95x95x48	1,15
Corridor 1PLED J10	For escape route	1x3 (LED)	1	Maintained	95x95x48	1,45
Corridor 2PLED J11	For escape route	1x3 (LED)	2	Maintained	95x95x48	1,5
Corridor 3PLED J12	For escape route	1x3 (LED)	3	Maintained	95x95x48	1,55

Type	Application	Lamp type	Operating time, hours	Illumination modes	Overall dimensions, mm	Weight, kg
Corridor 1HLED J07 WIDE	For area illumination	1x3 (LED)	1	Non-maintained	95x95x48	0,95
Corridor 2HLED J08 WIDE	For area illumination	1x3 (LED)	2	Non-maintained	95x95x48	1,05
Corridor 3HLED J09 WIDE	For area illumination	1x3 (LED)	3	Non-maintained	95x95x48	1,15
Corridor 1PLED J10 WIDE	For area illumination	1x3 (LED)	1	Maintained	95x95x48	1,45
Corridor 2PLED J11 WIDE	For area illumination	1x3 (LED)	2	Maintained	95x95x48	1,5
Corridor 3PLED J12 WIDE	For area illumination	1x3 (LED)	3	Maintained	95x95x48	1,55

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

#### **Escape route illumination**

Height, m	Mounting distance from the wall, m (1lx)	Mounting distance between the fittings, m (1lx)
2,5	8	15
3	8	18
3,5	8	19
4	8	20
4,5	8	20
5	7	20
6	7	16
7	7	15
8	7	15

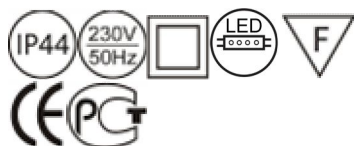
#### **Open area illumination**

Height, m	Mounting distance from the wall, m (1lx)	Mounting distance between the fittings, m (1lx)
2,5	4	11
3	4	11
3,5	4	11
4	3	11
4,5	3	10
5	3	9
6	3	9
7	3	7
8	2	6



# LEPUS

## LED Emergency Exit Sign



**Type:** Wall mounted LED emergency exit sign for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 30 m.

**Specification:** Durable transparent polycarbonate IP44 diffuser  
Grey thermoplastic body with LED status sensor. High- temperature nickel-metal hydride batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto walls, including flammable surfaces.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend ("Exit", "Left" and "Right"):



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
Lepus 1HLED J13	LED	1	IP44	Non-maintained	330x45x180	0,95
Lepus 2HLED J14	LED	2	IP44	Non-maintained	330x45x180	1,05
Lepus 3HLED J15	LED	3	IP44	Non-maintained	330x45x180	1,15
Lepus 1PLED J16	LED	1	IP44	Maintained	330x45x180	1,45
Lepus 2PLED J17	LED	2	IP44	Maintained	330x45x180	1,5
Lepus 3PLED J18	LED	3	IP44	Maintained	330x45x180	1,55

Options available on request:

AUT- The fitting is equipped with an autonomous testing system  
NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function  
CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system  
EMS- The emergency monitoring system

# LEPORIS

## LED Emergency Exit Sign



**Type:** Wall mounted LED emergency exit sign for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 30 m.

**Specification:** Durable transparent polycarbonate IP44 diffuser.  
Grey thermoplastic body with LED status sensor. High-temperature nickel-metal hydride batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceiling, including flammable surfaces. ROPE - for suspended mounting.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend ("Exit", "Left" and "Right"):



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
Leporis 1HLED J19 ROPE	LED	1	IP44	Non-maintained	330x45x1250(180)	0,95
Leporis 2HLED J20 ROPE	LED	2	IP44	Non-maintained	330x45x1250(180)	1,05
Leporis 3HLED J21 ROPE	LED	3	IP44	Non-maintained	330x45x1250(180)	1,15
Leporis 1PLED J22 ROPE	LED	1	IP44	Maintained	330x45x1250(180)	1,45
Leporis 2PLED J23 ROPE	LED	2	IP44	Maintained	330x45x1250(180)	1,5
Leporis 3PLED J24 ROPE	LED	3	IP44	Maintained	330x45x1250(180)	1,55
Leporis 1HLED J19	LED	1	IP44	Non-maintained	330x45x250	0,95
Leporis 2HLED J20	LED	2	IP44	Non-maintained	330x45x250	1,05
Leporis 3HLED J21	LED	3	IP44	Non-maintained	330x45x250	1,15
Leporis 1PLED J22	LED	1	IP44	Maintained	330x45x250	1,45
Leporis 2PLED J23	LED	2	IP44	Maintained	330x45x250	1,5
Leporis 3PLED J24	LED	3	IP44	Maintained	330x45x250	1,55

Options available on request:

ROPE- Suspended version

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system

## SEASON

### IP42 Four Sided Emergency Luminaire



**Type:** Surface-mounted/suspended four-sided exit box for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 30 m.

**Specification:** Durable polycarbonate IP42 opal diffuser.  
White polycarbonate body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings of any type, including flammable surfaces, or suspended.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

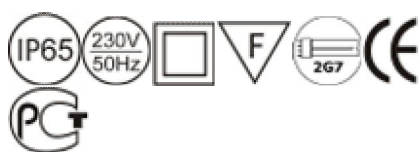
Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
Season 1H111 J25	1x11 (TC-EL, 2G7)	1	IP42	Non-maintained	240x240x240	2,31
Season 2H111 J26	1x11 (TC-EL, 2G7)	2	IP42	Non-maintained	240x240x240	2,41
Season 3H111 J27	1x11 (TC-EL, 2G7)	3	IP42	Non-maintained	240x240x240	2,45
Season 1P111 J28	1x11 (TC-EL, 2G7)	1	IP42	Maintained	240x240x240	2,68
Season 2P111 J29	1x11 (TC-EL, 2G7)	2	IP42	Maintained	240x240x240	2,78
Season 3P111 J30	1x11 (TC-EL, 2G7)	3	IP42	Maintained	240x240x240	2,84

Options available on request:

- AUT- The fitting is equipped with an autonomous testing system
- NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function
- CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system
- EMS- The emergency monitoring system

# DORADO

## IP65 Emergency Luminaire



**Type:** Surface-mounted square emergency luminaire for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.

**Specification:** Durable opal IP65 diffuser.  
White plastic body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm
DORADO 1H111 O74	1x11 (TC-EL, 2G7)	1	IP65	Non-maintained	300x300x83
DORADO 2H111 O75	1x11 (TC-EL, 2G7)	2	IP65	Non-maintained	300x300x83
DORADO 3H111 O76	1x11 (TC-EL, 2G7)	3	IP65	Non-maintained	300x300x83
DORADO 1P111 O77	1x11 (TC-EL, 2G7)	1	IP65	Maintained	300x300x83
DORADO 2P111 O78	1x11 (TC-EL, 2G7)	2	IP65	Maintained	300x300x83
DORADO 3P111 O79	1x11 (TC-EL, 2G7)	3	IP65	Maintained	300x300x83
DORADO 1H211 O80	2x11 (TC-EL, 2G7)	1	IP65	Non-maintained	300x300x83
DORADO 2H211 O81	2x11 (TC-EL, 2G7)	2	IP65	Non-maintained	300x300x83
DORADO 3H211 O82	2x11 (TC-EL, 2G7)	3	IP65	Non-maintained	300x300x83
DORADO 1P211 O83	2x11 (TC-EL, 2G7)	1	IP65	Maintained	300x300x83
DORADO 2P211 O84	2x11 (TC-EL, 2G7)	2	IP65	Maintained	300x300x83
DORADO 3P211 O85	2x11 (TC-EL, 2G7)	3	IP65	Maintained	300x300x83

Options available on request:

AUT- The fitting is equipped with an autonomous testing system

NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function

CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system

EMS- The emergency monitoring system



POLLUX

IP 54 Emergency  
Luminaire



- Type:** Surface-mounted circular emergency luminaire for both mains and emergency operations. One-hour or three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.
- Specification:** Durable white polycarbonate IP54 diffuser.  
White plastic body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:** Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.
- Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm
POLLUX 1H19 C32	1x9 (TC-SEL, 2G7)	1	IP54	Non-maintained	260x58
POLLUX 2H19 C33	1x9 (TC-SEL, 2G7)	2	IP54	Non-maintained	260x58
POLLUX 3H19 C34	1x9 (TC-SEL, 2G7)	3	IP54	Non-maintained	260x58
POLLUX 1P19 C35	1x9 (TC-SEL, 2G7)	1	IP54	Maintained	260x58
POLLUX 2P19 C36	1x9 (TC-SEL, 2G7)	2	IP54	Maintained	260x58
POLLUX 3P19 C37	1x9 (TC-SEL, 2G7)	3	IP54	Maintained	260x58

- Options available on request:
- AUT- The fitting is equipped with an autonomous testing system
  - NET- The fitting is operating with regular power 230V 50Hz is not equipped with emergency function
  - CEB- The fitting is equipped with electronic AC/DC ballast compatible with any central battery system
  - EMS- The emergency monitoring system

# LIBRA T5

## IP65 Emergency Luminaire



- Type:

A range of IP65 Emergency luminaires for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 20 m.
- Specification:

Transparent polycarbonate IP65 diffuser.  
White ABS body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:

Designed to be fixed onto ceilings or walls of any type, including flammable surfaces.
- Application:

For informational purposes when electricity supply fails. Suitable for escape routes and open areas.



SPORT version is equipped with a special white painted steel protective grid for sport halls and others areas, where a high degree of protection is required. See option list.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



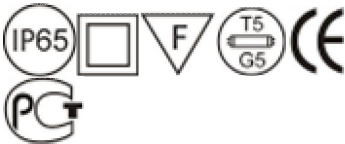
Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
LIBRA 3H18 G11	1x8 (T5, G5)	3	IP65	Non-maintained	360x120x80	1,35
LIBRA 3P18 G12	1x8 (T5, G5)	3	IP65	Maintained	360x120x80	1,35

Options available on request:  
SPORT- protective grid

# HYDRA T5

## IP65 Emergency Luminaire with Opal Diffuser



- Type:** Surface-mounted/suspended double-sided exit box for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 20 m.
- Specification:** Polycarbonate IP65 opal diffuser.  
White ABS body with LED status sensor. High-temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:** Designed to be fixed onto ceilings of any type, including flammable surfaces, or suspended.
- Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp (W) and socket	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
HYDRA 3H18 G13	1x8 (T5, G5)	3	IP65	Non-maintained	355x120x170	1,65
HYDRA 3P18 G14	1x8 (T5, G5)	3	IP65	Maintained	355x120x170	1,65

ZETA

LED Emergency Exit Sign



**Type:** Surface/suspended double-sided LED exit sign for both mains and emergency operations. Three-hour standby operation with a recharge time of 24 hours.  
Ambient temperature: 0°C to +40°C.  
Recognition distance 30 m.

**Specification:** Transparent acrylic IP20 diffuser.  
Extruded aluminum body with LED status sensor. High- temperature nickel-cadmium batteries.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Designed to be fixed onto ceilings of any type, including flammable surfaces, or suspended.

**Application:** For informational purposes when electricity supply fails. Suitable for escape routes and open areas.

Supplied with legend kits ("Exit", "Left" and "Right")



Arrow Exit



Arrow Left



Arrow Right

Type	Lamp type	Operating time, hours	IP level	Illumination modes	Overall dimensions, mm	Weight, kg
ZETA 3H18 G15	LED	3	IP65	Non-maintained	353x34x250	1,4
ZETA 3P18 G16	LED	3	IP65	Maintained	353x34x250	1,4





# SPOTLIGHTS

[www.northcliffe.org](http://www.northcliffe.org)

# PEGASUS

## Recessed Adjustable Spot Light for Halogen Lamps



PEGASUS 150 B29

PEGASUS 250 B30

PEGASUS 350 B31

<b>Type:</b>	A range of elegant recessed adjustable spotlights for halogen lamp, providing unique interior design solutions. Ideal for areas requiring good colour rendering and high lighting levels.
<b>Specification:</b>	Double-ring reflectors adjustable in all directions. Facetted aluminum reflector in non reflective enclosure. Black powder coated steel housing with silver coated frame outside. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Ideal for all display lighting, showrooms and exhibitions.

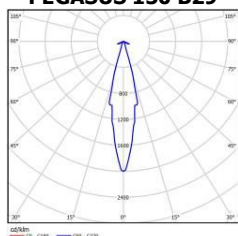
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
PEGASUS 150 B29	1x50W (GY6,35)	205x205x203	0.8	50
PEGASUS 250 B30	2x50W (GY6,35)	390x205x203	1.6	100
PEGASUS 350 B31	3x50W (GY6,35)	520x205x203	2.2	150
PEGASUS 450 B32	4x50W (GY6,35)	362x362x203	3.0	200
PEGASUS 450 B52	4x50W (GY6,35)	668x205x203	3.0	200

Options available on request:  
HV- Version with lamps for 220-240V AC voltage



Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Pegasus HID 135 O97 HF	1x35W (GX8,5)	205x205x203	1,2	39
Pegasus HID 170 O98 HF	1x70W (GX8,5)	205x205x203	1,2	78
Pegasus HID 235 O99 HF	2x35W (GX8,5)	390x205x203	2	87
Pegasus HID 270 P01 HF	2x70W (GX8,5)	390x205x203	2	156
Pegasus HID 335 Q38 HF	3x35W (GX8,5)	520x205x203	3	126
Pegasus HID 370 Q39 HF	3x70W (GX8,5)	520x205x203	3	234
Pegasus HID 435 P02 HF	4x35W (GX8,5)	362x362x203	3,6	174
Pegasus HID 470 P03 HF	4x70W (GX8,5)	362x362x203	3,6	312

#### PEGASUS 150 B29





# PEGASUS LED

## Recessed Adjustable Spot Light



Pegasus LED B119 1x530lm T840

Pegasus LED B120 2x530lm T840

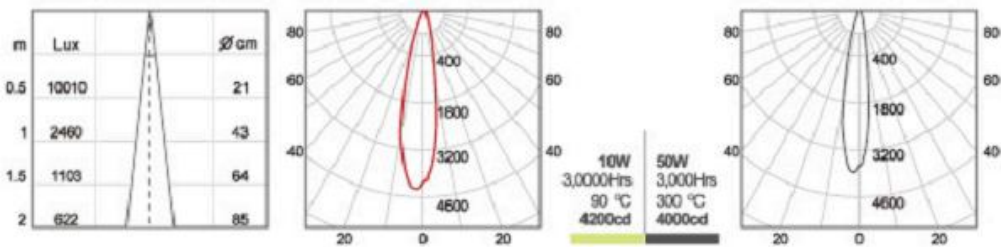
Pegasus LED B121 3x530lm T840



Fittings with a 50W halogen lamps can be directly replaced by PEGASUS fitting with 10W LED unit. Reflector of LED unit designed to prevent glare and the LED is hidden behind the metal bracket and the light beam is reflected, softened and focused to a beam angle of 8, 24 or 35 ° degrees.

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Pegasus LED B119 1x550lm T840	205x205x123	550	4000	>80	10	0,8
Pegasus LED B120 2x550lm T840	390x205x123	1100	4000	>80	20	1,6
Pegasus LED B121 3x550lm T840	520x205x123	1650	4000	>80	30	2,2
Pegasus LED B122 4x550lm T840	362x362x123	2200	4000	>80	40	3,0

Options available on request:  
RAL- RAL colours



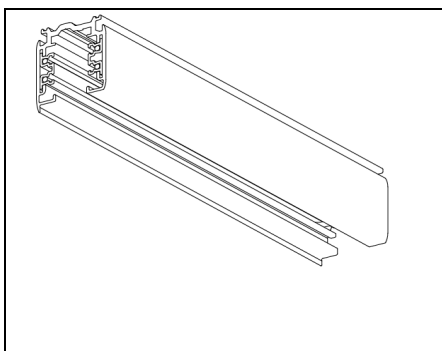
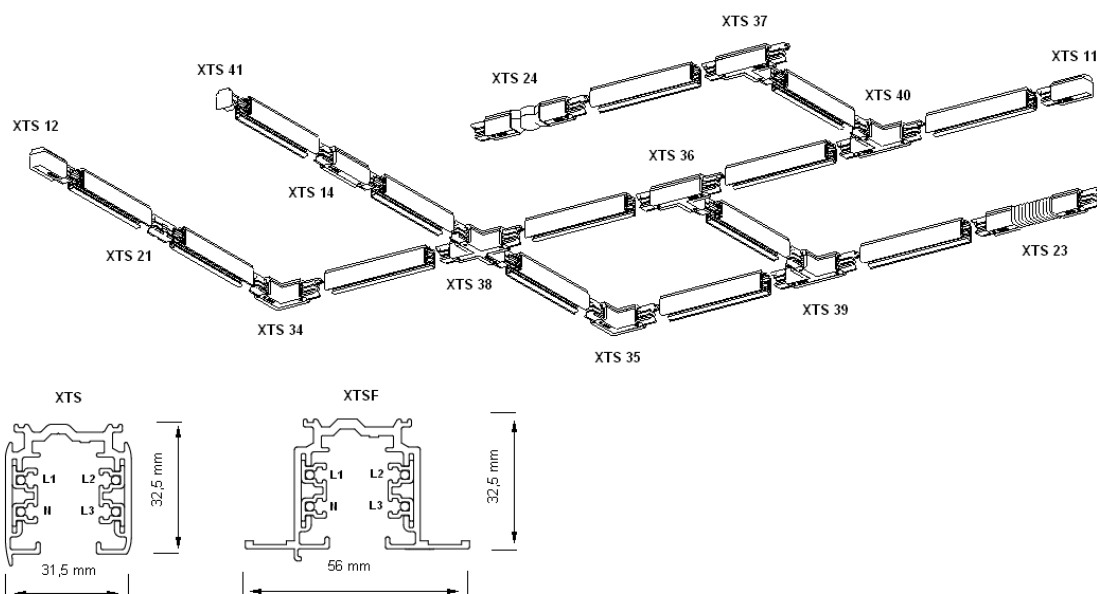




## GLOBAL Track PRO

- the most popular three-circuit track
- circuits can be controlled individually
- easy to mount and change position
- modular solution, easy to extend/adapt
- suitable for department stores and shops
- recessed version also available

### The three-circuit lighting track connection diagram



#### Article: XTS 4100-4400

**Surface track** – three-circuit surface track.

**Color options:** Natural anodized aluminum, white (RAL 9010), black (RAL 9005).

**Dimensions:**

**XTS 4100** H32.5xW31.5xL1000 mm

**XTS 4200** H32.5xW31.5xL2000 mm

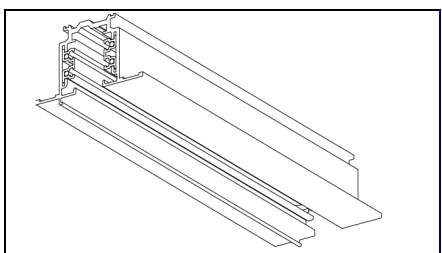
**XTS 4300** H32.5xW31.5xL3000 mm

**XTS 4400** H32.5xW31.5xL4000 mm

**Possible connections:**

1-phase, 3-circuit      230V AC, 16A, 3.7kVA    IP 20

3-phase, 3-circuit      230/400V AC, 16A, 3x3.7kVA    IP 20



#### Article: XTSF 4100-4400

**Recessed track** – three-circuit recessed track.

**Color options:** Natural anodized aluminum, white (RAL 9010), black (RAL 9005).

**Dimensions:** H32.5xW56xL1000/2000/3000/4000 mm

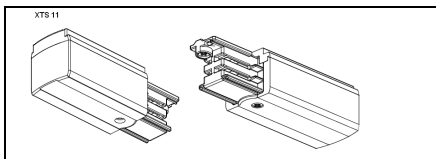
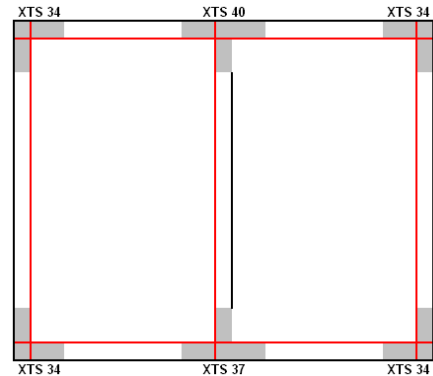
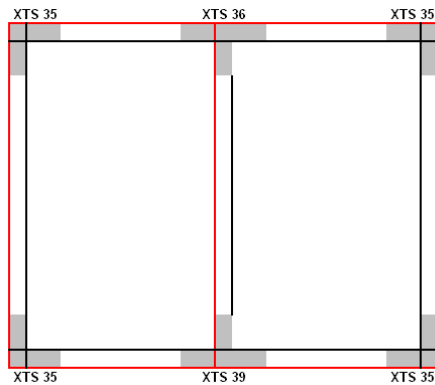
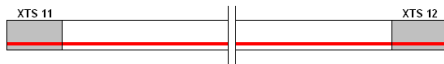
**Possible connections:**

1-phase, 3-circuit      230V AC, 16A, 3.7kVA    IP 20

3-phase, 3-circuit      230/400V AC, 16A, 3x3.7kVA    IP 20

## Use of L- and T- accessories

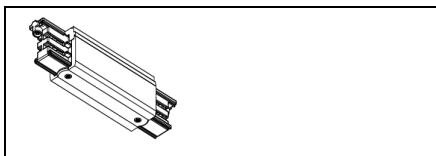
Red line indicates polarity ridge



### Article: XTS 11, 12

**End-feed** – used to feed track from the end chosen, these could have 2 different polarity ridges.

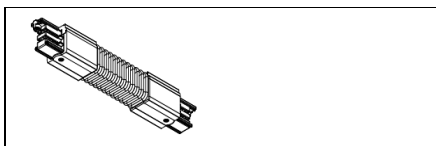
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 14

**Middle-feed** – used to feed track from the point chosen, these have 1 polarity ridge.

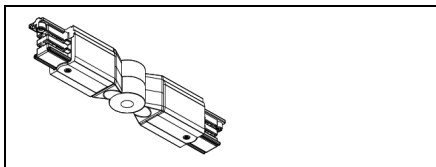
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 23

**Flexible middle-feed** – used to obtain angle needed, these have 1 polarity ridge.

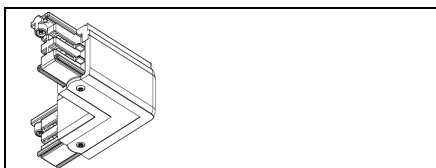
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 24

**Adjusting middle-feed** – used to obtain angle needed, these have 1 polarity ridge.

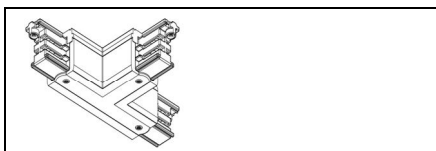
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 34, 35

**L-feed** – used to make track turn, these could have 2 different polarity ridges.

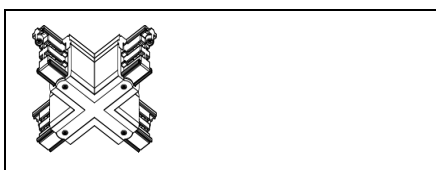
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 36, 37, 39, 40

**T-feed** – allows distributing through 3 branches, these could have 4 different polarity ridges.

**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



### Article: XTS 38

**X-feed** – allows distributing through 4 branches, these have 1 polarity ridge.

**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



#### Article: XTS 21

**Straight connector** – allows **connecting** tracks together.

**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



#### Article: XTS 41

**End cap** – used to secure live ends of track.

**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).



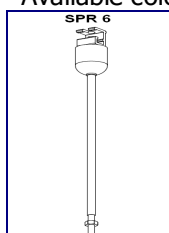
#### Article: GA 70

**FIX point** – used for single track light installation at point chosen.

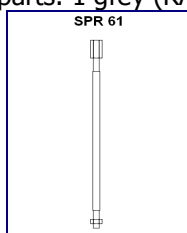
**Color options:** Grey (RAL 7040), white (RAL 9010), black (RAL 9005).

## The suspension applications for track system

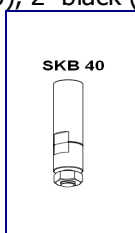
Available colors for parts: 1 grey (RAL 7040), 2- black (RAL 9005), 3- white (RAL 9010)



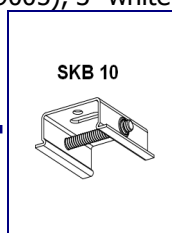
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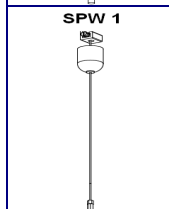
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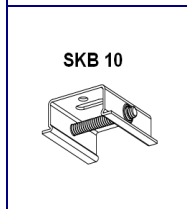
Rod suspension application with rod extension set or without:

**SPR 6 1000mm**

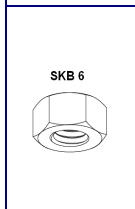
**SPR 61 1000mm**



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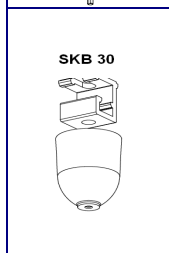


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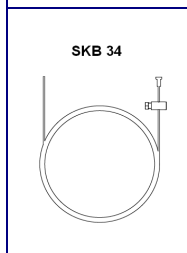


Wire suspension application with wire suspension set:

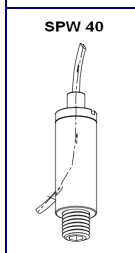
**SPW 1 1500mm**



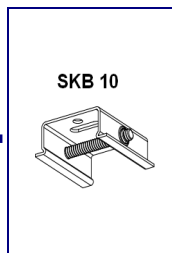
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Wire suspension application with fast mounting "click" and optional wire length:

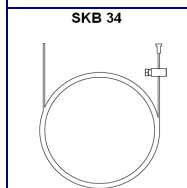
**SKB 34-1 1500mm**

**SKB 34-1/3m 3000mm**

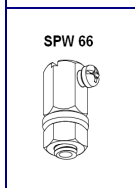
**SKB 34-1/5m 3000mm**



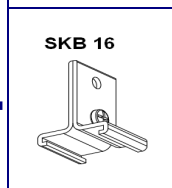
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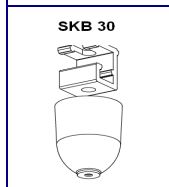
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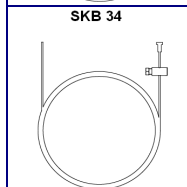
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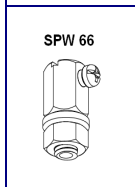
Wire suspension application with "T" clamp and optional wire length



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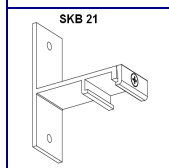
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Wire suspension application with "T" clamp for track connection and optional wire length



Wall fixing bracket application:

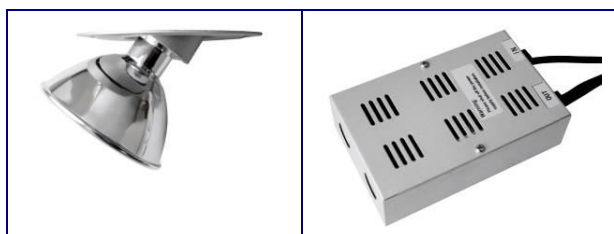
**SKB 21**

# ATTIS

## Round adjustable HID 35-70 W Luminaire with Symmetric Reflector



<b>Type:</b>	A wide application discharge slim design recessed luminaire with symmetric different beam angle choice reflector designed for the accent lighting. Luminaires could be 120° far and wide adjusted without removing or disconnecting system from power network.
<b>Specification:</b>	Specular aluminum reflector with tempered glass cover. Die-cast aluminum housing grey powder coated. Protection degree IP20. Luminaire is plastic-wrapped and packaged separately.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Shops, department stores, public facilities, museums and etc.



Versions equipped with electronic ballasts (or DIM and DALI- see options list) and independent gear box.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Attis 135 O86 24° HF	1x35 W(G 12)	Ø110x90x140(130)	1,1	43
Attis 170 O87 24° HF	1x70 W(G 12)	Ø110x90x140(130)	1,2	78

Reflector for different light beam angle is available on request.

Options available on request:

- HF- High Frequency control gear
- 24°- Reflector with 24° light beam angle



## ARES

### Tracklight SLIM HID 35-70 W Luminaire with Symmetric Reflector



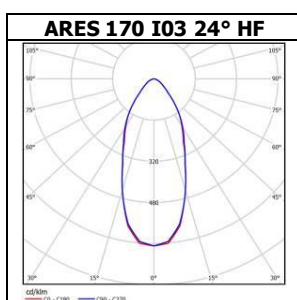
<b>Type:</b>	A wide application discharge slim design open type track lights series with symmetric different beam angle choice reflector designed for the accent lighting. Supplied with GLOBAL brand adaptor. Track lights system ensures flexibility by adjusting luminaries according to your requirements. Luminaries could be removed or added or changed to different ones without disconnecting system from power network.
<b>Specification:</b>	Specular aluminum reflector with tempered glass cover. Die-cast aluminum housing grey powder coated. Protection degree IP20. Luminaire is plastic-wrapped and packaged separately.
<b>Installation:</b>	Surface luminaire designed to be fixed into tracks or at fixed points by removing track adaptor.
<b>Application:</b>	Shops, department stores, public facilities, museums and etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Ares 135 I02 24° HF	1x35 W(G 12)	Ø110x140x100	1,1	43
Ares 170 I03 24° HF	1x70 W(G 12)	Ø110x140x100	1,2	78

Reflector for different light beam angle is available on request.

Options available on request:

- 24°- Reflector with 24° light beam angle
- FXP- Fixed point installation box



## SPHINX

### Tracklight SLIM HID 35-70 W Luminaire with Symmetric Reflector



<b>Type:</b>	A wide application discharge slim design open type track lights series with symmetric different beam angle choice reflector designed for the accent lighting. Supplied with GLOBAL brand adaptor. Track lights system ensures flexibility by adjusting luminaires according to your requirements. Luminaires could be removed or added or changed to different ones without disconnecting system from power network.
<b>Specification:</b>	Specular aluminum reflector. Tempered glass diffuser in aluminum frame. Die-cast aluminum housing grey powder coated. Protection degree IP20. Luminaire is plastic-wrapped and packaged separately.
<b>Installation:</b>	Surface luminaire is designed to be fixed into tracks or at fixed points by removing track adaptor.
<b>Application:</b>	Shops, department stores, public facilities, museums and etc.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Sphinx 135 I04 24° HF	1x35 W(G 12)	Ø120x165x100	1,3	43
Sphinx 170 I05 24° HF	1x70 W(G 12)	Ø120x165x100	1,5	78

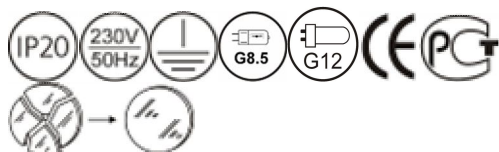
Reflector for different light beam angle available is on request.

Options available on request:

- 24°- Reflector with 24° light beam angle
- FXP- Fixed point installation box

# CALIPSO

## Tracklight HID 35-70 W Luminaire with Symmetric Reflector



<b>Type:</b>	A wide application discharge slim design open type track lights series with symmetric different beam angle choice reflector designed for the accent lighting. Supplied with GLOBAL brand adaptor. Track lights system ensures flexibility by adjusting luminaires according to your requirements. Luminaires could be removed or added or changed to different ones without disconnecting system from power network.
<b>Specification:</b>	Specular aluminum reflector. Tempered glass diffuser in aluminum frame. Die-cast aluminum housing grey powder coated. Protection degree IP20. Luminaire is plastic-wrapped and packaged separately.
<b>Installation:</b>	Surface luminaire <b>is</b> designed to be fixed into tracks or at fixed points by removing track adaptor.
<b>Application:</b>	Shops, department stores, public facilities, museums and etc.

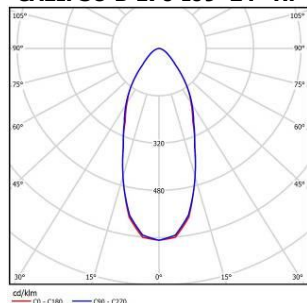
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Calipso 135 I06 24° HF	1x35 W(G8,5)	Ø120x270x295	1,8	43
Calipso 170 I07 24° HF	1x70 W(G8,5)	Ø120x270x295	1,9	78
Calipso B 135 I08 24° HF	1x35 W(G 12)	Ø132x245x210	2,4	43
Calipso B 170 I09 24° HF	1x70 W(G 12)	Ø132x245x210	2,5	78

Reflector for different light beam angle available on request

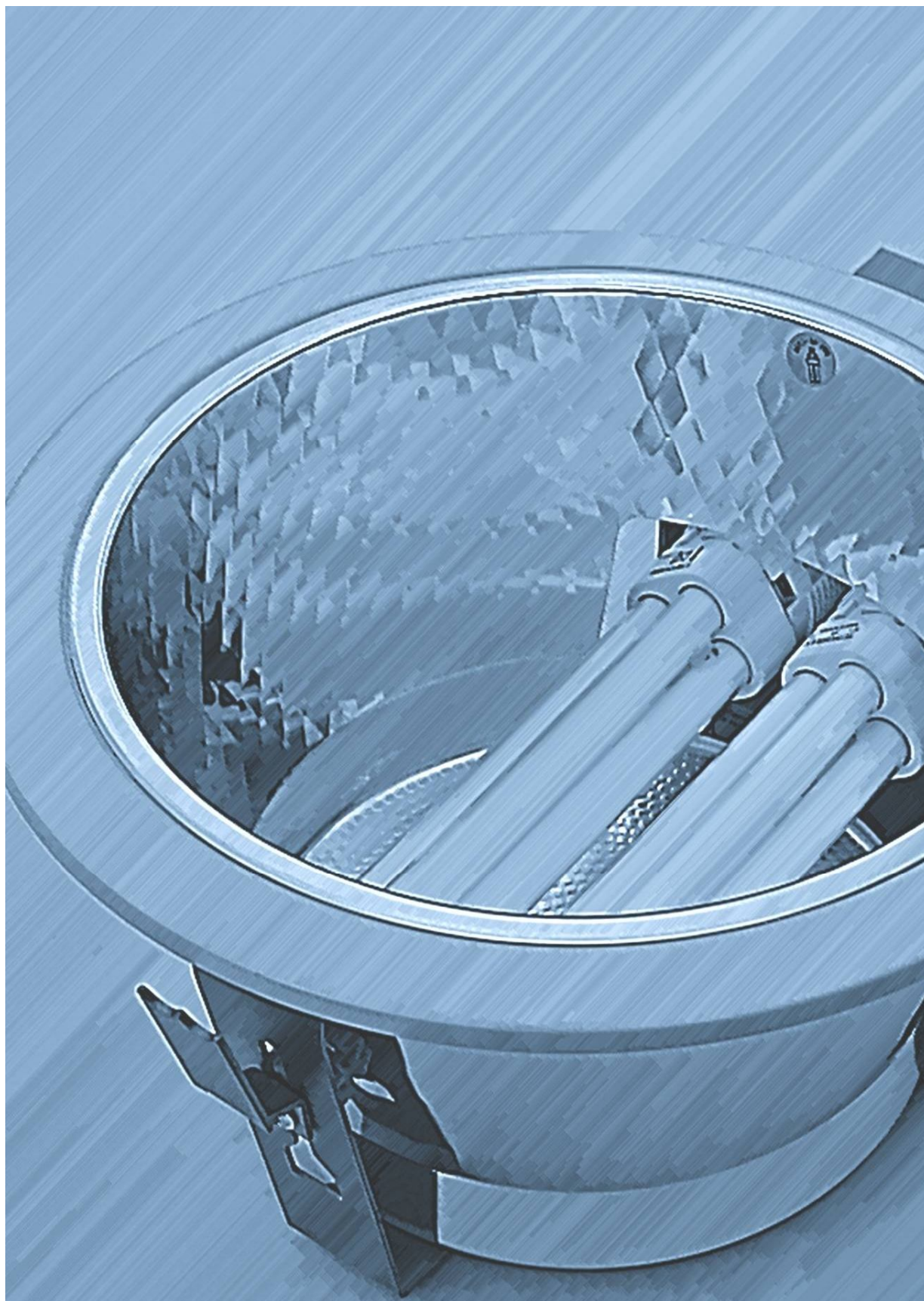
Options available on request:

- 24°- Reflector with 24° light beam angle
- FXP- Fixed point installation box

### CALIPSO B 170 I09 24° HF







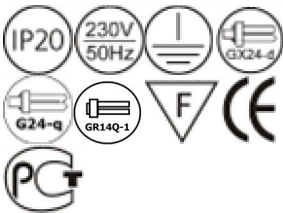
# DOWNLIGHTS

[www.northcliffe.org](http://www.northcliffe.org)



ORION

Recessed  
Downlight for  
Compact  
Fluorescent  
Lamp



Orion 226 B28 FCT

Orion 226 B28 GLR

Orion 226 B28 OGL

Type:	Recessed downlight with horizontal lamp position for compact fluorescent lamps for installations with minimal ceiling void.
Specification:	Gloss aluminum reflector with white powder coated steel ring. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
Application:	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.



SGEARS - Versions with electronic ballasts (also DIM and DALI) and independent gear box available on request. See Option list.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 113 D45	1x13W (G24d-1)	193(165)x100	1,3	19
Orion 213 D46	2x13W (G24d-1)	193(165)x100	1,7	38
Orion 118 E60	1x18W (G24d-2)	193(165)x100	1,4	26
Orion 218 B27	2x18W (G24d-2)	193(165)x100	1,8	52
Orion 126 I95	1x26W (G24d-3)	193(165)x100	1,5	34
Orion 226 I96	2x26W (G24d-3)	193(165)x100	1,9	68
Orion 126 D47	1x26W (G24d-3)	235(210)x126	1,6	34
Orion 226 B28	2x26W (G24d-3)	235(210)x126	2,1	68
Orion 132 J40 HF	1x32W (Gx24q-3)	235(210)x126	1,2	32
Orion 142 J41 HF	1x42W (Gx24q-4)	235(210)x126	1,2	44
Orion 132 J38 HF	1x32W (Gx24q-3)	260(245)x178	1,7	32
Orion 232 K28 HF	2x32W (Gx24q-3)	260(245)x178	1,8	64
Orion 142 J39 HF	1x42W (Gx24q-4)	260(245)x178	1,7	44
Orion 242 K29 HF	2x42W (Gx24q-4)	260(245)x178	1,8	85
<i>Energy saving series:</i>				
Orion 114 O89 HF	1x14W (GR14q-1)	235(210)x126	1,2	18
Orion 117 O90 HF	1x17W (GR14q-1)	235(210)x126	1,2	21,5
Orion 114 O91 HF	1x14W (GR14q-1)	260(245)x178	1,7	18
Orion 214 O92 HF	2x14W (GR14q-1)	260(245)x178	1,8	34
Orion 117 O93 HF	1x17W (GR14q-1)	260(245)x178	1,7	21,5
Orion 217 O94 HF	2x17W (GR14q-1)	260(245)x178	1,8	41

Options available on request:

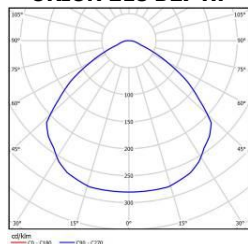
HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 5TB- 5 way terminal block for loop feed and ease of wiring

MAT- Matted reflector  
 FCT- Facetted reflector  
 OGL- Decorative glass outside (in middle frosted)  
 GLR- Decorative frosted ring outside  
 RAL- RAL colours  
 CR- Chrome plated ring  
 GOLD- Gold plated ring



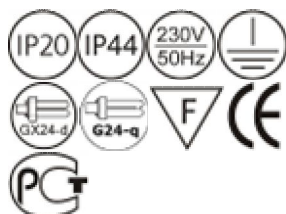
Steel ring can be optional: RAL powder coated, chrome or gold plated (see option list)

ORION 218 B27 HF



## ORION OP

### Recessed Downlight for Compact Fluorescent Lamp with Frosted Glass Cover



<b>Type:</b>	Recessed downlight with horizontal lamp position for compact fluorescent lamps for installations with minimal ceiling void.
<b>Specification:</b>	Matted aluminum reflector with white powder coated steel ring. Frosted glass cover. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 113 D45 OP	1x13W (G24d-1)	193(165)x100	1,3	19
Orion 213 D46 OP	2x13W (G24d-1)	193(165)x100	1,7	38
Orion 118 E60 OP	1x18W (G24d-2)	193(165)x100	1,4	26
Orion 218 B27 OP	2x18W (G24d-2)	193(165)x100	1,8	52
Orion 126 D47 OP	1x26W (G24d-3)	235(205)x126	1,6	34
Orion 226 B28 OP	2x26W (G24d-3)	235(205)x126	2,1	68

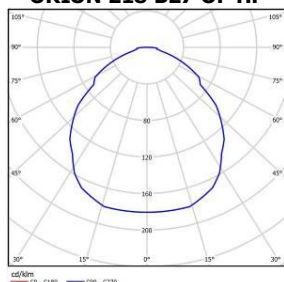
1x32/42W versions available on request

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

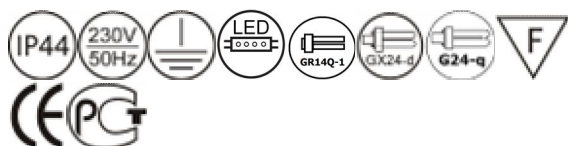
4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 PRZ- Prismatic glass  
 IP44- Protection degree from water and dust  
 RAL- RAL colors  
 CLR- Clear glass

ORION 218 B27 OP HF



## ORION SOP

### Recessed Downlight for Compact Fluorescent Lamp with Frosted Glass Cover



**Orion 226 B28 SOP CLR**



**Orion 226 B28 SOP MPRZ**



**Orion 226 B28 SOP PRZ**

<b>Type:</b>	Recessed downlight with horizontal lamp position for compact fluorescent lamps for installations with minimum ceiling void.
<b>Specification:</b>	Aluminum reflector with white powder coated steel ring. Frosted glass cover. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 113 D45 SOP	1x13W (G24d-1)	193(165)x100	1,3	19
Orion 213 D46 SOP	2x13W (G24d-1)	193(165)x100	1,7	38
Orion 118 E60 SOP	1x18W (G24d-2)	193(165)x100	1,4	26
Orion 218 B27 SOP	2x18W (G24d-2)	193(165)x100	1,8	52
Orion 126 D47 SOP	1x26W (G24d-3)	235(205)x126	1,6	34
Orion 226 B28 SOP	2x26W (G24d-3)	235(205)x126	2,1	68
Orion 132 J40 SOP HF	1x32W (Gx24q-3)	235(210)x126	1,2	32
Orion 142 J41 SOP HF	1x42W (Gx24q-4)	235(210)x126	1,2	44
Orion 132 J38 SOP HF	1x32W (Gx24q-3)	260(245)x178	1,7	32
Orion 232 K28 SOP HF	2x32W (Gx24q-3)	260(245)x178	1,8	64
Orion 142 J39 SOP HF	1x42W (Gx24q-4)	260(245)x178	1,7	44
Orion 242 K29 SOP HF	2x42W (Gx24q-4)	260(245)x178	1,8	85



*Energy saving series:*

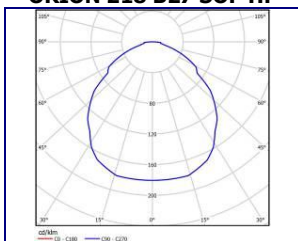
Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 114 089 SOP HF	1x14W (GR14q-1)	235(210)x126	1,2	18
Orion 117 090 SOP HF	1x17W (GR14q-1)	235(210)x126	1,2	21,5
Orion 114 091 SOP HF	1x14W (GR14q-1)	260(245)x178	1,7	18
Orion 214 092 SOP HF	2x14W (GR14q-1)	260(245)x178	1,8	34
Orion 117 093 SOP HF	1x17W (GR14q-1)	260(245)x178	1,7	21,5
Orion 217 094 SOP HF	2x17W (GR14q-1)	260(245)x178	1,8	41

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block for loop feed and ease of wiring  
 RAL- RAL colors  
 CLR- Clear glass  
 MPRZ- Mikroprismatic diffuser  
 PRZ- Prismatic diffuser

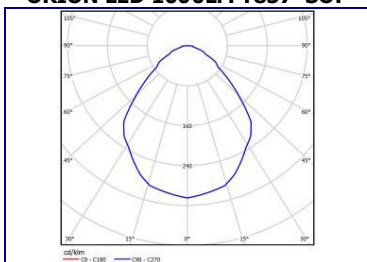
**ORION 218 B27 SOP HF**



*LED series:*

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Orion LED B118 950lm T840 SOP	235(210)x126	950	4000	>80	11	1,2
Orion LED B118 1000lm T857 SOP	235(210)x126	1000	5700	>80	11	1,2
Orion LED B118 950lm T840 SOP PRZ	235(210)x126	950	4000	>80	11	1,2
Orion LED B118 1000lm T857 SOP PRZ	235(210)x126	1000	5700	>80	11	1,2

**ORION LED 1000LM T857 SOP**



# ORION MIR

## Recessed Downlight for Compact Fluorescent Lamp with Radial Louvre or Cross-reflector



Orion 226 MR4 MAT

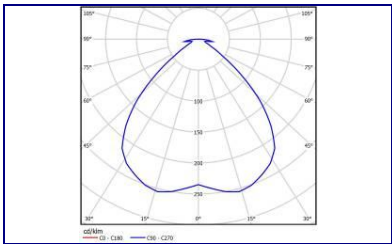
Type:	Recessed downlight with radial louvre and horizontal lamp position for compact fluorescent lamps.
Specification:	Gloss aluminum reflector with radial cross blades for better protection from direct glare. White powder coated steel ring outside. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
Application:	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 213 D46 MIR	2x13W (G24d-1)	235(205)x155	1,95	38
Orion 218 B27 MIR	2x18W (G24d-2)	235(205)x155	1,95	42
Orion 226 B28 MIR	2x26W (G24d-3)	235(205)x155	2,5	60

Options available on request:

HF-	High Frequency control gear	EM2-	Emergency version 2 hours
DIM-	Dimmable ballast	EM3-	Emergency version 3 hours
SWITCHDIM-	Switch DIM ballast	5TB-	5 way terminal block for loop feed and ease of wiring
DALI-	DALI ballast	MAT-	Matted reflector
EMG-	Emergency version 1 hour	MR4-	Cross-shape reflector

ORION 218 B27 MIR



## Ursa

### Recessed Downlight with Vertical Lamp Position



Ursa 118 I22 SOP

Ursa 118 I22

<b>Type:</b>	Recessed downlight with vertical lamp position for compact fluorescent lamps.
<b>Specification:</b>	Gloss aluminum reflector with white powder coated steel ring. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Ursa 1E27 I20	40W (E27)	180(155)x185	0,8	-
Ursa 113 I21	1x13W (G24d-1)	180(155)x185	1,0	19
Ursa 118 I22	1x18W (G24d-2)	180(155)x185	1,0	26
Ursa 1E27 I20 FCT	40W (E27)	180(155)x205	0,8	-
Ursa 113 I21 FCT	1x13W (G24d-1)	180(155)x205	1,1	19
Ursa 118 I22 FCT	1x18W (G24d-2)	180(155)x205	1,1	26
Ursa 1E27 I20 SOP	40W (E27)	180(155)x185	1,0	-
Ursa 113 I21 SOP	1x13W (G24d-1)	180(155)x185	1,2	19
Ursa 118 I22 SOP	1x18W (G24d-2)	180(155)x185	1,2	26

Options available on request:

HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours  
 FCT- Facetted reflector  
 SOP- Surface frosted glass cover  
 RAL- RAL colors

## TETRA SOP

### Square Recessed Downlight with Frosted Glass Cover



**Type:** Square recessed downlight with horizontal lamp position for compact fluorescent lamps for installations with minimal ceiling void.

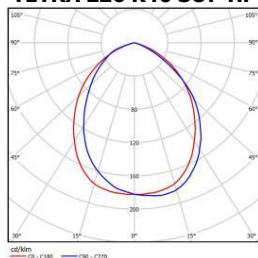
**Specification:** Aluminum reflector with white powder coated aluminum frame. Frosted glass cover. Body in steel with white finish, gearbox with grey finish. Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for plasterboard or similar types of ceilings, requires a cut-out

**Application:** Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Tetra 113 K35 SOP	1x13W (G24d-1)	232x232(210x210)x90	1,4	19
Tetra 213 K36 SOP	2x13W (G24d-1)	232x232(210x210)x90	1,8	38
Tetra 118 K37 SOP	1x18W (G24d-2)	232x232(210x210)x90	1,4	26
Tetra 218 K38 SOP	2x18W (G24d-2)	232x232(210x210)x90	1,8	52
Tetra 126 K39 SOP	1x26W (G24d-3)	232x232(210x210)x90	1,6	34
Tetra 226 K40 SOP	2x26W (G24d-3)	232x232(210x210)x90	2,1	68
Tetra 132 K41 SOP HF	1x32W (G24q-4)	232x232(210x210)x90	1,7	32
Tetra 232 K42 SOP HF	2x32W (G24q-4)	232x232(210x210)x90	1,8	64
Tetra 142 K43 SOP HF	1x42W (G24q-4)	232x232(210x210)x90	1,7	44
Tetra 242 K44 SOP HF	2x42W (G24q-4)	232x232(210x210)x90	1,8	85
Tetra 1E27 K45 SOP	max. 60W (E27)	232x232(210x210)x90	1,2	-
Tetra 2E27 M64 SOP	max. 2x40W (E27)	232x232(210x210)x90	1,3	-

**TETRA 226 K40 SOP HF**





*Energy saving series:*

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Tetra 114 Q40 HF	1x14W (GR14q-1)	232x232(210x210)x90	1,7	18
Tetra 214 Q41 HF	2x14W (GR14q-1)	232x232(210x210)x90	1,8	34
Tetra 117 Q42 HF	1x17W (GR14q-1)	232x232(210x210)x90	1,7	21,5
Tetra 217 Q43 HF	2x17W (GR14q-1)	232x232(210x210)x90	1,8	41

Options available on request:

HF- High Frequency control gear

DIM- Dimmable ballast

SWITCHDIM- Switch DIM ballast

DALI- DALI ballast

EMG- Emergency version 1 hour

EM2- Emergency version 2 hours

EM3-

Emergency version 3 hours

5TB-

5 way terminal block for loop feed and ease of wiring

RAL-

RAL colors

CLR-

Clear glass

MPRZ-

Mikroprismatic diffuser

PRZ-

Prismatic diffuser

*LED series:*

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Tetra LED B188 1x950lm T840 SOP	232x232(210x210)x90	950	4000	>80	11	1,2
Tetra LED B188 1x1000lm T857 SOP	232x232(210x210)x90	1000	5700	>80	11	1,2
Tetra LED B188 1x950lm T840 PRZ	232x232(210x210)x90	950	4000	>80	11	1,2
Tetra LED B188 1x1000lm T857 PRZ	232x232(210x210)x90	1000	5700	>80	11	1,2

# TETRA MIR

## Square Recessed Downlight with Cross-shape Reflector

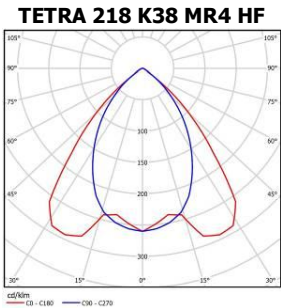


Type:	Square recessed downlight with horizontal lamp position for compact fluorescent lamps for installations with minimal ceiling void.
Specification:	Aluminum Cross-shape reflector with white powder coated aluminum frame. Body in zinc plated steel. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
Application:	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Tetra 213 K36 MR4	2x13W (G24d-1)	225x225(205x205)x135	1,95	38
Tetra 218 K38 MR4	2x18W (G24d-2)	225x225(205x205)x135	1,95	52
Tetra 226 K40 MR4	2x26W (G24d-3)	225x225(205x205)x135	2,15	68
Tetra 2E27 M64 MR4	max. 2x40W (E27)	225x225(205x205)x135	1,15	-

Options available on request:

HF-	High Frequency control gear	EM3-	Emergency version 3 hours
DIM-	Dimmable ballasts	4TB-	4 way terminal block for loop feed and ease of wiring
DALI-	DALI ballasts	5TB-	5 way terminal block for loop feed and ease of wiring
EMG-	Emergency version 1 hour	RAL-	RAL colors
EM2-	Emergency version 2 hours	MR4-	Cross-shape reflector



# ORION

## Surface Downlight for Compact Fluorescent Lamp with Frosted Glass Cover



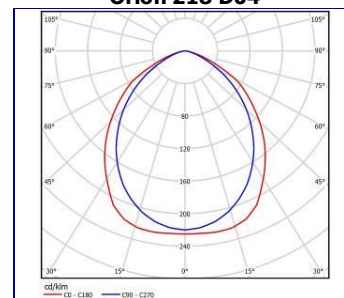
<b>Type:</b>	Surface downlight for compact fluorescent lamps with frosted glass cover and horizontal lamp position with minimal body height.
<b>Specification:</b>	Aluminum reflector with frosted glass cover. White painted steel body. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Surface mounting.
<b>Application:</b>	Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orion 113 K22	1x13W (G24d-1)	268x70	1,4	19
Orion 213 D97	2x13W (G24d-1)	268x70	1,7	38
Orion 118 K23	1x18W (G24d-2)	268x70	1,5	26
Orion 218 D04	2x18W (G24d-2)	268x70	1,8	52
Orion 126 K24	1x26W (G24d-3)	268x70	1,7	34
Orion 226 D05	2x26W (G24d-3)	268x70	2,1	68

Options available on request:

- HF- High Frequency control gear
- EMG- Emergency version 1 hour
- CLR- Clear glass
- MPRZ- Mikroprismatic diffuser
- PRZ- Prismatic diffuser

Orion 218 D04



# ORIONIS

## An Architecturally Inspired Surface Downlight for Compact Fluorescent Lamp with Frosted Glass Cover



**Type:** An architecturally inspired surface mounted downlight for compact fluorescent lamps with frosted glass cover and horizontal lamp position.

**Specification:** Aluminum reflector with frosted glass cover.  
White painted steel body.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Surface mounting.

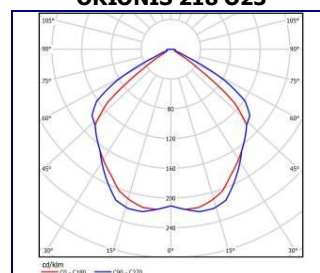
**Application:** Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Orionis 113 O20	1x13W (G24d-1)	Ø238x158	2,05	19
Orionis 213 O21	2x13W (G24d-1)	Ø238x158	2,35	38
Orionis 118 O22	1x18W (G24d-2)	Ø238x158	2,05	26
Orionis 218 O23	2x18W (G24d-2)	Ø238x158	2,35	52
Orionis 126 O24	1x26W (G24d-3)	Ø238x158	2,25	34
Orionis 226 O25	2x26W (G24d-3)	Ø238x158	2,65	68

Options available on request:

- HF- High Frequency control gear
- DIM- Dimmable ballast
- SWITCHDIM- Switch DIM ballast
- DALI- DALI ballast
- EMG- Emergency version 1 hour
- EM2- Emergency version 2 hours
- EM3- Emergency version 3 hours
- CLR- Clear glass
- MPRZ- Mikroprismatic diffuser
- PRZ- Prismatic diffuser
- STB- 5 way terminal block for loop feed and ease of wiring

ORIONIS 218 O23

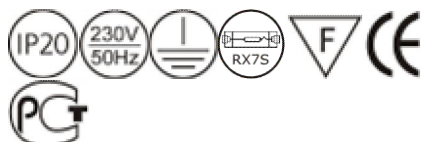


Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Orionis LED B187 1x950lm T840 OP	Ø238x158	950	4000	>80	11	1,2
Orionis LED B187 1x1000lm T857 OP	Ø238x158	1000	5700	>80	11	1,2
Orionis LED B187 1x950lm T840 PRZ	Ø238x158	950	4000	>80	11	1,2
Orionis LED B187 1x1000lm T857 PRZ	Ø238x158	1000	5700	>80	11	1,2



## MIZAR

### Recessed Downlight for Metal Halide Lamps with Frosted Glass



**Mizar 170 D98 SOP**

**Type:** Recessed downlight with frosted glass with horizontal lamp position for metal halide lamps. High performance downlights, ideal for high mounting applications.

**Specification:** Aluminum reflector with frosted glass.  
Body in steel with white finish, gearbox with black finish.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for plasterboard or similar types of ceilings, requires a cut-out.

**Application:** Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

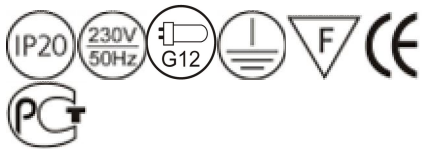
Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Mizar 170 E01 OP	1x70W (Rx7s)	265(230)x195	2,7	80
Mizar 1150 E02 OP	1x150W (Rx7s)	265(230)x195	2,9	170
Mizar 170 D98 SOP	1x70W (Rx7s)	265(230)x195	2,7	80
Mizar 1150 D99 SOP	1x150W (Rx7s)	265(230)x195	2,9	170

Options available on request:

HF- High Frequency control gear  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp  
RAL- RAL colors

## CANIS

### Adjustable Circular Downlight for Metal Halide Lamps



**Canis 170 O17**

**Type:** A range of round adjustable downlights for metal halide lamps.

**Specification:** Aluminum reflector with tempered glass.  
Body in cast aluminum with white finish, gearbox with black finish.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for plasterboard or similar types of ceilings, requires a cut-out.

**Application:** Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Canis 135 O16	1x35W (G12)	Ø191(181)x160	2,65	44
Canis 170 O17	1x70W (G12)	Ø191(181)x160	2,65	84

Options available on request:

HF- High Frequency control gear  
TP- With built-in thermal protector  
TIM- Timed ignitor  
RAL- RAL colors

## DELPHINUS

### Adjustable Circular Downlight for Metal Halide Lamps



**Delphinus 170 O18**

**Type:** A range of square adjustable downlights for metal halide lamps.

**Specification:** Aluminum reflector with tempered glass.  
Body in cast aluminum with white finish, gearbox with black finish.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for plasterboard or similar types of ceilings, requires a cut-out.

**Application:** Decorative lighting for shops, displays, interiors, offices, receptions and other public areas.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Delphinus 170 O18	1x70W (Rx7s)	230x144 (220x134)	2,6	84
Delphinus 1150 O19	1x150W (Rx7s)	230x144 (220x134)	3,2	168

Options available on request:

HF- High Frequency control gear  
TP- With built-in thermal protector  
TIM- Timed ignitor  
RAL- RAL colors

## PERSEUS OP

### Recessed IP65 Downlight with Frosted Glass Cover



<b>Type:</b>	Recessed IP65 downlight for maximum protection and use in adverse conditions.
<b>Specification:</b>	Matted aluminum reflector with grey powder coated aluminium ring. Frosted glass cover. Die-casting aluminium body with grey finish. Silicon gasket. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for plasterboard or similar types of ceilings, requires a cut-out.
<b>Application:</b>	Dust and moisture proof luminaire, ideal for environments subject to humidity and excessive dust.

Type	Lamp (W) and socket	Overall dimensions (cut-out), mm	Weight, kg	Total wattage, W
Perseus 113 Q46 OP	1x13W (G24d-1)	230(210)x195	2,0	19
Perseus 213 Q47 OP	2x13W (G24d-1)	230(210)x195	2,3	38
Perseus 118 Q44 OP	1x18W (G24d-2)	230(210)x195	2,1	26
Perseus 218 Q45 OP	2x18W (G24d-2)	230(210)x195	2,4	52

Options available on request:

HF-	High Frequency control gear
DIM-	Dimmable ballast
SWITCHDIM-	Switch DIM ballast
DALI-	DALI ballast
5TB-	5 way terminal block for loop feed and ease of wiring
RAL-	RAL colors

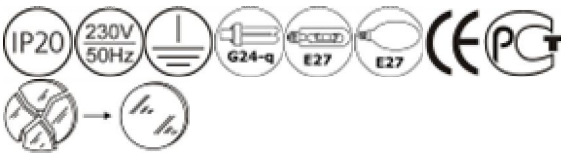


# HIGH BAYS

[www.northcliffe.org](http://www.northcliffe.org)

# MONTBLANC

## High-Bay Luminaire for Metal Halide Lamps



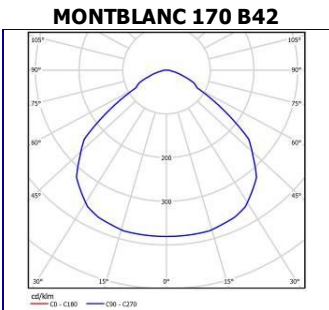
Type:	Luminaire for high mounting applications for metal halide lamps. High performance, ideal for high mounting applications.
Specification:	Body in die-cast aluminum with grey finish, reflector in aluminum with matt finish, frosted glass cover. Luminaire is plastic-wrapped and boxed individually.
Installation:	Supplied with suspension hook and chain for easy mounting.
Application:	For use in most industrial and many commercial applications.



Suspension kit **is** supplied together with the fixture.

Type	Lamp type, W	Overall dimensions, mm	Weight, kg	Total wattage, W
Montblanc 142 M53	1x42 (G24q-4)	330x350	3,6	44
Montblanc 242 M54	2x42 (G24q-4)	330x350	3,7	85
Montblanc 170 B42	1x70W	330x350	4.6	80
Montblanc 1150 B41	1x150W	330x350	5.5	170

- Options available on request:
- HF- High Frequency control gear
  - TP- Built-in thermal protector
  - DIM- Dimmable ballast
  - SWITCHDIM- Switch DIM ballast
  - DALI- DALI ballast



# PRIZMA

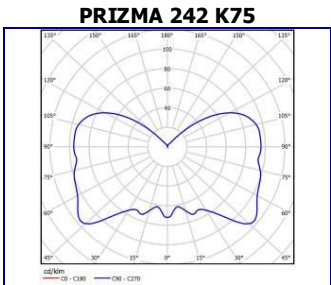
## High-Bay Luminaire with Prismatic Reflector



Type:	Luminaire for high mounting applications with transparent prismatic reflector.
Specification:	Aluminum body with light grey finish, transparent prismatic reflector. Protection cover is supplied on request. Luminaire is plastic-wrapped and boxed individually.
Installation:	Supplied with suspension hook for easy mounting.
Application:	For use in most industrial and many commercial applications.

Type	Lamp type, W	Overall dimensions, mm	Weight, kg	Total wattage, W
Prizma 142 K74 HF	1x42 (G24d-4)	Ø420x530	3,6	44
Prizma 242 K75 HF	2x42 (G24d-4)	Ø420x530	3,7	88
Prizma 170 K71	1x70 (E27)	Ø420x530	4,6	80
Prizma 1150 K72	1x150 (E27)	Ø420x530	5,5	170
Prizma 342 K76 HF	3x42 (G24d-4)	Ø510x595	4,9	132
Prizma 1250 K73	1x250 (E40)	Ø510x595	6,8	280

- Options available on request:
- HF- High Frequency control gear
  - TP- Built-in thermal protector
  - DIM- Dimmable ballast
  - SWITCHDIM- Switch DIM ballast
  - DALI- DALI ballast
  - COVER- PC protection cover



## AUSTER

### High-Bay Luminaire for Metal Halide Lamps



<b>Type:</b>	Luminaire for high mounting applications for metal halide lamps. High performance, ideal for high mounting applications.
<b>Specification:</b>	Body in die-cast aluminum with grey finish, reflector in aluminum with matt finish, frosted glass cover. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Supplied with suspension hook and chain for easy mounting.
<b>Application:</b>	For use in most industrial and many commercial applications.

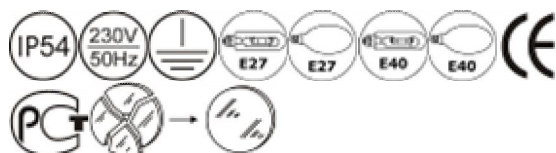
Type	Lamp type, W	Overall dimensions, mm	Weight, kg	Total wattage, W
Auster 142 Q48	1x42 (G24q-4)	315x381	3,6	44
Auster 170 Q49	1x70W	315x381	4.6	80
Auster 1150 Q50	1x150W	315x381	5.5	170

Options available on request:  
HF- High Frequency control gear  
TP- Built-in thermal protector  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast



## NORTE

### Low-Bay Luminaire for Metal Halide Lamps



**Norte 1250 G96 HI GRID**



**Norte 1250 G96 HI FRAME**

<b>Type:</b>	Luminaire for high mounting applications for metal halide lamps. High performance, ideal for high mounting applications.
<b>Specification:</b>	White painted steel body. Parabolic reflector in symmetrical faceted aluminum with clear glass cover. Luminaire is plastic-wrapped and packed separately.
<b>Installation:</b>	Suitable for surface mounting on ceilings.
<b>Application:</b>	For use in factories, warehouses, garages, halls and many others commercial applications.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Norte 1150 G95 HI	HI	1x150 (E27)	365x490x175	7,5	170
Norte 1250 G96 HI	HI	1x250 (E40)	365x490x175	7,9	280
Norte 1400 G97 HI	HI	1x400 (E40)	365x490x175	8,4	440
Norte 1150 G98 HS	HS	1x150 (E40)	365x490x175	7,5	170
Norte 1250 G96 HS	HS	1x250 (E40)	365x490x175	7,9	280
Norte 1400 G97 HS	HS	1x400 (E40)	365x490x175	8,4	440

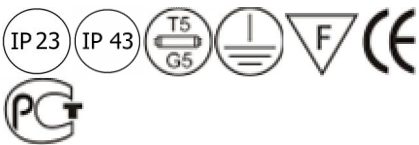
Options available on request:

TP- Built-in thermal protector  
 HS- For high pressure sodium lamp  
 GRID- Protection grid

AS- Asymmetric reflector  
 FRAME- Frame for recessed mounting  
 IP65- IP65 version

# SKY SPORT

## Luminaire with Wire-guard for use in Sport Halls



Type:	Luminaire with protection grid for use in Sport halls. High performance, ideal for high mounting applications.
Specification:	Mirror aluminum reflector. Protective frame retaining clips and hinges for easy maintenance. IP43 version is made with clear polycarbonate diffuser (see option list) White painted steel body with wire-guard. Luminaire is plastic-wrapped and packaged in twin boxes.
Installation:	Surface luminaire is designed to be fixed to ceilings of any type or suspended.
Application:	For use in all sports, athletics and recreational halls with ceiling heights of 4 meters and higher.



Protection grid hinges and stainless steel clips for easy access to maintain luminaire

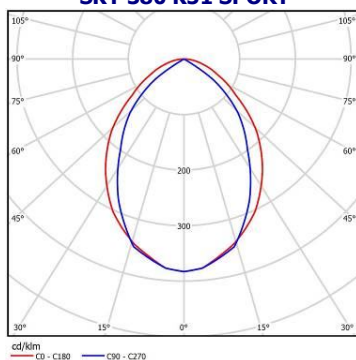
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Sky 235 K46 SPORT	2x35 (G5)	1510x315x135	6,2	76
Sky 335 K47 SPORT	3x35 (G5)	1510x315x135	6,6	114
Sky 249 K48 SPORT	2x49 (G5)	1510x315x135	6,2	105
Sky 349 K49 SPORT	3x49 (G5)	1510x315x135	6,6	158
Sky 280 K50 SPORT	2x80 (G5)	1510x315x135	6,2	170
Sky 380 K51 SPORT	3x80 (G5)	1510x315x135	6,6	255

Options available on request:

DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast  
 EMG- Emergency version 1 hour  
 EM2- Emergency version 2 hours  
 EM3- Emergency version 3 hours

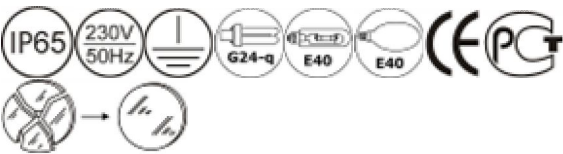
4TB- 4 way terminal block for loop feed and ease of wiring  
 5TB- 5 way terminal block with two holes (for in and out going cable)  
 MAT- Matted reflector (subject to minimum order)  
 IP43- With PC diffuser and IP43 protection

#### SKY 380 K51 SPORT



EVEREST

High-Bay Luminaire for Metal Halide Lamps



Everest 1250 E65 HI STR

Everest 1250 E65 HI GRID

Type:	Luminaire for high mounting applications for metal halide lamps. High performance, ideal for high mounting applications.
Specification:	Body in die-cast aluminum with grey finish. Parabolic reflector in aluminum with matted finish, clear glass cover. Luminaire is plastic-wrapped. Reflector, gear box and glass cover are packed separately.
Installation:	Supplied with suspension hook and sealing washer for easy mounting.
Application:	For use in most industrial and many commercial applications.





Through wired  
version is available  
on request



Switching device

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Everest 332 K77	IP65, CFL	3x32 (G24q-4)	485x615	7,2	96
Everest 342 K78	IP65, CFL	3x42 (G24q-4)	485x615	7,2	132
Everest 1150 I31 HI	IP65, HI	1x150 (E27)	485x615	8,6	170
Everest 1250 E65 HI	IP65, HI	1x250 (E40)	485x615	9	280
Everest 1400 E66 HI	IP65, HI	1x400 (E40)	485x615	9,5	440
Everest 1150 I32 HS	IP65, HS	1x150 (E40)	485x615	8,6	170
Everest 1250 E67 HS	IP65, HS	1x250 (E40)	485x615	9	280
Everest 1400 E68 HS	IP65, HS	1x400 (E40)	485x615	9,5	440

Options available on request:

- TiM-

Timmed ignitor
- HS-

For high pressure sodium lamp
- STR-

Strip type reflector
- IP23-

Without protection glass
- GRID-

Protection grid
- 1LIN-

Through wiring version with two sealing washers
- GLMAT-

Frosted tempered glass
- SWITCH-

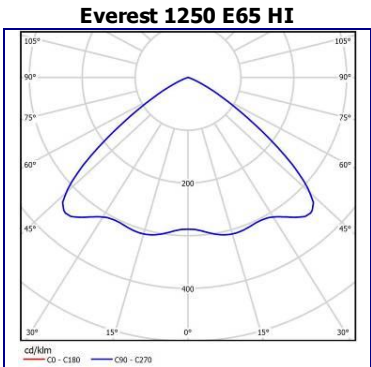
Switching device
- SINGLE-

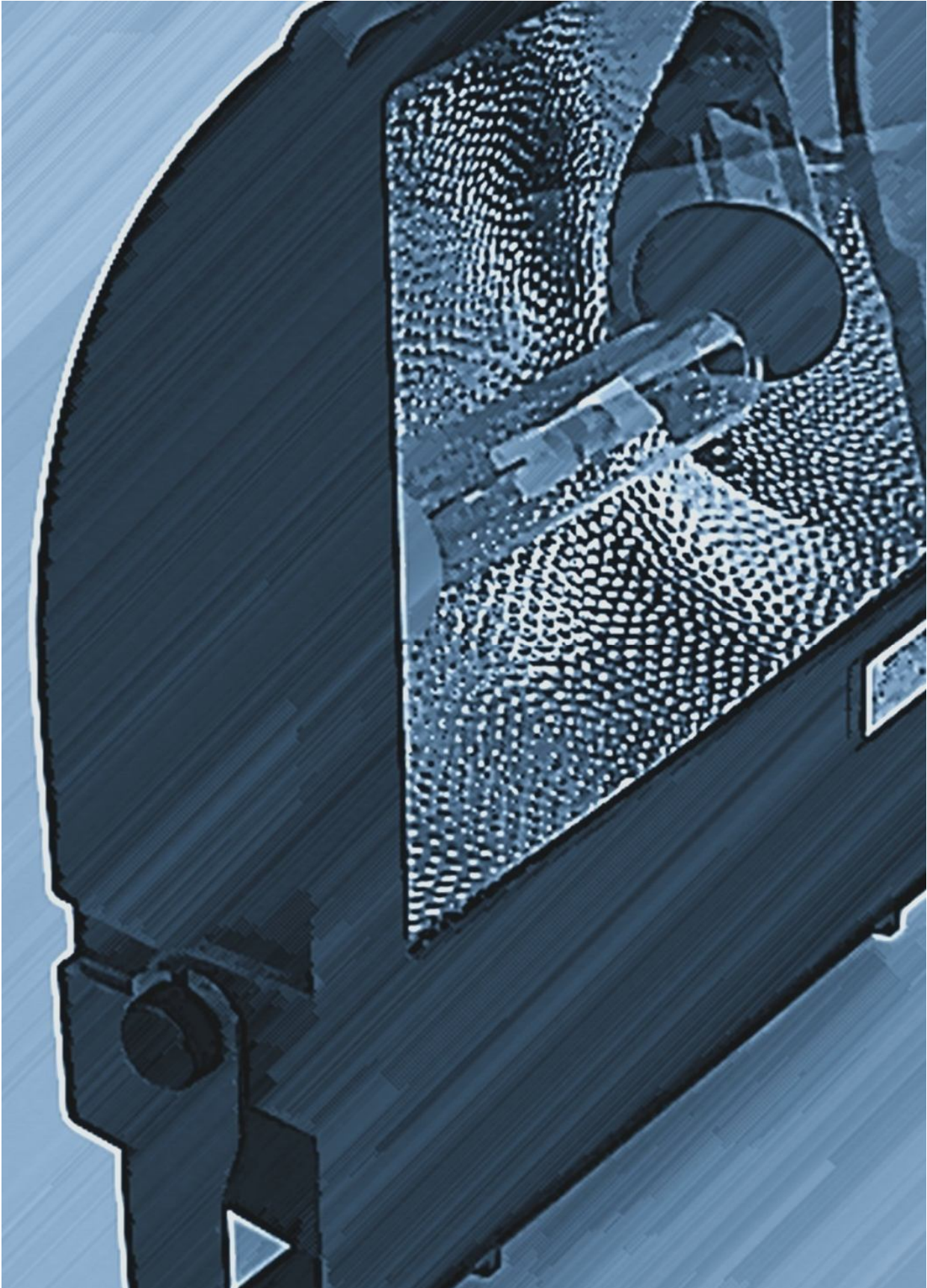
Single packaging (assembled)
- RAL-

Reflector and body painted RAL color



Reflector and body  
painted RAL colour  
(subject to a minimum  
order quantity)





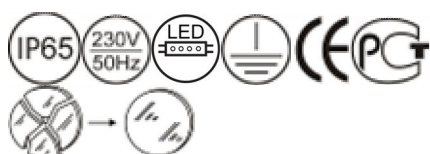
**NORTHCLIFFE**  
MAKING LIFE BRIGHTER

# FLOODLIGHTS

[www.northcliffe.org](http://www.northcliffe.org)

## BOREAS LED

### LED Floodlight with Symmetrical Reflector



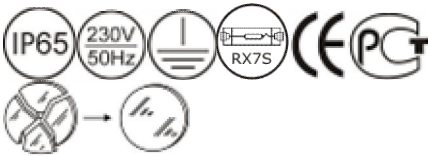
<b>Type:</b>	A range of LED floodlights with symmetrical reflector. IP65 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum, clear glass diffuser. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for any horizontal and/or vertical surfaces.
<b>Application:</b>	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Overall dimensions, mm	Luminous flux, lm	Color temperature, K	Color rendering, Ra	Total wattage, W	Weight, kg
Boreas LED B188 800lm T840	150x205x50	800	4000	>80	10	3,5
Boreas LED B188 900lm T857	150x205x50	900	5700	>80	10	3,5
Boreas LED B189 2400lm T840	245x330x75	2400	4000	>80	30	5,4
Boreas LED B189 2700lm T857	245x330x75	2700	5700	>80	30	5,4
Boreas LED B190 4800lm T840	300x400x95	4800	4000	>80	60	9,8
Boreas LED B190 5400lm T857	300x400x95	5400	5700	>80	60	9,8



# BOREAS

## Discharge Floodlight for Metal Halide Lamps with Symmetrical Reflector

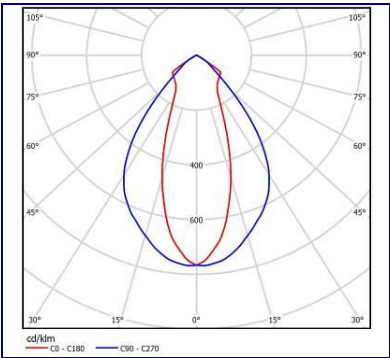


Type:	A range of discharge floodlights with symmetrical reflector for metal halide lamps. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum, clear glass diffuser. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 170 E73	1x70 (RX7s)	280x232x170	3,5	83,5
Boreas 1150 E74	1x150 (RX7s)	280x232x170	4,2	168
Boreas 170 E81 HS	1x70 (RX7s)	280x232x170	3,5	83,5
Boreas 1150 E82 HS	1x150 (RX7s)	280x232x170	4,2	168

Options available on request:  
HF- High Frequency control gear  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp

Boreas 170 E73





# BOREAS

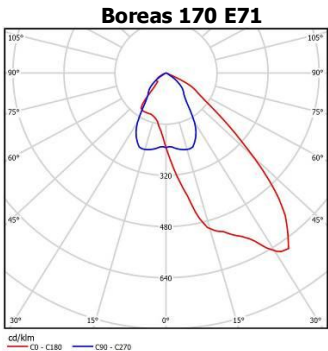
## Discharge Floodlight for Metal Halide Lamps with Asymmetrical Reflector



Type:	A range of discharge floodlights with asymmetrical reflector for metal halide lamps. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted asymmetrical reflector in anodized aluminum, clear glass diffuser. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 170 E71	1x70 (RX7s)	434x230x87	3,6	83,5
Boreas 1150 E72	1x150 (RX7s)	434x230x87	4,5	168
Boreas 170 E79 HS	1x70 (RX7s)	434x230x87	3,6	83,5
Boreas 1150 E80 HS	1x150 (RX7s)	434x230x87	4,5	168

Options available on request:  
HF- High Frequency control gear  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp



# BOREAS

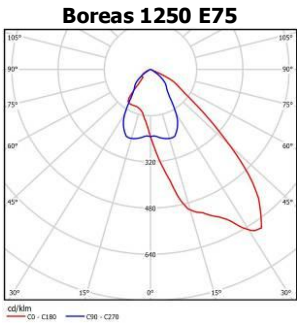
## Discharge Floodlight for Metal Halide Lamps with Asymmetrical Reflector



Type:	A range of discharge floodlights with asymmetrical reflector for metal halide lamps. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum, clear glass diffuser. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 1150 I77	1x150 (E27)	514x420x146	7,2	168
Boreas 1250 E75	1x250 (E40)	514x420x146	8,2	280
Boreas 1400 E76	1x400 (E40)	514x420x146	9	440
Boreas 1150 I78 HS	1x150 (E27)	514x420x146	7,2	168
Boreas 1250 E83 HS	1x250 (E40)	514x420x146	8,2	280
Boreas 1400 E84 HS	1x400 (E40)	514x420x146	9	440

Options available on request:  
HF- High Frequency control gear  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp



# BOREAS

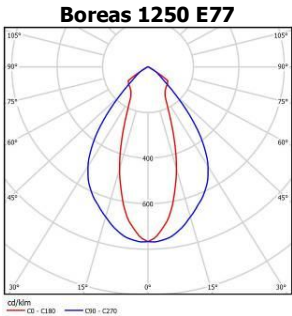
## Discharge Floodlight for Metal Halide Lamps with Symmetrical Reflector



Type:	A range of discharge floodlights with symmetrical reflector for metal halide lamps. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum, clear glass diffuser. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

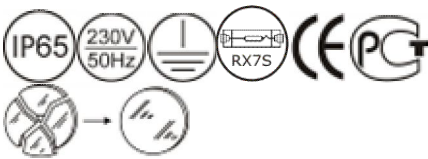
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 1150 I79	1x150 (E27)	514x420x146	7,2	168
Boreas 1250 E77	1x250 (E40)	514x420x146	8,2	280
Boreas 1400 E78	1x400 (E40)	514x420x146	9	440
Boreas 1150 I80 HS	1x150 (E27)	514x420x146	7,2	168
Boreas 1250 E85 HS	1x250 (E40)	514x420x146	8,2	280
Boreas 1400 E86 HS	1x400 (E40)	514x420x146	9	440

Options available on request:  
HF- High Frequency control gear  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp



# BOREAS CL

## Discharge Floodlight with Clips and Asymmetrical Reflector



- Type:

A range of discharge floodlights with asymmetrical reflector and aluminum clips. IP65 - water and dust protection for use in adverse conditions.
- Specification:

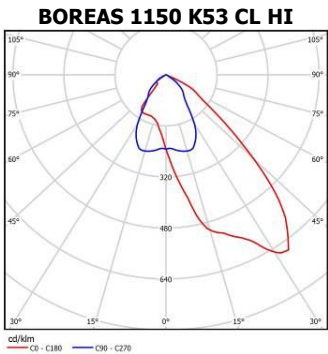
Body in aluminum with dark grey finish. Facetted asymmetrical reflector in anodized aluminum. Clear glass diffuser with aluminum clips.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:

Suitable for any horizontal and/or vertical surfaces.
- Application:

Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 170 K52 CL HI	1x70 W(RX7s)	445x275x130	3,6	83,5
Boreas 1150 K53 CL HI	1x150 W(RX7s)	445x275x130	4,5	168
Boreas 170 K83 CL HS	1x70 W(RX7s)	445x275x130	3,6	83,5
Boreas 1150 K80 CL HS	1x150 W(RX7s)	445x275x130	4,5	168

- Options available on request:
- TIM- Timed ignitor
  - HF- High Frequency control gear
  - TP- With built-in thermal protector
  - HS- For high pressure sodium lamp





# BOREAS CL

## Discharge Floodlight with Clips and Asymmetrical Reflector



- Type:

A range of discharge floodlights with asymmetrical reflector and aluminum clips. IP65 - water and dust protection for use in adverse conditions.
- Specification:

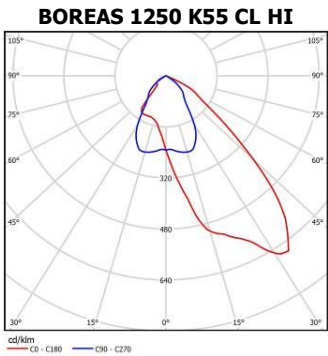
Body in aluminum with dark grey finish. Facetted asymmetrical reflector in anodized aluminum. Clear glass diffuser with aluminum clips.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:

Suitable for any horizontal and/or vertical surfaces.
- Application:

Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

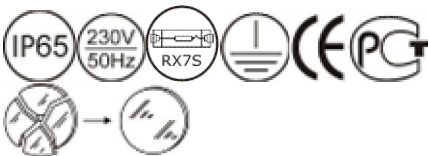
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 1150 K54 CL HI	1x150 (E27)	500x420x145	7	168
Boreas 1250 K55 CL HI	1x250 (E40)	500x420x145	8,2	280
Boreas 1400 K56 CL HI	1x400 (E40)	500x420x145	9	440
Boreas 1150 J37 CL HS	1x150 (E40)	500x420x145	7	168
Boreas 1250 K81 CL HS	1x250 (E40)	500x420x145	8,2	280
Boreas 1400 K82 CL HS	1x400 (E40)	500x420x145	9	440

- Options available on request:
- TIM- Timed ignitor
  - HF- High Frequency control gear
  - TP- With built-in thermal protector
  - HS- For high pressure sodium lamp



# BOREAS CL

## Discharge Floodlight with Clips and Spot Reflector



- Type:** A range of discharge floodlights with spot reflector and aluminum clips. IP65 - water and dust protection for use in adverse conditions.
- Specification:** Body in aluminum with dark grey finish. Spot reflector made of bright anodized aluminum. Clear glass cover with aluminum clips. Luminaire is plastic-wrapped and boxed individually.
- Installation:** Suitable for any horizontal and/or vertical surfaces.
- Application:** Efficient floodlight for building facades, churches, statues, displays, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 170 K02 CL SPOT HI	1x70 W(RX7s)	445x275x130	3,6	83,5
Boreas 1150 K03 CL SPOT HI	1x150 W(RX7s)	445x275x130	4,5	168
Boreas 170 K10 CL SPOT HS	1x70 W(RX7s)	445x275x130	3,6	83,5
Boreas 1150 K11 CL SPOT HS	1x150 W(RX7s)	445x275x130	4,5	168

- Options available on request:
- TIM- Timed ignitor
  - HF- High Frequency control gear
  - HI- For metal halide lamps
  - HS- For high pressure sodium lamp
  - TP- With built-in thermal protector

# BOREAS

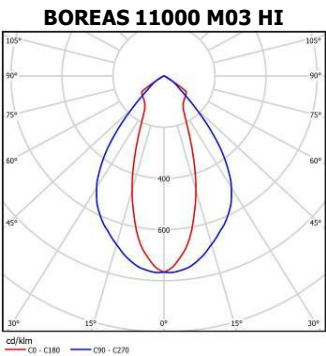
## Discharge Floodlight for Metal Halide Lamps with Symmetrical Reflector



Type:	A high power discharge floodlight with symmetrical reflector for metal halide lamps. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum. Clear glass cover with aluminum clips. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for building facades and perimeters, billboards, displays, car parks, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Boreas 11000 M03 HI With separate gear box	1x1000 (E40)	600x165x525	19,8	1075

Options available on request:  
TP- With built-in thermal protector  
HS- For high pressure sodium lamp



ARENA

Discharge Floodlight for sports field and stadium lighting



Arena 11000 N86 BLD

Arena 12000 N90 SPOT

Arena 11000 N86

Type:	A high specification and performance discharge floodlight with a choice of symmetrical or asymmetrical reflector. IP65 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish. Facetted symmetrical reflector in anodized aluminum or circular reflector in matt aluminum. Thermal resistant glass diffuser sealed with anti-ageing silicone gasket. Luminaire and gear box is plastic-wrapped and boxed individually.
Installation:	Suitable for any horizontal and/or vertical surfaces.
Application:	Efficient floodlight for sport fields, stadiums, perimeters and airports etc.



Easy installation and maintenance with rear access to the lamp and IP65 water/dust protection. Stainless steel clips.





Additional blade provides better glare control and serves for asymmetrical light distribution. See option list (BLD).

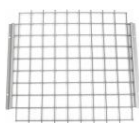


Ventilation valve ensures excess moisture depletion from inside of the luminaire and protects internal parts from corrosion.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Arena 11000 N86	symmetric	1x1000 (E40)	632x265x744	26	1075
Arena 11000 N86 BLD	asymmetric	1x1000 (E40)	632x265x744	26	1075
Arena 11000 N87 SPOT	symmetric	1x1000 (E40)	632x265x744	26	1075
Arena 11000 N87 SPOT BLD	asymmetric	1x1000 (E40)	632x265x744	26	1075
Arena 12000 N89	symmetric	1x2000 (E40)	632x265x744	28	2150
Arena 12000 N89 BLD	asymmetric	1x2000 (E40)	632x265x744	28	2150
Arena 12000 N90 SPOT	symmetric	1x2000 (E40)	632x265x744	28	2150
Arena 12000 N90 SPOT BLD	asymmetric	1x2000 (E40)	632x265x744	28	2150

All luminaires are with separate gear box

Hot re-strike versions are available on request (see option list)



**Grid A2**



**Frame A1**



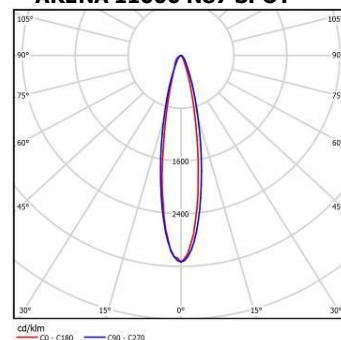
**Frame A2**

Accessories for glass protection or better glare control are available on request. Please use short names placing order.

Options available on request:

- TIM- Timed ignitor
- HI- For metal halide lamps
- HS- For high pressure sodium lamp
- K12s- Double ended lamp holder (K12s)
- HOT- Hot re-strike version (available only with option K12s)
- BLD- For asymmetrical light distribution

**ARENA 11000 N87 SPOT**



## RADIUS

### A Narrow Beam Projector with Spot Reflector



<b>Type:</b>	A range of narrow beam and high intensity projectors with spot reflector. IP65 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	Body in aluminum with dark grey finish. Spot reflector made of bright anodized aluminum. Toughened glass cover fixed with stainless steel screws. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for any horizontal and/or vertical surfaces.
<b>Application:</b>	Efficient projector for illuminating the churches, flag poles, monuments and building facades, etc.

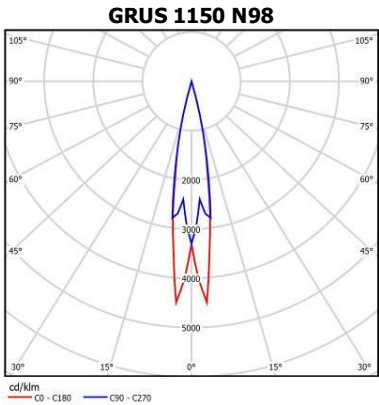
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Radius 135 N81 HI	1x35 W(G12)	Ø175x265	3,4	44
Radius 170 N82 HI	1x70 W(G12)	Ø175x265	3,4	83,5
Radius 1150 N84 HI	1x150 W(G12)	Ø175x265	3,9	168

Options available on request:

TIM-	Timed ignitor
HI-	For metal halide lamps
HF-	High Frequency control gear
TP-	With built-in thermal protector

GRUS

A Spotlight  
Projector with  
Stainless Steel Clips



Grus 1150 N98

<b>Type:</b>	A range of projectors with a spot reflector and high intensity beam. IP65 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	Body in aluminum with dark grey finish. Spot reflector made of bright anodized aluminum. Toughened glass cover fixed with stainless steel screws. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for any horizontal and/or vertical surfaces.
<b>Application:</b>	Efficient projector for illuminating the churches, flag poles, monuments and building facades, etc.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Grus 150 N95	1x50 W(E27)	Ø275x255x400	3,5	62
Grus 170 N96	1x70 W(E27)	Ø275x255x400	3,5	84
Grus 1100 N97	1x100 W(E27)	Ø275x255x400	3,5	116
Grus 1150 N98	1x150 W(E27)	Ø275x255x400	4,1	168

- Options available on request:
- HI- For metal halide lamps
  - HS- For high pressure sodium lamp
  - TIM- Timed ignitor
  - HF- High Frequency control gear
  - TP- With built-in thermal protector

CYGNI

Aluminium IP65 luminaire



Cygni 128 Q99

Type:	Dust and moisture proof IP65 fixture made from aluminium profile.
Specification:	Hardened safety glass is fixed to the body. Glossy aluminium reflector. The body made from extruded aluminium profile, light grey finished. Silicone rubber sealing provide reliable IP protection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Surface luminaire designed to be fixed to walls of any type.
Application:	Dust and moisture proof luminaire, efficient floodlight for building facades and bridges.

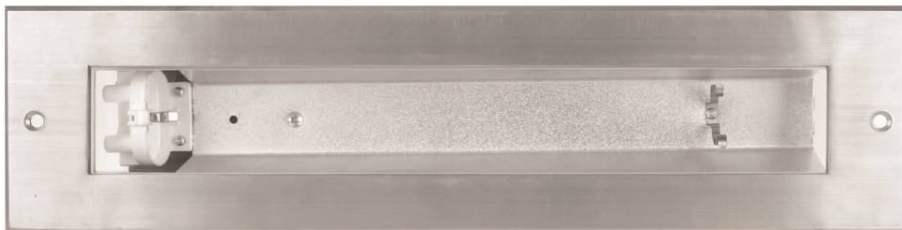
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Cygni 114 Q97	1x14 (G5)	62x630x63	2,1	16
Cygni 124 Q98	1x24 (G5)	62x630x63	2,1	25
Cygni 128 Q99	1x28 (G5)	62x1200x63	4,1	30
Cygni 154 R01	1x54 (G5)	62x1200x63	4,1	58

Options available on request:  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast



## FLOOR

### Stainless Steel Ground Recessed Floodlight



IK08

<b>Type:</b>	A range of ground recessed floodlights with square stainless steel frame. IP67 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	Symmetric reflector made of matt anodized aluminum. Body in aluminum with dark grey finish. Toughened glass cover with anti-ageing silicone gasket and stainless steel frame gives IP67 protection. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 200 mm in deep and around.
<b>Application:</b>	Efficient floodlight, ideal for illuminating walls. For in inside and outdoor applications.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Floor 114 Q91	1x14 (G5)	108x645x125	2,1	16
Floor 124 Q92	1x24 (G5)	108x645x125	2,1	25
Floor 128 Q95	1x28 (G5)	108x1245x125	4,1	30
Floor 154 Q96	1x54 (G5)	108x1245x125	4,1	58

Options available on request:

DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast  
EMG- Emergency version 1 hour

EM2- Emergency version 2 hours  
EM3- Emergency version 3 hours  
5TB- 5 way terminal block for easy wiring

## TUBE B & M

### Wall Mounted Luminaire with pleasing Direct/Indirect Lighting effect



**TUBE B HOL 1150 R09**



**TUBE M UP 170 R14**

**Type:** A range of wall mounted luminaires with pleasing direct/indirect light distribution.

**Specification:** Tempered glass diffuser.  
Die-cast aluminum body in dark grey finish.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for wall mounted on any vertical surface.

**Application:** Ideal for numerous indoor and outdoor applications.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Tube B 270 R05	2x70 W(Rx7s)	Ø180x500	3,4	160
Tube B 2150 R06	2x150 W(Rx7s)	Ø180x500	3,9	340
Tube B HOL 170 R08	1x70 W(Rx7s)	Ø180x220	2,2	80
Tube B HOL 1150 R09	1x150 W(Rx7s)	Ø180x220	2,6	170
Tube M 235 R10	2x35 W(G12)	Ø155x460	2,8	88
Tube M 270 R11	2x70 W(G12)	Ø155x460	3,2	160
Tube M UP 135 R12	1x35 W(G12)	Ø155x250	1,8	44
Tube M UP 170 R14	1x70 W(G12)	Ø155x250	2,2	80

Options available on request:

TIM- Timed ignitor  
HI- For metal halide lamps  
HF- High Frequency control gear  
TP- With built-in thermal protector  
UP- With uplight source only  
DOWN- With downlight source only

# TUBE S

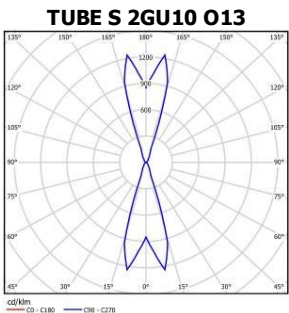
## Wall Mounted Luminaire with pleasing Direct/Indirect Lighting effect



Type:	A range of wall mounted luminaires with pleasing direct/indirect light distribution.
Specification:	Tempered glass diffuser. Die-cast aluminum body in dark grey finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for wall mounted on any vertical surface.
Application:	Ideal for numerous indoor and outdoor applications.

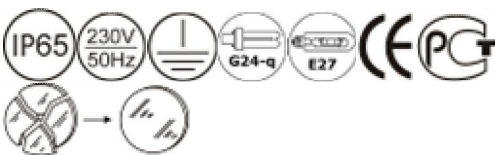
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Tube S 2GU10 O13	max 2x50W (GU10)	Ø90x225	1,4	-
Tube S 1GU10 O14 UP	max 1x50W (GU10)	Ø90x225	1,4	-
Tube S 1GU10 O15 DOWN	max 1x50W (GU10)	Ø90x225	1,4	-

Options available on request:  
UP- With uplight source only  
DOWN- With downlight source only



# ARCTURUS

## Vandal Resistant Bulkhead

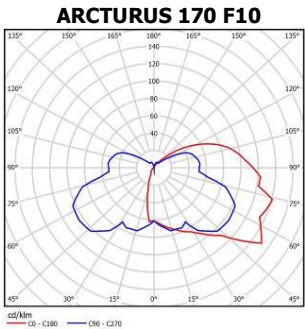


Type:	A non-corrosive vandal resistant luminaire manufactured of tough and durable polycarbonate. IP65 - water and dust protection for use in adverse conditions.
Specification:	Anodized aluminum reflector to maximize light output and efficiency. The diffuser is made of impact resistant UV stable polycarbonate. Injection molded polycarbonate body in black finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for surface mounting on walls or ceilings.
Application:	Building exteriors and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Arcturus 1E27 M52	max 100W (E27)	300x260x185	1,9	-
Arcturus 132 M50 HF	1x32W (G24q-3)	300x260x185	2,1	32
Arcturus 142 M51 HF	1x42W (G24q-4)	300x260x185	2,1	44
Arcturus 150 F09	1x50 (E27)	300x260x185	2,6	62
Arcturus 170 F10	1x70 (E27)	300x260x185	2,6	85

Options available on request:  
HF- High Frequency control gear  
DIM- Dimmable ballast  
SWITCHDIM- Switch DIM ballast  
DALI- DALI ballast

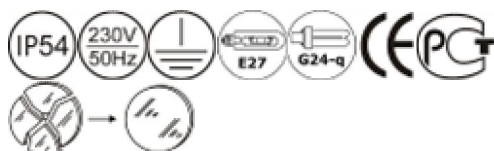
TP- With built-in thermal protector  
HS- For high pressure sodium lamp  
HI- For metal halide lamp





ETA

## Vandal Resistant Bulkhead



ETA 126 Q80 LOUVER



ETA 1E27 Q78

<b>Type:</b>	A non-corrosive vandal resistant luminaire. IP54 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	The diffuser is made of impact resistant UV stable polycarbonate. Die-cast aluminium in dark grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for surface mounting on walls or ceilings.
<b>Application:</b>	Building exteriors and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
ETA 1E27 Q78	1x60W (max) (E27)	Ø350x150	2	-
ETA 118 Q79	1x18W (G24d-2)	Ø350x150	2,3	26
ETA 126 Q80	1x26W (G24d-3)	Ø350x150	2,4	34
ETA 132 Q81 HF	1x32W (Gx24q-3)	Ø350x150	2,3	32
ETA 142 Q82 HF	1x42W (Gx24q-4)	Ø350x150	2,3	44
ETA 1E27 Q78 LOUVER	1x60W (max) (E27)	Ø350x150	2,1	-
ETA 118 Q79 LOUVER	1x18W (G24d-2)	Ø350x150	2,4	26
ETA 126 Q80 LOUVER	1x26W (G24d-3)	Ø350x150	2,5	34
ETA 132 Q81 LOUVER HF	1x32W (Gx24q-3)	Ø350x150	2,4	32
ETA 142 Q82 LOUVER HF	1x42W (Gx24q-4)	Ø350x150	2,4	44

Options available on request:  
 HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast

## OVAL

### Vandal Resistant Bulkhead



**OVAL 126 Q85 LOUVER**

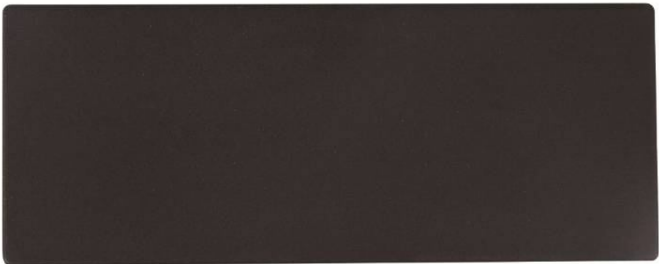
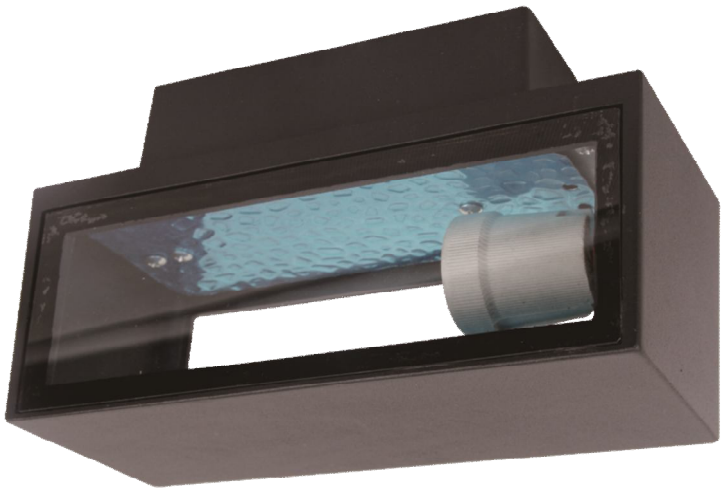
<b>Type:</b>	A non-corrosive vandal resistant luminaire. IP54 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	The diffuser is made of impact resistant UV stable polycarbonate. Die-cast aluminium in dark grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for surface mounting on walls or ceilings.
<b>Application:</b>	Building exteriors and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
OVAL 1E27 Q83	1x60W (max) (E27)	Ø350x150	1,8	-
OVAL 118 Q84	1x18W (G24d-2)	Ø350x150	2,1	26
OVAL 126 Q85	1x26W (G24d-3)	Ø350x150	2,2	34
OVAL 132 Q86 HF	1x32W (Gx24q-3)	Ø350x150	2,1	32
OVAL 1E27 Q83 LOUVER	1x60W (max) (E27)	Ø350x150	1,9	-
OVAL 118 Q84 LOUVER	1x18W (G24d-2)	Ø350x150	2,2	26
OVAL 126 Q85 LOUVER	1x26W (G24d-3)	Ø350x150	2,3	34
OVAL 132 Q86 LOUVER HF	1x32W (Gx24q-3)	Ø350x150	2,2	32

Options available on request:  
 HF- High Frequency control gear  
 DIM- Dimmable ballast  
 SWITCHDIM- Switch DIM ballast  
 DALI- DALI ballast

PYXIS

Wall Mounted Luminaire



MENSA 1E27 Q89

- Type:

A non-corrosive vandal resistant luminaire. IP54 - water and dust protection for use in adverse conditions.
- Specification:

Tempered glass diffuser.  
 Die-cast aluminium in dark grey finish.  
 Luminaire is plastic-wrapped and boxed individually.
- Installation:

Suitable for surface mounting on walls.
- Application:

Building indoor and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Pyxis 1E27 Q90	1x60W (max) (E27)	220x90x125	1,5	-

# MENSA

## Wall Mounted Luminaire



MENSA 1E27 Q89

Type:	A non-corrosive vandal resistant luminaire. IP54 - water and dust protection for use in adverse conditions.
Specification:	Tempered glass diffuser. Die-cast aluminium in dark grey finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for surface mounting on walls or ceilings.
Application:	Building indoor and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Mensa 1E27 Q89	1x60W (max) (E27)	157x160x180	2	-



# POCKET

## A Wall Recessed Luminaire

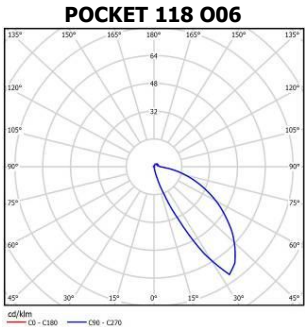


Pocket 1E27 O04

Type:	A range of square wall recessed luminaires with indirect light distribution and good vandal resistant.
Specification:	Tempered frosted glass diffuser. Die-cast aluminum body in dark grey finish with a thermoplastic recessing housing. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for recessed mounting into walls. Supplied with recessing housing.
Application:	Ideal for numerous indoor applications.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Pocket 1E27 O04	1x40W (max) (E27)	227x128(205x105)x87	1	
Pocket 113 O05	1x13W (G24d-1)	227x128(205x105)x87	1,3	19
Pocket 118 O06	1x18W (G24d-2)	227x128(205x105)x87	1,3	26

Options available on request:  
 NCP- Low Power Factor  
 HF- High Frequency control gear



# THETA

## A Wall Recessed Luminaire



**THETA 118 Q77 GRID**

**Type:** A range of square wall recessed luminaires with indirect light distribution and good vandal resistant.

**Specification:** Tempered frosted glass diffuser.  
Die-cast aluminum body in dark grey finish with a thermoplastic recessing housing.  
Luminaire is plastic-wrapped and boxed individually.

**Installation:** Suitable for recessed mounting into walls. Supplied with recessing housing.

**Application:** Ideal for numerous indoor applications.

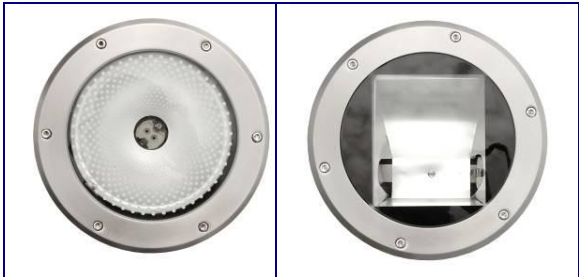
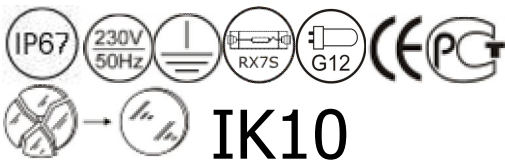
Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Theta 1E27 Q75	1x40W (max) (E27)	260x76x87	1	-
Theta 113 Q76	1x13W (G24d-1)	260x76x87	1,3	19
Theta 118 Q77	1x18W (G24d-2)	260x76x87	1,3	26
Theta 1E27 Q75 GRID	1x40W (max) (E27)	260x76x87	1	-
Theta 113 Q76 GRID	1x13W (G24d-1)	260x76x87	1,3	19
Theta 118 Q77 GRID	1x18W (G24d-2)	260x76x87	1,3	26

Options available on request:

NCP- Low Power Factor  
GRID- Protection grid  
HF- High Frequency control gear

# ATLAS B

## Ground Recessed Floodlight with a choice of Symmetric or Asymmetric Reflector



A choice of symmetric or asymmetric (**AS**) reflector. See product names in description table.



Square stainless steel frame with tempered glass. See option list (**SQUARE**)

<b>Type:</b>	A range of ground recessed floodlights with a choice of symmetric or asymmetric reflector. IP67 - water and dust protection for use in adverse conditions.
<b>Specification:</b>	Symmetric or asymmetric reflector made of matt anodized aluminum. Body in aluminum with dark grey finish and recessed housing in polypropylene. Toughened glass cover with anti-ageing silicone gasket and stainless steel ring gives IP67 protection. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 300 mm in deep and around.
<b>Application:</b>	Efficient floodlight for building facades, statues, sculptures, etc.



Recessed housing is used for easy access and service of floodlight during all life time.



Symmetrical reflector positioned at an angle suitable for wall lighting applications. See option list (**ANGLE**).



Louver to direct light and prevent from blinding effect. See option list (**LOUVER**).



Symmetrical moveable reflector available on request (**MOVE**).



Domed with single window (**COVER1**)



Domed with twin window (**COVER2**)



Domed with twelve window (**COVER12**)

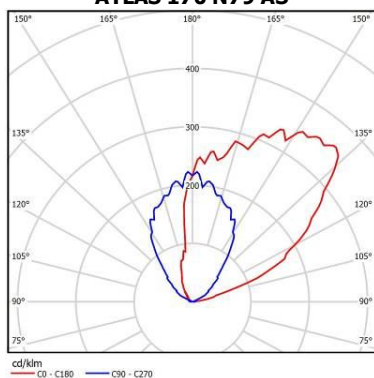


Type	Lamp (W) and socket		Overall dimensions, mm	Weight, kg	Total wattage, W
Atlas 135 N78	1x35 W(G12)	symmetric	Ø258x370	5,7	44
Atlas 170 N79	1x70 W(G12)	symmetric	Ø258x370	5,7	83,5
Atlas 1150 N80	1x150 W(G12)	symmetric	Ø258x370	6,3	168
Atlas 135 N78 AS	1x35 W(Rx7s)	asymmetric	Ø258x370	5,7	44
Atlas 170 N79 AS	1x70 W(Rx7s)	asymmetric	Ø258x370	5,7	83,5
Atlas 1150 N80 AS	1x150 W(Rx7s)	asymmetric	Ø258x370	6,3	168
Atlas 135 N78 SQUARE	1x35 W(G12)	symmetric	Ø258x370	5,7	44
Atlas 170 N79 SQUARE	1x70 W(G12)	symmetric	Ø258x370	5,7	83,5
Atlas 1150 N80 SQUARE	1x150 W(G12)	symmetric	Ø258x370	6,3	168
Atlas 135 N78 AS SQUARE	1x35 W(Rx7s)	asymmetric	Ø258x370	5,7	44
Atlas 170 N79 AS SQUARE	1x70 W(Rx7s)	asymmetric	Ø258x370	5,7	83,5
Atlas 1150 N80 AS SQUARE	1x150 W(Rx7s)	asymmetric	Ø258x370	6,3	168
Atlas 135 N78 ANGLE	1x35 W(G12)	symmetric	Ø258x450	5,7	44
Atlas 170 N79 ANGLE	1x70 W(G12)	symmetric	Ø258x450	5,7	83,5
Atlas 1150 N80 ANGLE	1x150 W(G12)	symmetric	Ø258x450	6,3	168
Atlas 135 N78 MOVE	1x35 W(G12)	symmetric	Ø258x370	5,7	44
Atlas 170 N79 MOVE	1x70 W(G12)	symmetric	Ø258x370	5,7	83,5
Atlas 1150 N80 MOVE	1x150 W(G12)	symmetric	Ø258x370	6,3	168
Atlas 135 N78 LOUVER	1x35 W(G12)	symmetric	Ø258x480	5,7	44
Atlas 170 N79 LOUVER	1x70 W(G12)	symmetric	Ø258x480	5,7	83,5
Atlas 1150 N80 LOUVER	1x150 W(G12)	symmetric	Ø258x480	6,3	168
Atlas 135 N78 COVER1	1x35 W(G12)	symmetric	Ø258x400	5,7	44
Atlas 170 N79 COVER1	1x70 W(G12)	symmetric	Ø258x400	5,7	83,5
Atlas 1150 N80 COVER1	1x150 W(G12)	symmetric	Ø258x400	6,3	168
Atlas 135 N78 COVER2	1x35 W(G12)	symmetric	Ø258x400	5,7	44
Atlas 170 N79 COVER2	1x70 W(G12)	symmetric	Ø258x400	5,7	83,5
Atlas 1150 N80 COVER2	1x150 W(G12)	symmetric	Ø258x400	6,3	168
Atlas 135 N78 COVER12	1x35 W(G12)	symmetric	Ø258x400	5,7	44
Atlas 170 N79 COVER12	1x70 W(G12)	symmetric	Ø258x400	5,7	83,5
Atlas 1150 N80 COVER12	1x150 W(G12)	symmetric	Ø258x400	6,3	168

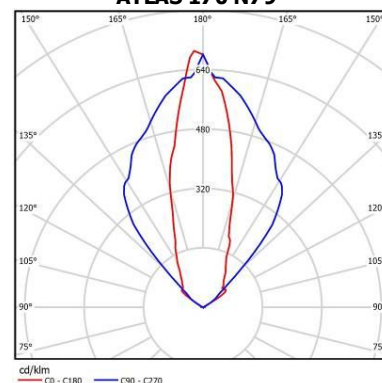
Options available on request:

SQUARE- Square stainless steel frame  
AS- Asymmetric reflector  
LOUVER- Louver to prevent from blinding effect  
MOVE- Symmetrical moveable reflector  
COVER1- Dome with single window  
COVER2- Dome with double window  
COVER12- Dome with twelve window  
TIM- Timed ignitor  
TP- With built-in thermal protector

**ATLAS 170 N79 AS**



**ATLAS 170 N79**



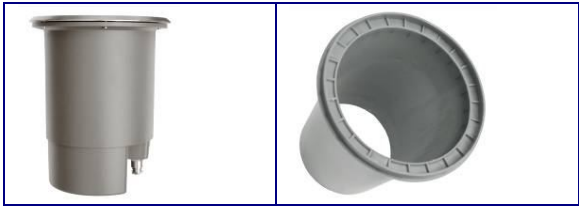
# ATLAS M

## Middle size ground Recessed Floodlight with a choice of round or square stainless steel frame



Square stainless steel frame with tempered glass. See option list **(SQUARE)**

Type:	A range of small size ground recessed floodlights with a choice of round or square stainless steel frame. IP67 - water and dust protection for use in adverse conditions.
Specification:	Symmetric reflector made of matt anodized aluminum. Body in aluminum with dark grey finish and recessed housing in polypropylene. Toughened glass cover with anti-ageing silicone gasket and stainless steel ring gives IP67 protection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 300 mm in deep and around.
Application:	Efficient floodlight for building facades, statues, sculptures, etc.



Recessed housing is used for easy access and service of floodlight during all life time.



Domed with single window (**COVER1**)



Domed with twin window (**COVER2**)



Domed with twelve window (**COVER12**)



Special glass to increase light efficiency available on request (**GLASS ATLAS S**). Can be used in set with COVER1, COVER2 or COVER12 only.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Atlas M 135 Q73	1x35 W(G12)	Ø200x235	3,9	44
Atlas M 170 Q74	1x70 W(G12)	Ø200x235	4,5	83,5
Atlas M 135 Q73 SQUARE	1x35 W(G12)	Ø200x235	3,9	44
Atlas M 170 Q74 SQUARE	1x70 W(G12)	Ø200x235	4,5	83,5
Atlas M 135 Q73 COVER1	1x35 W(G12)	Ø200x260	3,9	44
Atlas M 170 Q74 COVER1	1x70 W(G12)	Ø200x260	4,5	83,5
Atlas M 135 Q73 COVER2	1x35 W(G12)	Ø200x260	3,9	44
Atlas M 170 Q74 COVER2	1x70 W(G12)	Ø200x260	4,5	83,5
Atlas M 135 Q73 COVER12	1x35 W(G12)	Ø200x260	3,9	44
Atlas M 170 Q74 COVER12	1x70 W(G12)	Ø200x260	4,5	83,5

Options available on request:

SQUARE- Square stainless steel frame

COVER1- Dome with single window

COVER2- Dome with double window

COVER12- Dome with twelve window

GLASS- Special glass to increase light efficiency

TIM- Timed ignitor

# ATLAS S

Small size ground Recessed Floodlight with a choice of round or square stainless steel frame



Square stainless steel frame with tempered glass. See option list **(SQUARE)**

Type:	A range of small size ground recessed floodlights with a choice of round or square stainless steel frame. IP67 - water and dust protection for use in adverse conditions.
Specification:	Body in aluminum with dark grey finish and recessed housing in polypropylene. Toughened glass cover with anti-ageing silicone gasket and stainless steel ring gives IP67 protection. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 200 mm in deep and around.
Application:	Efficient floodlight for building facades, statues, sculptures, etc.



Recessed housing is used for easy access and service of floodlight during all life time.



Domed with single window (**COVER1**)



Domed with twin window (**COVER2**)



Domed with twelve window (**COVER12**)



Special glass to increase light efficiency available on request (**GLASS ATLAS S**). Can be used in set with COVER1, COVER2 or COVER12 only.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Atlas S 1GU10 Q72	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 SQUARE	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER1	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER2	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER12	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER1 GLASS	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER2 GLASS	max 1x50W (GU10)	Ø105x165	0,5	-
Atlas S 1GU10 Q72 COVER12 GLASS	max 1x50W (GU10)	Ø105x165	0,5	-

Options available on request:

SQUARE- Square stainless steel frame

COVER1- Dome with single window

COVER2- Dome with double window

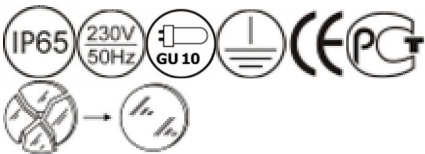
COVER12- Dome with twelve window

GLASS- Special glass to increase light efficiency



# KAPPA

## A Miniature Floodlight for Halogen Lamps



KAPPA 1GU10 Q88 LONG

Type:	A range of miniature wall mounted luminaires with IP65 protection.
Specification:	Tempered glass diffuser. Die-cast aluminum body in dark grey finish. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for surface mounting on walls or ceilings.
Application:	Building exteriors and other areas.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
KAPPA 1GU10 Q87	max 1x50W (GU10)	Ø70x150x210	0,7	-
KAPPA 1GU10 Q88 LONG	max 1x50W (GU10)	Ø70x150x605	1,2	-

# APUS A Miniature Floodlight for Halogen Lamps



Holder for wall mounted version should be ordered. See option list: HOL.



Apus 1GU10 O11 HOL



Apus 1GU10 O11 HOL LOUVER



Apus 1GU10 O12 GRO



Apus 1GU10 O12 GRO LOUVER

Ground spike for tree and plant should be ordered. See option list: GRO.

Type:	A range of miniature ground recessed&surface mounted luminaires with IP65 protection.
Specification:	Tempered glass diffuser. Die-cast aluminum body in dark grey finish with a thermoplastic recessing housing. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 300 mm in deep and around. Ground spike or holder for wall mounting can be ordered separately.
Application:	Ideal for lighting of architectural details, sculptures, plants and trees.



Recessed housing is used for easy access and service of floodlight during all life time. Supplied with Apus REC versions.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Apus 1GU10 O10 REC	max 1x50W (GU10)	Ø98x98	0,5	-
Apus 1GU10 O11 HOL	max 1x50W (GU10)	Ø98x98	0,5	-
Apus 1GU10 O12 GRO	max 1x50W (GU10)	Ø98x98	0,5	-
Apus 1GU10 O10 REC LOUVER	max 1x50W (GU10)	Ø98x130	0,5	-
Apus 1GU10 O11 HOL LOUVER	max 1x50W (GU10)	Ø98x130	0,5	-
Apus 1GU10 O12 GRO LOUVER	max 1x50W (GU10)	Ø98x130	0,5	-

Options available on request:

REC- Recessed version with plastic housing  
HOL- Wall mounted version with holder  
GRO- Ground mounted version with spike  
LOUVER- Anti-glare **louver**

# FISH

## A underwater Projector for lighting polls



FISH 1G5.3 R02



INOX BOX4



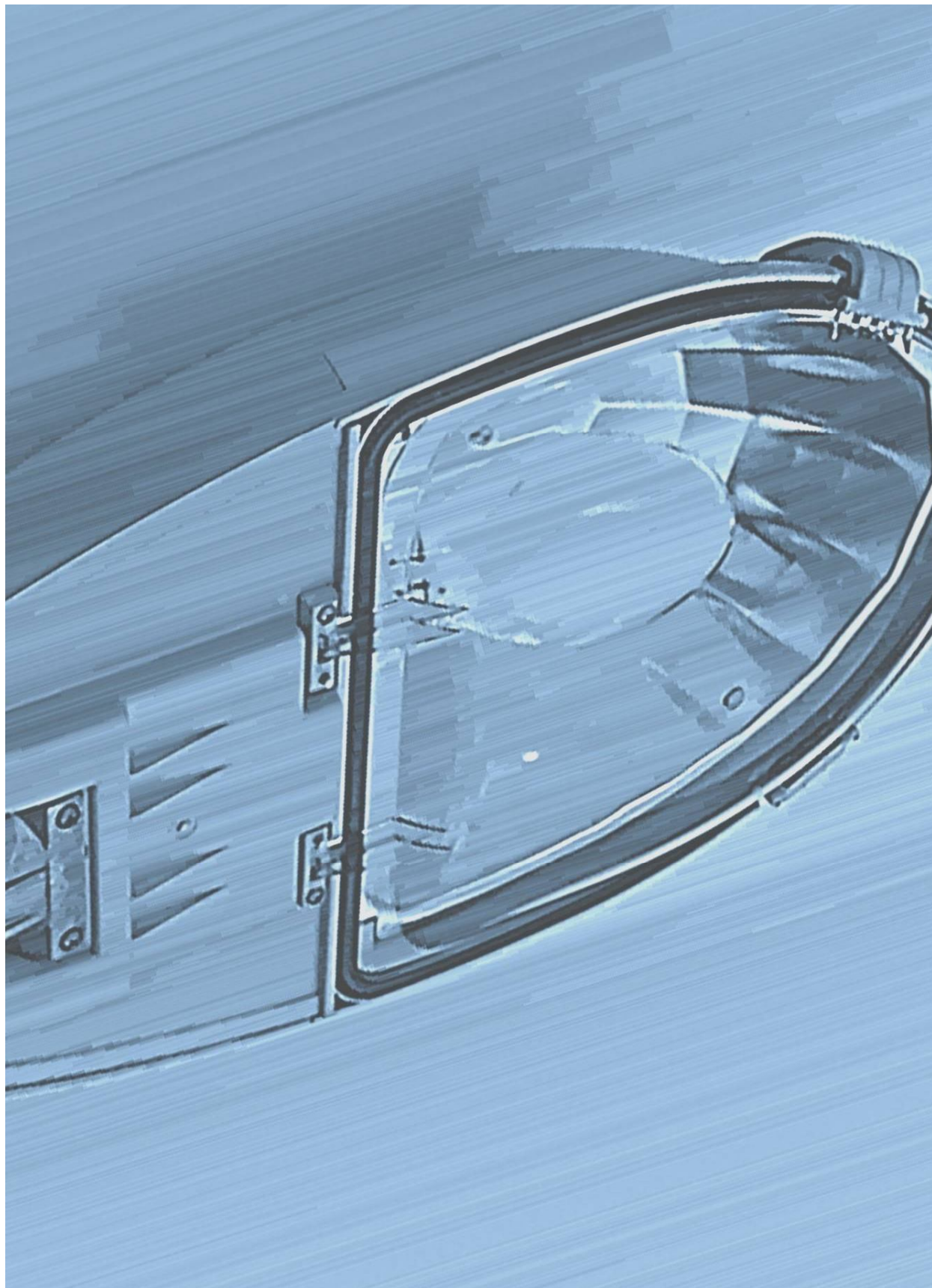
FISH 1G5.3 R03



FISH 1G5.3 R04

Type:	A range of underwater projectors for lighting polls. IP68 - water and dust protection for use in adverse conditions.
Specification:	Tempered glass diffuser with anti-ageing silicone gasket. Stainless steel body. Luminaire is plastic-wrapped and boxed individually.
Installation:	Suitable for fixing on any vertical or horizontal surface.
Application:	Ideal for lighting polls.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Fish 1G5.3 R02	max 1x50W (G5.3)	Ø90x110	0,9	-
Fish 1G5.3 R03	max 1x50W (G5.3)	Ø90x90	0,9	-
Fish 1G5.3 R04	max 1x50W (G5.3)	Ø90x120	1,1	-
Inox Box4	-	Ø85x55	0,4	-



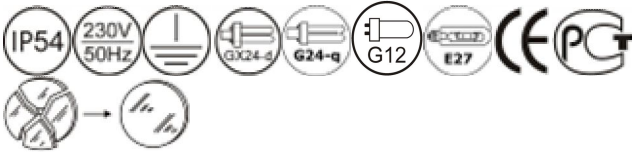
# STREETLIGHTS

[www.northcliffe.org](http://www.northcliffe.org)



DRACO

IP54 Bollard  
with Opal Diffuser

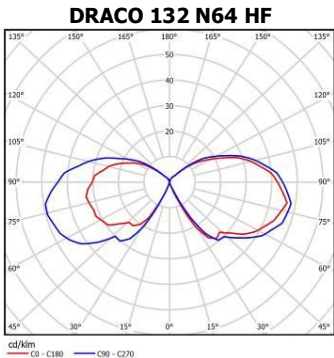


- Type:** A stylish circular bollard with emphasis on simple design and high vandal resistance.
- Specification:** Diffuser made of opal PC material.  
Body in extruded aluminum with dark grey finish. Gear tray made of zinc plated steel.  
Luminaire is plastic-wrapped and boxed individually.
- Installation:** Flange mounting plate (3x12,5 mm holes).
- Application:** Suitable for many applications including parks, path and side walks, residential areas and public places.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Draco 1E27 N62	E27 (max.60 W)	Ø140(225)x800	4,5	
Draco 126 N63	1x26 (G24d-3)	Ø140(225)x800	4,6	34
Draco 132 N64 HF	1x32 (G24q-3)	Ø140(225)x800	4,6	32
Draco 142 N65 HF	1x42 (G24q-4)	Ø140(225)x800	4,6	44
Draco 135 N66 HI	1x35 (G12)	Ø140(225)x800	5,8	44
Draco 150 N67 HI	1x50 (E27)	Ø140(225)x800	5,8	62

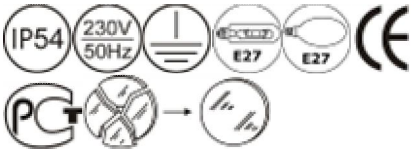
Bollard height can be adjusted on request

- Options available on request:**
- HS- For high pressure sodium lamps
  - HM- For high pressure mercury lamps
  - HI- For metal halide lamps
  - HF- High Frequency control gear



SPHERE&  
CYLINDER

IP54 Sphere-Shaped  
Park Lights



Sphere 170 H98 CLR RFL

Sphere 170 H96 PRZ

Cylinder 170 I01 CLR RFL

Type:	A range of non-corrosive sphere-shaped park lights. An efficient light distribution and glare designed to match the highest standards.
Specification:	Diffuser can be made of UV stable PMMA or PC material with a choice from three designs - opal, clear or prismatic. A stainless steel reflector for better glare control and light distribution in clear version is recommended. Black colour chassis made from injection moulded PC. Attached to diffuser with help of quick lock system. Gear tray made from zinc plated steel. Luminaire is plastic-wrapped and boxed individually.
Installation:	Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 5 meters.
Application:	Suitable for many applications including parks, path and side walks, minor roads, residential areas and public places.



A stainless steel reflector for better glare control and light distribution can be ordered on request. See option list- RFL. Recommended in versions with a clear diffuser.



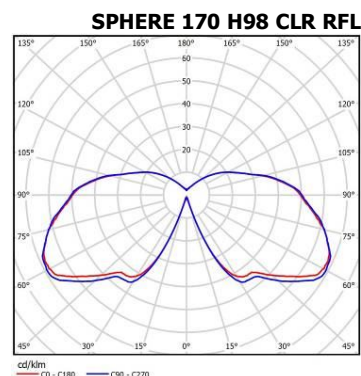
A chassis for suspended mounting **is** available on request (for Ø42mm pole). See option list- SUS.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Sphere 1E27 H92 OP	Opal	E27	Ø350x455	3,2	
Sphere 150 H93 OP	Opal, HS	1x50 (E27)	Ø350x455	3,6	62
Sphere 170 H94 OP	Opal, HS	1x70 (E27)	Ø400x505	4,1	85
Sphere 1100 O03 OP	Opal, HS	1x100 (E40)	Ø450x555	4,7	116
Sphere 150 H93 OP PC	Opal, HS	1x50 (E27)	Ø350x455	3,6	62
Sphere 170 H94 OP PC	Opal, HS	1x70 (E27)	Ø400x505	4,1	85
Sphere 1100 O03 OP PC	Opal, HS	1x100 (E40)	Ø450x555	4,7	116
Sphere 150 H95 PRZ	Prismatic, HS	1x50 (E27)	Ø400x505	4,1	62
Sphere 170 H96 PRZ	Prismatic, HS	1x70 (E27)	Ø400x505	4,1	85
Sphere 150 H95 PRZ PC	Prismatic, HS	1x50 (E27)	Ø400x505	4,1	62
Sphere 170 H96 PRZ PC	Prismatic, HS	1x70 (E27)	Ø400x505	4,1	85
Sphere 150 H97 CLR RFL	Clear, HS with reflector	1x50 (E27)	Ø350x455	3,9	62
Sphere 170 H98 CLR RFL	Clear, HS with reflector	1x70 (E27)	Ø400x505	4,4	85
Sphere 1100 O03 CLR RFL	Opal, HS with reflector	1x100 (E40)	Ø450x555	5,0	116
Sphere 150 H97 CLR RFL PC	Clear, HS with reflector	1x50 (E27)	Ø350x455	3,9	62
Sphere 170 H98 CLR RFL PC	Clear, HS with reflector	1x70 (E27)	Ø400x505	4,4	85
Sphere 1100 O03 CLR RFL PC	Opal, HS with reflector	1x100 (E40)	Ø450x555	5,0	116
Cylinder 150 H99 CLR RFL	Clear, HS with reflector	1x50 (E27)	Ø310x505	4,5	62
Cylinder 170 I01 CLR RFL	Clear, HS with reflector	1x70 (E27)	Ø310x505	4,5	85
Cylinder 150 H99 CLR RFL PC	Clear, HS with reflector	1x50 (E27)	Ø310x505	4,5	62
Cylinder 170 I01 CLR RFL PC	Clear, HS with reflector	1x70 (E27)	Ø310x505	4,5	85

Bowl diameter > **than** Ø450 mm and powers 150 & 250W can be produced on request.

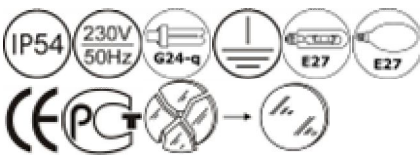
#### Options available on request:

- HF- High Frequency control gear
- HS- For high pressure sodium lamps
- HM- For high pressure mercury lamps
- HI- For metal halide lamps
- PC- PC bowl
- OP- Opal diffuser
- CLR- Clear diffuser
- PRZ- Prismatic diffuser
- RFL- Stainless steel reflector
- SUS- Suspended mounted version



# SARGAS

## IP54 Park Lights with a Large Round Canopy



Sargas 170 N72 OP

Sargas 170 N72 OP ROOF

Sargas 170 N72 CLR RFL

<b>Type:</b>	A range of decorative park lights with a large round canopy or without.
<b>Specification:</b>	Diffuser made of UV stable PMMA material with a choice from three designs- opal, clear or matt coated. A stainless steel reflector for better glare control and light distribution in clear version is recommended. Canopy in aluminum with dark grey finish. Gear tray made of zinc plated steel. Black colour chassis made of injection moulded PC. Attached to diffuser with help of quick lock system. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3,5 to 5 meters.
<b>Application:</b>	Suitable for many applications including parks, path and side walks, minor roads, residential areas and public spaces.



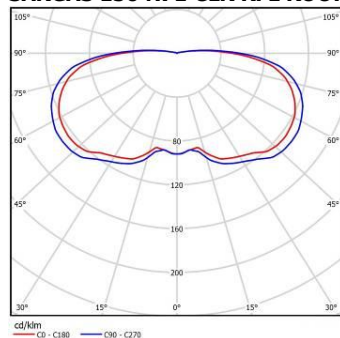
A stainless steel reflector for better glare control and light distribution can be ordered on request. See option list- RFL. Recommended in versions with a clear diffuser.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Sargas 1E27 N68 OP	Opal	E27 (max.100 W)	Ø280x620	3,5	
Sargas 142 N69 HF OP	Opal	1x42 (G24q-4)	Ø280x620	3,6	44
Sargas 150 N71 OP	Opal	1x50 (E27)	Ø280x620	4,7	62
Sargas 170 N72 OP	Opal	1x70 (E27)	Ø280x620	4,7	85
Sargas 1E27 N68 OP ROOF	Opal with canopy	E27 (max.100 W)	Ø500x630	4,4	
Sargas 142 N69 HF OP ROOF	Opal with canopy	1x42 (G24q-4)	Ø500x630	4,5	44
Sargas 150 N71 OP ROOF	Opal with canopy	1x50 (E27)	Ø500x630	5,6	62
Sargas 170 N72 OP ROOF	Opal with canopy	1x70 (E27)	Ø500x630	5,6	85
Sargas 1E27 N68 CLR RFL	Clear with reflector	E27 (max.100 W)	Ø280x620	3,8	
Sargas 142 N69 HF CLR RFL	Clear with reflector	1x42 (G24q-4)	Ø280x620	3,9	44
Sargas 150 N71 CLR RFL	Clear with reflector	1x50 (E27)	Ø280x620	5,0	62
Sargas 170 N72 CLR RFL	Clear with reflector	1x70 (E27)	Ø280x620	5,0	85
Sargas 1E27 N68 CLR RFL ROOF	Clear with reflector and canopy	E27 (max.100 W)	Ø500x630	4,7	
Sargas 142 N69 HF CLR RFL ROOF	Clear with reflector and canopy	1x42 (G24q-4)	Ø500x630	4,8	44
Sargas 150 N71 CLR RFL ROOF	Clear with reflector and canopy	1x50 (E27)	Ø500x630	5,9	62
Sargas 170 N72 CLR RFL ROOF	Clear with reflector and canopy	1x70 (E27)	Ø500x630	5,9	85

**Options available on request:**

- HS- For high pressure sodium lamps
- HM- For high pressure mercury lamps
- HI- For metal halide lamps
- HF- High Frequency control gear
- PC- PC bowl
- OP- Opal diffuser
- CLR- Clear diffuser
- MAT- Matt coated
- RFL- Stainless steel reflector

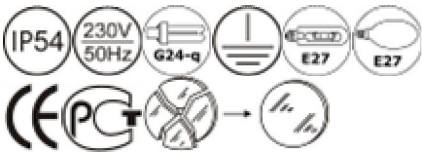
**SARGAS 150 N71 CLR RFL ROOF**





VELA

IP54 Park Lights  
with a Large Round  
Canopy



Vela 170 N94 OP

Vela 170 N94 CLR RFL ROOF

Vela 170 N94 CLR RFL

- Type:** A range of decorative park lights with a large round canopy.
- Specification:** Diffuser made of UV stable PMMA material with a choice from three designs- opal, clear or matt coated. A stainless steel reflector for better glare control and light distribution in clear version is recommended. Canopy in aluminum with dark grey finish. Gear tray made of zinc plated steel. Black colour chassis made of injection moulded PC. Attached to diffuser with help of quick lock system. Luminaire is plastic-wrapped and boxed individually.
- Installation:** Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3,5 to 5 meters.
- Application:** Suitable for many applications including parks, path and side walks, minor roads, residential areas and public spaces.

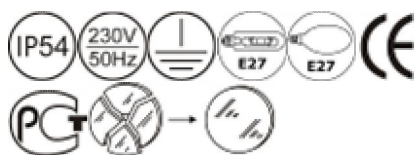


A stainless steel reflector for better glare control and light distribution can be ordered on request. See option list- RFL. Recommended in versions with a clear diffuser.



# CASTLE

## IP54 Classic-Shaped Park Lights



<b>Type:</b>	A range of classic shaped park lights with a low light pollution.
<b>Specification:</b>	Flat toughened glass diffuser with an opal top cap part made of UV stable PC material. A white aluminum reflector from two parts gives better glare control and light distribution. Canopy in aluminum with dark grey finish. Gear tray made of zinc plated steel. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 5 meters. Suspended mounted versions available on request.
<b>Application:</b>	Suitable for many applications including parks, old cities path walks and public spaces.



Suspended mounted version is available on separate request. See option list.

Type	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Castle 1E27 N73	E27 (max.100 W)	430x430x900	8,2	
Castle 150 N74	1x50 (E27)	430x430x900	9,6	62
Castle 170 N75	1x70 (E27)	430x430x900	9,6	85
Castle 1100 N76	1x100 (E27)	430x430x900	9,6	116
Castle 1150 N77	1x150 (E27)	430x430x900	10,2	168

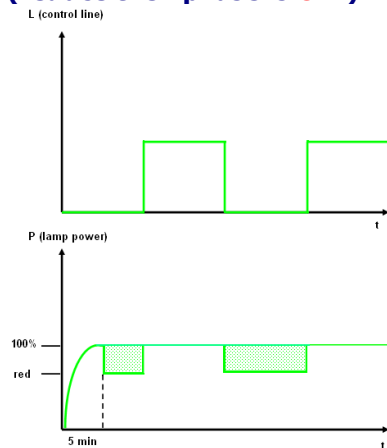
### Options available on request:

HF-	High Frequency control gear
HS-	For high pressure sodium lamps
HM-	For high pressure mercury lamps
HI-	For metal halide lamps
SUS-	Suspended mounted version

# ENERGY SAVINGS AND POWER REDUCTION DEVICES FOR STREET LIGHTING

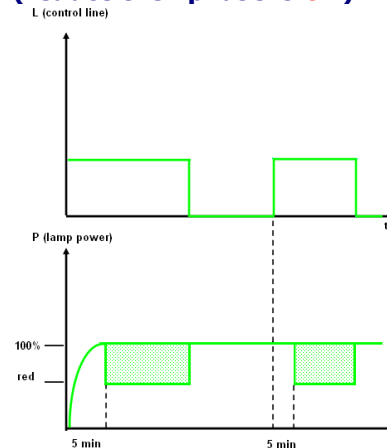


## **WCoffPRD** - power reduction device with control wire (reduce then phase is **OFF**)



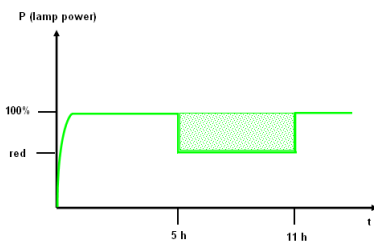
- Switch over to reduced power without applying control voltage
- 5 minutes of full load operation, independent if control voltage applied or not during switch on (lamp preservation)
- 3 minutes of full load operation after short mains interruptions independent if control voltage applied

## **WConPRD** - power reduction device with control wire (reduce then phase is **ON**)



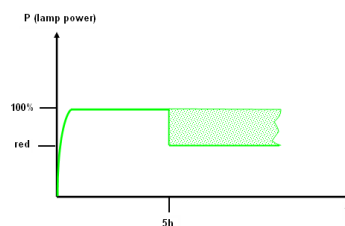
- Switch over to reduced power when control voltage applied, after delay of 5 minutes.
- 5 minutes of full load operation, independent if control voltage applied or not during switch on (lamp preservation)
- 3 minutes of full load operation after short mains interruptions independent if control voltage applied

## **AC5h/6hPRD** - power reduction device with automatic reduction for 6 h after 5h working time. **No control cable needed.**



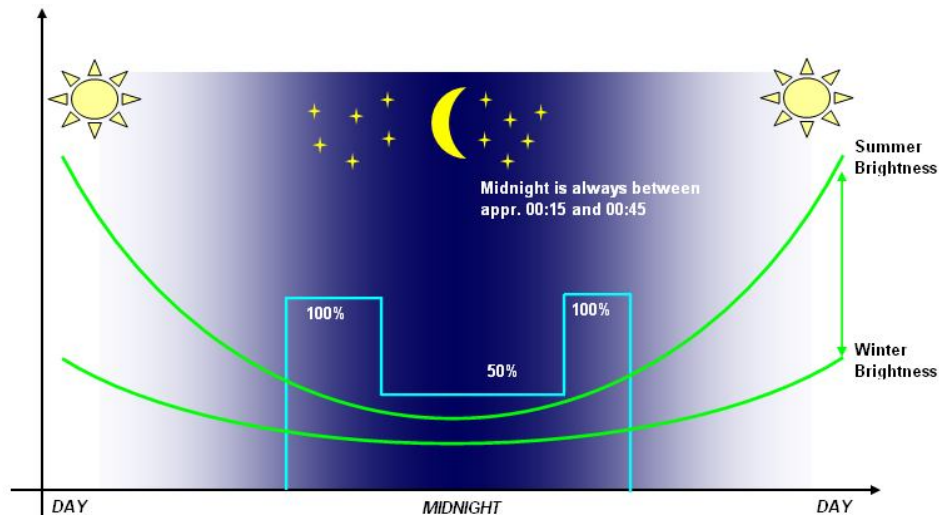
- Program sequence starts after supply voltage is applied
- Switch over to reduced power operation after permanently programmed time of 5h (no additional line needed)
- Reduced operation for 6h
- Full power operation till supply voltage is switched OFF
- 3 minutes of full load operation after short mains interruptions

## **AC5hPRD** - power reduction device with automatic reduction after 5h. **No control cable needed.**



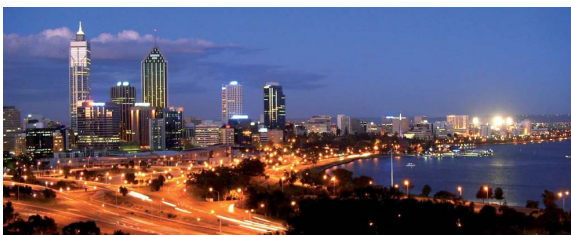
- Program sequence starts after supply voltage is applied
- Switch over to reduced power operation after permanently programmed time of 5h (no additional line needed)
- Reduced operation till supply voltage is switched OFF
- 3 minutes of full load operation after short mains interruptions

**ACmidPRD- power reduction device with automatic reduction and middle night detection (for 7h). No control wire needed.**



- Microprocessor controlled
- No additional cables required
- Reference point is "natural midnight".
- Factory settings, reduces power 3h before reference point power increase follows 4h after reference point
- Factory settings could be changed via mains supply, if needed.

**EXAMPLE: 19 o'clock street lights are turned ON and at 6 o'clock turned OFF. In this case we have total of 11 hours long operation, middle point in this case is 5.5 hours which makes "natural midnight" at 00:30, so power goes down to 50% operation at 21:30 (00:30 – 3h), returns to 100% operation at 04:30 (00:30 + 4h). Power switch always takes average of last 3 operating times to calculate reference point.**



	High-pressure Sodium Lamps (HS)					
Lamp Wattage, W	50/35	70/50	100/70	150/100	250/150	400/250
Circuit power (full), W	63	84	115	166	274	434
Circuit power (reduced), W	40	59	79	107	171	288
Energy savings, W	23	25	36	59	103	146
Circuit power reduction	37 %	30 %	31 %	36 %	38 %	34 %
Power-reduced operation/year, h	2190	2190	2190	2190	2190	2190
Energy savings per year, kW	50,37	54,75	78,84	129,21	225,57	319,74
Savings in Energy costs per year, EUR	6,04	6,57	9,46	15,50	27,07	38,36
Payback Period, Years	3,3	3	2,1	1,3	0,7	0,5

Energy costs are based on the power price of 0,12 Euro/kWh. Output reduction is based on an assumed period of 6 hours per night, 365 days a year. Lamps must always be ignited with the higher rated wattage of ballast and not switched down to reduced wattage before 10 minutes of normal operation after the ignition of a lamp.

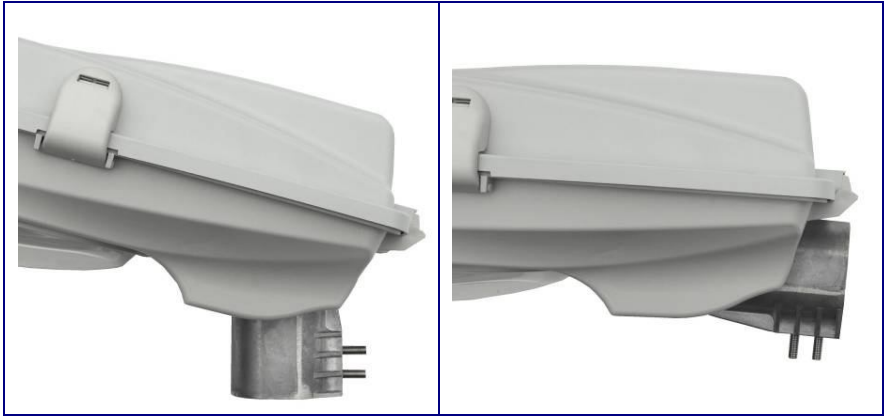


## ALGOL

### IP66 Road and Street Lights with Adjustable Lamp Position



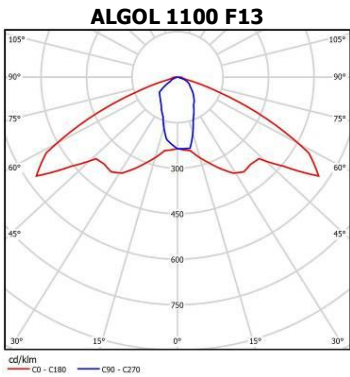
<b>Type:</b>	A range of non-corrosive street lights with unique curved profile. High lighting output and optical performance, designed to match the highest <b>required</b> standards.
<b>Specification:</b>	Bright <b>anodized</b> aluminum reflector with transparent PMMA or PC bowl. Adjustable lamp position. Upper and lower canopies made <b>of</b> injection molded glass-fibre UV stabilized polycarbonate. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Side entry or post top installation with two screws on poles Ø60mm. Suggested mounting height from 6 to 10 meters.
<b>Application:</b>	Suitable for many applications including car parks, minor and major roads, residential areas and public <b>places</b> .



Supplied with special adjustable joint for horizontal or vertical mounting.

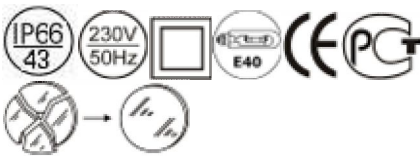
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Algol 170 F12	HS	1x70 (E27)	530x350x175	3,8	85
Algol 1100 F13	HS	1x100 (E40)	530x350x175	3,8	116
Algol 1150 F14	HS	1x150 (E40)	530x350x175	4,4	168
Algol 1125 F15	HM	1x125 (E27)	530x350x175	4,24	138

- Options available on request:**
- HS- For high pressure sodium lamps
  - HM- For high pressure mercury lamps
  - HI- For metal halide lamps
  - PC- PC bowl



# ALGOL

## IP66/IP43 Road and Street Lights



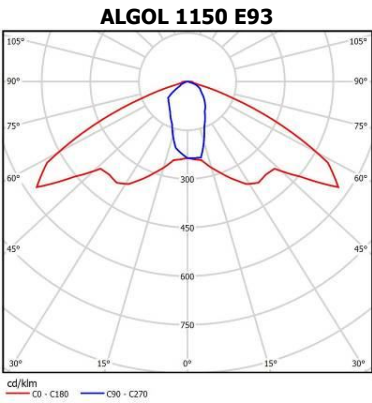
<b>Type:</b>	A range of multi-purpose street lights made of injection molded glass-fibre reinforced polypropylene with a choice of two different sizes for most applications. High lighting output and optical performance. IP66 optical compartment and IP43 (IP44) control gear compartment.
<b>Specification:</b>	Anodised aluminum reflector with transparent PMMA or PC bowl. UV stable polyamide clips with stainless steel springs enable tool-free bowl and gear compartment cover removal. Upper canopy and gear compartment cover made from injection molded glass-fibre UV stabilized polypropylene with grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Side entry or post top installation with two screws on poles Ø60mm. Suggested mounting height from 6 to 12 meters.
<b>Application:</b>	Suitable for many applications including car parks, minor and major roads, residential areas and public spaces.



Supplied with special adjustable joint for horizontal or vertical mounting.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Algol 170 E91	HS	1x70 (E27)	630x320x230	4,32	85
Algol 1100 E92	HS	1x100 (E40)	630x320x230	4,32	116
Algol 1150 E93	HS	1x150 (E40)	630x320x230	4,92	168
Algol 1250 E94	HS	1x250 (E40)	730x370x310	7,11	279
Algol 1125 F16 HM	HM	1x125 (E27)	630x320x230	4,15	138
Algol 1250 E94 HM	HM	1x250 (E40)	730x370x310	6,94	269

- Options available on request:**
- HS- For high pressure sodium lamps
  - HM- For high pressure mercury lamps
  - HI- For metal halide lamps
  - PC- PC bowl



# ALGOL

## IP65 Slim-line Road and Street Lights



- Type:** A range of IP65 slim street lights with optimal light output at competitive prices.
- Specification:** Bright **anodized** aluminum reflector with transparent PMMA bowl. UV stable polyamide clips with stainless steel springs enable tool-free bowl and gear compartment cover removal. Upper canopy made **of** injection molded glass-fibre UV stabilized polypropylene with grey finish. Luminaire is plastic-wrapped and boxed individually.
- Installation:** Side entry mounting with two screws on pole Ø60mm. Suggested mounting height from 4 to 6 meters.
- Application:** Suitable for many applications including car parks, minor and major roads, residential areas and public **places**.

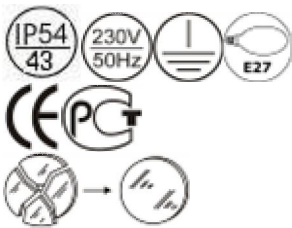
Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Algol 170 E95	HS	1x70 (E27)	438x308x162	2,95	85
Algol 1125 F17 HM	HM	1x125 (E27)	438x308x162	2,78	138

- Options available on request:**
- HS- For high pressure sodium lamps
  - HM- For high pressure mercury lamps
  - HI- For metal halide lamps



# ALGOL

## Aluminum Slim-line Road and Street Lights



- Type:

A range of street lights made of pressed aluminum with a choice of three different sizes for most applications. Simple yet elegant design and optimal light output at competitive price. IP54 optical compartment and IP43 control gear compartment.
- Specification:

Bright anodized aluminum reflector with transparent PMMA bowl. Extruded aluminum clips with stainless steel springs enable tool-free bowl and gear compartment removal. Upper canopy in pressed aluminum with grey finish. Polypropylene gear compartment cover. Luminaire is plastic-wrapped and boxed individually.
- Installation:

Post top installation with two screw plates on poles Ø42mm. Suggested mounting height from 4 to 6 meters.
- Application:

Suitable for many applications including car parks, minor and major roads, residential areas and public spaces.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Algol 170 E96	HS	1x70 (E27)	510x285x155	3,40	85
Algol 1125 F18 HM	HM	1x125 (E27)	510x285x155	3,25	138

- Options available on request:
- HS-

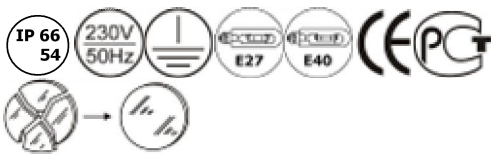
For high pressure sodium lamps
- HM-

For high pressure mercury lamps
- HI-

For metal halide lamps

# ALGOL

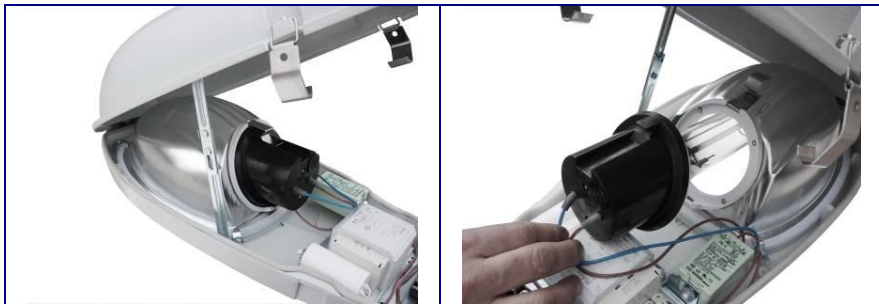
## IP66/54 Aluminum Road and Street Lights



<b>Type:</b>	A range of aluminum street lights with security switch. IP66 optical and IP54 control gear compartment.
<b>Specification:</b>	Anodized aluminum reflector with tempered glass bowl. Stainless steel clips. Upper canopy and gear compartment cover made of die-cast aluminum with light grey finish. Luminaire is plastic-wrapped and boxed individually.
<b>Installation:</b>	Side entry or post top installation with two screws on poles Ø50 or Ø60mm. Suggested mounting height from 6 to 12 meters.
<b>Application:</b>	Suitable for many applications including car parks, minor and major roads, residential areas and public spaces.



Supplied with special adjustable joint for horizontal or vertical mounting.



Upper canopy fixing in open position allows convenient service and access inside fitting.



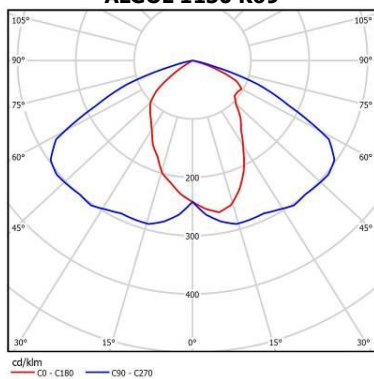
Security switch cuts power supply to fitting, once it has been opened. This way ensures safe maintenance of the luminaire.

Type	Description	Lamp (W) and socket	Overall dimensions, mm	Weight, kg	Total wattage, W
Algol 150 J33 SWT	HS	1x50 (E27)	570x265x110	5,50	65
Algol 170 K67 SWT	HS	1x70 (E27)	570x265x110	5,50	85
Algol 1100 K68 SWT	HS	1x100 (E40)	570x265x110	5,50	116
Algol 1150 K69 SWT	HS	1x150 (E40)	570x265x110	6,30	168
Algol 1250 K70 SWT	HS	1x250 (E40)	660x296x192	8,4	279

**Options available on request:**

- HS- For high pressure sodium lamps
- HM- For high pressure mercury lamps
- HI- For metal halide lamps

**ALGOL 1150 K69**



# INFORMATION

[www.northcliffe.org](http://www.northcliffe.org)



**Table of light stream values for fluorescent light sources supplied by emergency kits NOVA L and NOVA LE in %:**

Light source	Kit type	NOVA L/36, LE36	NOVA L/58, LE/58	NOVA L/80, LE/80
	Time of work Power	1h/2h/3h	1h/2h/3h	1h/2h/3h
<b>T8</b>	18W	10	12	23
	30W	9	13	17
	36W	8	10	16
	58W	-	7	9
<b>TC-SEL</b>	5W	20	23	-
	7W	16	19	-
	9W	14	17	-
	11W	16	19	-
<b>TC-L</b>	18W	12	16	21
	24W	-	14	20
	34W	-	11	19
	36W	-	10	17
	40W	-	10	13
<b>TC-DEL</b>	55W	-	7	10
	10W	13	17	19
	13W	11	16	18
	18W	9	14	16
	26W	-	12	14
<b>T5</b>	4W	26	30	37
	6W	23	32	36
	8W	20	32	34
	13W	18	30	33
	14W	16	21	27
	21W	-	21	23
	24W	-	17	19
	28W	-	14	18
	34W	-	11	13
	49W	-	8	10
<b>TC-2D</b>	54W	-	7	9
	80W	-	-	7
	10W	25	30	36
	16W	24	31	34
	21W	-	20	25
	28W	-	19	21
	38W	-	15	18
<b>TC-TEL</b>	13W	9	14	16
	18W	-	12	17
	26W	-	12	15
	32W	-	7	9
	42W	-	5	7




## Degrees of protection IP (International Protection)





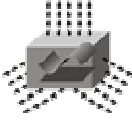



1-st number	2-nd number	added letter	additional letter
0...6	0...8	A...D	H...W

	Added letter (optional)
<b>Letter</b>	<b>protection of the persons</b>
<b>A</b>	protect against the access with the back of the hand
<b>B</b>	protect against the access with a finger
<b>C</b>	protect against the access with a tool
<b>D</b>	protect against the access with a wire
<b>H</b>	equipment to high tension
<b>M</b>	tested against the harmful due effects to the entry of the water with apparatus in operation.
<b>S</b>	tested against the harmful due effects to the entry of the water with apparatus not in operation
<b>W</b>	adapted to the use in specified atmospheric conditions



### 1-ST NUMBER protection against the contact of external solid bodies and against the access to dangerous parts

<b>0</b>	<b>No protection</b>		-
<b>1</b>	<b>Protection against large foreign bodies</b>		Protection of persons from accidental large area direct contact with active or internal moving parts (e.g. hand contact). Protection of the object from access of solid foreign matter larger than Ø50mm.
<b>2</b>	<b>Protection against medium-size foreign bodies</b>		Protection of persons from finger contact with active or internal moving parts. Protection of the object from access of solid foreign matter larger than Ø12mm.
<b>3</b>	<b>Protection against small foreign bodies</b>		Protection of persons from contact with active or internal moving parts with tools, wires or similar foreign matter thicker than Ø2.5mm. Protection of the object from access of solid foreign matter larger than Ø2.5mm.
<b>4</b>	<b>Protection against granular foreign bodies</b>		Protection of persons from contact with active or internal moving parts with tools, wires or similar foreign matter thicker than > than Ø1mm.
<b>5</b>	<b>Protection against deposits of dust</b>		Total protection of persons from contact with voltage carrying or internal moving parts. Protection of the object from harmful deposits of dust. Ingress of dust is not completely prevented, but dust is prevented from entering in a quantity that would impair the functioning of the object.
<b>6</b>	<b>Protection against ingress of dust</b>		Total protection of persons from contact with voltage carrying or internal moving parts. Protection of the object from ingress of dust.

## 2-nd NUMBER protection against the penetration of the liquids

<b>0</b>	<b>No protection</b>		-
<b>1</b>	<b>Protection against water dripping vertically</b>		Water drops falling vertically must not have any harmful effect.
<b>2</b>	<b>Protection against water dripping up to 15°</b>		Water drops falling at any angle up to 15° from vertical must not have any harmful effect.
<b>3</b>	<b>Protection against spray water</b>		Water hitting the object at any angle up to 60° from vertical must not have any harmful effect.
<b>4</b>	<b>Protection against splash water</b>		Water splashing against the object from all directions must not have any harmful effect.
<b>5</b>	<b>Protection against jet water</b>		A jet of water sprayed against the object from all directions must not have any harmful effect.
<b>6</b>	<b>Protection against flooding</b>		Water of temporary flooding, as in heavy seas, must not enter the object in any harmful quantity.
<b>7</b>	<b>Protection against dipped state</b>		If the object is dipped into water (150mm to 1000mm), under the defined conditions of pressure and time, water must not enter the object in any harmful quantity.
<b>8</b>	<b>Protection during submerged state</b>		If the object is submerged in water under defined extreme conditions, water must not enter the object in any harmful quantity.

**The degree of mechanical protection is identified by a code that consists of the letters IK followed by two digits:**

IK number	Energy		Equivalent impact
00	Non-protected		no test
01	Impact energy: 0,150 joules		Resistant against an impact from an object of 200 grams from a distance of 5,6 cm
02	Impact energy: 0,200 joules		Resistant against an impact from an object of 200 grams from a distance of 8,0 cm
03	Impact energy: 0,350 joules		Resistant against an impact from an object of 200 grams from a distance of 14,0 cm
04	Impact energy: 0,500 joules		Resistant against an impact from an object of 200 grams from a distance of 20 cm
05	Impact energy: 0,700 joules		Resistant against an impact from an object of 200 grams from a distance of 28 cm
06	Impact energy: 1,00 joules		Resistant against an impact from an object of 500 grams from a distance of 20 cm
07	Impact energy: 2,00 joules		Resistant against an impact from an object of 500 grams from a distance of 40 cm
08	Impact energy: 5,00 joules		Resistant against an impact from an object of 1.7 kg from a distance of 30 cm
09	Impact energy: 10,00 joules		Resistant against an impact from an object of 5 kg from a distance of 20 cm
10	Impact energy: 20,00 joules		Resistant against an impact from an object of 5 kg from a distance of 40 cm

## Chemical resistance of PROOF series parts made of thermoplasts

Enviroment	Max con- cent- ration	PROOF diffuser resistant			PROOF body resistant		
		yes	partially	no	yes	partially	no
Aceton (ketones)				•			•
Aniline				•			•
Ammonia	5%	•			•		
Benzene and Benzaldehyde				•			•
Diethylether(ethers)			•				•
Potassium nitrate		•					
Ethanol(alcohols)	50%		•			•	
Ethylacetate(esters)				•			•
Ethyl alcohol			•		•		
Phenol				•			•
Glycerine		•	•				
Heptane							•
Ammonium hydroxide	25%					•	
Sodium hydroxide-base	60%	•			•		
Sodium chloride-salt solution	15%	•			•		
Sulphur chloride and calcium chloride		•					
Carbon tetrachloride and Chloric ether				•			•
Iron dichloride		•					
Arsenic acid and Oleic acid		•			•		
Citric acid	20%	•			•		
Nitric acid	20%		•			•	
Nitric acid	50%			•			•
Hydrochloride acid	5%	•			•		
Hydrochloride acid	35%			•			•
Chromic acid	40%		•			•	
Formic acid	30%		•				
Acetic acid	10%	•				•	
Sulphuric acid	30%	•				•	
Methanol				•			•
Fuel oil			•		•		
Mineral oil		•			•		
Vegetable oil		•			•		
Rape oil		•				•	
Lamp oil			•			•	
Hydrogen peroxide	30%			•		•	
Ammonium sulphate	15%	•			•		
Toluene				•			•
Turpentine oil					•		•
Trichlorethylene				•			•
Sodium carbonate	20%	•					
Aliphatic hydrocarbons		•				•	
Aromatic hydrocarbons				•			•
Alkali		•			•		

## NOTES

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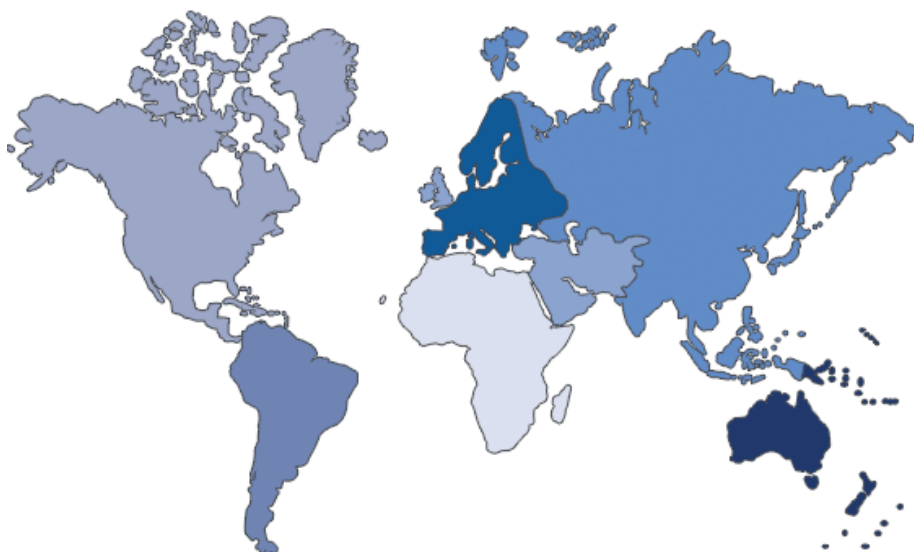
## NOTES

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## NOTES

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