



PHILIPS



Simply enhancing life with light

The Philips lighting difference



**People
focused**



**Partners in
innovation**



**Meaningful
solutions**

We believe that by focusing on people, and leveraging our expertise with the knowledge from a broad range of partners, we can develop meaningful solutions that meet real needs and desires.



In many ways, light has long been taken for granted. It is simply there, in the background and only really noticed in its absence. But we believe that light is so much more than this. Light is potential. Light is possibility.

At Philips, light has been a source of inspiration for over 100 years, inspiring us to improve people's lives, to make a difference, to make an impact.

Today, we believe that inspiration is more important than ever, as we find ourselves in the midst of a radical industry transformation. Digital lighting continues to transform how and where artificial light is used to improve people's lives.

We believe we can make cities more beautiful and livable with much less impact on our planet. It is not just about the bulb or the component, it is about solutions which are unique, sustainable, and fully-integrated. LEDs provide a range of new possibilities that conventional lighting could never match, allowing us to create environments that empower and reflect who we are and Philips is positioned to lead the way forward.

We bring a unique and powerful approach to our work, observing and listening to people, to ensure that we address their needs and aspirations. Partnering for great results, our collective passion, expertise, depth and reach opens up new possibilities, to create meaningful solutions that enhance the quality, use and experience of light.

Ensuring that we deliver significant value to the people we serve, in the places where they live, work and shop, or when they are traveling, learning, or entertaining.

Because at the end of the day, the reward is this...

We transform environments...create experiences...and shape identities

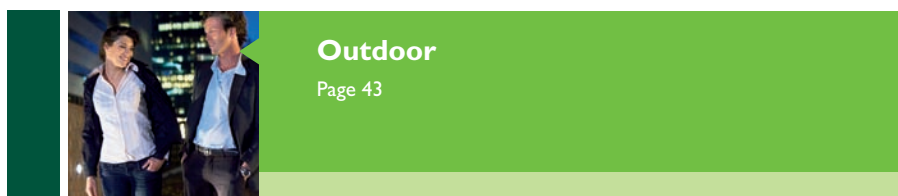
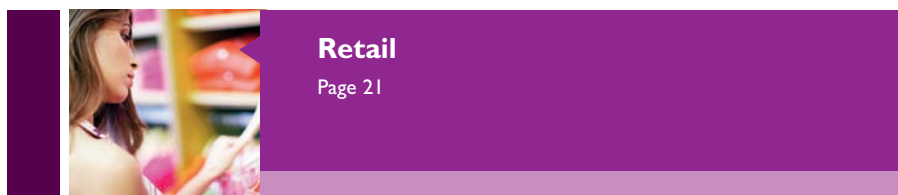
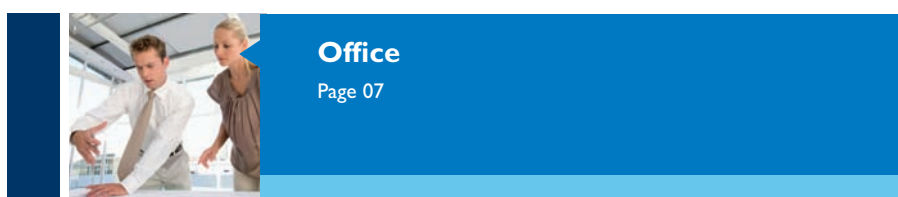
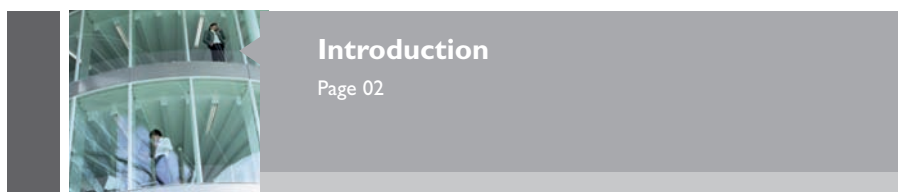
With light, we uplift and inspire.

With light, we comfort and heal.

With light, we create safety and spectacle.






Product experience and application

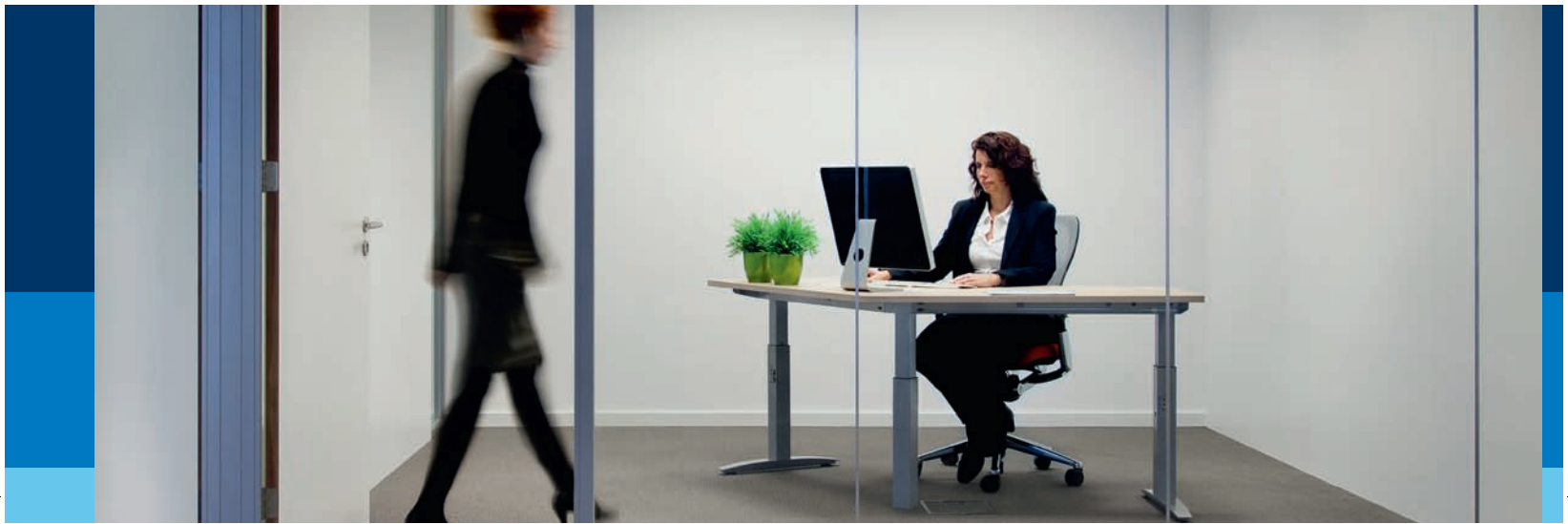
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Product specification and Technical Data

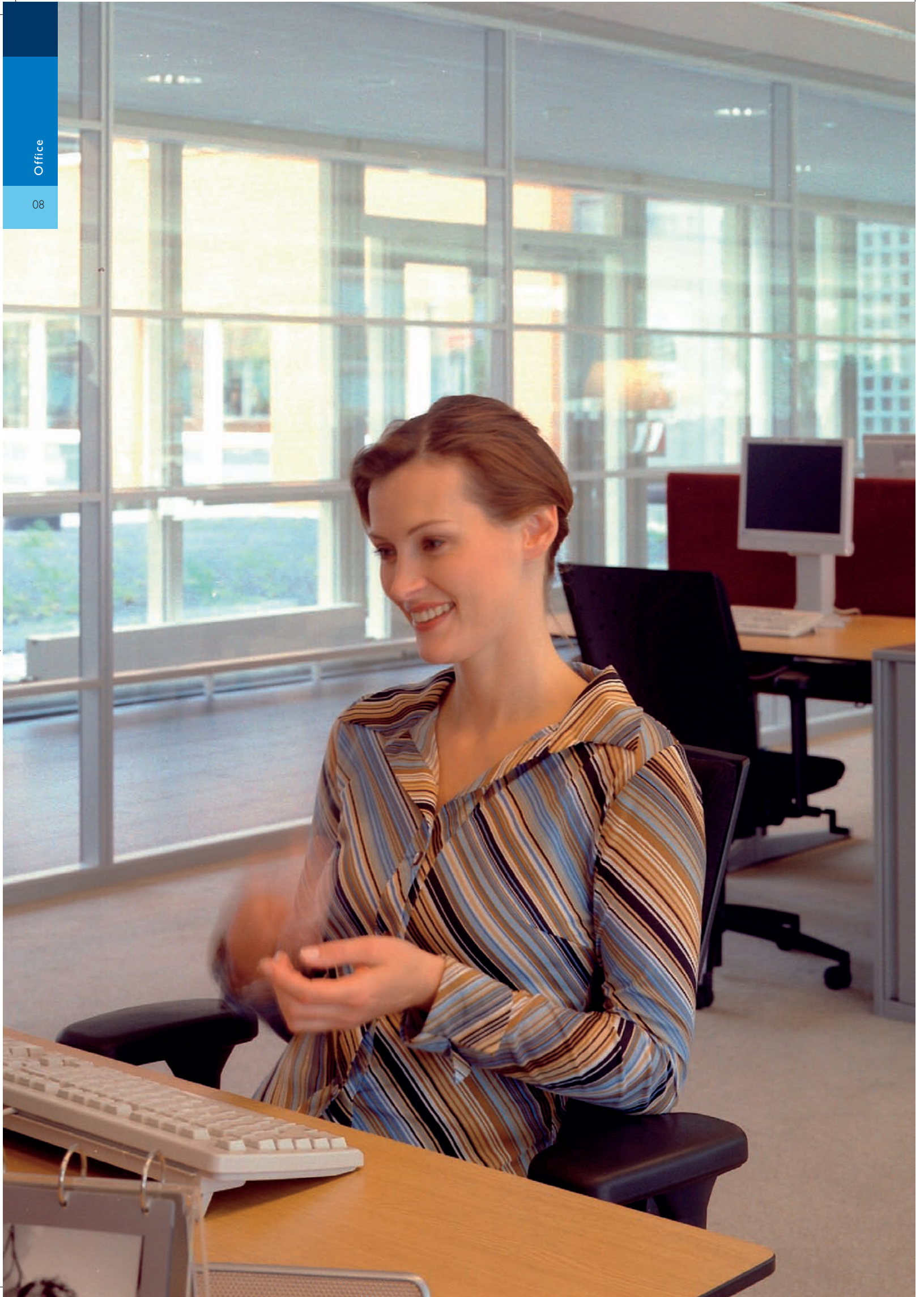
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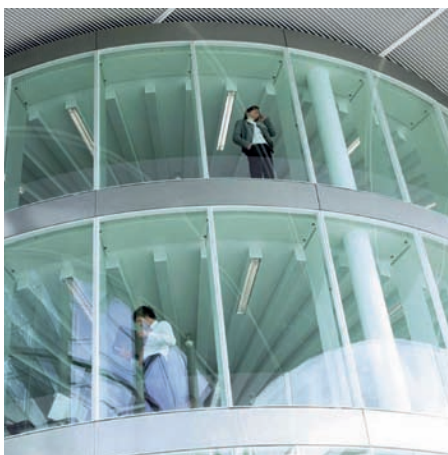
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Office

Product experience and application

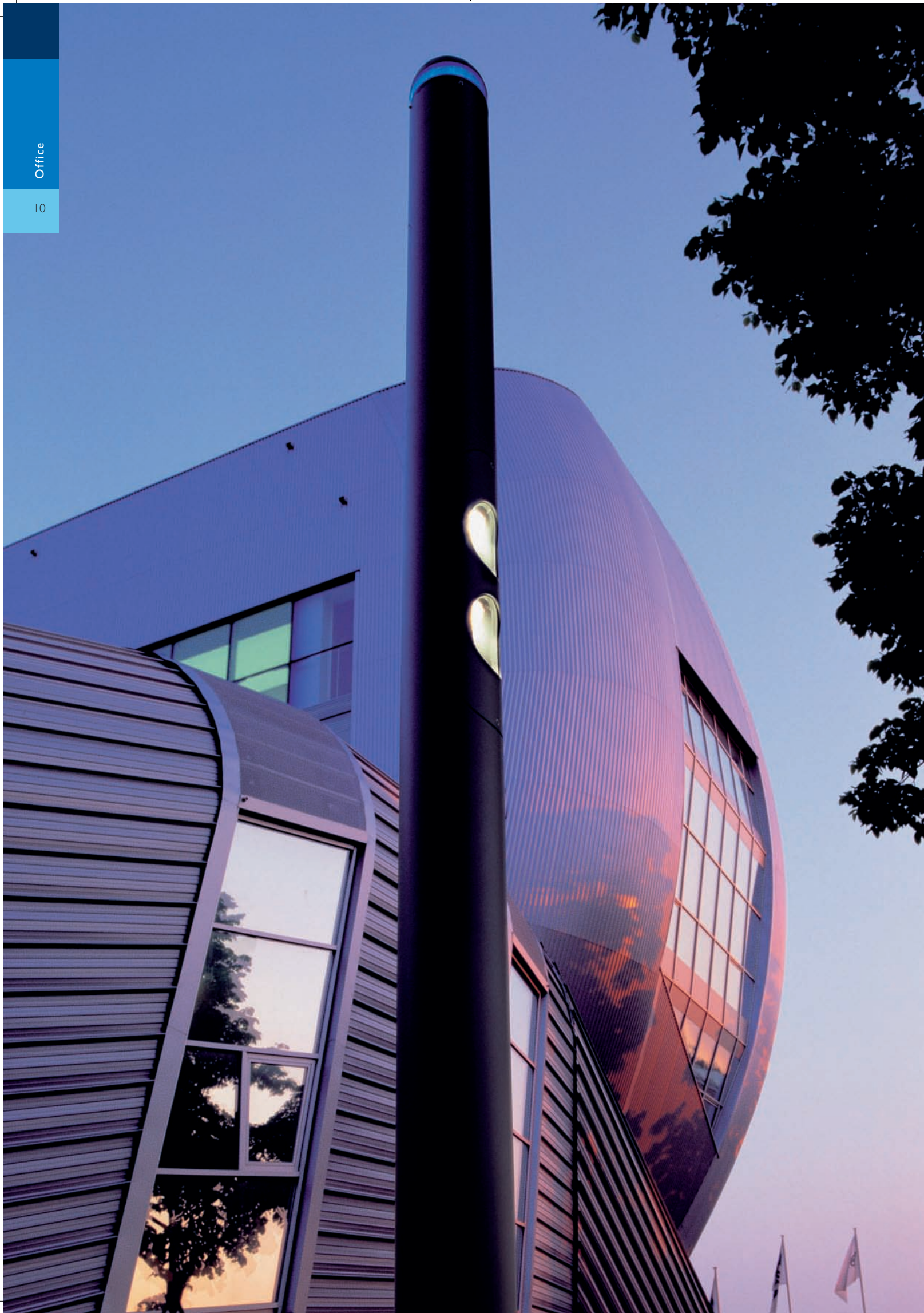




Philips office lighting difference

Lighting affects more than what you see.
It influences behavior, inspires ideas and
allows us to relate to others.

We believe in creative lighting solutions for
offices that beautify and distinguish, while
increasing productivity and energy efficiency.



Green building

Doing more. Using less.

Green building means using natural resources with maximum efficiency while minimizing the impact on human health and the environment. That means having alternative-energy systems, flexible lighting that complements natural sources. That's partnership in sustainable design.

Because green buildings aren't just healthier for humans and our planet, they make for better business too. It reduces energy consumption...and therefore energy costs. Social responsibility is also good for a company's image. Plus, green building certification can increase property values.

That's why we're committed to developing solutions that protect our environment and all who dwell in it, while giving us the light we need to live in safe and attractive places.

Green solution



Using less energy doesn't have to mean getting less light.

From innovative luminaire-based products to complete lighting management systems, our lighting controls are energy-efficient, while also dynamic, flexible and interactive.

We offer interactive lighting controls, an unrivaled series of control solutions designed to reduce energy consumption, reduce running costs, increase flexibility of space utilization, and maximize comfort by adapting light to human patterns.

So lighting complements the available natural light. Only when someone is around to enjoy it. For example, **Actilume** is a DALI-based product designed for presence detection and daylight regulation. And **Ocuswitch** is a movement detector that regulates lighting to the frequency with which people come and go from a room. It create energy savings of up to 30%.

A retractable shield screens off areas next to the detection zone so that the unit isn't activated unnecessarily. Other features, like a remote control and smart timer contribute to a product that is advanced and user-friendly.

Company on stage



Showing your business in a new light

Lighting can be a great help at creating the right atmosphere to support your company's identity.

We understand lighting in the spaces are designed to facilitate activities: according to why and how people use them. Certain activities and industries have different requirements for the levels of communication and autonomy employees need.

Colored lights can reflect a brand identity. Spaces can have a suite of LED options. Lights can provide solutions for the task at hand. And our products create maximum impact without maximum cost – to you or the environment.

Lighting doesn't just illuminate. It can fundamentally change what we see.

Healthy workplace

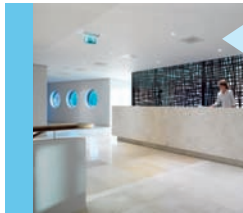


Feel good. Work better.

We're working with experts to better understand light's relationship to our physical and emotional health. We understood from them the deep relationship between light, well-being and performance in offices and schools. Next to enabling visual tasks, lighting has emotional and biological effects. With these insights, we have created lighting solutions that energize bodies and rejuvenate minds.

Because when people feel better,
they work better.

Lighting applications in office



Reception

Create a memorable first impression. Put guests at ease. Communicate the corporate culture.



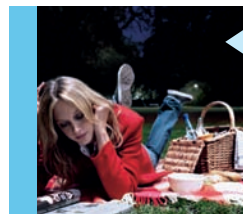
Corridors and stairways

Promote safety. Save energy. Accent displays



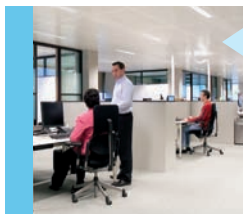
Conference rooms

Design for visual comfort and maximum flexibility: presentations, collaboration, communication. Relax or stimulate as appropriate.



Outdoor and parking

Convey corporate image through attractive lighting and signage. Promote safety. Efficiency and easy maintenance.



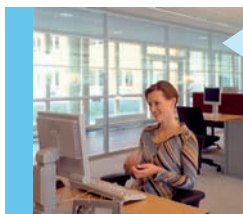
Open offices

Facilitate communication. Reduce glare. Engage employees in the corporate culture.



Touchdown areas

Enable social contact and individual short-term work.



Private offices

Flexible. Customizable. Enable comfort and well-being.



Classrooms and training rooms

Improve concentration and comprehension. Visual comfort. Adaptable for different activities.















Case-study

ING Bank
A sculpture of light.

Every company is different, inside and out. Reflecting the reality of today's 24/7 world, the architects of ING Bank's new headquarters in Budapest sought to create the impression of a building undergoing constant change.

To bring this distinctive look to the building's interior, Philips created custom luminaires that fit completely flush to maximize the visual effect of suspended metal ceilings.

Philips office lighting solutions

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Philips office lighting solutions

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Retail

Product experience and application





Philips retail lighting difference

We believe retail lighting is a source of empowerment when used to its fullest potential, it makes merchandise, brands and business shine.

We believe flexible, efficient, high-quality light, powered by enabling technologies, helps retailers communicate their identities in a way that is healthy for business, relevant to consumers and maximizes the shopping experience.

Sustainability: people, planet, profit



Quality and efficiency at multiple price tiers

At Philips, we are passionate about responsible practices. We know sustainable solutions aren't one-size-fits all and that is why our efficient, high-quality products are offered at multiple price tiers, be it energy-efficient installations and solutions, optimal fresh food lighting or LED retrofit modules.

The variety of price tiers help retailers of all sizes become more socially and environmentally responsible and open the door for every brand to benefit from sustainable practices.

The shopping experience



Crisp impressions. Clear identities.

In the retail environment, lighting is a powerful tool. From the freshness of fish to the texture of a leather boot, it can help influence buying decisions. It can create inspirational brand environments, exciting and personalized settings or can even create dramatic impacts through adjustable lighting.

We're committed to helping retailers showcase their products – whether fresh foods or the latest collections – in the best possible light.

Using light as a continuous element of brand, we help retailers guard their brand image and ensure consistency across differentiated formats.

Enable me



Help my business run at its best.

With solutions and services that simplify lighting operations, we're helping retailers keep their focus on the parts of business that matter most.

With remote and central control over all outlets, efficient LED freezer and cooler lighting, dynamic and flexible lighting solutions, we deliver options to drive a simpler, more centralized business model. This enables store workers and executives make the right move, at the right moment, without drawing attention away from what counts the most.



Case-study

MEXX







Creating an image that is balanced with nature.

MEXX wanted its fashion stores to project its brand's "optimistic" feel using flexible, natural-seeming light.

Philips AmbiScene concept for MEXX allowed the retailer to incorporate crisp white light and flexible luminaire, for color temperatures that range from 3000K to 5000K throughout the day in a natural rhythm, and for fitting room light that changes cool-to-warm with the seasons. The solution is getting customers into the brand's inspired feel in an environment that feels "naturally" refreshing.

Philips retail lighting solutions

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Industrial

Product experience and application





Philips industry lighting difference

Lighting illuminates and shows the way.
But it can do so much more. We believe
lighting can enhance form and function and
improve safety and security, while creating
flexible spaces that adapt to the task at hand.
And it can help companies achieve
sustainability goals that communicate
corporate responsibility.

We believe in energy-efficient lighting
solutions for industry that reduce
environmental impact and save cost, while
increasing quality and productivity.

Philips leads the way



Providing guidance to help industries increase productivity and reduce costs.

Productivity and well-being

We use our research on the effect of light, on well-being and productivity to help businesses develop solutions optimized for the task at hand.

Lighting scans and renovation plans

We implement energy scans that show how businesses can save money and increase productivity. How leading sustainable lighting solutions can reduce environmental impact, lower cost and improve quality.

Sustainability

We provide guidance for communicating responsible corporate citizenship and meeting sustainability objectives.

Increased energy efficiency



Save energy. Save costs.

We offer alternative-energy systems. We believe in flexible lighting that complements natural sources. We believe in partnership in sustainable design.

Because green facilities aren't just healthier for humans and our planet. They make for better business, too.



Enhanced productivity



See clearly. Work better.

We're working with experts to better understand how light affects worker performance in production environments.

With these insights, we have created lighting solutions that create safer work environments and reduce eyestrain by providing the right level of light.

Because when people see clearer, they can work better.

Safer production



Secure processes. Protect people.

We offer protection for process-critical products like foods and beverages, reduced risks posed by lamp particles, longer lifetimes and easier maintenance.

Because safer facilities open doors to healthier people, better products and stronger businesses.



Case-study

















SmarT-Bay

Light only when and where you need it.

Does a lamp consume energy even when no one is around to use it?

Of course it does, and it wastes a lot of energy. That's why we developed the SmarT-Bay, a high-bay solution that delivers light when you need it and automatically shuts off, when you don't. The operation is controlled through occupancy sensor technology, which ensures long lamp life with smart cycling.

Philips industrial lighting solutions

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Outdoor

Product experience and application





Philips outdoor lighting difference

We believe in creating innovative outdoor solutions that beautify and inspire, while making people safer and more comfortable.

We believe that environmentally and socially sustainable lighting solutions improve the livability of our world's cities, while respecting the planet.

We believe that making outdoor spaces more sound, secure and engaging, enhances people's lives.

Philips leads the way



We are the top outdoor lighting player worldwide

Contributing more to the market

Lamping one in every three outdoor light points in the world.

Driving the future

Advising governments on outdoor energy legislation and investing over 40 million Euro annually in R & D.

Lighting the world

Covering the globe with a network of national support teams and the lighting international sales organization.

Setting the scene



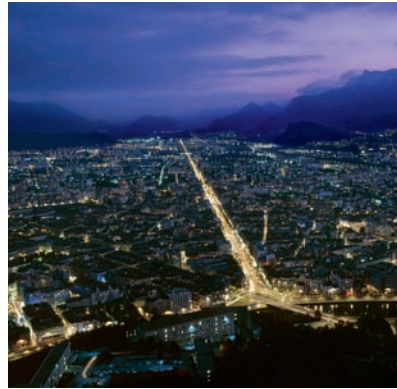
Better experiences. Better lives.

We have a passion for improving the livability and identity of cities across the globe. It's our goal to make environments engaging, spaces clear and de-cluttered, streets lit by secure and beautiful LED lights.

We're committed to helping cities build an image of livability and vitality.



Respecting the planet



We develop solutions that protect the planet.

We know people want a lot from their lighting. But it shouldn't come with a cost to Nature.

That's why we're committed to developing solutions that protect our environment and all who dwell in it, while giving us the light we need to live in safe and attractive places.

Energy efficiency



Doing more. Helping people use less.

Cities are tightening the reins on energy consumption, as resources become more precious and environmental protection more important than ever.

In accordance with new environmental legislation, our Outdoor Lighting team is focused on helping municipalities adhere to energy and waste reduction targets.

It is our objective to introduce more and more energy efficient installations and innovative solutions to track and manage consumption.



Case-study

Philips Color Kinetics
Making a statement in every color,
especially green.

Cities want to invigorate their skylines without hassle or high energy use.

Philips Color Kinetics partners with cities like Gateshead, UK to flexibly and simply illuminate landmarks. After foolproof integration with controls, ColorReach Powercore fixtures have painted light across its Millennium Bridge, enhancing image, while using less than half the energy of the previous fixtures.

Philips outdoor lighting solutions

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Philips outdoor lighting solutions

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Outdoor

Product specification

Outdoor Luminaires

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	Control Gear Box ZVX Series		Velocity - SGP 338		Skyline - SGP 325
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Outdoor Luminaires

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SONORA - HPS 360

Outdoor
Application

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Product description

Family of decorative environment lighting luminaires available as Post Tops, Bollards and Wall Brackets. The Post Tops are suitable for use with double ended Metal Halide lamp, ceramic discharge Metal Halide lamp and high pressure Mercury Vapour, Sodium Vapour lamps. Bollards and Wall Brackets are suitable for use with compact fluorescent lamp.

Features

- Aesthetically designed and sturdy housing in die-cast aluminium powder coated in attractive choice of colors. This ensures a long life in exterior lighting against all weather condition.
- UV stabilized polyethylene bowl for soft and controlled light distribution and enhancing aesthetic appeal.
- Available for mounting on 60mm diameter Pole Top. The Bollard offered is suitable for mounting on a base provided with luminaire.
- Wall mount version made of cast aluminium housing and moulded engineering plastic cover for mounting on wall with three screws.
- Dust tight and jet proof ingress protection of IP65.
- Available with built-in control gear plate for compatibility with different lamp types.
- Available in a choice of four colors
 - Sunflower Green
 - Antique Silver
 - Textured Brown
 - Textured Gray

Applications

- Residential areas • Shopping areas • Squares
- Parks and lawns • Car parks



HCS 360



HWS 360

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
HPS360 1xMHN-TD70W GR	1 x MHN-TD 70W	240	0.45	> 0.85
HPS360 1xCDM-TT150W GR	1 x CDM-TT 150W	240	0.85	> 0.85
HPS360 1xHPL-N125W GR	1 x HPL 125W	240	0.70	> 0.85
HPS360 1xSON70W GR	1 x SON 70W	240	0.45	> 0.85
HCS360 1xPL-C / 2P18W GR	1 x PLC 18W	240	0.22	> 0.85
HWS360 1xPL-C / 2P18W GR	1 x PLC 18W	240	0.22	> 0.85
HPS360 1xCDM-TD70W GR	1 x CDM-TD 70W	240	0.45	> 0.85

Installation

- Post top version suitable for pole mounting with a maximum diameter of 60mm.
- Bollard version is provided with built-in pole of diameter 120mm and length 1m.
- Wall bracket mounting with three screws directly on wall.

Compliances

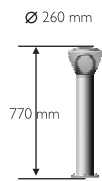
- IP 65 • Class I

HPS 360



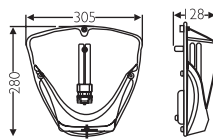
SONORA POLE TOP

HCS 360



SONORA BOLLARD

HWS 360



SONORA WALLMOUNT

Technical Drawing



Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
HPS360 1xMHN-TD70W GR	919115376632	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TT150W GR	919115367654	1	620X530X530	5.2	7.00	0.174158
HPS360 1xHPL-NI25W GR	919115376378	1	620X530X530	5.2	7.00	0.174158
HPS360 1xSON70W GR	919115376646	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TD70W GR	919115376636	1	620X530X530	5.2	7.00	0.174158
HPS360 1xMHN-TD70W BN	919115376633	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TT150W BN	919115367658	1	620X530X530	5.2	7.00	0.174158
HPS360 1xHPL-NI25W BN	919115387183	1	620X530X530	5.2	7.00	0.174158
HPS360 1xSON70W BN	919115387186	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TD70W BN	919115376637	1	620X530X530	5.2	7.00	0.174158
HPS360 1xMHN-TD70W SI	919115376634	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TT150W SI	919115367659	1	620X530X530	5.2	7.00	0.174158
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HPS360 1xSON70W SI	919115387187	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TD70W SI	919115376638	1	620X530X530	5.2	7.00	0.174158
HPS360 1xMHN-TD70W GN	919115376635	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TT150W GN	919115387651	1	620X530X530	5.2	7.00	0.174158
HPS360 1xHPL-NI25W GN	919115387185	1	620X530X530	5.2	7.00	0.174158
HPS360 1xSON70W GN	919115387188	1	620X530X530	5.2	7.00	0.174158
HPS360 1xCDM-TD70W GN	919115376639	1	620X530X530	5.2	7.00	0.174158
HCS360 1xPL-C / 2P18W GR	919115376164	1	355 x 335 x 1040	5.30	7.00	0.1167
HCS360 1xPL-C / 2P18W BN	919115376165	1	355 x 335 x 1040	5.30	7.00	0.1167
HCS360 1xPL-C / 2P18W SI	919115376166	1	355 x 335 x 1040	5.30	7.00	0.1167
HCS360 1xPL-C / 2P18W GN	919115376167	1	355 x 335 x 1040	5.30	7.00	0.1167
HWS360 1xPL-C / 2P18W GR	919115386164	2	310 x 340 x 250	1.50	4.12	0.0267
HWS360 1xPL-C / 2P18W BN	919115386168	2	310 x 340 x 250	1.50	4.12	0.0267
HWS360 1xPL-C / 2P18W SI	919115386169	2	310 x 340 x 250	1.50	4.12	0.0267
HWS360 1xPL-C / 2P18W GN	919115386173	2	310 x 340 x 250	1.50	4.12	0.0267

Note: Ballast of suitable rating shall be packed separately. Packing data on request. Ballasts of HID version.

Lumos - HCS 370

**Outdoor
Application**

Page 43



Product description

Family of decorative environmental lighting luminaires, available as Post Tops, Bollards and Wall Brackets. The Post Tops are suitable for use with ceramic discharge Metal Halide lamps, high pressure Mercury Vapour, and Sodium Vapour lamps, Bollards and wall Brackets are suitable for use with the compact fluorescent lamp.



HCS 370



HCS 370



HWS 370



HPS 370

Features

- Aesthetically designed housing made of die-cast aluminium, powder coated in attractive choice of colors for sturdiness and excellent corrosion resistance.
- Lamp compartment made of aesthetically designed injection moulded acrylic, with built-in high purity anodized aluminium louvers for lamp shielding and glare control. The louvers also function as reflectors.
- The top cover consists of a metallic lid to reduce upward light spill and protection. The metallic lid is provided with slits at the top and sides for enhanced aesthetic appeal during night.
- Available for mounting on 60mm diameter pole top. The bollard offered is suitable for mounting on a base provided with luminaire.
- Wall mount version made of cast aluminium housing and moulded engineering plastic cover for mounting on wall with three screws.
- Dust-tight and jet-proof to IP 65.
- Available with built-in control gear and accessories mounted on a gear plate for compatibility with different lamp types.
- Available in a choice of four colors
 - Sunflower Green
 - Antique Silver
 - Textured Brown
 - Textured Gray

Applications

- Residential areas
- Shopping areas
- Squares
- Parks and lawns
- Car parks

Installation

- Post Top version suitable for pole mounting with a maximum diameter of 60mm.
- Bollard version is provided with base.
- Wall Bracket for direct mounting on wall with 3 screws.

Compliances

- IP 65
- Class I



Technical data

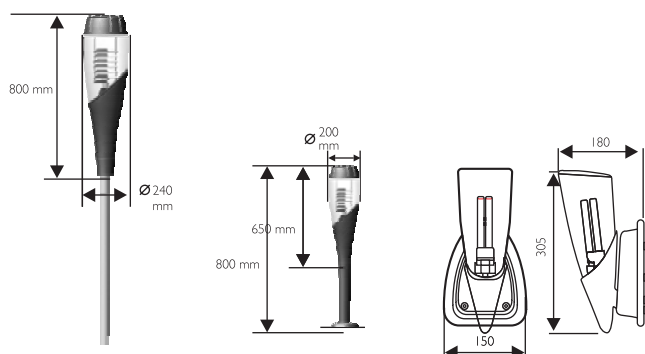
Description	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
HPS370 1xCDM-TT150W GR	1 x CDM-TT 150W	240	0.85	> 0.85
HPS370 1xHPL-N125W GR	1 x HPLI-N 125W	240	0.70	> 0.85
HPS370 1xSON70W GR	1 x SON 70W	240	0.45	> 0.85
HCS370 1xPL-L18W GR	1 x PL-L 18W	240	0.37	> 0.85
HWS370 1xPL-C / 2P18W GR	1 x PLC 18W	240	0.22	> 0.85



HPS 370

HCS 370

HWS 360



Technical Drawing

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
HPS370 1xCDM-TT150W GR	919115367653	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xHPL-NI25W GR	919115376377	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xSON70W GR	919115376644	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xCDM-TT150W BN	919115367655	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xHPL-NI25W BN	919115376379	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xSON70W BN	919115376647	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xCDM-TT150W SI	919115367656	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xHPL-NI25W SI	919115387181	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xSON70W SI	919115376648	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xCDM-TT150W GN	919115367657	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xHPL-NI25W GN	919115387182	1	310 x 300 x 925	5.70	8.40	0.09
HPS370 1xSON70W GN	919115376649	1	310 x 300 x 925	5.70	8.40	0.09
HCS370 1xCDM-TT70W GR	919115376645	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xPL-L18W GR	919115376163	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xCDM-TT70W BN	919115387631	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xPL-L18W BN	919115376168	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xCDM-TT70W SI	919115387632	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xPL-L18W SI	919115376169	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xCDM-TT70W GN	919115387633	1	330 x 330 x 1010	5.40	8.00	0.11
HCS370 1xPL-L18W GN	919115388161	1	330 x 330 x 1010	5.40	8.00	0.11
HWS370 1xPL-C / 2P18W GR	919115386163	4	360 x 360 x 370	1.40	6.90	0.05
HWS370 1xPL-C / 2P18W BN	919115386165	4	360 x 360 x 370	1.40	6.90	0.05
HWS370 1xPL-C / 2P18W SI	919115386166	4	360 x 360 x 370	1.40	6.90	0.05
HWS370 1xPL-C / 2P18W GN	919115386167	4	360 x 360 x 370	1.40	6.90	0.05

Note: Ballast of suitable rating shall be packed separately. Packing data on request. Ballasts of HID version.

S / H / MPC SERIES - 106 / 206

Outdoor
Application

Page 43



Product description

Post-top lanterns suitable for use with high pressure Sodium Vapour SON 70W (I or E), high pressure Mercury Vapour HPL-N 80W / 125W, blended ML-N 160W lamp.

Features

- Self contained, integral housing (with ballast, capacitor, ignitor etc.) ensures ease of maintenance.
- Four different shaped bowls of vandal-proof high density UV stabilized polyethylene.
- Conforms to IP 43 protection.
- Conforms to relevant IS specifications.

Applications

- Parks
- Residential areas

Installation

Suitable for maximum 60mm pole diameter.

Compliances

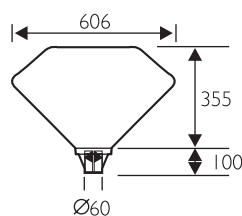
- IP 43
- Class I

Technical data

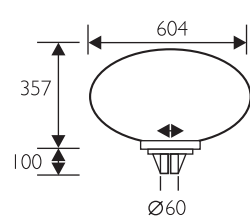
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SPC101	1 x SON 70W (E)	240v	0.45	> 0.85
SPC101	1 x SON 70W (I)	240v	0.45	> 0.85
HPC101	1 x HPL-N 125W	240v	0.70	> 0.85
SPC102	1 x SON 70W (E)	240v	0.45	> 0.85
SPC102	1 x SON 70W (I)	240v	0.45	> 0.85
HPC102	1 x HPL-N 125W	240v	0.70	> 0.85
SPC104	1 x SON 70W (E)	240v	0.45	> 0.85
SPC104	1 x SON 70W (I)	240v	0.45	> 0.85
HPC104	1 x HPL-N 125W	240v	0.70	> 0.85
SPC106	1 x SON 70W (E)	240v	0.45	> 0.85
SPC106	1 x SON 70W (I)	240v	0.45	> 0.85
HPC106	1 x HPL-N 125W	240v	0.70	> 0.85



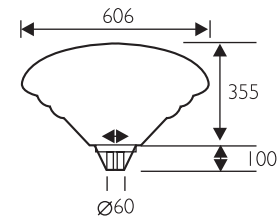
S / H / MPC 101 / 201



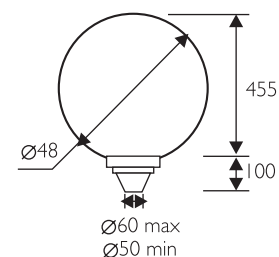
S / H / MPC 102 / 202



S / H / MPC 104 / 204



S / H / MPC 106 / 206



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SPC101 1xSON70W E	919115377166	4	435 x 435 x 335	1.285 x 4	6.67	0.065
SPC101 1xSON-I-70W E	919115377167	4	435 x 435 x 335	1.285 x 4	6.67	0.065
SPC101 1xHPL-NI25W E	919115376387	4	435 x 435 x 335	1.285 x 4	6.67	0.065
GPC101 PE-CONE	919115937604	1	610 x 610 x 375	1.50 x 1	2.30	0.140
GPC102 PE-OVL	919115937803	1	610 x 610 x 375	1.50 x 1	2.30	0.140
GPC104 PE-DECO	919115937605	1	610 x 610 x 375	1.50 x 1	2.30	0.140
GPC106 PE-GLB	919115937804	1	495 x 495 x 470	1.50 x 1	2.30	0.115

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Megapolis - Adonis

Outdoor
Application

Page 43



Product description

Decorative light column. Die-cast aluminium housing, Polycarbonate clear diffuser, supplied with high finish extruded aluminium column (2.5m) with base flange.

Features

- Decorative post top lantern.
- IP 55 ingress protection for dust and jet proofing.
- Suitable for SON 70W and CDM-ET Metal Halide lamp.
- Extruded aluminium pole also provided along with post top.
- UV stabilised clear vandal proof Polycarbonate diffuser.
- Corrosion resistant powder paint with chemical chromatised protection.
- Integral control gear.

Applications

Pathways, parks and lawns, car parks, squares.

Installation

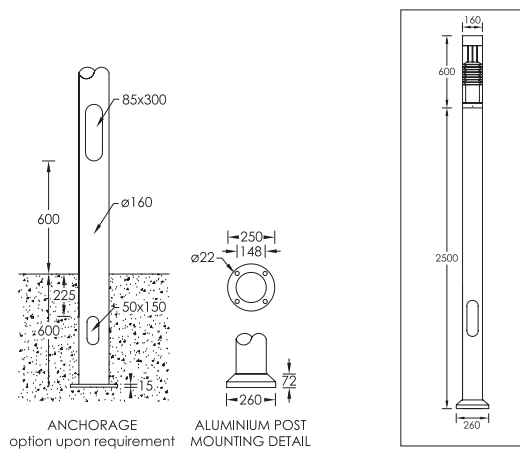
To be fixed on ground floor with the help of pole box range built-in with pole.

Compliances

- IP 55
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
CPP725 1XSON70W	1 x SON 70W	240	0.45	> 0.85



Technical Drawing

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
CPP725 IXSON70W	919115376177	1	230 × 230 × 820	4.00	5.00	0.043
CPP725 POLE	919115937607	1	280 × 280 × 2600	19.00	21.00	0.204

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Megapolis - Regina

Outdoor
Application

Page 43



Product description

Indirect-light column with die-cast aluminium housing of canopy, supplied with high finish extruded aluminium column (3m) with base flange.

Features

- Decorative indirect Post Top luminaire.
- IP 65 ingress protection for dust and jet proofing.
- Suitable for CDM-T 70W Metal Halide lamp.
- Extruded aluminium pole also provided along with Post Top.
- Corrosion resistant powder paint with chemical protection.
- Remote integral control gear.

Applications

Pathways, parks and lawns, car parks, squares.

Installation

To be fixed on ground floor with the help of pole box range built-in with pole.

Compliances

- IP 65
- Class I

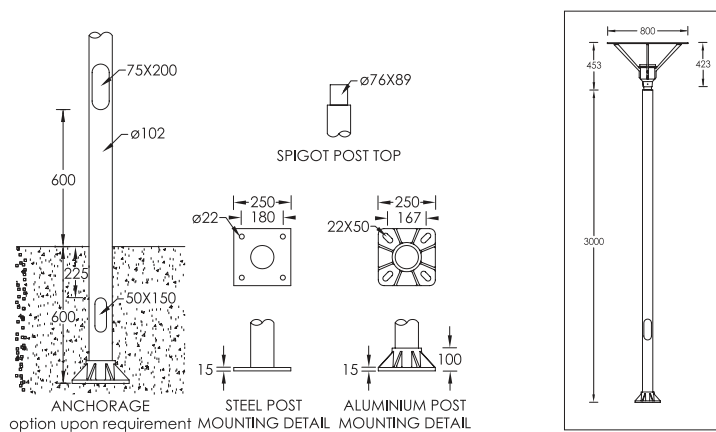
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
CPP735 1XCDM-T70W	1 x CDM-T 70W	240	0.45	> 0.85

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
CPP735 1XCDM-T70W	919115376178	1	830 x 830 x 450	12.50	16.10	0.310
CPP735 POLE	919115937608	1	280 x 280 x 3100	12.00	12.80	0.243

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Technical Drawing



Megapolis - Quadro

Outdoor
Application

Page 43



Product description

Wall recessed step light luminaire. Die-cast housing, suitable for 2 X PLC 18W, and supplied with suitable recessing box.

Features

- Wall recessed step light suitable for 2 X PL-C18W compact fluorescent lamp.
- Die-cast aluminium housing with high corrosion resistance.
- Reliable design using SS screws, silicon rubber gaskets and toughened front glass provide IP 65 protection.
- Effective light usage by high purity aluminium reflectors.
- Recessing box for the luminaire also available.

Applications

Corridors, pathways and stairs.

Installation

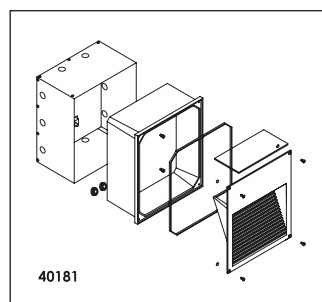
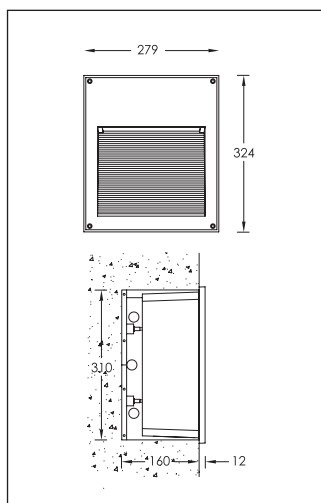
To be mounted recessed in the wall with the help of recessing box.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
DBP 701 / 2 × PLC 18W 2 PIN	2 × PLC 18W	240	0.22	> 0.47



Technical Drawing

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
DBP701 2XPL-CI8W	919115376181	1	330 × 330 × 190	5.60	6.20	0.021
DBP701 Recessing box	919115937610	1	330 × 330 × 190	1.50	2.10	0.021



Megapolis - Cressida Wall up-down light

Outdoor
Application

Page 43



Product description

Wall mounted up-downlight, integral unit, die-cast construction, single reflector and toughened glass cover IP 65.

Features

- Wall mounted up-down light.
- IP 65 ingress protection.
- Suitable for 1 X CDM-T70W ceramic discharge Metal Halide.
- Die-cast construction with aluminium top and bottom frame with special anti-glare baffles.
- Effective light usage by one piece high purity aluminium reflector.
- Durable silicon rubber gasket, clear toughened glass and corrosion resistant paint.

Applications

Passages, residential, industrial areas, building facade, commercial centres.

Installation

To be mounted on the wall surface.

Compliances

- IP 65
- Class I



Ophelia Wall Downlight

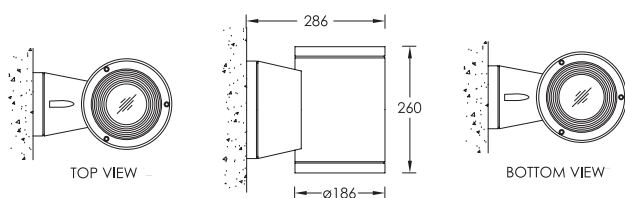
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
DCP72I 1XCDM-T70W	1 x CDM-T 70W	240	0.45	> 0.85
DCP73I / CDM-T 70W	1 x CDM-T 70W	240	0.45	> 0.85

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
DCP72I 1XCDM-T70W	919115376173	1	240 x 300 x 385	7.10	7.70	0.028
DCP73I / 1xCDM-T 70W	919115376173	1	240 x 300 x 385	6.20	6.80	0.028

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Technical Drawing

Cressida Wall up-downlight



Ophelia Wall downlight



Megapolis - Diemos / Phobos

Outdoor
Application

Page 43



Diemos



Phobos

Product description

Surface mounted wall step light. Die-cast construction and UV stabilised Polycarbonate diffuser.

Features

- Surface mounted wall step light.
- IP 65 dust and water jet proof.
- Suitable for 2 X PL-C18W compact fluorescent lamp
- Die-cast construction.
- Durable silicon rubber gasket, UV stabilised vandal-proof Polycarbonate diffuser.
- Double cable entry.

Applications

Passages, residential, industrial areas, walkways, commercial centres.

Installation

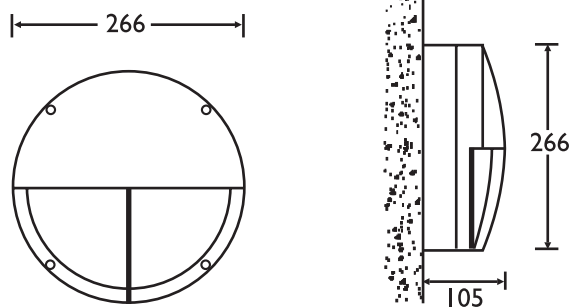
To be mounted on the wall surface.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
DCP711 / 2xPLC 18W 2PIN	2 x PLC 18W	240	0.22	> 0.47
DCP715 / 2 x PLC 18W	2 x PLC 18W	240	0.22	> 0.47



Technical Drawing

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
DCP711 / 2xPLC 18W 2PIN	919115376182	1	280 x 280 x 130	2.60	2.80	0.010
DCP715 / 2 x PLC 18W 2 PIN	919115376182	1	280 x 280 x 130	2.60	2.60	0.010

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Outdoor
Application

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Megapolis - Calisto



Product description

Decorative gate top / bollard with die-cast construction and diffused glass diffuser.

Features

- Decorative gate top luminaire.
- IP 55 dust and water jet proof.
- Suitable for 1x SON70W and CDM-ET ceramic discharge Metal Halide lamp.
- Extruded aluminium profile and die housing with high corrosion resistance.
- Durable construction uses SS screws, silicon rubber gasket, and UV stabilised clear PC diffuser.
- Integral control gear.

Applications

Residential, commercial, industrial, entrances, city centres, squares.

Installation

Can be mounted on gate top on floor.

Compliances

- IP 55
- Class I

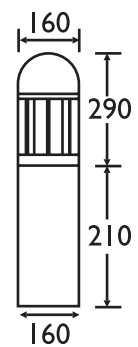
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
DCP715 / 2 x PLC 18W	2PIN 2 x PLC 18W	240	0.22	> 0.47

Ordering data

Description	Ordering data	Qty. per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
CPP715 / 1 x SON 70W	919115376176	1	230 x 230 x 820	7.00	7.40	0.043

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Technical Drawing



NGC and FGC series - NGC 100

**Outdoor
Application**

Page 43



Product description

Elegantly styled bollards and mini bollards suitable for use with GLS, PL-S, PL-C or SL lamp. The luminaires are available in two heights to suit the specific requirements.



FGC 200

Features

- Aesthetically designed housing made of fibre glass reinforced polyester (FRP) pigmented in olive green on the outer surface (NGC 100) or pigmented in a metallic black color (FGC 200 series), accommodating all electrical accessories.
- A set of louvers placed over the housing accommodated in a UV stabilised clear acrylic cover restricting glare (NGC 100), or an opal acrylic cover (FGC 200 series).
- A lid made of FRP covering the lamp compartment from the top.
- A Gear Tray carrying the lamp holder, ballast (in PL-S and PL-C only), earthing terminal, terminal block.
- Conforms to IP 43 protection.
- Conforms to relevant IS specifications.

Applications

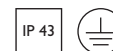
- Residential areas • Gardens • Pathways • Gate tops

Installation

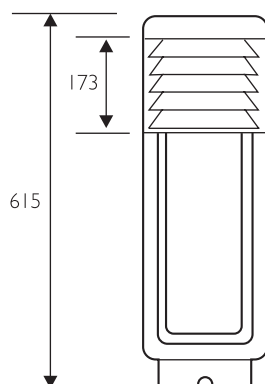
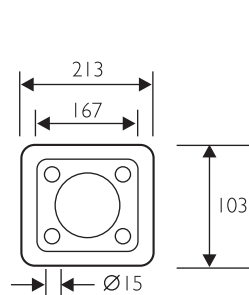
FGC 200 series can be mounted gate top or floor mounted.

Compliances

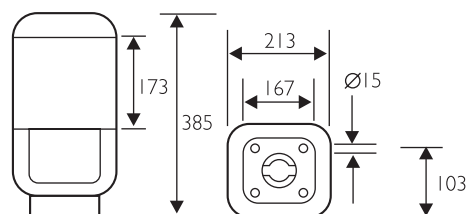
- IP 43
- Class I



NGC 100



FGC 201



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NGC100	1 x GLS 60W (BC)	230	0.26	1.00
FGC100 / 109	1 x PL-S 9W	230	0.17	0.35
FGC 201 / 209	2 x PL-S 9W	230	0.15	0.48
FGC 202 / 118	1 x PL-C 18W	240	0.22	0.50
FGC 203 / 118	1 x PL-C 18W	240	0.22	0.50
NGC 200	1 x PLE-T18W	230	0.14	0.50

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NGC100 1xA60-60W	919115938101	1	675 x 275 x 275	1 x 4.20	4.80	0.051
NGC200 1xPL-S / 2P9W	919115938202	1	405 x 270 x 270	1 x 3.00	3.50	0.030
NGC200 1xPL-C / 2P18W	919115938203	1	405 x 270 x 270	1 x 3.00	3.50	0.030
ZGC100 LPH	919115381302	12	226 x 280 x 186	12 x 0.15	2.50	0.012
ZGC100 GRT	919115381011	12	226 x 280 x 186	12 x 0.15	2.50	0.012

Minidecoflood - DGP 65 I

Outdoor
Application

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Product description

Compact decorative urban lighting luminaire suitable for use with 12V 50W dichroic halogen lamp.



DGP 653



DGP 652 With Corner Bracket and Treemount



ZGP 663



DGP 652 With Spike



DGP 651 with Hood

Features

- Compact, light weight, high pressure die-cast aluminium housing and connector box powder coated gray for sturdiness and excellent corrosion resistance.
- Heat-resistant toughened front glass cover for additional safety.
- Easy installation and quick lamp replacement through front opening.
- Heat-resistant silicon rubber gasket to ensure ingress protection of IP65.
- Available in integral version with built-in transformer compartment to accommodate electronic ETK 50 step down transformer. Twin glands are provided for loop-in loop-out arrangement.
- Available in non integral version with a separate high pressure diecast control gear box that can accommodate a maximum of four numbers electronic ETK 50 step down transformers for ease of wiring and compactness. The transformers are mounted on a gear plate for ease of maintenance. Loop-in loop-out feature is provided for parallel connection of control gear boxes.
- Specially designed light weight corner bracket to mount the luminaire on wall / tree branches. Optional nylon strap provided for mounting on tree branches.
- Available with optional features such as long arm, powder coated stainless steel spike for reaching nearer to the object of focus, mounting on grass lawns respectively.
- Facility for horizontal as well as vertical tilt for ease of aiming.
- Hood with louvers to limit spill light and glare control.

Applications

- Architectural lighting
- Gardens, trees, lawns
- Facades and columns

Installation

- Cable entry via twin cable entry glands (6mm maximum O.D.). Loop-in loop-out arrangement.
- Fixing to walls using two numbers M3 self tapping screws.
- Mounting on tree branches (approx 8 inches diameter) using Nylon strap.
- Non integral version to be wired from transformer hub for multiple connections.

Compliances

- IP 65
- Class I



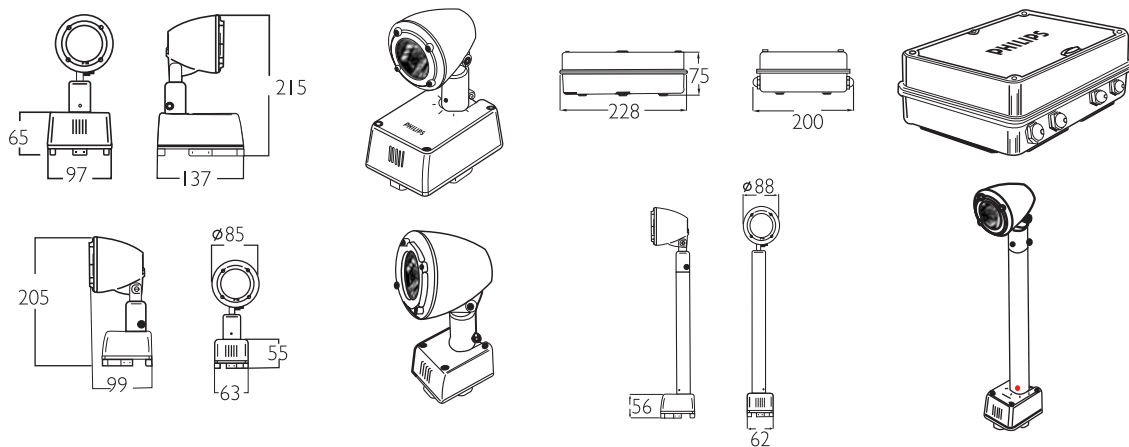
Outdoor | Minidecoflood - DGP 65 I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
DGP651 1xHAL-R50W-GU10	12V,50W Halogen	230-240	0.25	> 0.85
DGP652 1xHAL-R50W-GU10	12V,50W Halogen	230-240	0.25	> 0.85
DGP653 1xHAL-R50W-GU10	12V,50W Halogen	230-240	0.25	> 0.85



DGP 651 / 652 / 653



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
DGP651 1xHAL-R50W-GU10	919115385661	8	245 × 90 × 100	1.25	10.01	2.20
DGP652 1xHAL-R50W-GU10	919115385662	8	245 × 90 × 100	0.81	6.48	2.20
DGP653 1xHAL-R50W-GU10	919115385663	4	510 × 95 × 93	0.81	5.00	2.20
ZGP661 MB	919115985663	12	100 × 80 × 55	0.13	1.57	0.44
ZGP662 SPIKE	919115985662	6	205 × 85 × 70	0.24	1.49	1.21
ZGP663 TPS	919115985661	4	230 × 200 × 80	1.50	6.00	3.68
ZGP665 SPIKE	919115810076	8	310 × 230 × 245	0.28	4.00	0.017

Underwater Luminaire - NHG 010

Outdoor
Application

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Product description

Underwater luminaire suitable for use with 230V reflector lamp in R30 shell (75W, 100W and 150W in BC execution). When submerged the water head above the glass should not exceed 0.61 meter (2ft). The luminaire is not provided with many mounting arrangements. A provision for loop-in and loop-out has been kept but one gland must be suitably blocked if looping out is not done.

Features

- Compact and corrosion resistant housing made from brass and in natural finish.
- A gasket made of silicon rubber between the housing and the glass cover ensuring protection against ingress of water when submerged.
- A glass fixing ring made of brass in natural finish.
- A front cover made of heat resistant toughened clear glass.
- Conforms to IP 67 protection.

Applications

- Swimming pools
- Water cascades

Compliances

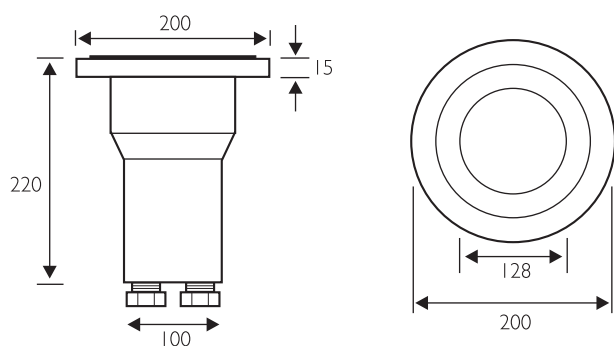
- IP 67
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NHG010 1xNR95-150W-FR	1 x 150W Reflector	230	0.65	1.00

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NHG010 1xNR95-150W-FR	919115374351	4	520 x 520 x 320	1.80 x 4	8.20	0.087



Technical Drawing



Radiance - RVP 501

**Outdoor
Application**

Page 43



Product description

High efficiency low glare asymmetrical floodlighting luminaire suitable for use with high pressure tubular Sodium Vapour lamp 1 x SON-T 1000W, 2 x SON-T400W or tubular Metal Halide lamp 1 x HPI-T 1000W, 2 x HPI-T 400W and MHN-LA 2000W lamp.

Features

- Housing made of die-cast aluminium with black powder coated finish for sturdiness and excellent corrosion resistance.
- The lamp compartment comprises of electrochemically brightened, high purity, pre-anodized aluminium reflector for long life and superior reflectivity. Outstanding glare suppression is secured by high grade asymmetric optics that achieve maximum intensity at around 15° with accurate beam control and uniform light distribution. Specially suited for critical areas such as airport aprons, sports stadium and junctions with fast, multidirectional traffic, container terminals, ports where there are restrictions on glare control and pollution and limitations on pole locations.
- Heat-resistant toughened front glass fixed to the housing with the help of specially designed stainless steel toggles with specially designed hinging mechanism for quick and easy lamp replacement.
- Hot dip galvanized MS mounting bracket with calibrated disk for ease of mounting and aiming.
- Heat-resistant long life EPDM / Silicon gasket renders the luminaire a dust tight and jet proof ingress protection classification of IP 65.
- The twin lamp version offers switching facilities that permits tailoring to the user's needs while allowing energy savings. Rugged all weather construction designed for easy aiming, simple cleaning and speedy maintenance. Horizontal mounting for optimum light distribution is recommended with maximum rotational adjustment of 12° from the horizontal.
- Separate control gear boxes to be used are
 - 1 x ZVX 400 / 1000 for 1 x SON-T 1000W
 - 1 x ZVX 410 / 1000 for 1 x HPI-T 1000W
 - 2 x ZVX 310 / 400 for 2 x HPI-T 400W
 - 2 x ZVX 340 / 400 for 2 x SON-T 400W

Applications

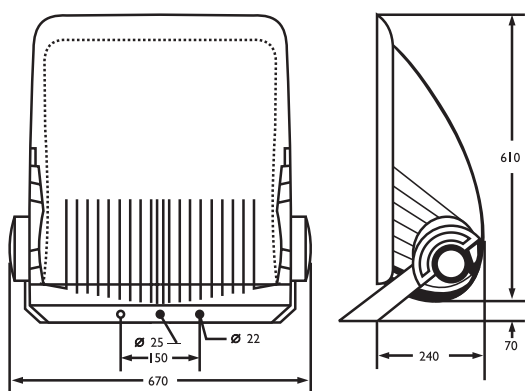
- Airport aprons
- Sports facilities
- Car parks
- Industrial areas
- Multilevel junctions and roundabouts
- Container terminals
- Ports
- Open storage yards

Installation

Universal mounting bracket allows mounting on head frame, ceiling and wall.

Compliances

- IP 65
- Class I



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
RVP501 2XSON-T400W	2 x SON-T 400W	240	4.50	> 0.85
RVP501 2XHPI-TP400W	2 x HPI-T 400W	240	4.40	> 0.85
RVP501 1xSON-T1000W	1 x SON-T 1000W	240	5.40	> 0.85
RVP501 1xHPI-TP1000W	1 x HPI-T 1000W	240	5.30	> 0.85
RVP501 1xMHN-LA2000W	1 x MHN-LA 2000W	410	12.00	> 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
RVP501 M 2x MAX400W-E40*	919115241226	1	790 x 760 x 330	19.50	23.50	0.198
RVP501 M 1xSON1000W-E40*	919115241227	1	790 x 760 x 330	19.50	23.50	0.198
RVP501 1xMHN-LA2000W 240V*	919115252993	1	790 x 760 x 330	20.00	24.00	0.198

Note: To be used with appropriate separate CG box.



F1 race track lighting in Singapore

Nocturne - RVP 302

Outdoor
Application

Page 43



Product description

Compact, sturdy non integral high performance floodlight luminaire suitable for use with SON-T/HPIT luminaire in 2x250W and 2x400W lamp versions.

Features

- Housing made of pressure die-cast aluminium alloy for sturdiness and better corrosion resistance.
- Unique profile of the housing offers lower wind resistance and better aesthetics. Powder coated black finish offers better aesthetics
- The lamp compartment comprises of electrochemically brightened, high purity, pre anodized aluminium reflector for high efficiency, specially profiled to suit area and facade lighting applications.
- Specially designed lamp support clips ensure correct beam distribution.
- Heat resistant EPDM gaskets bonded to the front cover renders the luminaire an ingress protection of IP 65 specially designed power coated mounting bracket with graduating disk for ease of mounting and aiming.
- This luminaire shall be used with separate deep drawn control gear boxes. Details of the suitable CG Box are given below:
 - ZVX33I 2xSON-T250W for 250W SON-T lamp
 - ZVX33I 2xHPI-T250W for 250W HPI-T lamp
 - ZVX34I 2xSON-T400W for 400W SON-T lamp
 - ZVX34I 2xHPI-T400W for 400W HPI-T lamp

Applications

- Large open areas
- Parks, junctions, roundabouts and toll plazas
- Architectural and building façade lighting
- Sports facilities
- Railway marshalling yards
- Ports and container terminals
- Lighting of industrial and large external storage areas
- Security lighting
- Industrial outdoor areas

Installation

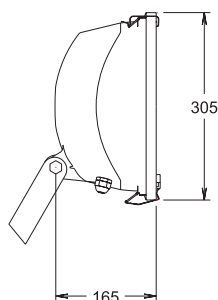
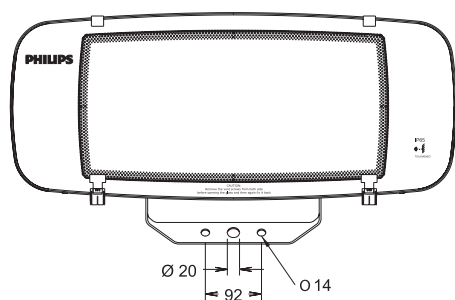
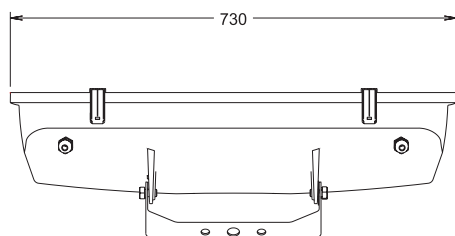
Cable entry via 10mm maximum O.D. gland.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
RVP302 2XSON-T 250W	2 X SON-T 250W	240	2.8	≥0.85
RVP302 2XSON-T 400W	2 X SON-T 400W	240	4.5	≥0.85
RVP302 2XHPI-T 250W	2 X HPI-T 250W	240	2.65	≥0.85
RVP302 2XHPI-T 400W	2 X HPI-T 400W	240	4.4	≥0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
RVP302 2XSON-T 250W	919115810060	1	820x435x230	6.4	8.7	0.082
RVP302 2XSON-T 400W	919115810061	1	820x435x230	6.4	8.7	0.082
RVP302 2XHPI-T 250W	919115810062	1	820x435x230	6.4	8.7	0.082
RVP302 2XHPI-T 400W	919115810063	1	820x435x230	6.4	8.7	0.082

Note: To be used with separate CG box.



Light Smasher - SLF 125 / HLF 125

**Outdoor
Application**

Page 43



Product description

Versatile, rotational, symmetrical floodlight suitable for use with high pressure Sodium up to 400W and high pressure Mercury up to 400W lamps with appropriate gear box.

Features

- Housing made of pressure die-cast aluminium for sturdiness and long life.
- High purity aluminium reflector electrochemically brightened and anodised.
- Different light beam angles can be obtained with corresponding lamp placements.
- Special heat-resistant glass cover which encloses the front side of the reflector.
- Rubber gasket securely fixed to make the luminaire rainproof.
- Non integral control gear which can be located separately away from luminaire for easy maintenance.
- Conforms to IP 54 protection.
- Conforms to relevant IS specifications.

Applications

- Area lighting
- Monument lighting
- The control gear boxes to be used are
 - ZVX 320 / 150 for SON-T 150W
 - ZVX 330 / 250 for SON-T 250W
 - ZVX 340 / 400 for SON-T 400W
 - ZVX 280 I x HPL-N 250W 240W
 - ZVX 290 I x HPL-N 400W 240W

Installation

Universal mounting bracket allows wall or surface mounting.

Compliances

- IP 54
- Class I

Outdoor | Light Smasher - SLF 125 / HLF 125

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SLF125 1xSON-T250W	1 x SON / SON-T 250W	240	1.40	> 0.85
SLF125 1xSON-T400W	1 x SON / SON-T 400W	240	2.25	> 0.85
SLF125 1x150W	1 x SON / SON-T 150W	240	0.85	> 0.85
HLF125 1x250W	1 x HPL-N 250W	240	1.35	> 0.85
HLF125 1x400W	1 x HPL-N 400W	240	2.15	> 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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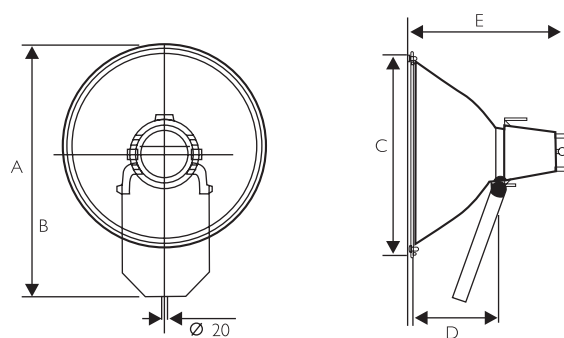
Housing

SLFI15 1xMAX400W-E40	919115262255	1	235 x 240 x 220	1.20	1.5	0.0124
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Reflector

GLFI15 R	919115926207	1	670 x 240 x 220	4.95	8.43	0.0353
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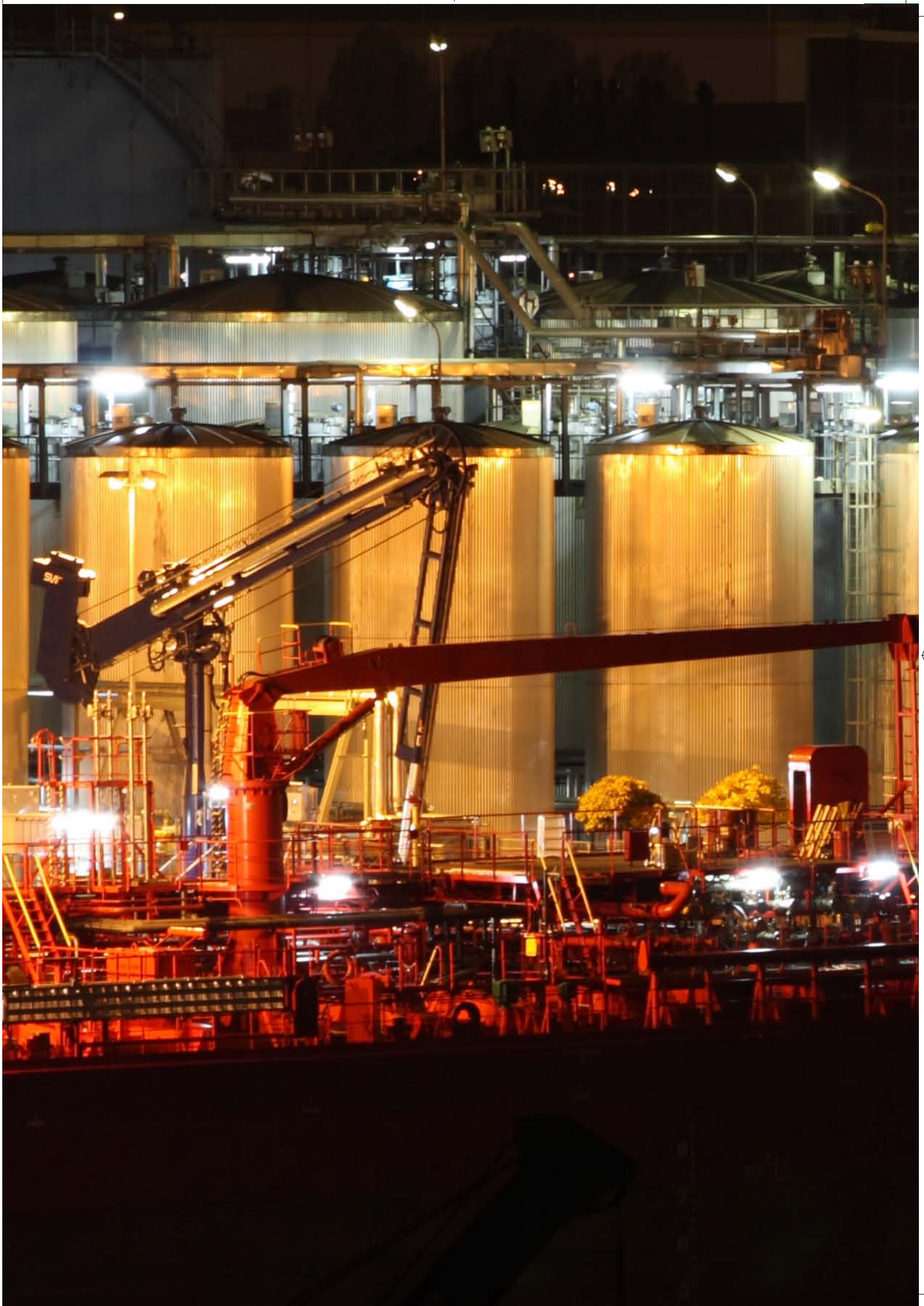
*To be used with separate CG Box.



	A	B	C	D	E
SLF 125	125	726	592	225	445

Technical Drawing





Outdoor
Application

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Product description

Compact, sturdy general-purpose floodlight with integral gear; suitable for use with high pressure tubular Sodium Vapour SON-T 250W / 400W, high pressure Metal Halide HPI-T 250W / 400W lamp. All-weather construction designed for simple cleaning and speedy servicing.

Features

- Housing made of non corrosive, high pressure die-cast aluminium with low copper content and black powder coated finish.
- Ingress protection of IP 65.
- All electrical accessories such as ballast, ignitor and power factor improvement capacitor are prewired up to terminal block.
- High grade symmetrical and asymmetrical peened anodized aluminium reflector to suite various applications.
- Wall, ceiling and surface mounting with various adjustments suitable for up / down lighting.
- Quick and easy access to lamp and gear through hinged front window with quick release stainless steel clips.
- Heat resistant EPR gasket offers sustained IP rating of IP 65.

Applications

- Bill boards
- Car parks
- Architectural lighting
- Sports lighting
- Industrial areas
- Security lighting

Installation

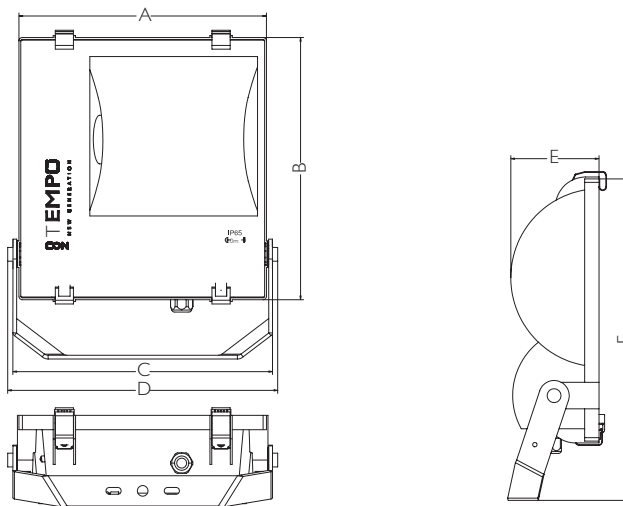
- Aperture bracket for firmer and versatile mounting.
- Quick release hinge clips for easy lamp replacement.
- Cable entry via cable gland. (cable with outer dia 8-10 mm.)

Outdoor | ConTempo 3 - MWF 33I / SWF 33I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SWF33I IXSON-T250W S	1 X SON-T 250W	240	1.4	≥0.85
MWF33I IXHPI-TP250W S	1 X HPI-T 250W	240	1.38	≥0.85
SWF33I IXSON-T250W A	1 X SON-T 250W	240	1.4	≥0.85
MWF33I IXHPI-TP250W A	1 X HPI-T 250W	240	1.38	≥0.85
SWF33I IXSON-T400W S	1 X SON-T 400W	240	2.25	≥0.85
MWF33I IXHPI-TP400W S	1 X HPI-T 400W	240	2.2	≥0.85
SWF33I IXSON-T400W A	1 X SON-T 400W	240	2.25	≥0.85
MWF33I IXHPI-TP400W A	1 X HPI-T 400W	240	2.2	≥0.85

Dimensions (mm)



Type	A	B	C	D	E	F
SWF/MWF 23I	327	346	343	363	117	424
SWF/MWF 33I	425	430	440	460	137	476

Technical Drawing



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SWF331 IXSON-T250W S	9191 158 10043	1	503 × 503 × 195	6.2	7.6	0.0493
MWF331 IXHPI-TP250W S	9191 158 10044	1	503 × 503 × 195	6.2	7.6	0.0493
SWF331 IXSON-T250W A	9191 158 10045	1	503 × 503 × 195	6.2	7.6	0.0493
MWF331 IXHPI-TP250W A	9191 158 10046	1	503 × 503 × 195	6.2	7.6	0.0493
SWF331 IXSON-T400W S	9191 158 10047	1	503 × 503 × 195	6.2	7.6	0.0493
MWF331 IXHPI-TP400W S	9191 158 10048	1	503 × 503 × 195	6.2	7.6	0.0493
SWF331 IXSON-T400W A	9191 158 10049	1	503 × 503 × 195	6.2	7.6	0.0493
MWF331 IXHPI-TP400W A	9191 158 10050	1	503 × 503 × 195	6.2	7.6	0.0493

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Con Tempo 2 - MWF 231 / SWF 231

**Outdoor
Application**

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Product description

Compact, sturdy general purpose floodlight with integral gear suitable for use with high pressure tubular Sodium Vapour SON-T 150W, high pressure Metal Halide MHN-TD 150W lamp. All weather construction designed for simple cleaning and speedy servicing.

Features

- Housing made of non corrosive, high pressure die-cast aluminium with low copper content and black powder coated finish.
- Ingress protection of IP 65.
- All electrical accessories such as ballast, ignitor and power factor improvement capacitor are prewired up to terminal block.
- High grade symmetrical and asymmetrical peened anodized aluminium reflector to suite various applications.
- Wall, ceiling and surface mounting with various adjustments suitable for up / down lighting.
- Quick and easy access to lamp and gear through hinged front window with quick release stainless steel clips.
- Heat resistant EPR gasket offers sustained IP rating of IP 65.

Applications

- Bill boards
- Car parks
- Architectural lighting
- Sports lighting
- Industrial areas
- Security lighting

Installation

- Aperture bracket for firmer and versatile mounting.
- Quick release hinge clips for easy lamp replacement.
- Cable entry via cable gland - cable with outer dia 8-10 mm.

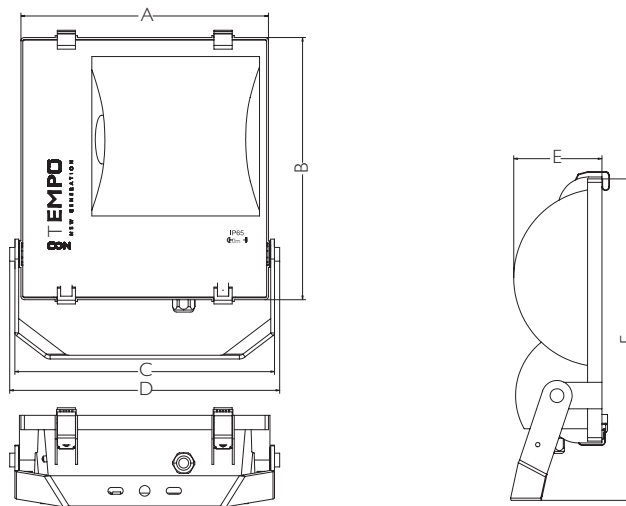
Outdoor | Con Tempo 2 - MWF 231 / SWF 231

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SWF231 IXSON-T150W S	1 x SON-T 150W	240	0.85	> 0.85
MWF231 IXMHN-TD150W S	1 x MHN-TD 150W	240	0.85	> 0.85
SWF231 IXSON-T150W A	1 x SON-T 150W	240	0.85	> 0.85
MWF231 IXMHN-TD150W A	1 x MHN-TD 150W	240	0.85	> 0.85



Dimensions (mm)



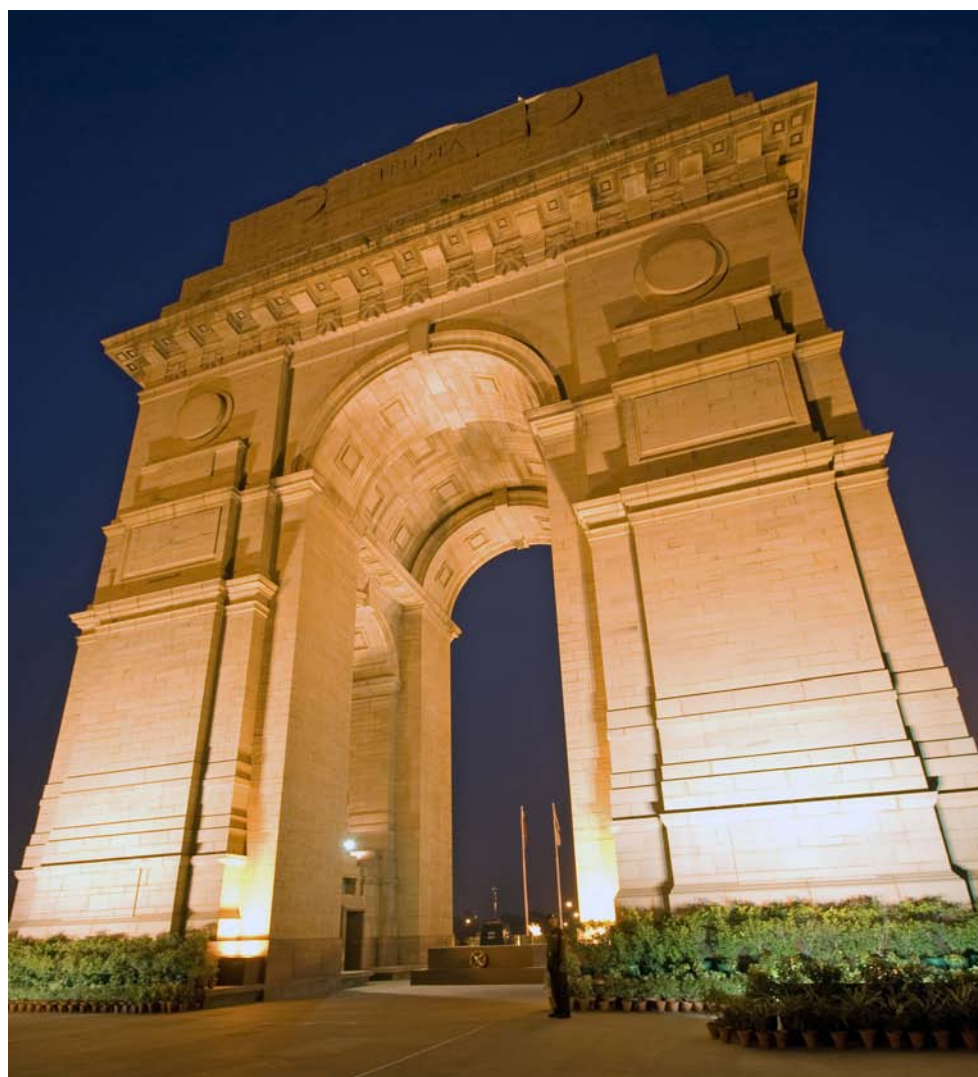
Type	A	B	C	D	E	F
SWF/MWF 231	327	346	343	363	117	424
SWF/MWF 331	425	430	440	460	137	476

Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SWF231 IXSON-TI50W S	9191 158 10051	1	410 X 395 X 156	4.5	5.4	0.0252
MWF231 IXMHN-TDI50W S	9191 158 10052	1	410 X 395 X 156	4.5	5.4	0.0252
SWF231 IXSON-TI50W A	9191 158 10053	1	410 X 395 X 156	4.5	5.4	0.0252
MWF231 IXMHN-TDI50W A	9191 158 10054	1	410 X 395 X 156	4.5	5.4	0.0252

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Uniflood - RVP339

Outdoor
Application

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Product description

Compact study general proposed low wattage floodlight with integral gear, suitable for 1xMHN-TD / CDM-TD 70 W lamp. The luminaire is specially designed for architectural application with narrow and wide beam to suite various lighting application.

Features

- Pressure die-cast aluminium housing with epoxy-polyester powder coating makes the luminaire withstand environmental conditions for long.
- Aerodynamic design with ergonomic shape makes the luminaire appear elegant and good looking.
- Lamp and gear compartment integrated together provide fast access to lamp as well as gear components to the user.
- Optics: High quality anodized aluminium reflectors specially stitched to offer two type of optics
 - Rotationally symmetric: Parabolic reflector (PR) type for narrow rotationally symmetric beam. Ideal for highlighting details in architectural lighting application.
 - Axially symmetric: Rectangular reflector (RR) type for axially symmetric wide beams. Best for flat façade and bill board lighting.
- Housing embossed protractor and bracket with slot makes aiming easy during installation as well as re-aiming at later dates.
- Ergonomic and rugged bracket for mounting on horizontal surfaces, walls, ceilings and for pole mounting.
- Special heat dissipation fins on housing makes it thermally more stable.
- Toughened glass front cover sits over the profiled gasket and is clamped with SS toggles and hinge arrangement to achieve IP65 protection.

Applications

- Parks • Pathways • Gardens • Sculptures • Structures
- Architectural flood lighting • Bill board lighting

Installation

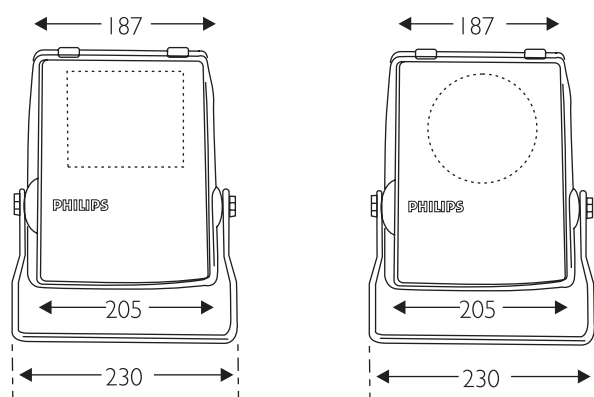
Universal mounting bracket allows wall or surface mounting.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
RVP339 1xCDM-TD70W R	1 x CDM-TD / MHN-TD 70W	240	0.45	> 0.85
RVP339 1xCDM-TD70W PR	1 x CDM-TD / MHN-TD 70W	240	0.45	> 0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
RVP339 1xCDM-TD70W R	919115241230	1	365 x 305 x 165	2.06	2.86	0.0180
RVP339 1xCDM-TD70W PR	919115241231	1	365 x 305 x 165	2.06	2.86	0.0180

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Flood Light - NVC 502 / MVC 502

**Outdoor
Application**

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Product description

General purpose Flood Light suitable for use with 1 x 1000W Linear Tungsten Halogen lamp and double ended high pressure Metal Halide MHN-TD 150W lamp with appropriate ZVX 320 CG box.

Features

- Compact, light weight and corrosion resistant housing.
- Heat-resistant and toughened glass cover in cast aluminium retaining frame which can be hinged with the housing for lamp replacement.
- Glass retaining frame of cast aluminium (LM6), powder coated in an attractive black color.
- High-purity textured aluminium reflector electrochemically brightened and anodized.
- Heat resistant and toughened glass.
- Heat resistant silicon rubber gasket.
- Terminal block of heat resistant nylon-6 grade.
- Mounting bracket of MS powder coated.
- High grade reflectors provide an efficient wide light distribution.
- Quick and easy lamp replacement through front window.
- Rear access for mains connection.

Applications

- Industrial areas
- Architecture
- Security
- Billboards and parks
- Construction sites
- Shopping areas

Installation

Universal mounting bracket allows wall or surface mounting.

Compliances

- IP 54
- Class I

Outdoor | Flood Light - NVC 502 / MVC 502

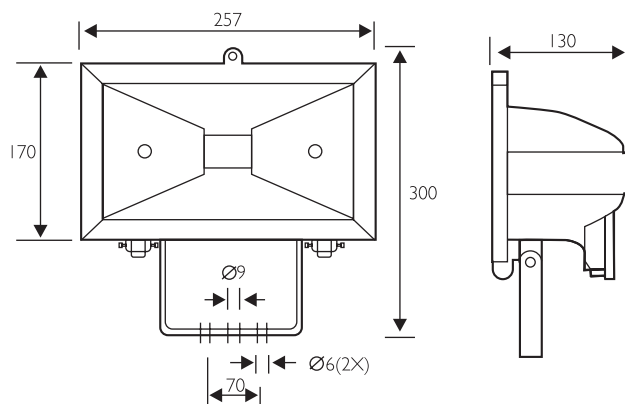
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NVC502 1xHAL-TDL1000W	1 x 1000W Tungsten Halogen	230	4.00	1.00
MVC502 1xMHN-TD150W	1 x MHN-TD 150W	240	0.85	> 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NVC502 1xHAL-TDL1000W	919115264546	1	270 x 230 x 180	2.00 x 1	2.20	0.011
MVC502 1xMHN-TD150W*	919115264547	1	270 x 230 x 180	2.00 x 1	2.20	0.011

* Separate control gear is to be used.



Technical Drawing



Flood Light - QVF 135

Outdoor
Application

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Product description

General purpose Flood Light suitable for use with 500 W Linear Tungsten Halogen lamp or high pressure Metal Halide MHN-TD 70W lamp with appropriate ZVX 270 control gear box.

Features

- Compact, light weight and corrosion resistant pressure die-cast housing.
- Heat-resistant and toughened glass cover in aluminium retaining frame which can be hinged with the housing for lamp replacement.
- High-purity textured aluminium reflector electrochemically brightened and anodized.
- Terminal block of heat resistant nylon-6 grade.
- Mounting bracket of MS powder coated black.
- Quick and easy lamp replacement through front window.
- Rear access for mains connection through terminal box.

Applications

- Industrial areas
- Architecture
- Security
- Billboards and parks
- Construction sites
- Shopping areas

Installation

Universal mounting bracket allows wall or surface mounting.

Compliances

- IP 54
- Class I

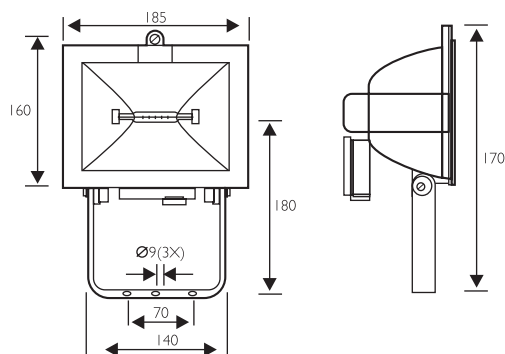
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
QVF135 1xHAL-TDS500W	1 x 500W Tungsten Halogen	240	2.08	1.00
QVF135 1xMHN-TD70W	1 x MHN-TD 70W	240	0.45	> 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
QVF135 1xHAL-TDS500W*	919115267162	12	400 x 470 x 360	0.91 x 12	13.80	0.068

* Separate control gear is to be used for 70W MHN-TD.



Technical Drawing



Halolite NG - QVF 135 GR

**Outdoor
Application**

Page 43



Product description

General purpose flood light suitable for use with 500 W linear Tungsten Halogen lamp or high pressure Metal Halide MHN-TD 70W lamp with appropriate ZVX 270 control gear box.

Features

- Compact and trendy design.
- Rugged, pressure die-cast aluminium housing and frame with corrosion resistant powder coating.
- Anodized aluminium patterned reflectors for widespread light distribution.
- 'V' shaped silicon rubber gasket for dust and water resistance with Ingress protection of IP 54.
- Easy rear access with class II connection box.
- Hinged toughened glass cover for safe and easy access to lamp.
- Sturdy MS powder coated mounting bracket for reliable mounting and aiming purpose.

Applications

- Industrial areas
- Architecture
- Security
- Billboards and parks
- Construction sites
- Shopping areas

Installation

Universal mounting bracket allows wall or surface mounting.

Compliances

- IP 54
- Class I

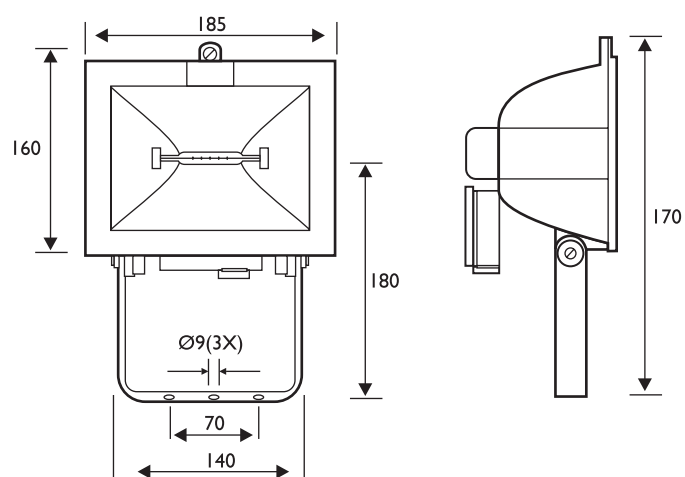
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
QVFI35 HAL-TDS500W K 240V GR	1 x 500W Tungsten Halogen	240	2.08	1.00

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
QVFI35 HAL-TDS500W K 240V GR IN	911401065680	12	580 x 400 x 310	12.00	13.30	0.07192

* Luminaire supplied with lamp.



Technical Drawing



Control Gear Box ZVX Series

Outdoor
Application

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Product description

Die-cast control gear boxes suitable for use with high pressure Sodium Vapour SON / SON-T 70 W (I or E) / 150W / 250W / 400W / 1000W, high pressure Mercury Vapour HPL-N 80W / 125W / 250W / 400W, high pressure Metal Halide HPI-T 250W / 400W / 1000W.

Main Application

- Non-integral floodlights
- Non-integral industrial luminaires

Features

- The light-weight control gear boxes enable ease of installation and maintenance.
- HRC fuse of adequate rating can be provided as an optional attachment.
- Luminaires type MVC 503 can be mounted on the control gear box directly if required.
- All accessories are pre-wired up to terminal block.
- The cable glands provided facilitates loop-in loop-out option.
- Four point fixing arrangement.
- Conforms to IP 54 protection up to 400W and IP55 for 1000W.

Material Finish

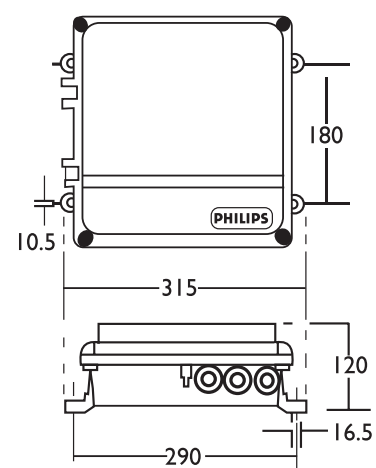
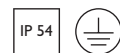
Die-cast housing and lid.

Compliances

- IP 54



CG box for 1000W



CG box for 1000W

Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
ZVX240 1xHPL-N80W 240V	1 x HPL-N 80W	240	0.45	> 0.85
ZVX250 1xHPL-N125W 240V	1 x HPL-N 125W	240	0.70	> 0.85
ZVX260 1xSON-I-70W 240V	1 x SON 70W (I)	240	0.45	> 0.85
ZVX270 1xSON70W 240V	1 x SON 70W (E)	240	0.45	> 0.85
ZVX320 1xSON150W 240V	1 x SON 150W	240	0.85	> 0.85
ZVX330 1xSON250W 240V	1 x SON 250W	240	1.40	> 0.85
ZVX340 1xSON400W 240V	1 x SON 400W	240	2.25	> 0.85
ZVX280 1xHPL-N250W 240V	1 x HPL-N 250W	240	1.35	> 0.85
ZVX290 1xHPL-N400W 240V	1 x HPL-N 400W	240	2.15	> 0.85
ZVX300 1xHPI-T250W 240V	1 x HPI-T 250W	240	1.38	> 0.85
ZVX310 1xHPI-TP400W 240V	1 x HPI-T 400W	240	2.20	> 0.85
ZVX400 1xSON1000W 240V	1 x SON-T 1000W	240	5.40	> 0.85
ZVX410 1xHPI-T1000W 220V	1 x HPI-T 1000W	240	5.30	> 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
ZVX240 1xHPL-N80W 240V	919515036828	1	310 x 250 x 140	3.00	3.20	0.011
ZVX250 1xHPL-N125W 240V	919515036827	1	310 x 250 x 140	3.00	3.20	0.011
ZVX260 1xSON-I-70W 240V	919515364162	1	310 x 250 x 140	3.00	3.20	0.011
ZVX270 1xSON70W 240V	919515364161	1	310 x 250 x 140	3.00	3.20	0.011
ZVX320 1xSON150W 240V	919515165256	1	310 x 250 x 140	3.00	3.20	0.011
ZVX330 1xSON250W 240V	919515170359	1	310 x 250 x 140	3.00	3.20	0.011
ZVX340 1xSON400W 240V	919515176453	1	310 x 250 x 140	3.00	3.20	0.011
ZVX280 1xHPL-N250W 240V	919115136829	1	310 x 250 x 140	3.00	3.20	0.011
ZVX290 1xHPL-N400W 240V	919115136831	1	310 x 250 x 140	3.00	3.20	0.011
ZVX300 1xHPI-T250W 240V	919115147222	1	310 x 250 x 140	3.00	3.20	0.011
ZVX310 1xHPI-TP400W 240V	919115153322	1	310 x 250 x 140	3.00	3.20	0.011
ZVX400 1xSON1000W 240V	919515377355	1	318 x 295 x 124	3.20	3.80	0.117
ZVX410 1xHPI-T1000W 220V	919515377354	1	318 x 295 x 124	3.20	3.80	0.117

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Velocity - SGP 338

Outdoor
Application

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON-T PLUS / HPI-T PLUS / CDM-TT 400W lamp. Luminaire can also be used with SON-T PLUS / HPI-T PLUS / CDM-TT 250 W lamp and SON-T PLUS / CDM-TT 150W lamps.



SGP 338 FG

Side Mounting

Direct pole Mounting

Features

- Housing made of LM6 high pressure die-cast aluminium which does not need painting to prevent corrosion of the housing. However paint options are available as an optional feature. Available in choice of colors.
- All electrical accessories such as energy efficient, low loss, open construction copper ballast, ignitor and power factor improvement capacitor etc. are pre-wired up to the terminal block and mounted on a removable control gear module for ease of maintenance. All electrical connections of the control gear module with the rest of the luminaire are click fix, fool proof and require use of no tools. Control gear compartment opens from top.
- The lamp compartment consists of electrochemically brightened and anodized, high purity POT reflector with a specially designed ribbed profile for high spacing to mounting height ratio.
- The lamp compartment consists of a heat resistant toughened, available in options of curved glass and flat glass (FG) which is sealed to the housing. Lamp replacement is by opening the top compartment. This ensures IP66 classification of ingress protection for the lamp compartment.
- Specially designed pole mounting arrangement facilitates bottom as well as lateral pole mounting.
- Flexible optics to achieve optimum light distribution to suit different road and installation parameters.

Applications

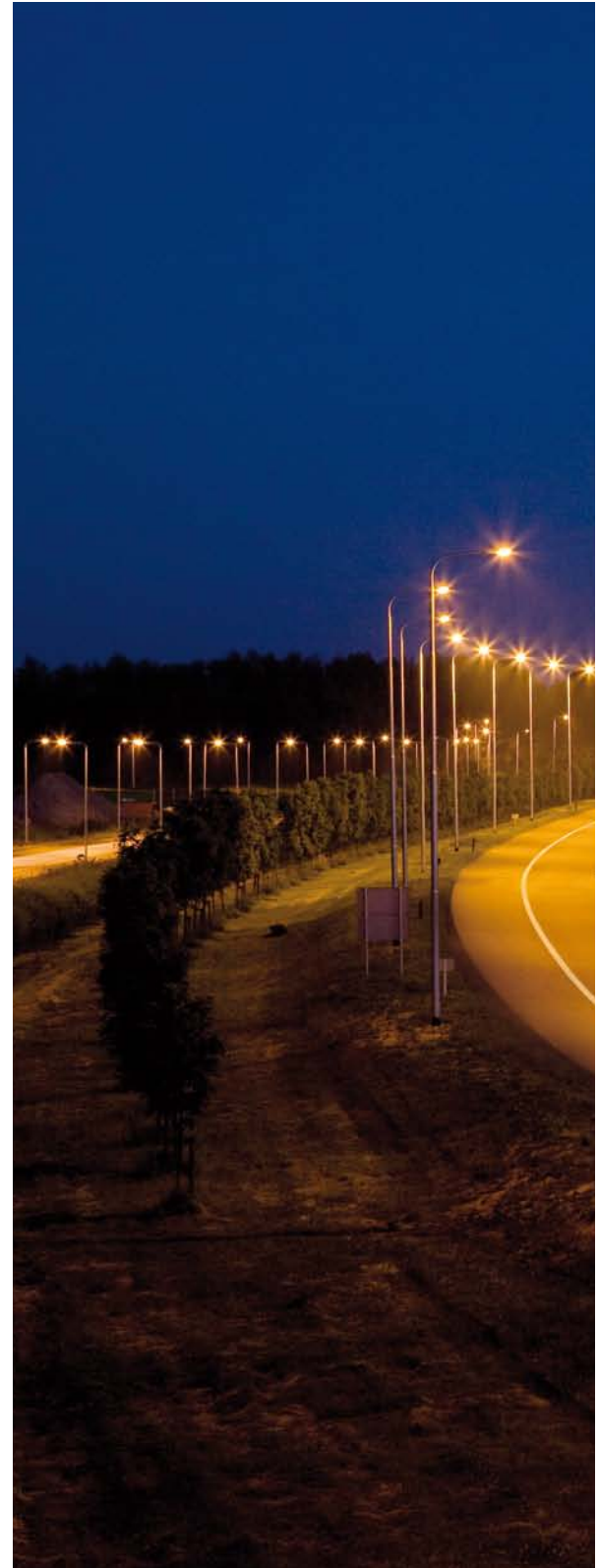
- Major city roads
- Highways and expressways
- Junctions and roundabouts
- Industrial areas
- Car parks

Installation

Specially designed spigot enables pole entry diameter options from 42mm to 70mm O.D. Specially designed pole-mounting piece for bottom as well as lateral entry.

Compliances

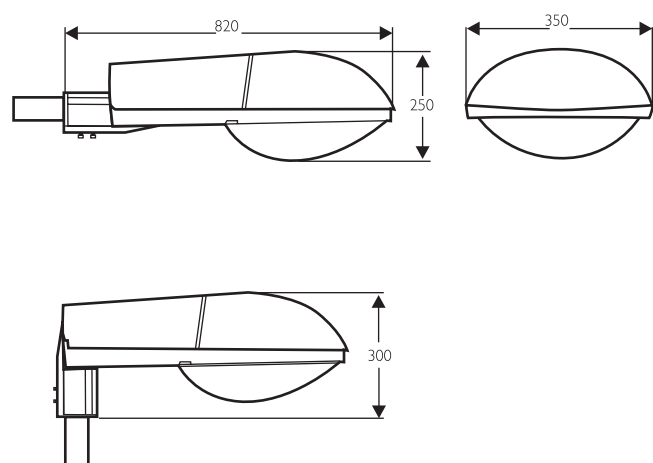
- IP 66 lamp compartment
- IP 54 gear compartment
- Class I





Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SGP338 M 1xSON-T250W GB	1 x SON-T 250W	240	1.40	>0.85
MGP338 M 1xHPI-TP250W GB	1 x HPI-TP 250W	240	1.38	>0.85
SGP338 M 1xSON-T400W GB	1 x SON-T 400W	240	2.25	>0.85
MGP338 M 1xHPI-TP400W GB	1 x HPI-TP400W	240	2.20	>0.85
SGP338 M 1xSON-T250W FG	1 x SON-T 250W	240	1.40	>0.85
SGP338 M 1xHPI-TP250W FG	1 x HPI-TP 250W	240	1.38	>0.85
SGP338 M 1xSON-T400W FG	1 x SON-T 400W	240	2.25	>0.85
SGP338 M 1xHPI-TP400W FG	1 x HPI-TP 400W	240	2.20	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SGP338 M 1xSON-T250W GB	919115152226	1	840 × 445 × 330	9.00	12.5	0.123
MGP338 M 1xHPI-TP250W GB	919115136255	1	840 × 445 × 330	9.00	12.5	0.123
SGP338 M 1xSON-T400W GB	919115136253	1	840 × 445 × 330	9.00	12.5	0.123
MGP338 M 1xHPI-TP400W GB	919115136254	1	840 × 445 × 330	9.00	12.5	0.123
SGP338 M 1xSON-T250W FG	919115136256	1	870 × 420 × 210	9.00	12.0	0.077
SGP338 M 1xHPI-TP250W FG	919115136258	1	870 × 420 × 210	9.00	12.0	0.077
SGP338 M 1xSON-T400W FG	919115136257	1	870 × 420 × 210	9.00	12.0	0.077
SGP338 M 1xHPI-TP400W FG	919115136259	1	870 × 420 × 210	9.00	12.0	0.077

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Skyline - SGP 325

Outdoor
Application

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON-T PLUS 150W / 250W or ceramic discharge Metal Halide HPI-T PLUS 250W lamp or CDM-TT 150W / 250W.



SGP 325 GLA



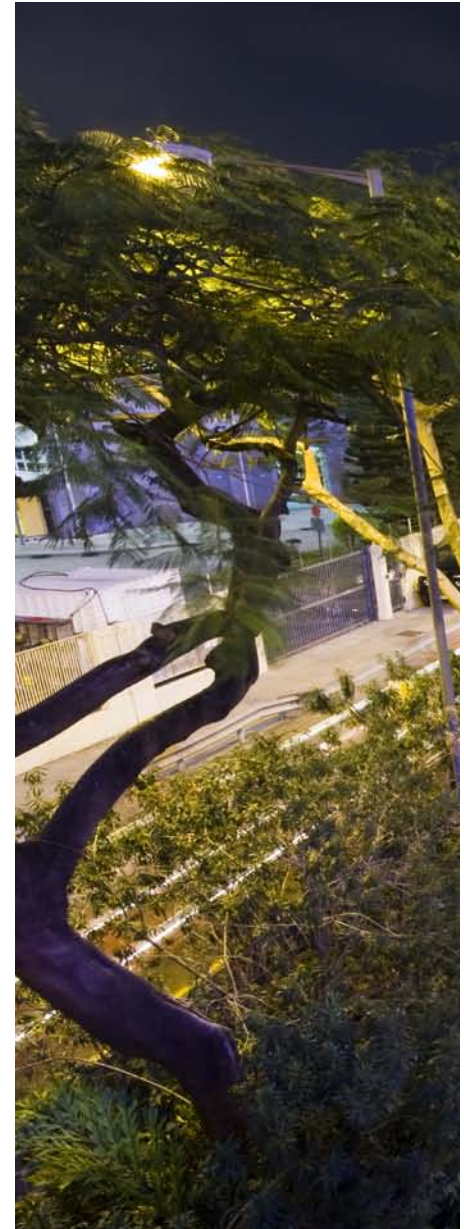
SGP 325 PCA

Features

- Housing made of single piece pressure die-cast aluminium alloy with low copper content for sturdiness and excellent corrosion resistance.
- Specially designed styling with powder coated finish for improved aesthetics and better environmental protection. Available in choice of colors.
- All electrical accessories such as energy efficient, low loss, open construction copper ballast, ignitor and power factor improvement capacitor are pre-wired up to the terminal block.
- The lamp compartment consists of electrochemically brightened and anodized, high purity POT reflector with a specially designed ribbed profile for better uniformity and high spacing to mounting height ratio.
- Specially designed pole mounting arrangement accommodated in a separate compartment with a cover made of engineering plastic to facilitate bottom as well as lateral pole mounting without disturbing the lamp or gear compartment.
- Multiple configurations for cover are available to suit different lamps and environmental conditions.
- Clear curved Polycarbonate cover (PCA) for the lamp compartment UV stabilized to avoid yellowing to ensure ingress protection of IP 65 for the lamp compartment suitable for highly polluted areas.
- Gear compartment cover made of engineering plastic to ensure an ingress protection classification of IP 54.
- Heat resistant toughened flat glass cover (GLA) for the lamp compartment to ensure ingress protection of IP 65 for the lamp compartment suitable for highly polluted areas.
- High quality long life EPDM / FELT gasket specially treated for heat resistance and insect repellence to ensure the declared level of ingress protection throughout the life of the luminaire.
- User friendly hinging arrangement for lamp and gear compartment consisting of stainless steel toggles facilitating access to lamp and gear compartment from bottom.
- Flexible optics to achieve optimum light distribution to suit different road and installation parameters.
- All electrical accessories are mounted to a removable gear plate for ease of maintenance and installation.

Applications

- Major city roads • Junctions and roundabouts
- Industrial areas • Car parks





Installation

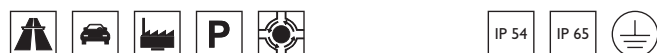
Pole entry diameter of maximum 60mm. O.D. Specially designed pole mounting piece for bottom as well as lateral entry.

Compliances

• IP 65 lamp compartment • IP 54 gear compartment • Class I

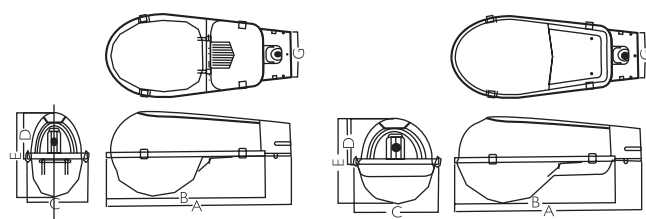
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SGP325 1xSON-T150W PC	1 x SON-T 150W	240	0.85	>0.85
SGP325 1xSON-T250W PC	1 x SON-T 250W	240	1.40	>0.85
SGP325 1xHPI-TP250W PC	1 x HPI-TP 250W	240	1.38	>0.85
SGP325 1xSON-T150W FG	1 x SON-T 150W	240	0.85	>0.85
SGP325 1xSON-T250W FG	1 x SON-T 250W	240	1.40	>0.85
SGP325 1xHPI-TP250W FG	1 x HPI-TP 250W	240	1.38	>0.85



SGP 325 PCA

SGP 325 GLA



Luminaire	A	B	C	D	E	G
SGP 325 PCA	735	635	327	178	332	170
SGP 325 GLA	735	635	327	178	195	170

Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SGP325 1xSON-T150W PC	919115120261	1	805 x 425 x 400	5.40	7.80	0.139
SGP325 1xSON-T250W PC	919115120232	1	805 x 425 x 400	5.40	7.80	0.139
SGP325 1xHPI-TP250W PC	919115120233	1	805 x 425 x 400	5.40	7.80	0.139
SGP325 1xSON-T150W FG	919115120262	1	795 x 420 x 220	5.78	8.00	0.073
SGP325 1xSON-T250W FG	919115120234	1	795 x 420 x 220	5.78	8.00	0.073
SGP325 1xHPI-TP250W FG	919115120235	1	795 x 420 x 220	5.78	8.00	0.073

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Broadway Plus - CRP 330

**Outdoor
Application**

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON-T 150 / 250W lamp. The luminaire is also suitable for ceramic discharge Metal Halide CDMTT 150W / 250W lamp and new generation Cosmo Polis CPO-T 60W and CPO-T 140W lamps.

Road lighting plays a vital role in people's lives because it provides safety, security and comfort at night. But these days it is also expected to play an equally vital role in the daytime by adding to the architectural appeal of the landscape. The new Philips Broadway range of streetlights is designed with precisely this in mind. Not only does it deliver high quality lighting, its distinctive looks also add character to the street scene.



Color Option

Color Option

Features

- Die-cast aluminium (LM6) housing and head frame, powder coated in attractive gray color. For outside color; options can be given.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor, power factor improvement capacitor etc. are pre-wired up to the terminal block and mounted on a gear plate.
- The access to the gear compartment is from above in an ergonomic position. A single screw at the front end ensures secure and easy clamping.
- High purity aluminium pot reflector electrochemically brightened and anodized.
- EPDM gasket is used in between the housing and the frame.
- Heat resistant and toughened glass cover is provided for the lamp compartment to minimize discomfort glare for vehicular traffic.
- Contemporary shape of the luminaire offers elegant and futuristic ambience at the installation site.
- IP 65 for both lamp and glass compartment.

Applications

- Major city roads
- Colony roads
- Roundabouts
- Industrial areas
- Commercial city centers
- Squares and car parks

Installation

Pole entry through integrated pole piece on the frame, suitable for pole diameter of maximum 60mm diameter.

Compliances

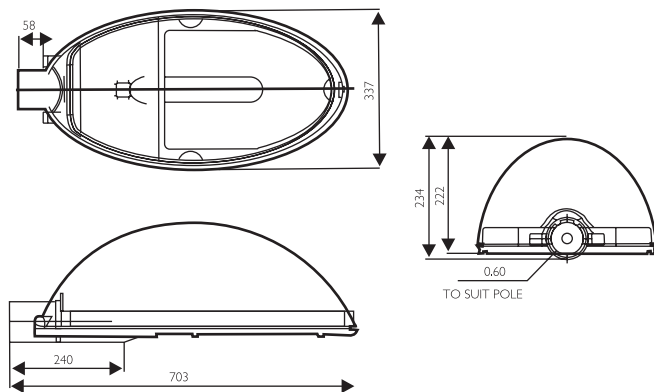
- IP 65
- Class I



Outdoor | Broadway Plus - CRP 330

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
CRP330 1xSON-T150W	1 x SON-T / CDM-TT 150W	240	0.85	>0.85
CRP330 1xSON-T250W	1 x SON-T / CDM-TT / HPI-T 250W	240	1.40	>0.85
CRP330 CPO-T60W EB I OC FG GR	CPO-TW60W	220-240	0.3	>0.98
CRP330 CPO-T140W EB I OC FG GR	CPO-TW140W	220-240	0.6	>0.98



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
CRP330 I X SON-T150WTP	919115810055	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T150WTP TS	919115810094	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T150WTP SG	919115810096	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T150WTP PK	919115810098	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T150WTP AS	919115810100	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 I X SON-T250WTP	919115810056	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T250WTP TS	919115810095	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T250WTP SG	919115810097	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T250WTP PK	919115810099	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 IXSON-T250WTP AS	919115810101	1	720 X 410 X 230	8.30	10.60	0.068
CRP330 CPO-T60 W EB I OC FG GR	919115810068	1	720 X 410 X 230	9	11.3	0.068
CRP330 CPO-T140W EB I OC FG GR	919115810067	1	720 X 410 X 230	9	11.3	0.068

Note: SG: Sea Green, PK: Pink, AS: Antique Silver, TS: Textured Silver.

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Secura - SGP 438

Outdoor
Application

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Product description

Road lighting luminaire, aerodynamically shaped single piece pressure die-cast aluminium housing, toughened glass cover, special BR-POT optics, IP66 ingress protection. Special PUL coating for improved aesthetics, suitable for SON-T / HPI-T / CDM-TT up to 250W.

Features

- Aerodynamically shaped single piece pressure die-cast aluminium construction make Secura robust and sturdy.
- IP 66 ingress protection level for lamp as well as gear compartment eliminates dust and water ingress offering improved protection from weather.
- Special mounting system of luminaire holds the luminaire weight from its centre of gravity which offers most reliable and extra safe luminaire mounting. It leads to no vibrations and minimises pendulum effect.
- Compact in size makes it easy to handle.
- Special PUL treatment of housing offers aesthetically appealing and elegant appearance.
- Bottom cover comprises of toughened glass with patterned gray paint for glare free light distribution on the road.
- Specially developed state-of-the-art BR 'POT' optics which has excellent light distribution and efficiency. It provides uniform distribution of light and allows higher pole to pole spacing.
- Luminaire is suitable for wide range of lamps starting from SON to CDM-TT providing SON yellow light to crisp white light.
- All hardwares - outer toggles and hinges are made up of weather proof stainless steel construction for increased life and weather ability.

Applications

- Major city roads
- Car parks
- Junctions, roundabouts
- Open yards
- Industrial areas

Installation

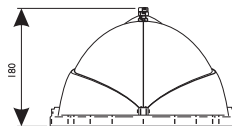
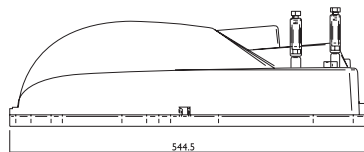
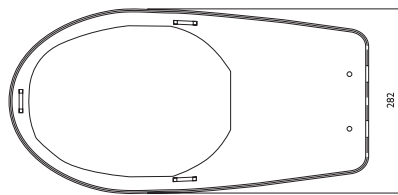
Suitable for pole entry outer diameter of 48 to 60mm.

Compliances

- IP 66 • Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SGP438 1xSON-T150W	1 x SON-T 150W	240	0.85	>0.85
SGP438 1xSON-T250W	1 x SON-T 250W	240	1.40	>0.85
SGP438 1xCDM-TT150W	1 x SON-T / CDM-TT 150W	240	0.85	>0.85
SGP438 1xCDM-TT250W	SON-T / HPI-T / CDM-TT 250W	240	1.40	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SGP438 1xSON-T150W	919115120245	2	305 x 305 x 650	4.20 x 2	10.00	0.0605
SGP438 1xSON-T250W	919115120244	2	305 x 305 x 650	4.20 x 2	10.00	0.0605
SGP438 1xCDM-TT150W	919115120249	2	305 x 305 x 650	4.20 x 2	10.00	0.0605
SGP438 1xCDM-TT250W	919115120248	2	305 x 305 x 650	4.20 x 2	10.00	0.0605

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Esplanade - SGP 401

**Outdoor
Application**

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour lamp SON-T 150 / 250 W or Metal Halide lamp CDM-TT 150 / 250 W.

Features

- Housing made of single piece high pressure die-cast aluminium alloy with low copper content for sturdiness and excellent corrosion resistance. Specially designed styling with powder coated finish for improved aesthetics and better environmental protection.
- All electrical accessories such as energy efficient, low loss, open construction copper ballast; ignitor and powder factor improvement capacitor are pre-wired up to the terminal block.
- The lamp compartment consists of electrochemically brightened and anodized, high purity POT reflector for efficient distribution.
- Heat resistance toughened flat glass cover for glare free lighting.
- The flat glass cover is fixed to the housing with two number stainless steel hinges and three number stainless steel clips for maintained contact pressure throughout life offering IP 65 level of ingress protection for the lamp as well as gear compartment ensuring long life of components and maintained efficiency of light distribution.
- The hinging mechanism of the flat glass cover retains the cover when it is opened resulting in ease of maintenance.
- The specially designed pole mounting mechanism ensures secure mounting even in high winds and offers a built-in tilt of 5° to ensure proper light. Suitable for pole entry diameter of 50 to 60 mm.
- Specially designed extruded EPR gasket ensures the declared level of ingress protection throughout the life of the luminaire.

Applications

- Major city roads
- Junctions and roundabouts
- Industrial areas
- Car parks and other open areas

Installation

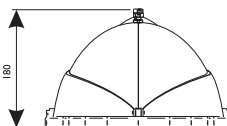
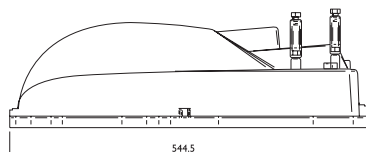
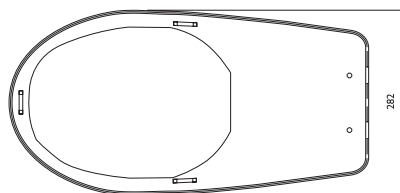
- Pole entry diameter of 50 to 60mm O.D.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SGP401 1xSON-T150W	1 x SON-T 150W	240	0.85	>0.85
SGP401 1xSON-T250W	1 x SON-T 250W	240	1.40	>0.85
SGP401 1xCDM-TT150W	1 x SON-T / CDM-TT 150W	240	0.85	>0.85
SGP401 1xCDM-TT250W	SON-T / HPI-T / CDM-TT 250W	240	1.40	>0.85

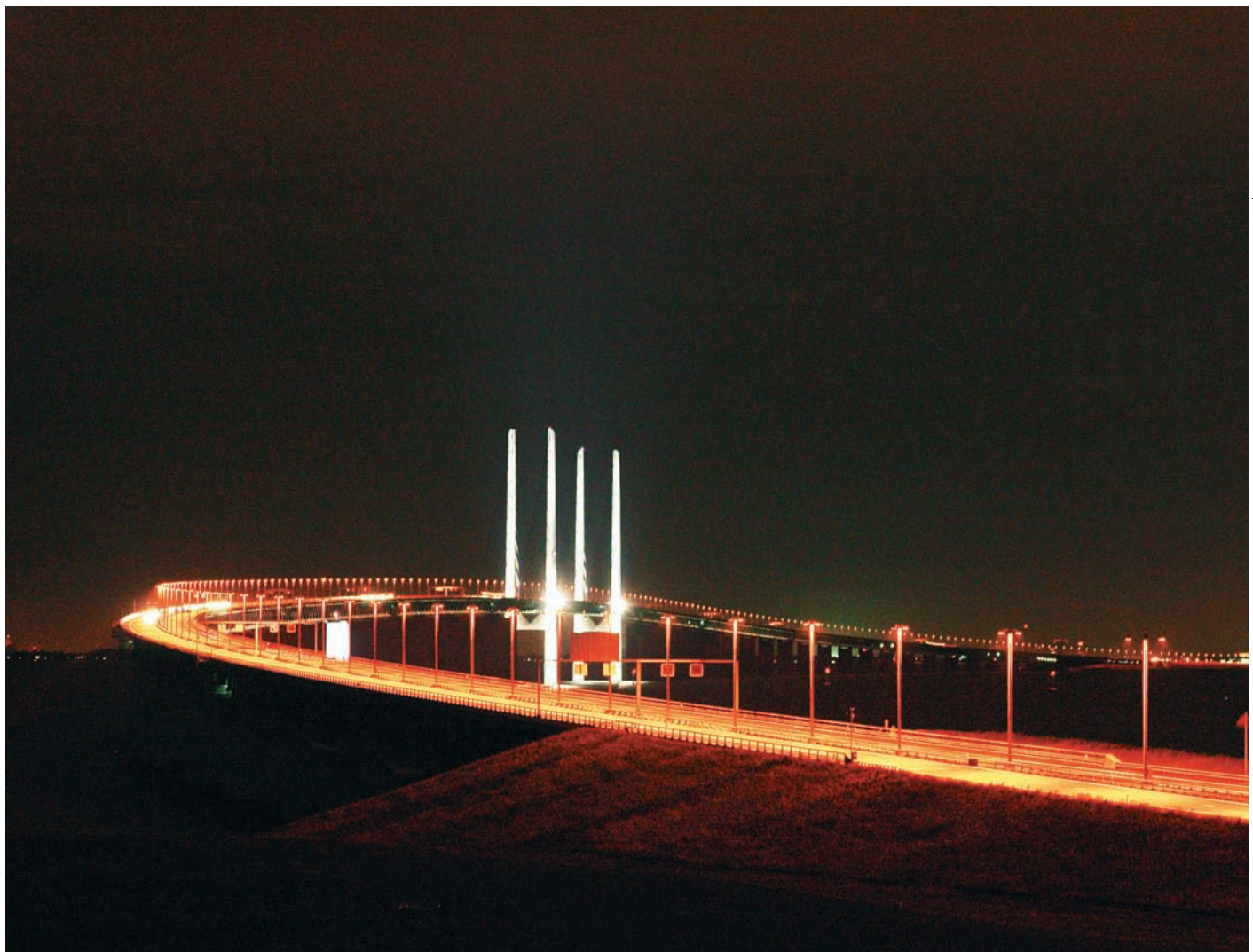


Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SGP401 1xSON-T150W	919115120251	1	550 x 290 x 190	3.50	0.03	-
SGP401 1xSON-T250W	919115120250	1	550 x 290 x 190	3.50	0.03	-
SGP401 1xCDM-TT150W	919115120247	1	550 x 290 x 190	3.50	0.03	-
SGP401 1xCDM-TT250W	919115120246	1	550 x 290 x 190	3.50	0.03	-

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - SRX 05 I / HRX 05 I

**Outdoor
Application**

Page 43



Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON / SON -T 150W / 250W, high pressure Mercury Vapour HPL -N 250W and high pressure Metal Halide HPI-T 250W lamps.

Features

- All electrical accessories such as energy efficient copper ballast, electronic ignitor power factor improvement capacitor etc. are pre-wired to a terminal block.
- Flexible optics to achieve optimum light distribution for most of the roads / installation parameters.
- Heat resistant and toughened glass cover for minimising discomfort glare to vehicular traffic.
- Lamp compartment consists of high purity aluminium pot reflector, electrochemically brightened and anodised inside, powder coated in an attractive gray color outside.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the lamp compartment.
- Die-cast aluminium (LM6) gear compartment, powder coated outside.
- Stainless steel toggles for fixing glass cover to lamp compartment.
- Hinging arrangement for glass cover for ease of maintenance.
- Option for side as well as pole top mounting.
- Conformance to IP 54 protection for lamp compartment and IP 33 for gear compartment.

Applications

- Major city roads
- Roundabouts
- Industrial areas
- Car parks

Installation

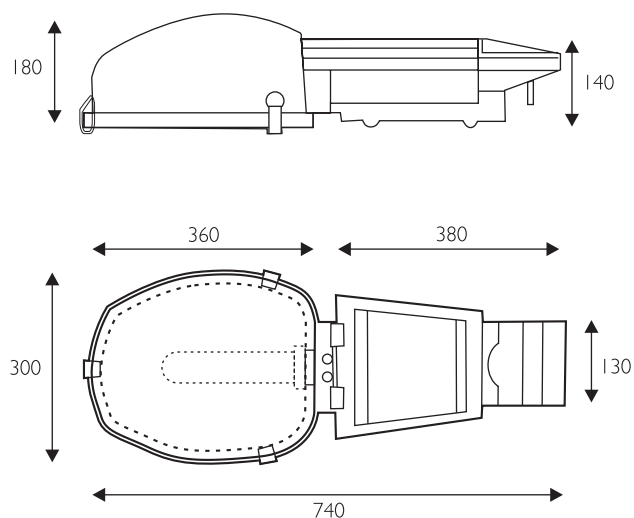
Pole entry through U clamps suitable for pole diameter of maximum $\varnothing 60\text{mm}$.

Compliances

- IP 54 lamp compartment
- IP 33 gear compartment
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRX05 I 1xSON150W	1 x SON / SON-T 150W	240	0.85	>0.85
SRX05 I 1xSON250W	1 x SON / SON-T 250W	240	1.40	>0.85
MRX05 I 1xHPI-TP250W	1 x HPI-T 250W	240	1.38	>0.85
HRX05 I 1xHPL-N250W	1 x HPL-N 250W	240	1.35	>0.85

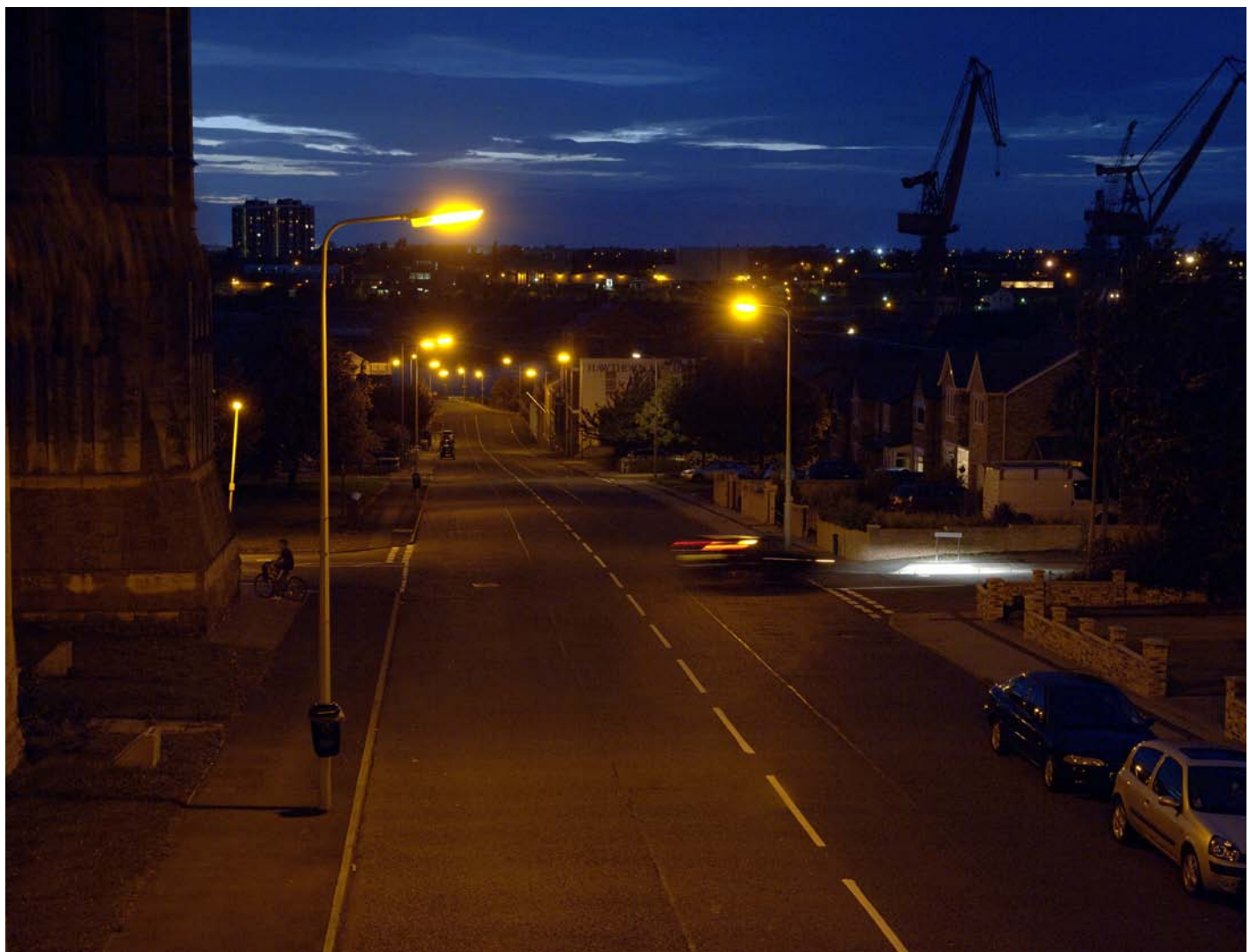


Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SRX051 1xSON150W	919115152213	1	810 × 372 × 250	4.75 × 1	6.52	0.077
SRX051 1xSON250W	919115152223	1	810 × 372 × 250	4.75 × 1	6.52	0.077
MRX051 1xHPI-TP250W	441536034961	1	810 × 372 × 250	4.75 × 1	6.52	0.077
HRX051 1xHPL-N250W	919115151221	1	810 × 372 × 250	4.75 × 1	6.52	0.077

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - SRX 086

**Outdoor
Application**

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON / SON -T 150W / 250W lamp.

Features

- Single piece housing cum reflector of deep drawn aluminium, powder coated in attractive gray color outside.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor, power factor improvement capacitor etc., are pre-wired up to a terminal block and mounted on a specially designed detachable gear plate.
- Lamp compartment is electrochemically brightened and anodised inside.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the housing.
- Stainless steel toggles for fixing acrylic bowl to the housing.
- Die-cast aluminium pole mounting piece.
- Hinging arrangement for UV stabilized acrylic bowl for ease of maintenance.
- Conformance to IP 54 protection for lamp and gear compartment.

Applications

- Major city roads
- Roundabouts
- Industrial areas
- Car parks

Installation

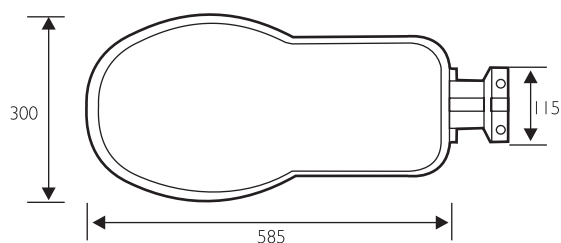
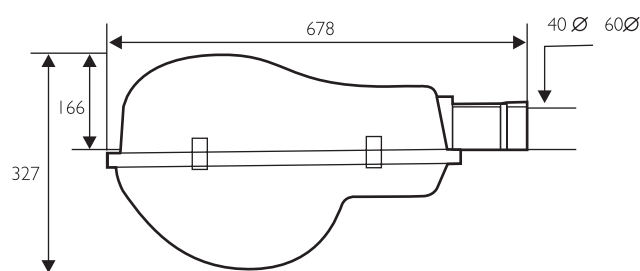
Pole entry through U clamps suitable for pole diameter of maximum Ø60mm.

Compliances

- IP 54
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRX086 1xSON150W	1 x SON / SON-T 150W	240	0.85	>0.85
SRX086 1xSON250W	1 x SON / SON-T 250W	240	1.40	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
Housing						
SRX086 1xSON150W	919115152215	1	735 × 310 × 210	2.80 × 1	4.20	0.048
SRX086 1xSON250W	919115152224	1	735 × 310 × 210	2.80 × 1	4.20	0.048
Cover						
ZRX086 AC	919115915201	10	610 × 320 × 370	0.45 × 10	5.90	0.072

Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - SRP 05 I

**Outdoor
Application**

Page 43



Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON / SON-T 150W / 250W lamp.

Features

- Single piece die-cast aluminium (LM6) housing powder coated in attractive gray color outside.
- Flexible optics for energy efficient SON / SON-T lamp to achieve optimum light distribution for most of the roads / installation parameters.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor, power factor improvement capacitor etc. are pre-wired up to a terminal block and mounted on a easily detachable gear plate.
- Hinging arrangement for thermoformed acrylic bowl for ease of maintenance.
- High quality long lasting felt gasket impregnated with insecticides and water repellent chemicals on the periphery of the housing.
- High purity aluminium POT reflector, electrochemically brightened and anodised.
- Hinging arrangement with a set of nylon chords for acrylic bowl.
- Stainless steel toggles for fixing acrylic bowl to the housing.
- Conformance to IP 54 protection for lamp and gear compartment.

Applications

- Major city roads
- Roundabouts
- Industrial areas
- Car parks

Installation

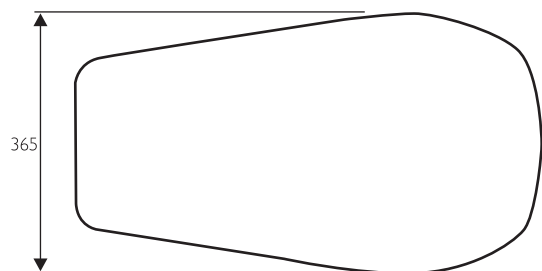
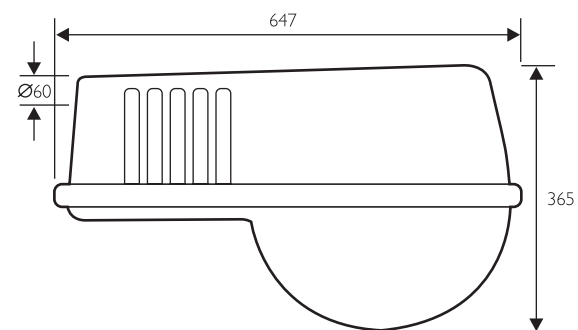
Pole entry through U clamps suitable for pole diameter of maximum $\varnothing 60\text{mm}$.

Compliances

- IP 55
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRP05 I 1xSON150W	1 x SON / SON-T 150W	240	0.85	>0.85
SRP05 I 1xSON250W	1 x SON / SON-T 250W	240	1.40	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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Housing

SRP05 I 1xSON150W	919115120214	1	660 x 385 x 195	5.25 x 1	6.60	6.60
SRP05 I 1xSON250W	919115120224	1	660 x 385 x 195	5.25 x 1	6.60	6.60

Cover

ZRP050 AC	919115912001	10	710 x 402 x 502	0.90 x 10	9.50	9.500
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Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - SRP 202 / HRP 202

Outdoor
Application

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON 150W / 250W and high pressure Mercury Vapour HPL-N 250W lamp.

Features

- Single piece die-cast aluminium (LM6) housing, powder coated in attractive gray color outside.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor power factor improvement capacitor etc. are pre-wired to a terminal block.
- High quality electrochemically brightened and anodised faceted aluminium reflector for optimum light distribution with ovoid SON lamps.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the housing.
- Stainless steel toggles for fixing UV stabilised acrylic bowl to housing.
- Stainless steel slide lock arrangement for retention of acrylic bowl with housing.
- Powder coated metallic gear compartment cover.
- Hinging arrangement for acrylic bowl for ease of maintenance.
- Retention of gear compartment lid with the housing during maintenance / installation.
- Conformance to IP 54 protection for lamp and IP 33 protection for gear compartment.

Applications

- Major city roads
- Roundabouts
- Industrial areas
- Car parks

Installation

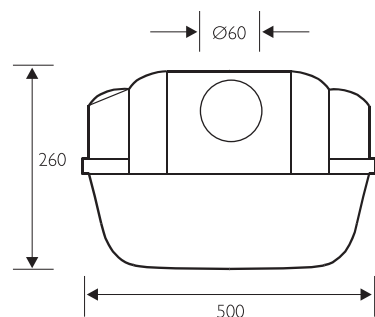
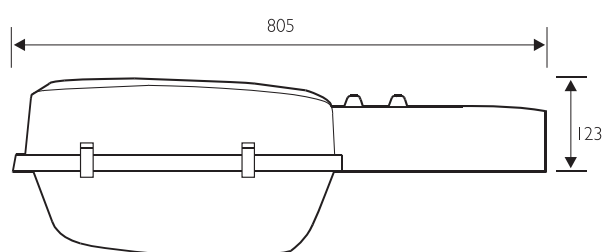
Pole entry through U clamps suitable for pole diameter of maximum Ø60mm.

Compliances

- IP 54
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRP202 1xSON150W	1 x SON 150W	240	0.85	>0.85
SRP202 1xSON250W	1 x SON 250W	240	1.40	>0.85
HRP202 1xHPL-N250W	1 x HPL-N 250W	240	1.35	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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Housing

SRP202 1xSON150W	919115143217	2	820 × 520 × 130	5.11 × 2	6.70	0.134
SRP202 1xSON250W	919115143227	2	820 × 520 × 130	5.11 × 2	6.70	0.134
HRP202 1xHPL-N250W	919115146395	2	820 × 520 × 130	5.11 × 2	6.70	0.134

Cover

ZRP202 AC	919115914303	10	535 × 535 × 250	0.60 × 10	7.50	0.072
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Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - SRP 021

**Outdoor
Application**

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON 400W.

Features

- Single piece die-cast aluminium (LM6) housing powder coated in attractive gray color outside.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor, power factor improvement capacitor etc. are pre-wired up to a terminal block and mounted on an easily detachable gear plate.
- High quality electrochemically anodised and brightened faceted aluminium reflector for optimum light distribution with SON 400W.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the housing.
- Stainless steel side lock arrangement for retention of acrylic bowl with the housing.
- Powder coated metallic gear compartment cover.
- Hinging arrangement for acrylic bowl for ease of maintenance.
- Conformance to IP 54 protection for lamp compartment and IP 33 protection for gear compartment.
- Conformance to relevant IS specifications.

Applications

- Major city roads
- Roundabouts
- Highways
- Industrial areas
- Car parks

Installation

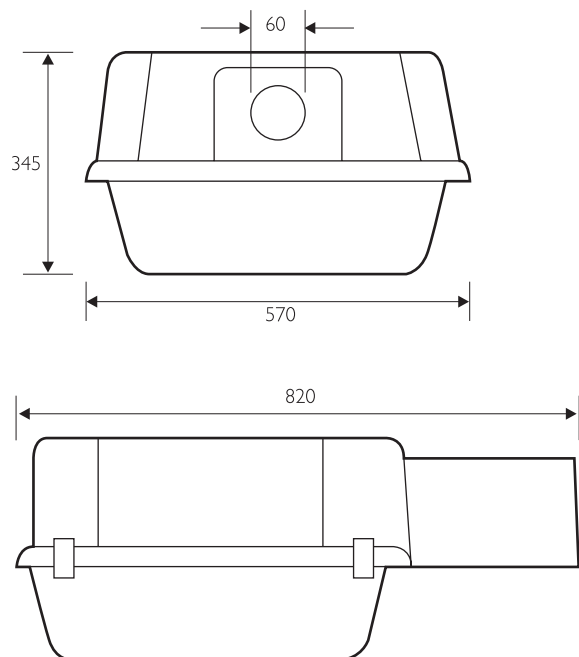
Pole entry through U clamps suitable for pole diameter of maximum Ø60mm.

Compliances

- IP 54
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRP021 1xSON400W	1 x SON 400W	240	2.25	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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Housing

SRP021 1xSON400W	919115136252	1	835 x 600 x 205	7.20 x 1	7.80	0.103
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Cover

ZRP021 AC	919115913504	10	630 x 530 x 345	0.90 x 10	9.50	0.115
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Note: Ballast of suitable rating shall be packed separately (packing data on request).



Broadway III - CRP 320

**Outdoor
Application**

Page 43



Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON-T 70W (E / I lamp). The luminaire is also suitable for use with ceramic discharge CDM-TT 70W lamp.



Color Option

Color Option

Features

- Die-cast aluminium housing accommodating the lamp and gear compartments ensuring ruggedness and long life.
- POT optics reflector and heat resistant toughened glass cover for efficient and glare free lighting.
- All components such as lamp holder, ballast, ignitor and power factor improvement capacitor are pre-wired up to the terminal block and mounted on a removable Gear Tray. This Gear Tray is mounted on a die-cast aluminium frame. The housing has a top opening hinging mechanism and single point fastening for ease of maintenance.
- Both lamp and gear compartment conform to IP 65 classification of ingress protection ensuring long life of components and undiminished light distribution.
- Suitable for use with tubular high pressure Sodium Vapour SON-T and Ceramic Discharge Metal Halide CDM-TT lamps.

Applications

- Secondary roads
- Malls, shopping and pedestrian areas
- Parks and gardens
- Parking spaces and other open areas
- Industrial areas
- Software Parks
- Housing complexes

Installation

Suitable for side mounting with the help of U clamps for pole diameter of maximum 28mm O.D.

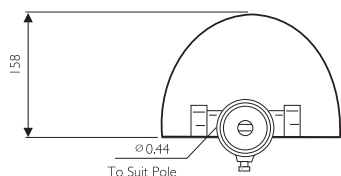
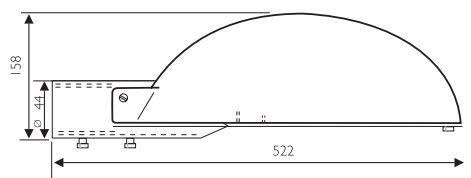
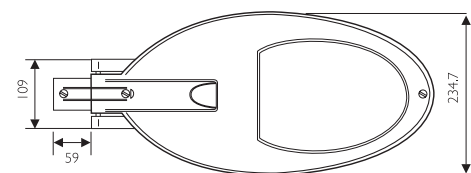
Compliances

- IP 65
- Class I



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
CRP320 1xSON-T70W GR	1 x SON-T 70W(E)	240	0.45	>0.85
CRP320 1xCDM-TT70W FG GR	1 x CDM-TT 70W	240	0.45	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
CRP320 1xSON-T70W GR	919115120274	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xSON-T70W GN	919115120266	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xSON-T70W PK	919115120268	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xSON-T70W AS	919115120269	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xSON-T70W TS	919115120270	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xCDM-TT70W FG GR	919115810082	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xCDM-TT70W FG GN	919115810083	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xCDM-TT70W FG PK	919115810084	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xCDM-TT70W FG AS	919115810085	1	555 x 300 x 165	3.05	4.26	0.027
CRP320 1xCDM-TT70W FG TS	919115810086	1	555 x 300 x 165	3.05	4.26	0.027

Note: SG: Sea Green, PK: Pink, AS: Antique Silver; TS: Textured Silver.

Note: Ballast of suitable rating shall be packed separately (packing data on request).

Celeste - SGP 30 I

**Outdoor
Application**

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Product description

Compact and sturdy low wattage street lighting luminaire suitable for use with tubular high pressure Sodium Vapour lamps SON-T 70W (E / I). The luminaire can also be used with CDM-TT 70W ceramic discharge Metal Halide lamps and Cosmo Polis CPO-T 60W lamp.

Features

- High pressure die-cast aluminium housing accommodating lamp as well as gear compartment.
- All accessories such as ballast, ignitor, power factor improvement capacitor are pre-wired up to the terminal block and mounted on a high pressure die-cast aluminium frame.
- Top opening gear compartment for ease of maintenance with hinging mechanism and single clip fastening.
- IP 65 ingress protection with Polycarbonate as well as flat glass cover. In case of Polycarbonate cover the edges of the cover should be enclosed inside the luminaire to ensure the required IP.
- Lateral as well as pole top mounting with built-in tilt of 5 degrees.
- Specially designed optics for tubular high pressure Sodium Vapour lamp.
- Suitable for ceramic discharge tubular Metal Halide lamp.
- Luminaire should be recommended with tubular lamp to achieve the best photometric results.
- Compact and aesthetically appealing looks.

Applications

- Secondary roads
- Malls, shopping and pedestrian areas
- Parks and gardens
- Parking lots and other open areas
- Industrial areas

Installation

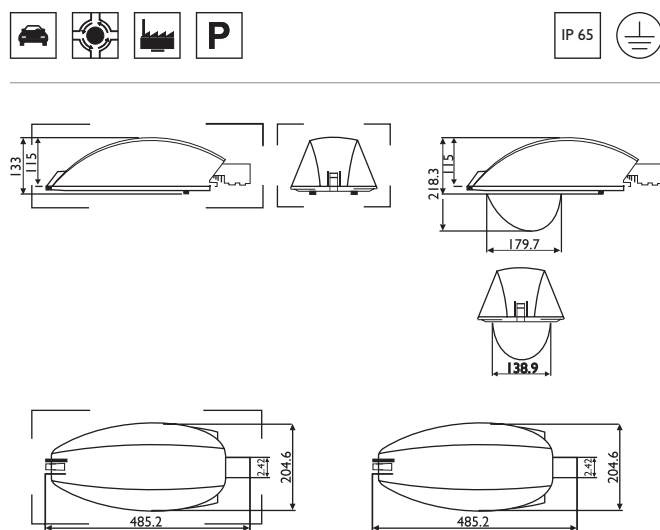
Luminaire is opened by 1 toggle on frame and fixed to the pole by tightening 2 screws.

Compliances

- IP 65
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SGP301	SON-T 70W (E)	240	0.45A	0.85
SGP301	SON-T 70W (I)	240	0.45A	0.85
SGP301	CDM-TT 70W	240	0.45A	0.85
SGP301	CPO-TW 60W	220-240	0.30A	0.98



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
SGP301 1xSON70W FG	919115121166	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xSON-I-70W FG	919115121169	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xCDM-TT70W FG	919115810080	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xSON70W PC	919115121167	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xSON-I-70W PC	919115121168	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xCDM-TT70W PC	919115810081	4	560 x 490 x 292	2.20	10.30	0.08
SGP301 1xCPO-TW60W FG*	919115810006	4	560 x 490 x 292	2.20	10.30	0.08

Note: Ballast of suitable rating shall be packed separately (packing data on request).

*The luminaire is supplied with electronic ballast.



Street Light - SRX 066

**Outdoor
Application**

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON / SON-T 70W (I or E) lamp.

Features

- Single piece housing-cum-reflector of deep drawn aluminium, powder coated outside in an attractive gray color. Lamp compartment is electrochemically brightened and anodised.
- Specially designed optics for energy efficient tubular SON-T lamps. Alternatively compatible with ovoid SON lamp.
- All electrical accessories such as energy efficient copper ballast, electronic ignitor (for SON / E or SON-T 70W lamp), power factor improvement capacitor etc., are pre-wired up to a terminal block and mounted on a specially designed easily detachable gear plate.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the lamp compartment.
- Stainless steel toggles for fixing UV stabilised acrylic bowl to housing.
- Die-cast aluminium (LM6) pole mounting piece.
- Hinging arrangement for UV stabilised acrylic bowl for ease of maintenance.
- Conformance to IP 54 protection for lamp and gear compartment.

Applications

- Secondary roads
- Industrial areas
- Residential colony roads

Installation

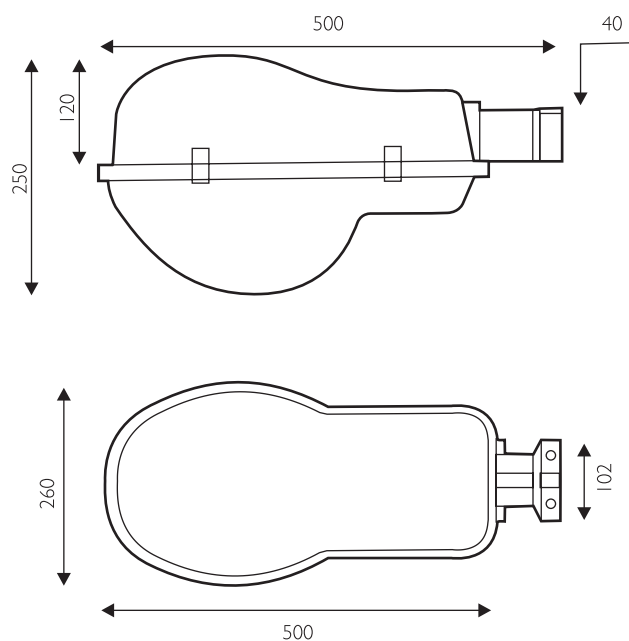
Pole entry through U clamps suitable for pole diameter of maximum $\text{Ø}40\text{mm}$.

Compliances

- IP 54
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRX066	1 x SON / SON-T 70W (E) and (I)	240	0.45	>0.85
HRX066	1 x HPL-N 125W	240	0.70	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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Housing

SRX066 1xSON70W	919115145169	1	600 x 300 x 200	2.60 x 1	3.00	0.360
SRX066 1xSON-I-70W	919115145172	1	600 x 300 x 200	2.60 x 1	3.00	0.360
HRX066 1xHPL-N125W	919115140385	1	600 x 300 x 200	2.60 x 1	3.00	0.360

Cover

ZRX066 AC	919115914004	10	580 x 300 x 330	0.30 x 10	4.00	0.057
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Note: Ballast of suitable rating shall be packed separately (packing data on request).



Street Light - HRP 308 / SRP 308

Outdoor
Application

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Product description

Road lighting luminaire suitable for use with high pressure Sodium Vapour SON 70W (I or E) and high pressure Mercury Vapour HPL-N 125W lamp.

Features

- Electrical accessories such as energy efficient copper ballast, electronic ignitor (for SON / E lamps), power factor improvement capacitor etc., are pre-wired up to a terminal block.
- Pressure die-cast aluminium gear plate for mounting all accessories.
- Accessibility to gear compartment from top for ease of maintenance and installation.
- High purity aluminium lamp compartment, electrochemically brightened and anodised inside, epoxy powder coated outside in an attractive gray color.
- High quality long lasting felt gasket impregnated with insecticide and water repellent chemical on the periphery of the lamp compartment.
- Stainless steel toggles for fixing UV stabilised acrylic bowl or heat resistant toughened glass cover to housing.
- EPR gasket between lamp and specially designed gear compartment (ensuring IP 33 protection to the gear compartment).
- Hinging arrangement for both gear and lamp compartment cover for ease of maintenance.
- Option for acrylic bowl or heat resistant toughened glass cover.
- Conformance to IP 54 protection for lamp compartment.

Applications

- Secondary roads
- Industrial areas
- Residential colony roads

Installation

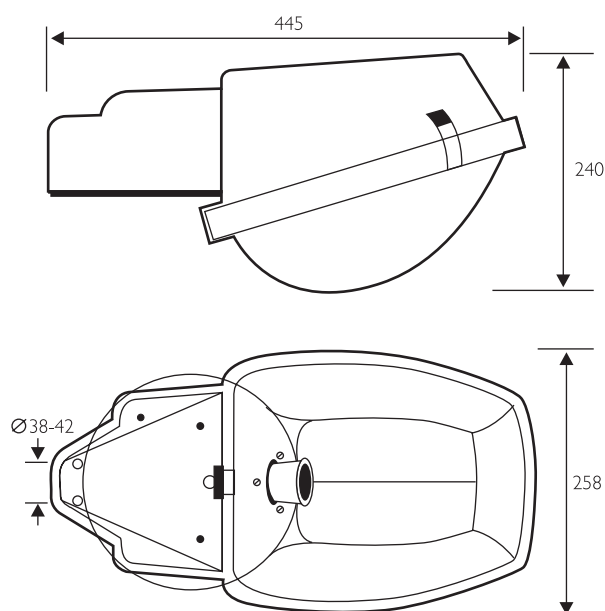
Pole entry through U clamps suitable for pole diameter of maximum $\varnothing 40\text{mm}$.

Compliances

- IP 33 gear compartment
- IP 54 lamp compartment
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
SRP308	1 x SON 70W (E)	240	0.45	>0.85
SRP308	1 x SON 70W (I)	240	0.45	>0.85
HRP308	1 x HPL-N 125W	240	0.70	>0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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With Glass Cover

SRP308 1xSON70W FG	919115150169	1	550 × 385 × 270	4.40 × 1	5.00	0.057
SRP308 1xSON-I-70W FG	919115150168	1	550 × 385 × 270	4.40 × 1	5.00	0.057
HRP308 1xHPL-NI25W FG	919115150181	1	550 × 385 × 270	4.40 × 1	5.00	0.057

With Acrylic Cover

SRP308 1xSON70W AC	919115147162	1	550 × 385 × 270	4.00 × 1	4.60	0.057
SRP308 1xSON-I-70W AC	919115147161	1	550 × 385 × 270	4.00 × 1	4.60	0.057
HRP308 1xHPL-NI25W AC	919115147184	1	550 × 385 × 270	4.00 × 1	4.60	0.057

Note: Ballast of suitable rating shall be packed separately (packing data on request).



TL Street Light - TRC 033

Outdoor
Application

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Product description

Road lighting luminaire suitable for use with 2x36W / 40W fluorescent lamps.

Features

- A lightweight housing, fabricated from aluminium sheet, stove enamelled gray. It is suitable for mounting on mast-arms of up to 38mm O.D.
- Gear Tray-cum-reflector made of CRCA sheet, stove enamelled white. Gear Tray accommodating the electrical control gear pre-wired up to the terminal block.
- Acrylic cover made from clear Methyl Methacrylate sheet and provided with 6 nos. of toggles for fixing the acrylic cover on to the canopy of the luminaire.
- Rubber gasket provided making the luminaire rainproof.

Applications

- Residential colony roads
- Industrial areas
- Secondary roads

Installation

Pole entry through U clamps suitable for pole diameter of maximum Ø38mm.

Compliances

- IP 33
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TRC033 2xTL-D36W IC	2x TL'D 36W / TL'40W	240	0.45	0.95

Ordering data

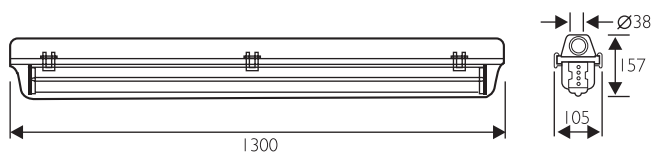
Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
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Housing

TRC033 2xTL-D36W IC	919115005122	4	1320 x 340 x 190	4.60 x 4	20.40	0.085
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Cover

TRC033 2xTL-D36W AC	919115900502	8	1350 x 420 x 230	0.30 x 8	3.10	0.130
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Technical Drawing



TL Street Light - HGS 120

**Outdoor
Application**

Page 43



Product description

Road lighting luminaire suitable for use with tubular fluorescent lamp
1 x 36W / 40W.

Features

- A housing fabricated from sheet aluminium powder coated white with end caps made of impact-resistant engineering plastic for sturdy and excellent corrosion-resistant construction.
- Gear Tray-cum-reflector made of CRCA sheet steel epoxy powder coated white.
- Gear Tray accommodating all electrical accessories comprising of energy efficient open construction ballast, starter and capacitor pre-wired up to the terminal block.
- Acrylic cover made from clear Methyl Methacrylate sheet and provided with 6 numbers of toggles for fixing the acrylic cover on to the canopy of the luminaire.
- Suitable for side mounting with the help of U clamps provided on the canopy.
- Luminaire is protected against ingress of dust and moisture with felt gaskets provided in the housing.
- Conforms to IP 43.

Applications

- Secondary roads
- Industrial areas
- Residential colony roads

Installation

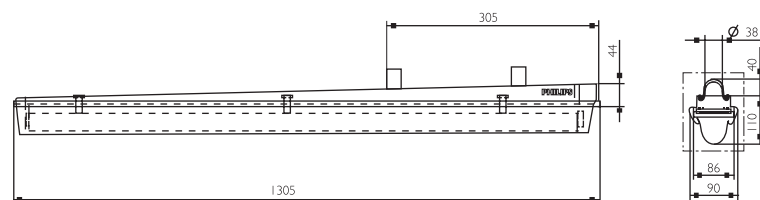
Suitable for side mounting with the help of U clamps for pole diameter of maximum 38mm O.D.

Compliances

- IP 43
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
HGS120 1xTL-D36W IC	1 x TLD 36 / 40W	240	0.23A	0.85
HGS120 1xTL5-28W EBE	1 x TL5 28W	240	0.15A	0.95
HGS120 2xTL5-28W EBE	2 x TL5 28W	240	0.28A	0.95
HGS120 2xTL5-54W EBP	2 x TL5 54W	240	0.46A	0.99



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
------	---------------	------------------	-----------------	-----------------	-------------------	-------------

Housing

HGS120 1xTL-D36W IC	919115905123	6	1390 × 290 × 100	8.75	10	0.040
HGS120 1xTL5-28W EBE	919115810003	6	1390 × 290 × 100	8.75	10	0.040
HGS120 2xTL5-28W EBE	919115810004	6	1390 × 290 × 100	8.75	10	0.040
HGS120 2xTL5-54W EBP	919115810005	6	1390 × 290 × 100	8.75	10	0.040

Cover

HGPI20 1xTL-D36W AC	919115900505	12	1320 × 220 × 260	3.6	4.8	0.075
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Industrial

Product specification

Industrial Luminaires

Index

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Optibay - HPK 225

**Industrial
Application**

Page 31



Product description

High performance High-Bay and Medium-Bay luminaire available in both closed and open versions suitable for used with high pressure Sodium Vapour lamps (150-400W), high pressure Mercury Vapour and Metal Halide lamps (250-400W) with a choice of reflectors to meet specific beam requirements. The luminaire is compact in size with universal mounting system and integral control gear. The luminaire consists of pressure die-cast aluminium housing, aluminium anodised reflector and a toughened glass cover providing IP 65 protection for the gear compartment and IP 54 for the lamp compartment. Option of prismatic reflector for indoor applications.

High quality material and optical performance make it an ideal solution for a wide range of applications. Optibay is designed for industrial usage but with its prismatic versions it is suitable for large non-industrial spaces with high ceilings.

Optibay is a modern functionally designed luminaire providing high optical performance making it ideal for a wide range of application.



HPK 225 With Glass



HPK 225 Without Glass

Features

- Compact high pressure die-cast aluminium housing powder coated in black accommodating the lamp holder and Gear Tray assembly.
- Specially designed housing to ensure IP 65 ingress protection.
- Access to the Gear Tray is from the side without the use of any tools, making it trouble free to connect to mains. The hinged Gear Tray accommodates the Ballast, Capacitor and the Ignitor all pre-wired up to terminal block.
- Aluminium reflector is electrochemically brightened and anodized for better optics and longer life, giving a very good distribution. Separate reflectors are available for narrow beam and wide beam reflector.
- For dusty environment it is provided with heat resistant toughened glass with EPR gasket.

Applications

- Heavy engineering industries
- Power plants
- Automobile industries
- Steel plants
- Aircraft hangers
- Large areas with high ceilings

Mounting Type

Surface suspended

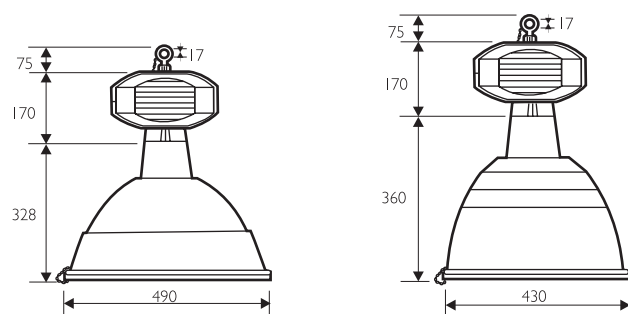
Installation

Mounting can be done by standard eyebolt with 15mm inside diameter.



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
HPK225 1xSON150W E	SON 150W E	240	0.85	≥ 0.85
HPK225 1xSON250W E	SON 250W E	240	1.40	≥ 0.85
HPK225 1xSON400W E	SON 400W E	240	2.25	≥ 0.85
HPK225 1xHPL-N250W E	HPL-N250W	240	1.35	≥ 0.85
HPK225 1xHPL-N400W E	HPL-N400W	240	2.15	≥ 0.85
HPK225 1xHPI-P250W-BU E	HPI-BU plus 250W	240	1.35	≥ 0.85
HPK225 1xHPI-P400W-BU E	HPI-BU plus 400W	240	2.15	≥ 0.85



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
HPK225 1xSON150W E	919015255261	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xSON250W E	919015255231	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xSON400W E	919015255242	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xHPL-N250W E	919015255233	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xHPL-N400W E	919015255243	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xHPI-P250W-BU E	919015255232	1	280 × 250 × 330	1.92	2.40	0.023
HPK225 1xHPI-P400W-BU E	919015255241	1	280 × 250 × 330	1.92	2.40	0.023
GPK225 R-NB	919015955201	6	570 × 500 × 410	0.8	6.00	0.116
GPK225 R-WB	919015955202	6	510 × 440 × 450	0.8	6.00	0.100
		6	513 × 502 × 247		20.00	0.063
		6	445 × 440 × 247		17.50	0.048

Note : Ballast of suitable rating shall be packed separately (packing data on request).

Optibay - HPK 205

Industrial
Application

Page 31



Product description

Non integral high performance High-Bay and Medium-Bay luminaire available in both closed and open versions suitable for use with high pressure Sodium Vapour lamps (150-400W), high pressure Mercury Vapour and Metal Halide lamps (250-400W) with a choice of reflectors to meet specific beam requirements. The luminaire is compact in size with universal mounting system. The luminaire consists of pressure die-cast aluminium housing, aluminium anodised reflector and a toughened glass cover. The gear providing IP 65 protection for the gear compartment and IP 54 for the lamp compartment. Option of prismatic reflector for indoor application is available.

Optibay in non-integral version is modern, functional design and robust, high quality material and optical performance make it an ideal solution for a wide range of applications. Optibay is designed for industrial usage but with its prismatic versions, it is suitable for large non-industrial spaces with high ceilings.

Features

- Compact high pressure die-cast aluminium housing powder coated in black.
- Aluminium reflector is electrochemically brightened and anodized for better optics and longer life, giving a very good distribution. Separate reflectors are available for narrow beam and wide beam reflector.
- For dusty environment, it is provided with heat resistant toughened glass with EPR gasket.

Applications

- Heavy engineering industries
- Power plants
- Automobile industries
- Steel plants
- Aircraft hangers
- Large areas with high ceilings

Mounting Type

Surface suspended

Installation

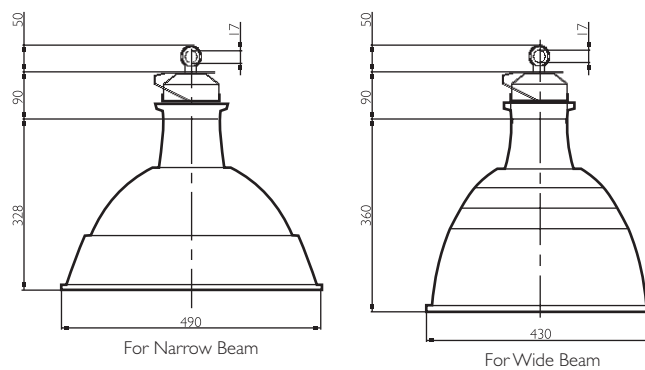
Mounting can be done by standard eyebolt with 15mm inside diameter.





Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
HPK205 1XHPL-N250W E*	1 × HPL-N 250W	240	1.35	≥ 0.85
HPK205 1XHPL-N400W E*	1 × HPL-N 400W	240	2.15	≥ 0.85
HPK205 1XSON150W E*	1 × SON 150W	240	0.85	≥ 0.85
HPK205 1XSON250W E*	1 × SON 250W	240	1.40	≥ 0.85
HPK205 1XSON400W E*	1 × SON 400W	240	2.25	≥ 0.85
HPK205 1XHPIP250W BU E*	1 × HPI-BU 250W	240	1.35	≥ 0.85
HPK205 1XHPIP400W BU E*	1 × HPI-BU 400W	240	2.15	≥ 0.85



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
Non Integral Housing						
HPK205 1xMAX250W-E 40 E R	919015255253	6	548 x 350 x 255	0.748	6.50	0.0489
HPK205 1xMAX400W-E 40 E R	919015255254	6	548 x 350 x 255	0.743	6.42	0.0489
GPK225 R-NB	919015955201	6	570 x 500 x 410	0.73	6.00	0.116
GPK225 R-WB	919015955202	6	570 x 500 x 410	0.66	6.00	0.116
ZPK225 GC-NB	919015955205	6	513 x 502 x 247	2.47	20.00	0.063
ZPK225 GC-WB	919015955206	6	445 x 440 x 247	1.95	17.50	0.063

Accessories

Control Gear Boxes

Endura PLUS - HPK 150

Industrial
Application

Page 31



Product description

Integral well glass luminaire suitable for use with high pressure Sodium Vapour SON70 (E or I) lamps or high pressure Mercury Vapour HPL N 80w / 125w lamps.

Features

- Pressure die-cast aluminium housing construction with epoxy polyester powder coat offers robustness and good weatherability.
- The integral gear compartment accommodates all the accessories like PF improvement Capacitor, Ignitor, Ballast pre-wired up to the terminal block.
- Heat resistant toughened glass cover with heavy duty 5mm Wire Gurad fixed to the housing by means of robust clamps.
- Adjustable mounting bracket for top as well as side mounting option.
- Profiled EPDM gasket with special hardness treatment so as to achieve and maintain higher ingress protection.

Applications

- Industries
- Cable galleries
- Boiler platforms
- Power stations

Mounting Type

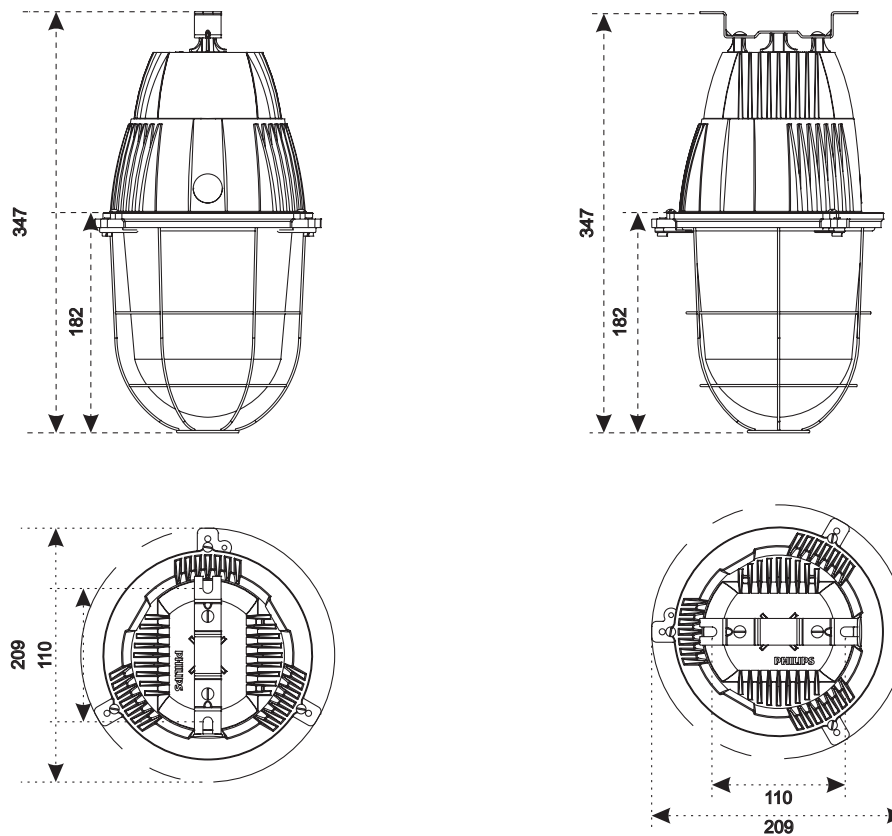
- Surface Mounted
- Wall Mounted

Installation

Direct mounting on ceiling or columns with the help of the mounting bracket.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
HPK I50 1xSON-E 70W	1xSON-E 70W	240	0.45	0.85
HPK I50 1xSON-I 70W	1xSON-I 70W	240	0.45	0.85
HPK I50 1xHPL-N 80W	1xHPL-N 80W	240	0.45	0.85
HPK I50 1xHPL-N 125W	1xHPL-N 125W	240	0.7	0.85



Technical Drawing



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
HPK150 1xSON-E 70W	9191 158 10113	4	390x470X470	2.1	9.3	0.086
HPK150 1xSON-I 70W	9191 158 10114	4	390x470X470	2	9.2	0.086
HPK150 1xHPL-N 80W	9191 158 10115	4	390x470X470	2	9.2	0.086
HPK150 1xHPL-N 125W	9191 158 10116	4	390x470X470	2	9.2	0.086



Endura - HPK 105

**Industrial
Application**

Page 31



Product description

Integral well glass luminaire suitable for use with high pressure Sodium Vapour SON70 (E or I) lamps or high pressure Mercury Vapour HPL N 80W / 125W lamps. CFL version suitable for PLC 18 Watt and PLC 26 Watt also available.

Features

- Pressure die-cast aluminium housing construction with epoxy polyester powder coat offers robustness and good weatherability.
- The integral gear compartment accommodates all the accessories like PF improvement Capacitor, Ignitor, Ballast pre-wired up to the terminal block.
- Heat resistant toughened glass cover with heavy duty 5mm Wire Gurad fixed to the housing by means of robust clamps.
- Adjustable mounting bracket for top as well as side mounting option.
- Profiled EPDM gasket with special hardness treatment so as to achieve and maintain higher ingress protection.

Applications

- Industries
- Cable galleries
- Boiler platforms
- Power stations

Mounting Type

- Surface mounted
- Wall mounted

Installation

Direct mounting on ceiling or columns with the help of the mounting bracket.

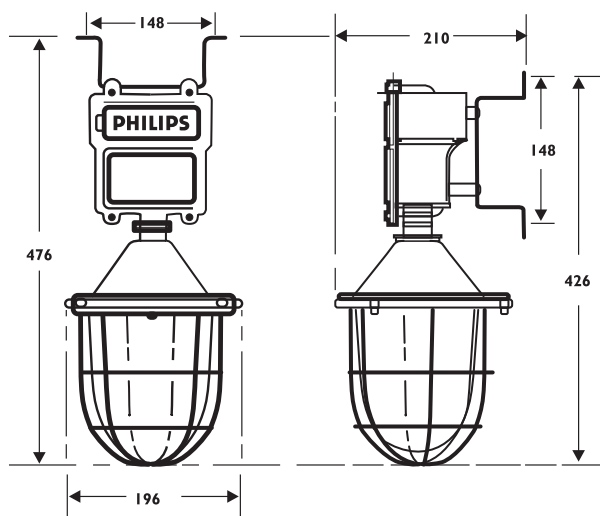
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
HPK105 1xSON70W	1 x SON-E 70W	240	0.45	≥ 0.85
HPK105 1xSON-I-70W	1 x SON-I 70W	240	0.45	≥ 0.85
HPK105 1xHPL-N80W	1 x HPL-N 80W	240	0.45	≥ 0.85
HPK105 1xHPL-N125W	1 x HPL-N 125W	240	0.70	≥ 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
HPK105 1xSON70W	919115373167	1	255 x 255 x 460	1.80	3.00	0.0299
HPK105 1xSON-I-70W	919115373168	1	255 x 255 x 460	1.80	3.00	0.0299
HPK105 1xHPL-N80W	919115372387	1	255 x 255 x 460	1.80	3.00	0.0299
HPK105 1xHPL-N125W	919115372388	1	255 x 255 x 460	1.80	3.00	0.0299

Note : Ballast of suitable rating shall be packed separately (packing data on request).



Technical Drawing





Non-Integral Well Glass

**Industrial
Application**

NDC 203

Page 31



Product description

Well Glass luminaire suitable for use with incandescent (GLS 200W), blended ML-N 160W, high pressure Mercury Vapour HPLN 80W / HPLN 125W and high pressure Sodium Vapor SON 70 E / 70 I lamp. HPLN and SON lamps are operated on appropriate external control gear Box.

Features

- Light weight pressure die-cast aluminium housing painted black from outside and white inside to provide sturdiness and good optimal distribution.
- Heat resistant and toughened clear glass cover along with Ethylene Propylene rubber to provide protection against ingress of dust and water.
- Porcelain holder pre-wired up to the terminal block. Earthing terminal is also provided.
- Wire Gurad made of MS to protect the luminaire from damages.
- Pressure die-cast aluminium ring hinged to the housing to hold the glass cover in place.
- Combined with pressure die-cast gear box offers a long operational life.

Applications

- Industries
- Cable galleries in power plants
- Conveyors in cement and steel plants
- Boiler platforms in power stations

Mounting Type

Surface suspended

Installation

Mounting provision suitable for suspension by means of a diameter 20mm threaded GI pipe.

Industrial | Non-Integral Well Glass - NDC 203

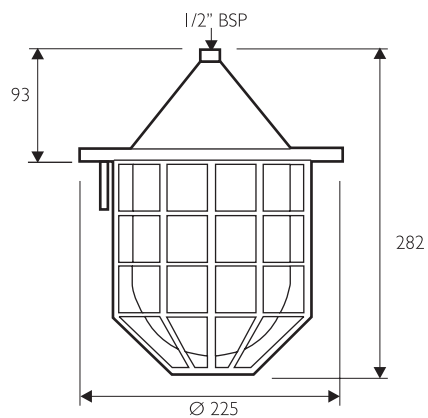
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NONINT INDL WELGLAS LUM NDC203	1 x GLS 200W (max)	230	0.80	1.00
NDC203 1xML-N 160w*	1 x ML-N 160W	240	0.72	0.97
NDC203 1XHPL-N80W*	1 x HPL-N 80W	240	0.45	≥ 0.85
NDC203 1XHPL-N125W*	1 x HPL-N 125W	240	0.70	≥ 0.85
NDC203 1XSON-E70W*	1 x SON 70W	240	0.45	≥ 0.85
NDC203 1XSON-I70W*	1 x SON 70W	240	0.45	≥ 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NONINT INDL WELGLAS LUM NDC203	919015928504	1	225 x 275 x 305	1.35 x 1	2.00	0.036

*To be used with appropriate control gear unit.



Technical Drawing





Non-Integral Well Glass

**Industrial
Application**

NDC 021

Page 31



Product description

Well glass luminaire suitable for use with incandescent (GLS 500W), HPLN 250W and high pressure Sodium Vapor SON 150W / 250W lamp. HPLN and SON lamps are operated on appropriate external control gear box.

Features

- Light weight die-cast aluminium housing painted gray outside and white inside.
- Heat resistant and toughened clear glass cover along with Ethylene Propylene rubber to provide protection against ingress of dust and water.
- Wire Gurad made of MS to protect the luminaire from damages.
- Pressure die-cast aluminium ring hinged to the housing to hold the glass cover in place.
- Combined with pressure die-cast gear box offers a long operational life.

Applications

- Industries
- Cable galleries in power plants
- Conveyors in cement and steel plants
- Boiler platforms in power stations

Mounting Type

Surface Suspended

Installation

Mounting provision suitable for suspension by means of a diameter 20mm threaded GI pipe.

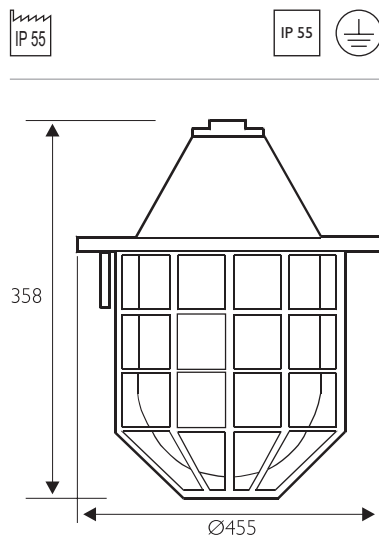
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NDC021 MAX250W-E40	1 x GLS 500W	250	2.00	1.00
NDC021 1XSON 150W	1 x SON 150W	240	0.85	≥ 0.85
NDC021 1XSON250W	1 x SON 250W	240	1.40	≥ 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NDC021	919015284532	1	520 x 520 x 330	6.00 x 1	6.50	0.089

*To be used with appropriate control gear unit.



Technical Drawing



Bulkhead - NXC 101

Industrial
Application

Page 31



Product description

Bulkhead luminaire suitable for use with GLS 60W (maximum) and PL-S 9W compact fluorescent lamps with option of clear or frosted glass.

Applications like lighting of the lift wells, emergency staircase and passages require a solution that provides optimal light and requires minimum maintenance. Bulkhead luminaire with their robust construction and basic lamps combinations offers the best solution for these harsh conditions.

Features

- Single piece die-cast aluminium housing and glass retaining frame offer excellent corrosion resistance.
- Heat resistant toughened glass cover / acrylic cover for PL-S version together with gasket offer excellent protection against dust and moisture.
- Wire Gaurd made form powder coated MS protects luminaire from damage.

Applications

- Stairways
- Corridors
- Lift wells

Mounting Type

Surface / Wall



NXC 101

Industrial | Bulkhead - NXC 101

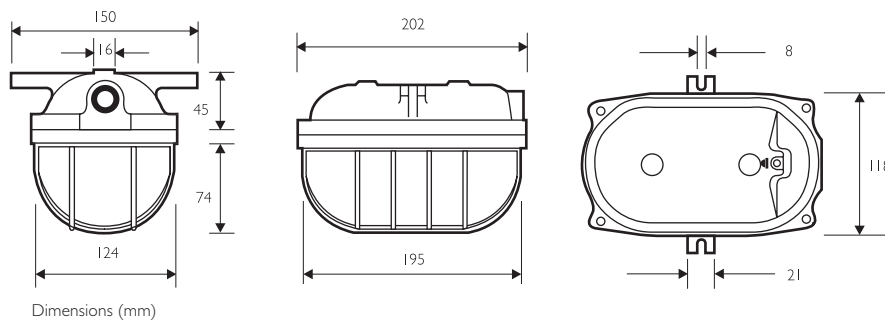
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
NXC101 1xA60-60W-CL B22 GR	1 x GLS 60W	230	0.26	1.00
FXC101 1xPL-S / 2PI 1W AC GR	1 x PL-S 9W	230	0.17	0.35

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
NXC101 1xA60-60W-CL B22 GR	919215100052	8	325 x 305 x 440	1.20 x 8	10.80	0.044
NXC101 1xA60-60W-CL B22 BK	919215100051	8	325 x 305 x 440	1.20 x 8	10.80	0.044
NXC101 1xA60-60W-CL B22 RD	919215100053	8	325 x 305 x 440	1.20 x 8	10.80	0.044
FXC101 1xPL-S / 2PI 1W AC GR	919215100054	8	325 x 305 x 440	1.00 x 8	9.40	0.044
FXC101 1xPL-S / 2PI 1W AC RD	919215100056	8	325 x 305 x 440	1.10 x 8	9.40	0.044
FXC101 1xPL-S / 2PI 1W ACO GR	919215100055	8	325 x 305 x 440	1.10 x 8	9.40	0.044
FXC101 1xPL-S / 2PI 1W ACO RD	919215100057	8	325 x 305 x 440	1.10 x 8	9.40	0.044

NXC 101 / FXC 101



Technical Drawing



Pentura - TMS I22

Industrial
Application

Page 31

Retail
Application

Page 21



Product description

Functional, energy efficient and economical general purpose Batten for 1xTL5 and 2xTL5 fluorescent lamp with aluminium symmetric reflector for ceiling and wall mounting.

Pentura TMS 122 is a high quality Batten for single and twin TL5 fluorescent lamps. It is integrated with a series of Slim T5 Ballast for varying usages and compactness. A robust energy efficient solution with CRCA sheet steel white powder coated housing and imported anodised glossy reflector find application in wide variety of areas like small office, textile industries, buildings, corridor etc.



With Reflector

Without Reflector

Features

- Robust construction with CRCA sheet steel powder coated base plate and cover. Weld-free construction.
- Polycarbonate end caps which support the holder assembly.
- Wide variety of Ballast and lamps combination available for varying application needs.
- Optional imported anodised glossy reflector can be used for effective light distribution.
- Option with high output T5 lamps like TL5 54 Watt for high ceiling areas.

Applications

- Small offices
- Conference room-coves
- Shops and hyper markets
- Textile mills
- General industries

Mounting Type

Surface suspended

Installation

Electrical connection through cable entry centrally.

Mounting method

The base plate (with electrical components) is fixed to the ceiling or wall via holes for screws. White Cover is fixed on the base plate with two screws.



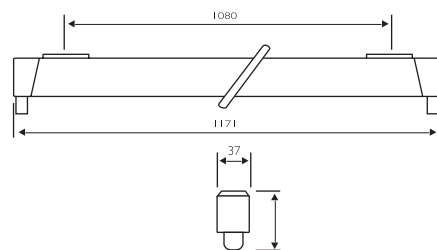


Industrial | Pentura - TMS I22

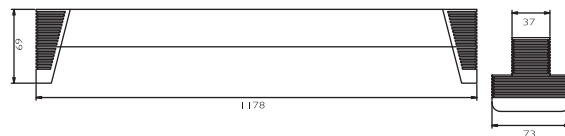
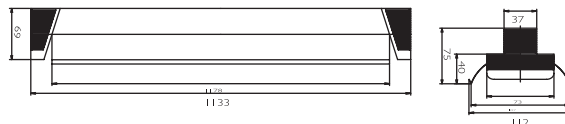
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMSI22 M 1xTL5 28W EBT	1 x TL5 28W	240	0.12	0.98
TMSI22 M 1xTL5-28W EBE	2 x TL5 28W	240	0.23	0.98
TMSI22 M 2xTL5 28W EBT	1 x TL5 28W	240	0.12	0.98
TMSI22 M 2xTL5-28W EBE	2 x TL5 28W	240	0.23	0.98
TMSI22 M 1xTL5 54W EBP	1 x TL5 54W	240	0.24	0.98
TMSI22 M 2xTL5-54W EBP	2 x TL5 54W	240	0.45	0.98

Pentura TMS I22/I28



TMS I22 / 228

TMS I22 / 228
with GMS I22 REFLECTOR

Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMS122 M 1xTL5 28W EBT	919015810350	6	1240 × 145 × 150	0.84	6.25	0.027
TMS122 M 1xTL5-28W EBE	919215100085	6	1240 × 145 × 150	0.84	6.25	0.027
TMS122 M 2xTL5 28W EBT	919015810351	6	1240 × 145 × 150	0.84	6.25	0.027
TMS122 M 2xTL5-28W EBE	919215100086	6	1240 × 145 × 150	0.84	6.25	0.027
TMS122 M 1xTL5 54W EBP	919015810349	6	1240 × 145 × 150	0.84	6.25	0.027
TMS122 M 2xTL5-54W EBP	441536074831	6	1240 × 145 × 150	0.94	7.00	0.027
GMS122 M 1 28 R	919015902703	6	1200 × 120 × 70	0.27	2.00	0.01
GMS122 M 2 28 / 54 R	919015902704	6	1200 × 120 × 70	0.27	2.00	0.01

*This reflector can be used with TMS 122 / 254 luminaire also.

Proton - TMS 021

Industrial
Application

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Product description

Functional general purpose basic Batten for TLD fluorescent lamps suitable for surface mounting on wall or ceiling. Option for suitable powder coated reflector.

Features

- The channel has a single piece construction made of white powder coated white CRCA sheet steel, eliminating spot welds and hence rust free.
- The aesthetically designed Polycarbonate lamp holder brackets are side-in-type for ease of installation and maintenance.
- Choice of powder coated CRCA reflector.
- Option of wide variety of ballast like electromagnetic, high frequent electronic, analog and digital dimmable.

Applications

- Small office
- Public ares
- Residential areas
- Textile mills
- Cove lighting application

Mounting Type

Surface suspended

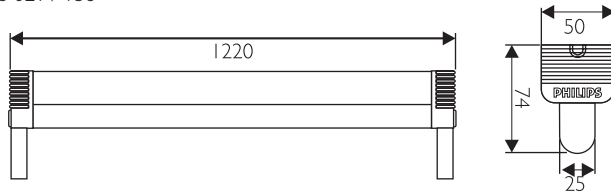
Installation

Holes for (wood) screw, fixing and knockouts for suspension mounting by means of 19mm conduits.

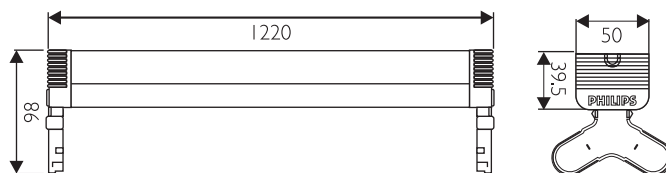
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMS021 1xTL-D36W I	1 x TLD 36W	240	0.365	0.44
TMS021 1xTL-D36W IC	1 x TLD 36W	240	0.23	≥ 0.80
TMS021 1xTL-D36W EBE	1 x TLD 36W	240	0.17	0.95
TMS021 1xTLD36W EBT	1 x TLD 36W	240	0.17	0.95
TMS021 2xTL-D36W I	2 x TLD 36W	240	0.41	0.44
TMS021 2xTL-D36W IC	2 x TLD 36W	240	0.42	0.87
TMS021 2xTL-D36W EBE	2 x TLD 36W	240	0.30	0.95
TMS021 2xTLD-36W EBT	2 x TLD 36W	240	0.30	0.95

TMS 021 / 136



TMS 021 / 236



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMS021 1xTL-D36W I	919015148141	6	1230 × 230 × 145	8.80	10.00	0.041
TMS021 1xTL-D36W IC	919015148142	6	1230 × 230 × 145	0.90	10.20	0.041
TMS021 1xTL-D36W EBE	919015148154	6	1230 × 230 × 145	6.50	7.70	0.041
TMS021 1xTLD36W EBT	919015810155	6	1230 × 230 × 145	6.50	7.70	0.041
TMS021 2xTL-D36W I	919015148144	6	1230 × 230 × 145	1.60	10.50	0.041
TMS021 2xTL-D36W IC	919015148145	6	1230 × 230 × 145	1.60	10.50	0.041
TMS021 2xTL-D36W EBE	919015148155	6	1230 × 230 × 145	1.60	10.50	0.041
TMS021 2xTLD-36W EBT	919015810155	6	1230 × 230 × 145	1.60	10.50	0.041
GMS021 36 R	919015810013	6				

TMC 501

**Industrial
Application**

Page 31

**Retail
Application**

Page 21



Product description

Functional and aesthetical general purpose basic Batten for TL-D 36 Watt fluorescent lamp, for surface mounting on wall and ceiling.

TMC 501 Batten family is functional surface mounted solution for general lighting. Its compact construction with decorative end caps add aesthetic value to the installation. The housing is CRCA sheet steel white powder coated. The Batten is available with specially designed reflectors enhancing the luminaire efficiency.

Features

- The channel has a single piece construction made of white powder coated white CRCA sheet steel, eliminating spot welds and hence rust free.
- The aesthetically designed lamp holder brackets are side-in-type for ease of installation and maintenance.
- Choice of wide variety of reflectors like powder coated, aluminium, sandwiched etc.
- Option of wide variety of ballast like electromagnetic, high frequent electronic, analog and digital dimmable.

Applications

- Industries
- Parking
- Schools and colleges
- Corridors

Mounting Type

Surface suspended

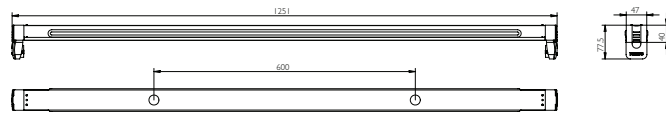
Installation

Holes for (wood) screw, fixing and knockouts for suspension mounting by means of 19mm conduits.

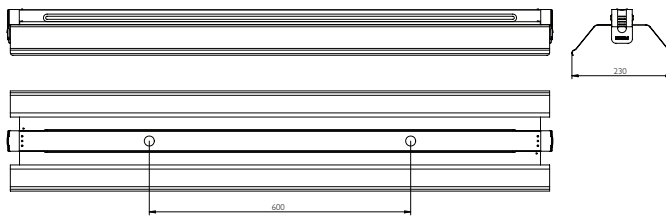
Industrial | TMC 501

Technical data

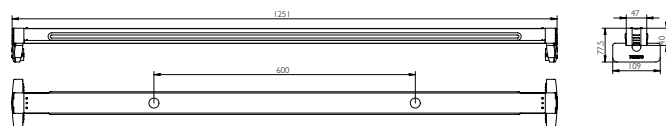
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMC501 1xTL-D36W IC	1 x 'TLD 36W / 'TL' 40W	240	0.23	0.90
TMC501 2xTL-D36W IC	2 x 'TLD 36W / 'TL' 40W	240	0.46	0.90
TMC501 1xTL-D36W EBE	1 x 'TLD 36W / 'TL' 40W	240	0.16	0.95
TMC501 2xTL-D36W EBE	2 x 'TLD 36W / 'TL' 40W	240	0.30	0.95
TMC501 1xTLD36W EBT	1 x 'TLD 36W / 'TL' 40W	240	0.23	0.90
TMC501 2xTLD-36W EBT	2 x 'TLD 36W / 'TL' 40W	240	0.46	0.90



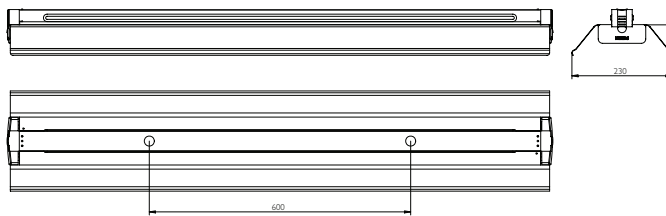
TMC 50 1/136



TMC 50 1/136 WITH REFLECTOR



TMC 50 1/236



TMC 50 1/236 WITH REFLECTOR

Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMC501 1xTL-D36W IC	919015160126	6	1305 × 171 × 101	1.50 × 6	9.70	0.023
TMC501 2xTL-D36W IC	919015160125	6	1305 × 171 × 101	2.00 × 6	13.10	0.023
TMC501 1xTL-D36W EBE	919015164138	6	1305 × 171 × 101	1.50 × 6	9.70	0.023
TMC501 2xTL-D36W EBE	919015164139	6	1305 × 171 × 101	2.00 × 6	13.10	0.023
TMC501 1xTLD36W EBT	919015810151	6	1305 × 171 × 101	1.50 × 6	9.70	0.023
TMC501 2xTLD-36W EBT	919015810152	6	1305 × 171 × 101	2.00 × 6	13.10	0.023
GMC501 WR	919015902606	6	1270 × 260 × 140	2.20 × 6	15.80	0.050

*data for LPF versions available on request.

TKC 203 comprises of 1 no. reflector GMC 501 and 1 no. Batten TMC 501.



TMC 055

Industrial
Application

Page 31



Product description

Heavy duty industrial Batten purpose basic Batten for TL-D 36 Watt fluorescent lamp, for surface mounting on wall and ceiling.

Its sturdy compact construction in combination with special reflectors with improved distribution help in addressing different application areas. The Batten is made from CRCA sheet steel powder coated gray and white cover. The reflector can be either powder coated or sandwiched aluminium.

TMC 055 Batten family is a range of robust industrial solutions suitable for lighting general industrial spaces like panel rooms, switch gear rooms.



With Reflector

Without Reflector

Features

- Sturdy channel made from CRCA sheet steel, powder coated gray housing and white cover.
- Choice of wide variety of reflectors like powder coated, aluminium, sandwiched etc.
- Option of wide variety of ballast like electromagnetic, high frequent electronic, analog and digital dimmable.
- Designed for ceiling and surface mounting with special provision for cable entry from the side.

Applications

- Industries
- Parking
- Schools and colleges
- Corridors

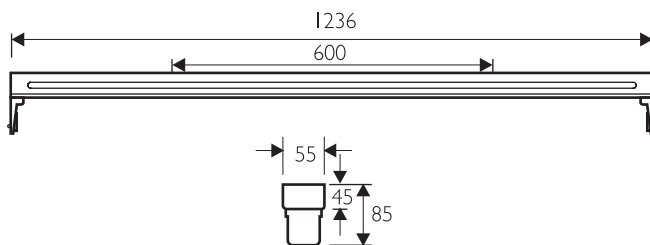
Mounting Type

Surface Suspended

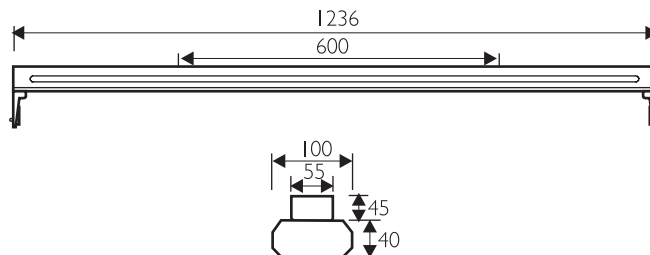
Installation

Holes for (wood) screw, fixing and knockouts for suspension mounting by means of 19mm conduits.

TMC 55 / 136



TMC 55 / 236



Technical Drawing



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMC055 1xTL-D36W IC	1 x TLD 36W	240	0.23	0.90
TMC055 1xTL-D36W EBE	1 x TLD 36W	240	0.16	0.95
TMC055 1xTLD-36W EBT	1 x TLD 36W	240	0.17	0.98
TMC055 2xTL-D36W IC	2 x TLD 36W	240	0.46	0.90
TMC055 2xTL-D36W EBE	2 x TLD 36W	240	0.30	0.95
TMC055 2xTLD36W EBT	2 x TLD 36W	240	0.30	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMC055 1xTL-D36W IC	919015148136	6	1272 x 190 x 110	2.50 x 6	15.00	0.027
TMC055 1xTL-D36W EBE	919015146131	6	1272 x 190 x 110	2.50 x 6	15.00	0.027
TMC055 1xTLD-36W EBT	919015810153	6	1272 x 190 x 110	2.50 x 6	15.00	0.027
TMC055 2xTL-D36W IC	919015148139	6	1272 x 190 x 110	3.00 x 6	19.00	0.027
TMC055 2xTL-D36W EBE	919015146132	6	1272 x 190 x 110	3.00 x 6	19.00	0.027
TMC055 2xTLD36W EBT	919015810154	6	1272 x 190 x 110	3.00 x 6	19.00	0.027
GMC055 E-WB	919015902604	6	1325 x 295 x 215	3.40 x 6	27.00	0.080

T5 High-Bay - TPS 325

**Industrial
Application**

Page 31



Product description

Advanced High-Bay luminaire suitable for 4xTL5 28 Watt and 4xTL5 54 Watt with option of closed and open version. The range can be mounted on surface or suspended through conduit, chain assembly.

The luminaire has been conceptualised as an energy efficient and eco-friendly alternative to traditional Medium-Bay lighting solutions. The luminaire is suitable for four TL5 lamps and has the added benefits of low mercury content, excellent color rendition and instant re-start. This solution also opens up possibilities of dimming and daylight integration for enhanced energy savings. The longer lamp life has the potential to further shorten the payback time, thus making it a very attractive proposition.



Closed High-Bay

Features

- Suitable for 4x28W and 4X54W TL-5 fluorescent lamp version.
- Available in open and closed version (both IP20).
- Specially designed optics for T5 lamps allows to have very high vertical lighting levels, ideally suitable for warehouse, industries with high vertical requirement.
- The luminaire is suitable for conduit, chain and surface mounting.
- A specially designed mounting bracket is provided for surface mounting version which offers ease of mounting. This bracket is an optional bracket.

Applications

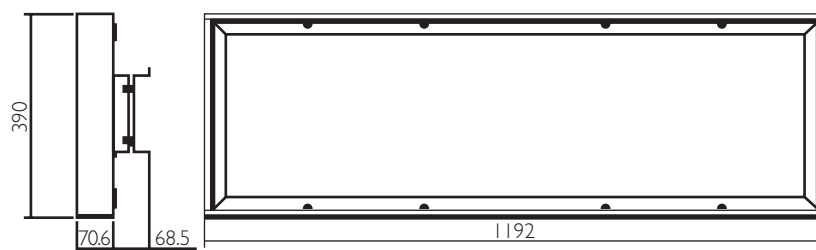
- Industries
- Warehouses
- High ceiling areas

Mounting Type

Surface suspended

Installation

- Ceiling mounting is possible with the help of surface mounting bracket which is fastened onto the ceiling and then sliding the luminaire in to the bracket.
- This luminaire can be suspended by means of chain / suspension conduit.



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TPS325 4xTL5-54W EBP AC	4xTL-5 54 W	240	0.5	0.99
TPS325 4xTL5-54W EBP	4xTL-5 54 W	240	0.5	0.99
TPS325 4xTL5-28W EBP AC	4xTL-5 28 W	240	0.27	0.99
TPS325 4xTL5-28W EBP	4xTL-5 28 W	240	0.27	0.99

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TPS325 4xTL5-28W EBP AC	1350 2996 5	2	1235 x 445 x 235	7.75	18	0.129
TPS325 4xTL5-28W EBP	1350 2996 5	2	1235 x 445 x 235	5.5	13.5	0.129
TPS325 4xTL5-28W EBP AC	1350 2996 5	2	1235 x 445 x 235	7.75	18	0.129
TPS325 4xTL5-28W EBP	1350 2996 5	2	1235 x 445 x 235	5.5	13.5	0.129



Waterproof - TCW450

**Industrial
Application**

Page 31



Product description

Surface / suspension mounted waterproof luminaire suitable for single and twin TL-D 36 Watt and TL-5 28W / 54W.

Designed for applications in demanding operating environments. TCW450 is dust, jet and shock proof luminaire for TLD and TL5 lamps is a perfect solution for moist and dusty conditions. TCW 450 has Polycarbonate housing and cover with all the accessories mounted in a CRCA Gear Plate. The ribbed Polycarbonate cover provides better light distribution. The luminaire offers the flexibility and ease of installation.



TCW 450

TCW 450

TCW 450

Industrial | Waterproof - TCW450

Features

- Polycarbonate housing and linear prismatic ribbed cover providing excellent distribution of light.
- Convenient Polycarbonate fastening clips and hinged diffuser to make it easy to replace lamps.
- Ingression protection of IP 65 for protection against dust and water.
- Option of electronic gear to provide flicker free and low cost operations.
- Press fit CRCA gear for ease of maintenance.

Applications

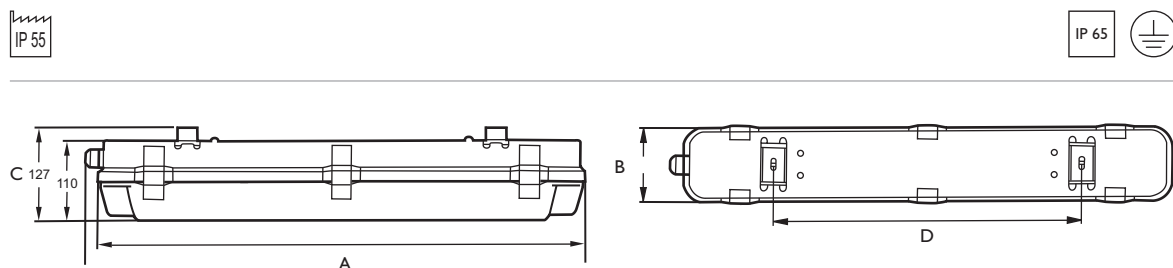
- Industries
- Public parkings
- General interiors
- Dusty and wet environment

Mounting Type

Surface / suspended

Installation

Suitable for surface and suspended mounting with the use of chain.
SS mounting bracket is provided.



Type	Length	Width	Height	Clamp Mounting Distance
	A	B	C	D
1XTL-D36W	1265	100	95	900
2XTL-D 36W	1265	140	95	900
1XTL-5 28W	1220	100	85	840
2XTL-5 28W	1220	100	85	840
2XTL-5 54W	1220	140	95	900

Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCW450 1XTL-D 36W EBT	1xTL-D 36W	240	0.15	0.98
TCW450 2XTL-D 36W EBT	2xTL-D 36W	240	0.30	0.98
TCW450 1XTL-5 28W EBT	1xTL-5 28W	240	0.135	0.98
TCW450 2XTL-5 28W EBT	2xTL-5 28W	240	0.27	0.98
TCW450 P 2XTL-5 54W HF P2953	2xTL-5 54W	240	0.5	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)
TCW450 1XTL-D 36W EBT	9191 158 10074	4	137X31.5X25	8	10.00
TCW450 2XTL-D 36W EBT	9191 158 10073	4	137X22X25	10.3	12.93
TCW450 1XTL-5 28W EBS	9191 158 10041	4	125X22X23	8.3	10.35
TCW450 2XTL-5 28W EBS	9191 158 10042	4	125X22X23	8.4	10.54
TCW450 P 2XTL-5 54W HF P2953	9196 158 10147	4	137X31.5X25	10.4	12.97



CLARIA - FBS 650

Industrial
Application

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Product description

Philips Claria is a family of specialised luminaires suitable for offering effective lighting solutions for clean room applications in industry. The luminaire has an advanced design suitable for PL-L and TL-D lamps with option of rear opening and front opening. It has a robust CRCA housing, high corrosion resistant stainless steel frame and option of glass and acrylic cover. Protected against ingress of water and dust.

Cleanrooms are specially conditioned industrial areas with strict environmental conditions. The primary role of lighting is to make activities visible to permit safe, comfortable and productive working conditions. The lighting system must not interfere with the production process or interrupt the flow of clean air to the area, and it must be easy to maintain. Large sized cleanrooms are found in the semi-conductor, electronics, computer and aerospace industries. Biological cleanrooms can be found in the pharmaceutical and food and beverage industries.



Surface Mounted



Surface Mounted



Surface Mounted



Recess Mounted



Recess Mounted



Recess Mounted

Features

- Corrosion resistant powder coated CRCA housing with hingable stainless steel frame.
- Sealed dual compartment construction for better heat management and ingress protection retention.
- Performer Ballast for constant light output.
- Aluminium anodised reflector for optimal lighting distribution.
- Detachable Gear Tray which accommodates the holders and the gear for ease of maintenance.

Applications

- Cleanrooms in pharma and electronic industries
- Kitchens in hotels and resorts
- Food processing industries

Mounting Type

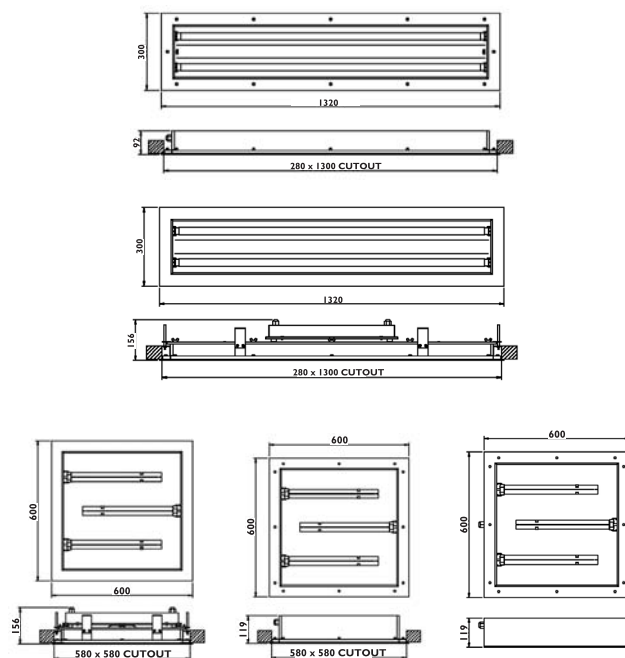
- Recessed PL-L
- Surface PL-L
- Recessed TL-D





Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS650 3xPL-L36W EBP ROP GT	3 × PL-L 36W	240	0.3	0.98
FBS650 3xPL-L36W EBP FOP GT	3 × PL-L 36W	240	0.3	0.98
FBS650 2xPL-L36W EBP FOP GT	2 × PL-L 36W	240	0.25	0.98
FBS650 3xPL-L36W EBP FOP AC	3 × PL-L 36W	240	0.3	0.98
FBS650 3xPL-L36W EBP ROP AC	3 × PL-L 36W	240	0.3	0.98
FCS650 3xPL-L36W EBP FOP GT	3 × PL-L 36W	240	0.3	0.98
FCS650 2xPL-L36W EBP FOP GT	2 × PL-L 36W	240	0.25	0.98
TBS 670 2 × 36wTLD HFTO GT	TLD 36W	240	0.25	0.98
TBS 670 2 × 36wTLD HF BO GT	TLD 36W	240	0.25	0.98



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS650 3xPL-L36W EBP ROP GT	919615200102	1	580 × 580	11.6	14.50	0.076
FBS650 3xPL-L36W EBP FOP GT	919615200104	1	580 × 580	12	15.00	0.058
FBS650 3xPL-L36W EBP FOP AC	919615200110	1	580 × 580	10.4	13.00	0.058
FBS650 3xPL-L36W EBP ROP AC	919615200108	1	580 × 580	10	12.50	0.076
FCS650 3xPL-L36W EBP FOP GT	919615200106	1	580 × 580	13.28	16.60	0.058
FCS650 2xPL-L36W EBP FOP GT	919615810030	1	580 × 580	13.28	16.60	0.058
TBS 670 2 × 36wTLD HF TO GT	919615200101	1	280 × 1300	13.84	17.3	0.087
TBS 670 2 × 36wTLD HF BO GT	919615200103	1	280 × 1300	11.28	14.1	0.076

Multitude - MPF 900

Industrial
Application

Page 31



Product description

Efficient, low glare, recessed / surface / pole mounted cast aluminium luminaires suitable for use with double ended Metal Halide MHNTD / CDMTD 150W, MHNTD / CDMTD 250W, single ended tubular SON, MH and CDMTT in 250W.

Driving the productivity upwards is a big challenge for all industries. Lighting plays an important role in enhancing productivity as properly designed lighting helps to reduce faults and rejection. There should be proper combination of intensity and color temperatures of light for different application. Multitude with its wide variety of lamps, optics and installation options provides the ideal solution for different applications.



Recessed

Pole Mounted

Surface

Features

- Suitable for a wide variety of lamps – CDMTD, CDMTT, SONT PLUS PIA, HPIT PLUS.
- Option of symmetrical and asymmetrical optics for different applications.
- Surface / Recessed and Pole mounted options.
- Single piece pressure die-cast housing.
- Extruded EPDM Gasket to provide Ingress protection IP 65.
- Toughened glass cover.

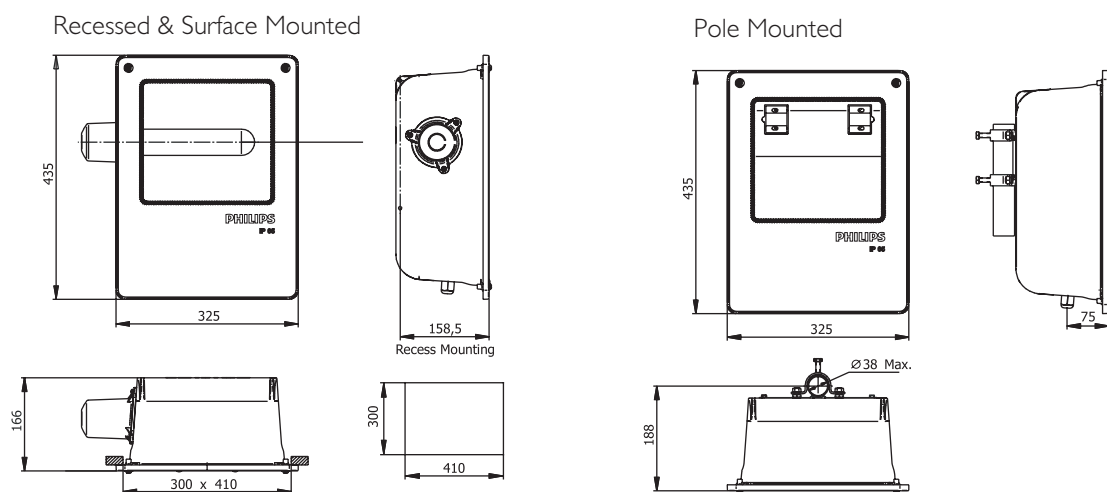
Applications

- Industries, sports halls
- Railway station platforms
- Petrol stations

Mounting Type

- Recessed
- Pole mounted
- Surface mounted

Dimensional Data (mm)



Technical Drawing



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
MPF900 1XCDM-TT 250W IC S WH	1xCDM-TT 250W, 1xHPI-T 250W, 1xSON-TP 250W	240 v AC 50 hz	1.4	≥ .85
MPF900 1XCDM-TT 250W IC A WH	1xCDM-TT 250W, 1xHPI-T 250W, 1xSON-TP 250W	240 v AC 50 hz	1.4	≥ .85
MPF900 1XSON-TP 150W IC S WH	1xSON-T PIA 150W	240 v AC 50 hz	0.85	≥ .85
MPF900 1XSON-TP 150W IC A WH	1xSON-T PIA 150W	240 v AC 50 hz	0.85	≥ .85
MPF900 1XCDM-TD 250W IC S WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF900 1XCDM-TD 250W IC A WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF900 1XCDM-TD 150W IC S WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85
MPF900 1XCDM-TD 150W IC A WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85
MPF920 1XCDM-TD 250W IC S WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF920 1XCDM-TD 250W IC A WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF920 1XCDM-TD 150W IC S WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85
MPF920 1XCDM-TD 150W IC A WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85
MPF910 1XCDM-TD 250W IC S WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF910 1XCDM-TD 250W IC A WH	1xCDM-TD 250W, 1xMHN-TD 250W	240 v AC 50 hz	1.4	≥ .85
MPF910 1XCDM-TD 150W IC S WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85
MPF910 1XCDM-TD 150W IC A WH	1xCDM-TD 150W, 1xMHN-TD 150W	240 v AC 50 hz	0.85	≥ .85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (cm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
MPF900 IXCDM-TT 250W IC S WH	9191 158 10010	1	51x46x22.5	6.4	7.9	0.053
MPF900 IXCDM-TT 250W IC A WH	9191 158 10011	1	51x46x22.5	6.4	7.9	0.053
MPF900 IXSON-TP 150W IC S WH	9191 158 10018	1	51x46x22.5	6.2	7.7	0.053
MPF900 IXSON-TP 150W IC A WH	9191 158 10019	1	51x46x22.5	6.2	7.7	0.053
MPF900 IXCDM-TD 250W IC S WH	9191 158 10012	1	51x46x22.5	6.2	7.7	0.053
MPF900 IXCDM-TD 250W IC A WH	9191 158 10013	1	51x46x22.5	6.2	7.7	0.053
MPF900 IXCDM-TD 150W IC S WH	9191 158 10020	1	51x46x22.5	6.2	7.7	0.053
MPF900 IXCDM-TD 150W IC A WH	9191 158 10021	1	51x46x22.5	6.2	7.7	0.053
MPF920 IXCDM-TD 250W IC S WH	9191 158 10016	1	51x46x22.5	6.5	8.1	0.053
MPF920 IXCDM-TD 250W IC A WH	9191 158 10017	1	51x46x22.5	6.5	8.1	0.053
MPF920 IXCDM-TD 150W IC S WH	9191 158 10024	1	51x46x22.5	6.5	8.1	0.053
MPF920 IXCDM-TD 150W IC A WH	9191 158 10025	1	51x46x22.5	6.5	8.1	0.053
MPF910 IXCDM-TD 250W IC S WH	9191 158 10014	1	51x46x22.5	6.5	8.1	0.053
MPF910 IXCDM-TD 250W IC A WH	9191 158 10015	1	51x46x22.5	6.5	8.1	0.053
MPF910 IXCDM-TD 150W IC S WH	9191 158 10022	1	51x46x22.5	6.5	8.1	0.053
MPF910 IXCDM-TD 150W IC A WH	9191 158 10023	1	51x46x22.5	6.5	8.1	0.053

Petrol station - MPF 922

Industrial
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Product description

Efficient, low glare, recessed / surface-mounted cast aluminium luminaire for lighting of the filling stations and other low height canopies. The luminaire is suitable for double ended Metal Halide MHN-TD 70W and 150W lamps, IP 65 protected.

Today, lighting a petrol station is more than just providing lighting solutions for carrying out the basic operations. Lighting at a petrol station should act as an beacon to the passing by vehicles. They highlight the merchandise and provide glare-free visibility to the people who move into the station.



MPF 921

Features

- Excellent uniform light distribution with bi-directional beam ensured by stippled aluminium, anodised and brightened reflector.
- Silicon rubber gasket makes the luminaire protected against ingress of dust and water.
- Easy maintainable detachable Gear Tray is provided in the luminaires which carries the ballast, ignitor and condenser.
- Specially designed mounting arrangement which allows easy and fast installation.

Applications

- Under canopy: Low height under canopies up to 6 metre
- Petrol station

Mounting Type

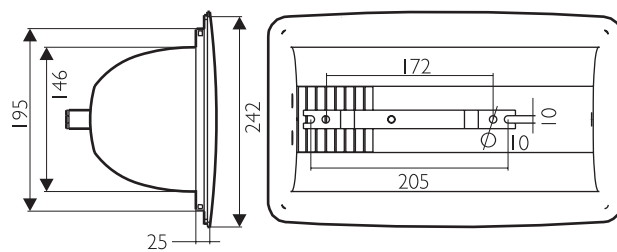
Surface / Recessed



IP 65

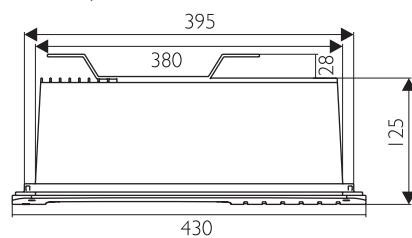


MPF 922 CST
MPF 922 CST



CUTOUT DIMENSIONS

150x380mm--for 150mm panel
200x400mm--for 200mm panel



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
MPF922 1xMHN-TD150W	1 x MHN-TD / CDM-TD, 150W	240	0.85	≥ 0.85
MPF922 1xMHN-TD70W	1 x MHN-TD / CDM-TD, 70W	240	0.45	≥ 0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
MPF922 1xMHN-TD150W	919115384213	1	560 x 325 x 145	3.00	3.20	0.026
MPF922 1xMHN-TD70W	919115384217	1	560 x 325 x 145	3.00	3.90	0.026







Retail

Product specification

Retail Luminaires

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FBH 145

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Product description

Recessed Downlights with high efficiency 145mm internal diameter reflector for PL-C 13 / 18W compact fluorescent lamps. Height of only 100mm.

Circular recessed mounted downlighter with high efficiency optics and option of multiple attachments suitable for PL-C13W / PL-C18W lamps. FBH I45 family is superior engineered PL downlighter designed to deliver performance and flexibility in design and installation. The construction comprises of a sturdy PDC housing, Satin finish reflector enclosed gear compartment and a removable front frame enabling the use with a variety of decorative attachments. FBH I45 is available in two depths, 100mm and 65mm.



Aqua cover reversible

Frosted Glass

Recessed Glass Flowers

Cross Louvre Aqua



Turbo Louvre

Recessed Glass Circline

Cross Louvre Aluminium

Recessed Glass Raindrops



FBH 145 Low depth

Low depth version

FBH 145 was a low depth version with 65mm depth specially designed to be used in places where the space above the false ceiling is limited.

Features

- Cast aluminium ring.
- Satin-finish, anodised aluminium reflector for low glare.
- Horizontal lamp position renders higher light output.
- Low depth requires less space above false ceiling.
- Wide mounting ring for hiding false ceiling cut out imperfections.
- Enclosed gear for higher safety against hazards in normal depth version.
- Available with 8 different types of attachments.

Applications

- Representative offices and general open plan offices
- Conference rooms
- Receptions, corridors and staircases
- Recreational areas (sport halls, restaurants, cafeterias)
- Department stores, shops and boutiques

Mounting Type

Downlights and Accents

Installation

Cut-out	185mm diameter
Thickness of false ceiling	1-24mm
Method	Fasteners to bend and turns on to the ceiling
Safety distance	0.5m
Maintenance	Direct lamp access

Compliances

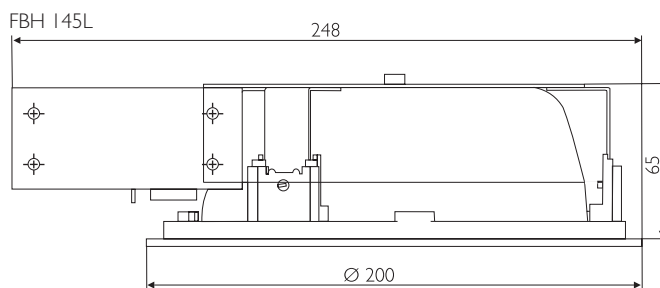
- IP 20
- Class I



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBHI45 M 2XPL-C/2P26W I 240V	441536073451	8	515x300x530	1.2	11	0.081
FBHI45 M 1XPL-C/2PI3W I 240V	919215000132	8	515x300x530	1.1	11	0.081
FBHI45 M 2XPL-C/2PI3W I 240V	919215000133	8	515x300x530	1.2	11	0.081
FBHI45 M 1XPL-C/2PI8W I 240V	919215000134	8	515x300x530	1.1	11	0.081
FBHI45 M 2XPL-C/2PI8W I 240V	919215000135	8	515x300x530	1.2	11	0.081
FBHI45 M 1XPL-C/4PI8W HFM 240V	441536068621	8	515x300x530	0.9	9	0.081
FBHI45 M 2XPL-C/4PI8W HFM 240V	441536068631	8	515x300x530	0.95	9	0.081
FBHI45 M 1XPL-C/4PI3W HFM 240V	441536068711	8	515x300x530	0.85	9	0.081
FBHI45 M 2XPL-C/4PI3W HFM 240V	441536068721	8	515x300x530	0.95	9	0.081
FBHI45 M 2XPL-T/4P26W HF	441536074961	8	515x300x530	0.93	9	0.081
FBHI45 M 1XPL-C/2PI8W I 240V LH	441536069981	8	515x300x530	1	9.5	0.081
FBHI45 M 1XPL-C/2PI3W I 240V LH	441536070311	8	515x300x530	1	9.5	0.081
FBHI45 M 2XPL-C/2PI3W I 240V LH	441536070341	8	515x300x530	1	9.5	0.081
FBHI45 M 2XPL-C/2PI8W I 240V LH	441536070351	8	515x300x530	1	9.5	0.081
FBHI45 M 1XPL-C/4PI3W HFM 240V LH	441536071171	8	515x300x530	0.8	8.5	0.081
FBHI45 M 2XPL-C/4PI3W HFM 240V LH	441536071881	8	515x300x530	0.85	8.5	0.081
FBHI45 M 1XPL-C/4PI8W HFM 240V LH	441536071941	8	515x300x530	0.8	9	0.081
FBHI45 M 2XPL-C/4PI8W HF 240V LH	441536072201	8	515x300x530	0.85	9	0.081

Ordering details of attachments available on request.



Space - FBH 225 and FBH 250

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Product description

New generation all plastic Downlighter suitable for a range of CFL lamps (PL-C 18W, PL-C 26W, PL-T 32W, PL-T 42W).

Modern building interiors offer a huge challenge while designing lighting layout. Within the same premises there are different areas with different ceiling heights which needs different lighting requirement. Use of downlights with their compact size and option of a wide variety of lamps and optics within the same size helps designers overcome this problem without any compromises. Philips Space offers the unique combination of a variety of lamps (PLC 18W, PLC 26W, PLT 32W, PLT 42W) and optics (mirror finish, dual finish, turbo full metal) to address the varying lighting needs.

FBH 250 is the full metal version of space offering higher efficiency.

Features

- Housing made up of PBT offers high temperature and flame retardancy.
- Chrome plated mirror finish front reflectors.
- Dual finish internal reflector with matte at bottom and diamond at sides for higher light output.
- Separate control gear box.

Applications

- Corridors and walkways
- Offices
- Shops, hotels and clubs
- Public areas

Mounting Type

Downlights and Accents

Installation

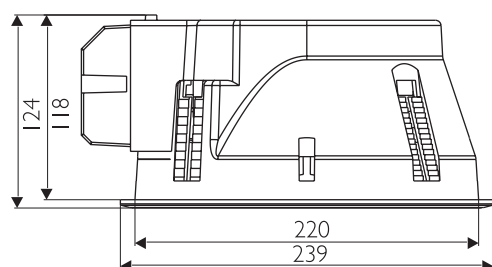
Unique easy installation system by means of adjustable clips.

Compliances

- IP 20
- Class I

Technical data

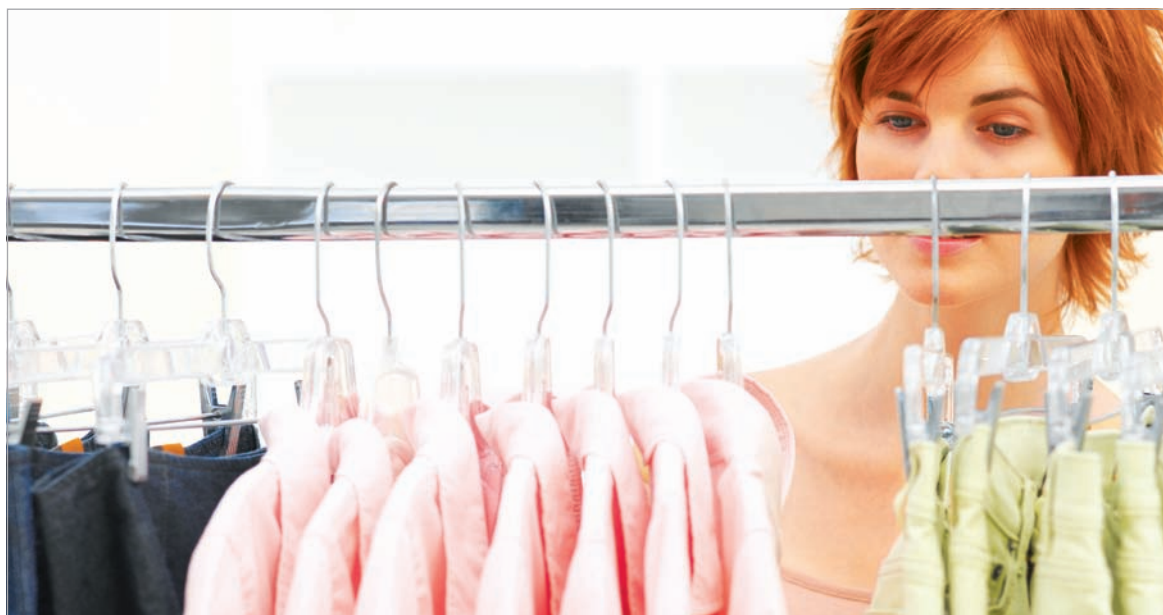
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBH225 2XPL-C/2P18W I 240V	2XPL-C/2P18W	240	0.44	0.45
FBH225 1XPL-C/2P26W I 240V	1XPL-C/2P26W	240	0.37	0.45
FBH225 2XPL-C/2P26W I 240V	2XPL-C/2P26W	240	0.74	0.47
FBH225 2XPL-C/4P18W HFM 240V	2XPL-C/4P18W	240	0.16	0.6
FBH 225 2XPLC 26W EBW	2XPL-C/4P26W	240	0.24	0.6
FBH225 2XPL-T/4P32W HFP 240V	2XPL-T/4P32W	240	0.31	0.97
FBH225 2XPL-T/4P42W HFP 240V	2XPL-T/4P42W	240	0.42	0.97



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBH225 2XPL-C/2P18W I 240V	919215000149	8	550x520x400	2.5	21.08	0.114
FBH225 1XPL-C/2P26W I 240V	919215000152	8	550x520x400	2.4	21.2	0.114
FBH225 2XPL-C/2P26W I 240V	919215000153	8	550x520x400	2.9	25.3	0.114
FBH225 2XPL-C/4P18W HFM 240V	441536069921	8	550x520x400	2.2	19.1	0.114
FBH 225 2XPLC 26W EBW	919015810339	8	550x520x400	2.4	21.2	0.114
FBH225 2XPL-T/4P32W HFP 240V	919215000197	8	550x520x400	2.2	19.11	0.114
FBH225 2XPL-T/4P42W HFP 240V	919215000196	8	550x520x400	2.2	19.11	0.114
FBH250 2XPL-T/2P26W I 240V	919215000217	8	550x520x400	2.5	21.08	0.114
FBH250 2XPL-T/4P26W HF	919215000218	8	550x520x400	2.4	21.2	0.114
FBH250 2XPL-T/4P42W HFP	919215000219	8	550x520x400	2.2	19.11	0.114
ZZG225 T	919215000173	8	475x240x255	0.35	3.8	0.02907
ZZG225 DR DG	919215000174	8	475x240x255	0.35	3.8	0.02907
ZZG225 DR	919215000175	8	475x240x255	0.35	3.8	0.02907



Soho - FBH 150

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Product description

Attractive Downlight with horizontally placed lamp, 100mm over all depth, suitable for PL-C (3W / 18W) lamp.

Soho offers a complete range of Downlight solutions for PL-13W and 18 Watt light sources. The range offers the option of Turbo, Matte finish, anodised aluminium optics.

Features

- Hingeable gear assembly for easy maintenance.
- Housing made of CRCA 1.2mm thick sheet.
- Bright patterned reflector with a combination of serration at the bottom, intermediate diamond and gloss at the top for higher light output.
- Matte finish and turbo version available.
- Wide CRCA ring cover false ceiling cut out imperfections.
- Also available in Turbo louvre attachment for low glare.

Applications

- Corridors and walkways
- Offices
- Shops, hotels and clubs
- Public Areas

Mounting Type

Downlights and Accents

Installation

By rotating the springs from inside and moving the clamp down.

Compliances

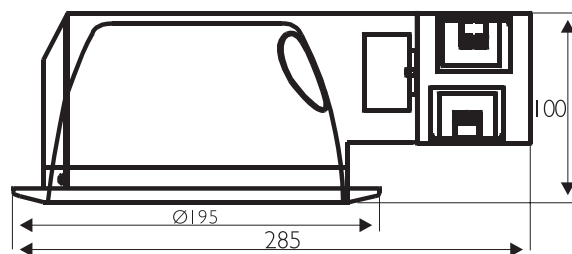
- IP 20
- Class I



FBH 150

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBH I50 M 1XPL-C/2P13W I 240V	1XPL-C/2P13W	240	0.17	0.45
FBH I50 M 2XPL-C/2P13W I 240V	2XPL-C/2P13W	240	0.34	0.45
FBH I50 M 1XPL-C/2P18W I 240V	1XPL-C/2P18W	240	0.22	0.5
FBH I50 M 2XPL-C/2P18W I 240V	2XPL-C/2P18W	240	0.44	0.5
FBH I50 M 1XPL-C/4P18W HFM 240V	1XPL-C/4P18W	240	0.13	0.6
FBH I50 M 2XPL-C/4P18W EB 240V	2XPL-C/4P18W	240	0.26	0.6
FBI50 1XPL-C/2P13W I 240V	1XPL-C/2P13W	240	0.17	0.45
FBI50 2XPL-C/2P13W I 240V	2XPL-C/2P13W	240	0.34	0.45
FBI50 1XPL-C/2P18W I 240V	1XPL-C/2P18W	240	0.22	0.5
FBI50 2XPL-C/2P18W I 240V	2XPL-C/2P18W	240	0.44	0.5



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBH I50 M 1XPL-C/2PI3W I 240V	919215000142	8	500X350X550	1.5	13.5	0.0875
FBH I50 M 2XPL-C/2PI3W I 240V	919215000143	8	500X350X550	1.75	16.5	0.0875
FBH I50 M 1XPL-C/2PI8W I 240V	919215000144	8	500X350X550	1.5	13.5	0.0875
FBH I50 M 2XPL-C/2PI8W I 240V	919215000145	8	500X350X550	1.75	16.5	0.0875
FBH I50 M 1XPL-C/4PI8W HFM 240V	441536070421	8	500X350X550	1.3	12	0.0875
FBH I50 M 2XPL-C/4PI8W EB 240V	441536070321	8	500X350X550	1.55	15	0.0875
FBT I50 1XPL-C/2PI3W I 240V	441536070361	8	500X350X550	1.5	14	0.0875
FBT I50 2XPL-C/2PI3W I 240V	441536070371	8	500X350X550	1.8	17	0.0875
FBT I50 1XPL-C/2PI8W I 240V	441536070381	8	500X350X550	1.5	14	0.0875
FBT I50 2XPL-C/2PI8W I 240V	441536069961	8	500X350X550	1.8	17	0.0875

(FBH: Open Version; FBT: Turbo Version.)

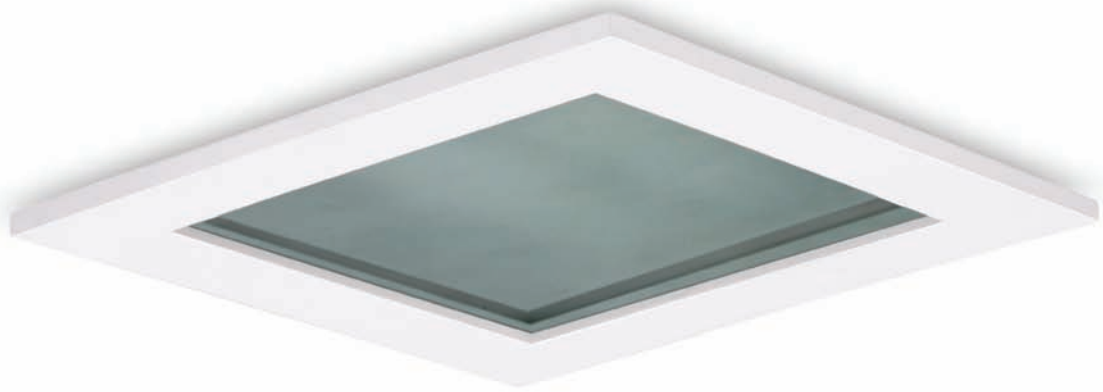
FBS 033

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Application

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Product description

Recessed mounted square Downlight suitable for single and twin lamp
PLC 18W and PLC 26W.

The FBS 033 is a aesthetically designed sleek square shaped down-light meant for recessed mounting. It's unconventional square shape with low depth makes it an ideal solution for lighting up office and retail spaces.

Features

- Die-cast front ring for enriched finish and durability.
- Energy saving electronic gear for better performance and long life.
- Low depth of 60mm for used in areas with less clearance behind the False Ceiling.
- Deep drawn housing for sturdiness and robust construction.
- Frosted front glass cover providing lamp shielding and better light distribution.

Applications

- Receptions
- Cooridor
- Retail Stores
- Hospitality

Mounting Type

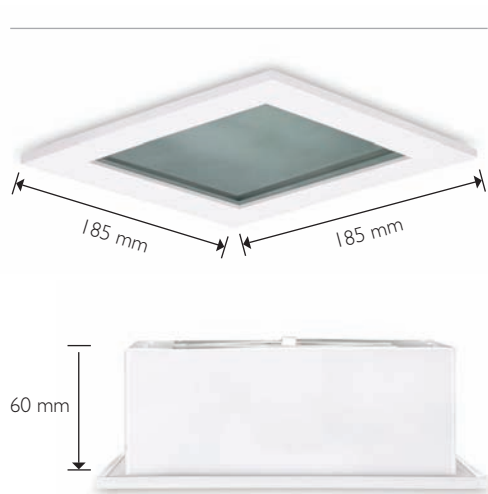
Recessed

Installation

Designed for recessed mounting on false ceilings. This luminaire can be mounted with the help of flexible mounting clamps.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS033 2xPLC 4P 18W RG-FR EBW	2 x PL-C 18W	240	0.16	0.95
FBS033 1xPLC 4P 18W RG-FR HFM	1 x PL-C 18W	240	0.135	0.60
FBS033 2xPLC 4P 26W RG-FR EBW	2 x PL-C 26W	240	0.12	0.95
FBS033 1xPLC 4P 26W RG-FR EBW	1 x PL-C 26W	240	0.12	0.95



Cutout dims. = SQ 165mm

Dimensional details

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS033 2xPLC 4P 18W RG-FR EBW	9194 158 10045	4	360 × 245 × 345	1.0	6.2	0.030
FBS033 2xPLC 4P 18W RG-FR EBW	9194 158 10046	4	360 × 245 × 345	0.9	5.8	0.030
FBS033 1xPLC 4P 18W RG-FR HFM	9195 158 10047	4	420 × 245 × 345	1.3	7.4	0.030
FBS033 2xPLC 4P 26W RG-FR EBW	9196 158 10048	4	360 × 245 × 345	1.0	6.2	0.030



FBS 085

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Product description

Recess mounted Downlight luminaire with centre frosted glass, suitable for use with 18W PL-C compact fluorescent lamp.

Features

- Housing made up of CRCA sheet steel with powder coating.
- Electrochemically brightened reflector with gloss for distinct looks.
- Wide ring covers false ceiling cut out imperfections.
- Frosted glass for glare cut off.
- Dimming is possible with appropriate ballast.

Applications

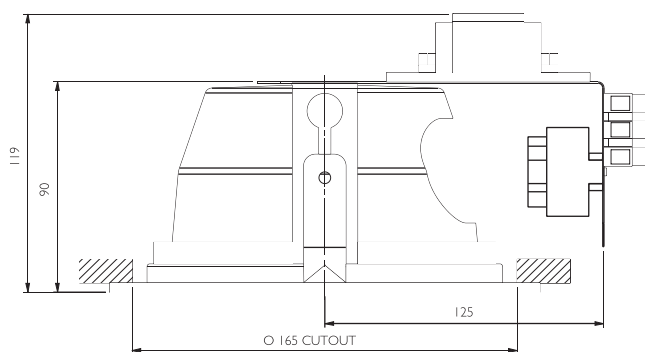
- Offices
- Small independent shops
- Corridors and walkways
- Reception and public service areas

Installation

Designed for recess mounting on false ceiling with help of clamps.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS085 2XPL-C/2P18W I 240V RG-FR	2XPL-C/2P18W	240	0.44	>.45
FBS085 2XPL-C/2P18W I SG-FR	2XPL-C/2P18W	240	0.44	>.45
FBS085 1XPL-C/2P18W I 240V RG FR	1XPL-C/2P18W	240	0.22	>.45
FBS085 1XPL-C/2P18W I SG-FR	1XPL-C/2P18W	240	0.22	>.45
FBS085 2XPL-C/4P18W HFB RG-FR	2XPL-C/4P18W	240	0.18	0.65
FBS085 1XPL-C/4P18W HFA RG-FR	1XPL-C/4P18W	240	0.13	0.65



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS085 2XPL-C/2P18W I 240V RG-FR	919215000207	8	390X260X472	8.4	10.2	0.047
FBS085 2XPL-C/2P18W I SG-FR	919215000208	8	390X260X472	8.4	10.2	0.047
FBS085 1XPL-C/2P18W I 240V RG FR	919215000209	8	390X260X472	6.4	8.2	0.047
FBS085 1XPL-C/2P18W I SG-FR	919215000210	8	390X260X472	6.4	8.2	0.047
FBS085 2XPL-C/4P18W HFB RG-FR	919215000213	8	390X260X472	8	9.4	0.047
FBS085 1XPL-C/4P18W HFA RG-FR	919215000214	8	390X260X472	6	7.6	0.047



FBS 095

Retail
Application

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Product description

High efficiency recess mounted downlight luminaire suitable for 18 W CFL lamp, available in single lamp as well as twin lamp version.

Features

- Housing made up of CRCA sheet steel with powder coating.
- Bright patterned reflector with serration at the bottom for wide distribution.
- Intermediate diamond and gloss finish on top offers higher light output.
- Wide CRCA ring covers false ceiling cut out imperfections.

Applications

- Small independent shops
- Department stores and fashion shops
- Small Offices
- Corridors and staircase
- Reception and public service areas

Installation

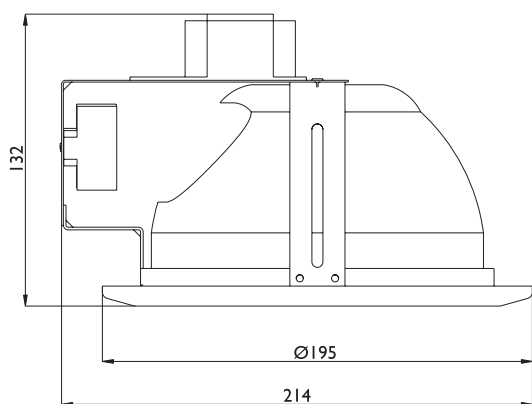
Designed for recess mounting on false ceiling with help of clamps.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS095 1xPL-C/2P18W I 240V	1xPL-C/2P18W	240	0.22	0.50
FBS095 2xPL-C/2P18W I 240V	2xPL-C/2P18W	240	0.44	0.50
FBS095 1xPL-C/4P18W EBS	1xPL-C/4P18W	240	0.12	0.6
FBS095 2xPL-C/4P18W HF	2xPL-C/4P18W	240	0.24	0.6

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FFBS095 1xPL-C/2P18W I 240V	919215000215	8	500x420x300	0.7	10	0.063
FBS095 2xPL-C/2P18W I 240V	919215000216	8	500x420x300	0.9	12.5	0.063
FBS095 1xPL-C/4P18W EBS	919215810212	8	500x420x300	0.6	9	0.063
FBS095 2xPL-C/4P18W HF	919215810095	8	500x420x300	0.8	11.5	0.063



Technical Drawing



DN 622

Retail
Application

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Office
Application

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Product description

Recessed Downlights type DN 622 is suitable for use with GLS 100W (maximum) incandescent lamps. To be used in non-ventilated false ceilings. DN 622 has a symmetric beam.

Features

- Ceiling ring made of aluminium, pressure die-cast.
- MS frame with two adjustable mounting clamps. The mounting clamps can be adjusted according to the ceiling thickness.
- Reflector made of satin finish brightened and anodised aluminium. The reflector is held in position by a pair of leaf springs.

Applications

- Representative offices
- Conference rooms
- Reception, corridors and staircases
- Recreational areas, sport halls, restaurants, cafeterias
- Department stores, shops and boutiques

Mounting Type

Downlights and Accents

Installation

Designed for recessed mounting on false ceilings. This luminaire can be mounted with the help of flexible mounting clamps.

Compliances

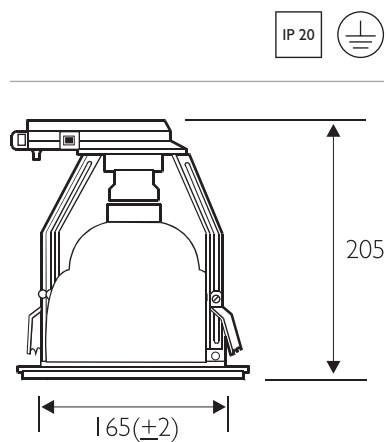
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
DNS622	1 x A60 100W WH	240	0.43	1.00

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
DNS 622 1x A60 100W WH	919215000095	12	575 x 390 x 460	0.45 x 12	8.30	0.103



Technical Drawing





FCS 105

Retail
Application

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Product description

Aesthetical surface mounted luminaire suitable for twin PLC 18 Watt lamp.

FCS150 is aesthetically designed cylindrical Downlight suitable for 2xPLC 18W lamp. The luminaire has a horizontal lamp position with high efficiency glossy reflector for better light distribution. It has an Electronic gear which provides an excellent lighting solution.

Features

- CRCA cylindrical housing providing good aesthetical appearance and robust body.
- High efficiency glossy reflector for better light distribution.
- Electronic gear for better performance and longer life.

Applications

- Receptions
- Corridor
- Retail Stores
- Internal Passages

Mounting Type

Surface

Installation

Direct mounting onto RCC through a mounting section.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FCS105/218 HF	2 x PL-C 18 W	240	0.16	0.95

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FCS105/218 HF	9194 158 10041	1	30.5 x 30.5 x 22.5	1.4	2	0.0209



Dimensional details



FCS 100

Retail
Application

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Application

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Product description

Surface mounted Downlight luminaire suitable for use with 1 X 13W / 18W PL-C compact fluorescent lamp.

Features

- Cylindrical aluminium housing with serrations and matte black powder coated.
- Electrochemical brightened reflector with combination of patterns having diamond, serration and gloss for distinct looks.
- Vertical mounted lamps 1 X PL-C 13W / 18W.
- Electronic and copper Ballast versions available.

Applications

- Corridors / walkways
- Offices
- Shops, hostels and clubs
- Restaurants
- Public areas

Mounting Type

Downlights and Accents

Installation

Designed for direct mounting on ceilings.

Compliances

- IP 20
- Class I

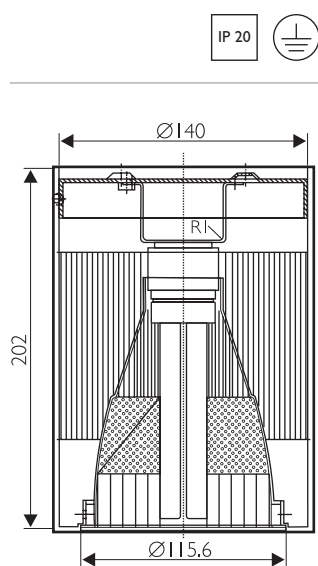
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FCS100	1 x PL-C / 2P13W 1240V	240	1.17	0.49
FCS100	1 x PL-C / 2P18W 1240V	240	0.22	0.50

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FCS 100 1xPL-C / 2P13W 1240V	919215000181	6	525 x 375 x 225	0.80	6.00	0.04
FCS 100 1xPL-C / 2P18W 1240V	919215000180	6	525 x 375 x 225	0.80	6.00	0.04

Version with electronic Ballast available on request.



Technical Drawing





MBS 050

Retail
Application

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Product description

Recessed Downlights suitable for use with high pressure Metal Halide MHN-TD / CDM-TD 70W lamp.

Features

- Aluminium ring, white powder coated.
- Sand blasted high purity anodised aluminium reflector designed to provide high light output.
- CRCA sheet steel control gear box with heat sink blade to eliminate over heating of ballast.
- Heat resistant and toughened glass cover.

Applications

- Representative offices
- Conference rooms
- Receptions, corridors and staircases
- Recreational areas, sport halls, restaurants, cafeterias
- Department stores, shops and boutiques

Mounting Type

Downlights and Accents

Installation

Designed for recessed mounting on false ceilings, this luminaire can be mounted with the help of flexible mounting clamps.

Compliances

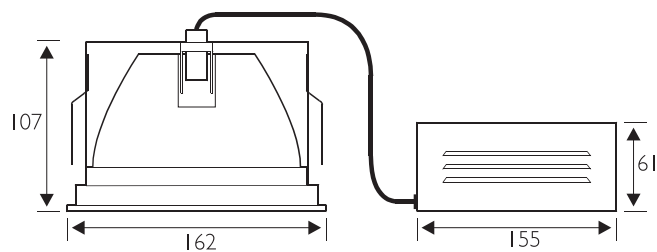
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
MBS050 IXCDM-TD70W IC 240V	IXCDM-TD70W	240	0.45	>.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
MBS050 IXCDM-TD70W IC 240V	919015290162	1	195x175x200	2.8	3	0.006



Technical Drawing



MBS 205

Retail
Application

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Product description

Recessed Downlights suitable for use with high pressure Metal Halide MHN-TD / CDM-TD 70W and 150W lamp.

Features

- Pressure die-cast aluminium housing.
- White Polycarbonate ceiling ring.
- Satin silver aluminium reflector designed to provide high light output.
- Aluminium control gear box with heat sink blade to eliminate over heating of ballast.
- 5mm thick tempered glass cover.

Applications

- Receptions and public service areas
- Corridors and staircases
- Recreational areas, sport halls, restaurants, cafeterias
- Department stores, shops and boutiques

Mounting Type

Downlights and Accents

Installation

Designed for recessed mounting on false ceilings.

Compliances

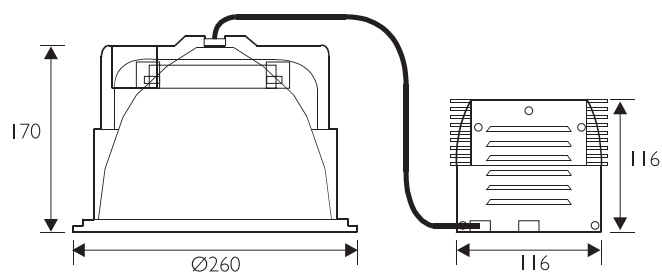
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
MBS205 IXCDM-TD70W IC 240V	IXCDM-TD70W	240	0.45	$\geq .85$
MBS205 IXCDM-TD150W IC 240V	IXCDM-TD150W	240	0.85	$\geq .85$

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m ³)
MBS205 IXCDM-TD70W IC 240V	919015290163	1	400x273x220	3.5	5.3	0.024
MBS205 IXCDM-TD150W IC 240V	919015290213	1	400x273x220	4.4	6.2	0.024



Technical Drawing



MBS 150

Retail
Application

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Product description

Recessed mounted adjustable down luminaire, suitable for use with 70W CDMT Metal Halide lamp. The luminaire is supplied with separate control gear box.

Features

- Housing made up of CRCA sheet steel in silver gray finish.
- High efficiency reflector with finish for wide light distribution.
- Completely enclosed connection box for safety.

Applications

- Small independent shops
- Department stores and fashion shops
- Conference rooms
- Reception and public service areas

Installation

Designed for recessed mounting on false ceiling with help of spring clamps.

Compliances

- IP 20
- Class I

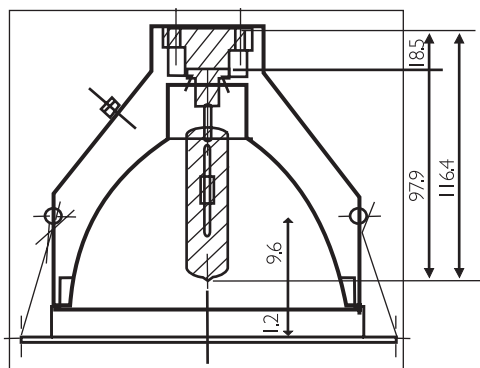
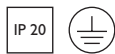
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
MBS 150 1x CDM-T 35W / 70W HSG	1x CDM-T 70W / 150W HSG	240	0.45	≥0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m ³)
MBS 150 1x CDM-T 35W/70W HSG	1350 2619 5	6	430 X 220 X 476	0.7	4.20	0.45
ZKL200/35 (w/ EHS35)	1350 2758 5	8	405 X 362 X 170	1.475	11.80	0.4
ZKL200/70 (w/ EHS70)	1350 2756 5	8	405 X 362 X 170	1.475	11.80	0.4

ZKL200 series is the electronic control gear unit.



Technical Drawing



MBS 175

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Product description

Recess mounted adjustable Downlight luminaire, suitable for use with 70 W CDMT Metal Halide lamp. The luminaire is supplied with separate control gear box.

Features

- Housing made up of CRCA sheet steel with die-cast aluminium ring, powder coated in silver gray.
- High efficiency reflector with matte finish for wide light distribution.
- Adjustable up to 45 degree in vertical direction.
- Completely enclosed connection box for safety.

Applications

- Small independent shops
- Department stores and fashion shops
- Conference rooms
- Reception and public service areas
- Discount store, DIY stores

Installation

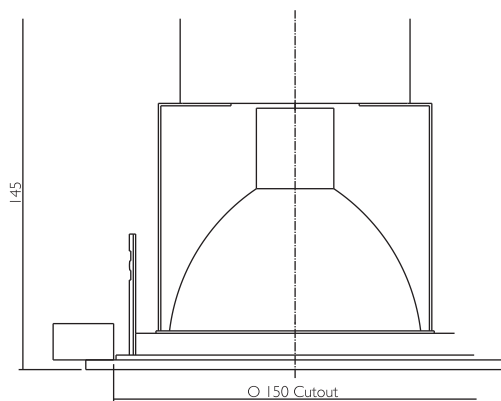
Designed for recess mounting on false ceiling with help of spring clamps.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
MBS175 IXCDM-T35/70W E-HF	IXCDM-T35/70W	240	0.41	0.9
ZKL200 IXCDM-T70W EB	IXCDM-T70W	240	NA	0.95
ZKL200 IXCDM-T35W EHS	IXCDM-T35	240	NA	0.95
ZKL200 IXCDM-T70W	IXCDM-T70W	240	NA	0.95

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
MBS175 IXCDM-T35/70W E-HF	919215000211	4	375x375x165	2.7	4.2	0.0216
ZKL200 IXCDM-T70W EB	919015810002	8	400x360x160	1.6	14	0.0216
ZKL200 IXCDM-T35W EHS	919015810003	8	400x360x160	1.6	12	0.0216
ZKL200 IXCDM-T70W	919215000212	8	400x360x160	2	17.6	0.0216



Technical Drawing



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Collection

MCS 250

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Product description

Aesthetical surface mounted luminaire suitable for 1xCDM-TD 70 Watt lamp.

MCS150 is aesthetically designed cylindrical Downlight suitable for 1XCDM-TD 70W lamp. The luminaire has a horizontal lamp position with high efficiency glossy reflector for better light distribution. It has an Electronic gear which provides an excellent lighting solution.

Features

- CRCA cylindrical housing providing good aesthetical appearance and robust Body.
- High efficiency glossy reflector for better light distribution.
- Electronic gear for better performance and longer life.

Applications

- Corridor
- Retail stores
- Internal passages

Mounting Type

Surface

Installation

Direct mounting onto RCC through a mounting section.

Technical data

Type	For lamp	Nominal voltage (V)	Recommended ballast	Main current (A)	Nominal power factor
MCS250/1xCDM-TD 70W HF	1x CDM-TD 70W	240	HID-CD 070/S CDM	0.35	0.95

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
MCS250/1xCDM-TD 70W HF	9194 158 10040	1	29.5 x 29.5 x 29.5	2.31	3	0.0257



Dimensional details



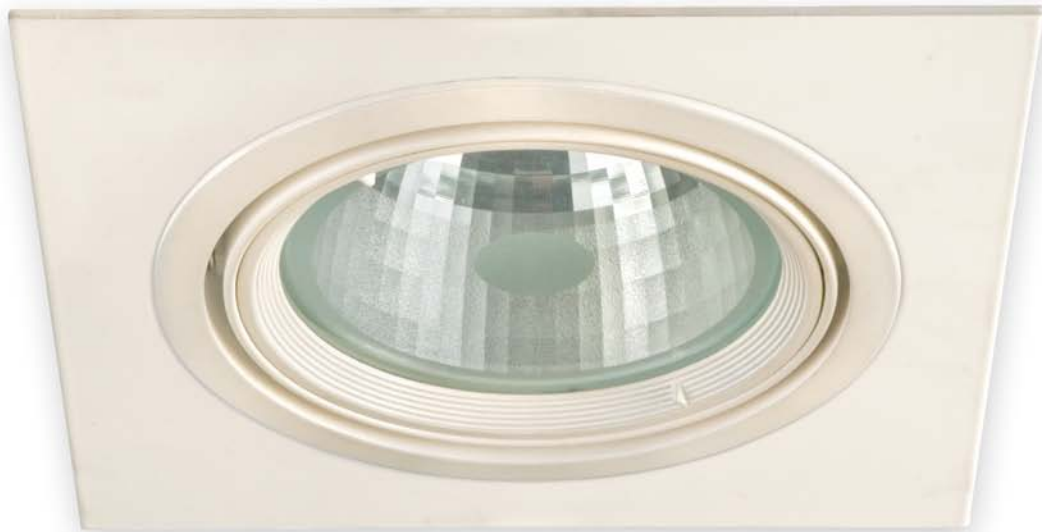
Frame Lights

Retail
Application

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Application

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Product description

Recessed mounted luminaire available in grid of 1, 2, 3 & 4 luminaires which can accommodate inserts suitable for ALR 111 50W, CDM-T35W and CDM-PAR35W.

'Framelights' are grid lights which are available in frames suitable for 1, 2, 3 or 4 adjustable luminaires, with a variety of lamp options, to suit the lighting requirement of different types of retail outlets as well as different and distinct applications. Framelights can be used for creating an excellent in store ambience as well as to create a contrast or accent effect. Framelights also offer an excellent freedom of configuration as any combination of Luminaire options (from the choice of options available) can be provided in any of the frames.

Features

- Pressure die-cast aluminium frame. Provides excellent finish and long life.
- Grid of 1, 2, 3 and 4 luminaires offering flexibility in designing.
- Option of three types of insert: ALR 111, CDM PAR, CDMT. Flexibility in design and option to choose from for various applications.

Applications

- Fashion stores
- Retail chains
- Receptions
- Corridors

Mounting Type

Recess

Installation

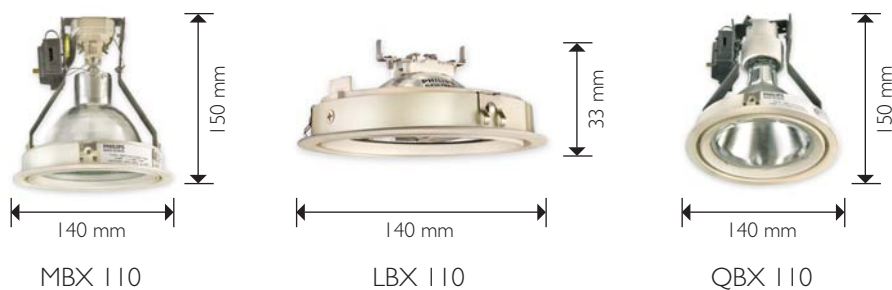
Direct mounting into false ceiling with the help of spring loaded clamp, inserts are self locking.

Technical data of luminaire inserts

Type	For lamp	Nominal voltage (V)	Recommended ballast	Main current (A)	Nominal power factor
LBX110/1xALU-111 50W	1 x Aluline-111 50W	240	ETK 50 Halolite	0.21	0.85
MBX110/1xCDM-T 35W	1 x CDM-T 35W	240	HID-PV C 035/S CDM	0.2	0.95
QBX110/1xPAR30	1 x CDM-R 35W	240	HID-PV C 035/S CDM	0.2	0.95

Ordering data of luminaire inserts

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
LBX110/1xALU-111 50W	919415810037	4	15.5 x 15.5 x 18	0.13	0.9	0.0043
MBX110/1xCDM-T 35W	919415810038	4	29.5 x 29.5 x 17	0.413	2.4	0.0148
QBX110/1xPAR30	919415810039	4	29.5 x 29.5 x 17	0.289	2	0.0148



Dimensional details of luminaire inserts

Ordering data of frames

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
GGH111	919415810033	4	39.5 x 20 x 17	0.205	1.8	0.0134
GGH122	919415810034	4	41 x 35.5 x 17	0.416	3.2	0.0247
GGH133	919415810035	4	53 x 41 x 17	0.544	4.5	0.0369
GGH144	919415810036	2	37.5 x 37.5 x 17	0.745	3	0.0239

Types of frames



GGH 111

Suitable for single luminaire

Frame material

Pressure die-cast aluminium

Outer dimensions

180 x 180 (mm)

Cutout dimensions

160 x 160 (mm)



GGH 122

Suitable for two luminaire

Frame material

Pressure die-cast aluminium

Outer dimensions

180 x 335 (mm)

Cutout dimensions

160 x 315 (mm)



GGH 133

Suitable for three luminaire

Frame material

Pressure die-cast aluminium

Outer dimensions

180 x 490 (mm)

Cutout dimensions

160 x 470 (mm)



GGH 144

Suitable for four luminaire

Frame material

Pressure die-cast aluminium

Outer dimensions

335 x 335 (mm)

Cutout dimensions

315 x 315 (mm)

Types of luminaire inserts



MBX 110

The luminaire is made of pressure die-cast aluminium and is suitable for lamp I x CDM-T 35W. The adjustable angle is 60 degrees with respect to horizontal.



LBX 110

The luminaire is made of pressure die-cast aluminium and is suitable for lamp I x ALULINE-111 50W. The adjustable angle is 60 degrees with respect to horizontal.



QBX 110

The luminaire is made of pressure die-cast aluminium and is suitable for lamp I x CDM-R 35W. The adjustable angle is 60 degrees with respect to horizontal.

Scrabble

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QBX/MBX500 1 lamp



QBX/MBX500 2 lamps



QBX/MBX500 3 lamps



QBX/MBX500 R111 4 lamps



QBX502/MBX502 R111 4 lamps

Product description

Recess mounted adjustable Downlight luminaire suitable for use with ceramic Metal Halide lamps: CDM-T, CDM-R, CDM-R III as well as Halogen lamps ALUline Pro-III (50W maximum).

Features

- Housing made of CRCA sheet steel painted black accommodating all electrical accessories, pre-wired up to the terminal block.
- Scrabble luminaire is available in one, two, three line versions for CDM-T and HAL R III lamps. Four lamp in square version is available in HAL R IIII and CDM-R III lamps.
- Choice of optics in 12° and 36° available in CDM-T versions. Reflector for CDM-T version is made of high grade Al in matte finish with suitable optics.
- The frames are available in white or silver color.
- Cradinac system allows the orientation of 40° in all directions.
- Stainless steel clips and removable Gear Tray offers ease of maintenance.

Applications

- Small and independent food / nonfood shops
- Hyper / super markets, discount stores, DIY stores
- High-end fashion shops
- Department stores, fashion shops
- Museums and art galleries

Mounting Type

Downlights and Accents

Installation

Designed for recess mounting on false ceilings. The luminaires can be mounted with the help of mounting clamps.

Compliances

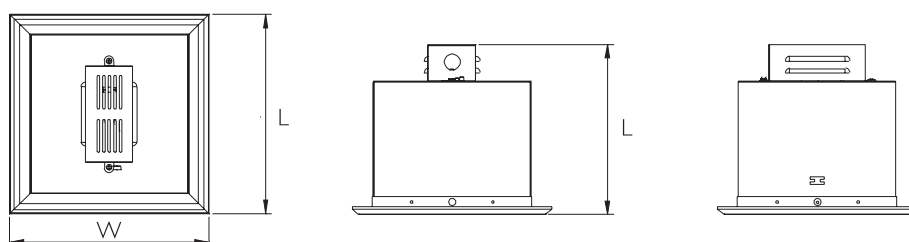
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
QBX500 1x50W WH	QR-111 - 50 W	240	–	0.85
QBX500 2x50W WH	QR-111 - 50 W	240	–	0.85
QBX500 3x50W WH	QR-111 - 50 W	240	–	0.85
QBX500 4x50W WH	QR-111 - 50 W	240	–	0.85
QBX502 4x50W WH	QR-111 - 50 W	240	–	0.85
MBX500 1x35W R WH	QR-111 - 50 W	240	0.53	0.85
MBX500 2x35W R WH	CDM-R PAR 35W	240	1.06	0.85
MBX500 3x35W R WH	CDM-R PAR 35W	240	1.59	0.85
MBX500 1x70W R WH	CDM-R PAR 35W	240	0.35	0.85
MBX500 2x70W R WH	CDM-R PAR 70W	240	0.70	0.85
MBX500 3x70W R WH	CDM-R PAR 70W	240	1.05	0.85
MBX500 1x35WTC WH 36D	CDM-R PAR 70W	240	0.53	0.85
MBX500 2x35WTC WH 36D	CDM-T35W	240	1.06	0.85
MBX500 3x35WTC WH 36D	CDM-T35W	240	1.59	0.85
MBX500 1x70WTC WH 36D	CDM-T35W	240	0.35	0.85
MBX500 2x70WTC WH 36D	CDM-T70W	240	0.70	0.85
MBX500 3x70WTC WH 36D	CDM-T70W	240	1.05	0.85

CRM-R111 version available on request.

Ordering data: Available on request.



Technical Drawing





Type		L(mm)	W(mm)	H(mm)
MBX500TC / MBX500 R	1 lamp	251	251	223
	2 lamps	441	251	223
	3 lamps	629	251	223
QBX500 / QBX502	1 lamp	204	204	150
	2 lamps	346	204	150
	3 lamps	448	204	150
	4 lamps(line)	630	204	150
	4 lamps(square)	356	356	150
MBX500 R I I I	1 lamp	204	204	190
	2 lamps	346	204	190
	3 lamps	448	204	190
	4 lamps(line)	630	204	190
	4 lamps(square)	356	356	190

MCN 810

Retail
Application

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Product description

Adjustable projectors with integrated control gear and aluminium reflector (36 focusable to 24), for master color CDM-T for direct mounting on a base plate.

Features

- Steel body with aluminium reflector.
- Lamp socket for CDM-T G12 type.
- Integrated gear (compensated).
- Orientation of 350° horizontal and 90° vertical possible.
- Available in white color.

Applications

- Discount stores, hyper / super markets, do-it-yourself shops
- Department store, shops and boutiques

Mounting Type

Downlights and Accents

Installation

- Mounting direct on ceilings, safety distance 0.8m.
- Direct lamp access for maintenance.
- Front glass to be removed for CDM-T.

Compliances

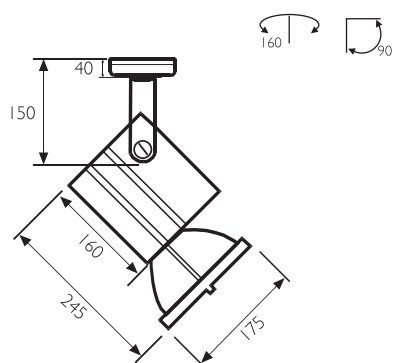
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal Power factor
MCN810 C IXCDM-T70W IC WH	MCN810 C IXCDM-T70W IC WH	240	0.45	0.9
MCN810 C IXCDM-T150W IC WH	MCN810 C IXCDM-T150W IC WH	240	0.85	0.9

Ordering data

Available on request.



Technical Drawing



QBS 652

**Retail
Application**

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Product description

Recessed Downlights suitable for use with 1 X 12V-50W (maximum) low voltage Halogen Dichroic lamp in GX 5.3 base. To be used with a separate transformer.

Features

- Ceiling ring made of mild steel.
- Two adjustable mounting clips, made of stainless steel for mounting the ring.
- A swivelling unit comprising an aluminium housing pressure die-cast, attached to a circular ring, made of mild steel (in case of DN 64I and DN 652). To retain the lamp in position, a circular wire spring is provided inside the aluminium housing.
- A nylon connector system for electrical connection.

Applications

- Representative offices
- Conference rooms
- Small independent food and non-food shops
- High-end fashion shops, boutiques

Mounting Type

Downlights and Accents

Installation

Designed for recessed mounting on false ceilings, these luminaires can be mounted with the help of flexible mounting clamps.

Compliances

- IP 20
- Class I



QBS 64I



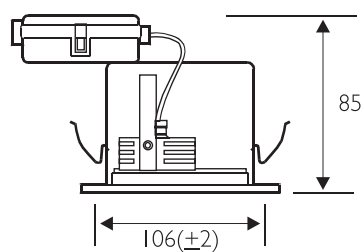
QBS 65I

Technical data

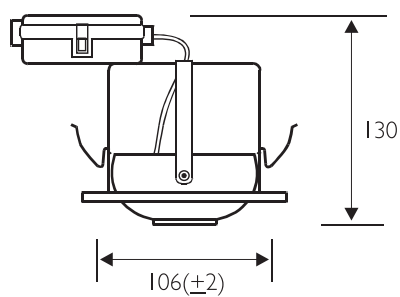
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
QBS651 M IXHAL-MR50-50W E-HF 12V WH	IXHAL-MR50	240	0.22	0.85
QBS652 IXHAL-MR50-50W E-HF 12V WH	IXHAL-MR50	240	0.22	0.85
QBS641 IXHAL-MR50-50W E-HF 12V WH	IXHAL-MR50	240	0.22	0.85



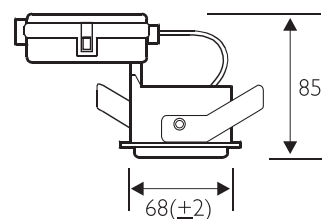
QBS 641



QBS 652



QBS 651



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
QBS651 M IXHAL-MR50-50W E-HF 12V WH	919215000035	8	385x305x205	0.2	2.3	0.024
QBS652 IXHAL-MR50-50W E-HF 12V WH	919215000036	8	605x305x205	0.3	3.3	0.024
QBS641 IXHAL-MR50-50W E-HF 12V WH	919215000040	8	605x305x205	0.3	3.3	0.024



Nova - QBS 050

**Retail
Application**

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Product description

Recess mounted Downlights suitable for use with 1X12V 50W (maximum) low voltage Halogen Dichroic lamp in GX 5.3 base. To be used with separate electronic transformer.

Features

- Body made of die-cast Al for white and black colored luminaire.
- Body made of die-cast Zinc alloy for gold and silver colored luminaire.
- Available in fixed and adjustable version.
- Orientation
 - QBS 050 - Fixed
 - QBS 051 - Vertical 35°
 - QBS 052 - Vertical 35°, Horizontal 35°
 - QBS 058 - Vertical 15°
- Custom designed twist and pull face plate for easy lamp access.

Applications

- Restaurants and bars • Conference rooms
- Public areas and lobbys • Fashion shops • Jewelry shops

Mounting Type

Downlights and Accents

Installation

Designed for recess mounting on false ceilings. The luminaires can be mounted with the help of spring clamps.

Compliances

- IP 20
- Class I



QBS 051

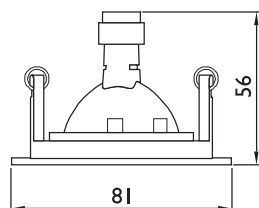
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
QBS058 MAX50W-GU5.3 12V WH IN	12v/50w	240	0.22	0.85
QBS051 MAX50W-GU5.3 12V SI IN	12v/50w	240	0.22	0.85
QBS050 MAX50W-GX5.3 12V SI IN	12v/50w	240	0.22	0.85
QBS050 MAX50W-GX5.3 12V WH IN	12v/50w	240	0.22	0.85
QBS050 MAX50W-GX5.3 12V GO IN	12v/50w	240	0.22	0.85
QBS050 MAX50W-GX5.3 12V BK IN	12v/50w	240	0.22	0.85
QBS051 MAX50W-GU5.3 12V WH IN	12v/50w	240	0.22	0.85
QBS051 MAX50W-GU5.3 12V GO IN	12v/50w	240	0.22	0.85
QBS051 MAX50W-GU5.3 12V BK IN	12v/50w	240	0.22	0.85
QBS052 MAX50W-GU5.3 12V SI IN	12v/50w	240	0.22	0.85
QBS052 MAX50W-GU5.3 12V WH IN	12v/50w	240	0.22	0.85
QBS052 MAX50W-GU5.3 12V GO IN	12v/50w	240	0.22	0.85

Ordering data: Available on request.

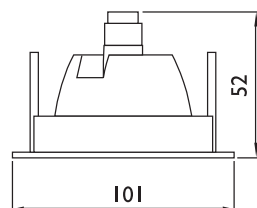


QBS050



Fixed range
Cut-out diameter: 68 ~ 71mm

QBS051

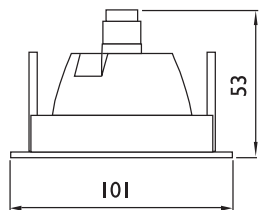


Adjustable range: Vertical 35
Cut-out diameter: 92 ~ 95mm

Technical Drawing



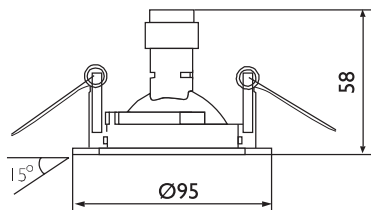
QBS052



Adjustable range:
Vertical 35, Horizontal 355
Cut-out diameter: 92 ~ 95mm

Technical Drawing

QBS058



Adjustable range : Vertical 15
Cut-out diameter : 86 ~ 89 mm

**Retail
Application**

Page 21



Product description

Decorative and easy to install decobay indoor luminaire with integral control gear. Available in PLC 26W and CDM-T 70W lamp versions.

The luminaire is supplied with 1 metre "Y" type suspension with micrometric clutch which can be used for the adjustment of height. In CDM- T lamp version, the Polycarbonate prismatic dome is supplied along with Polycarbonate cover and in CFL lamp version, only the dome is supplied.

Features

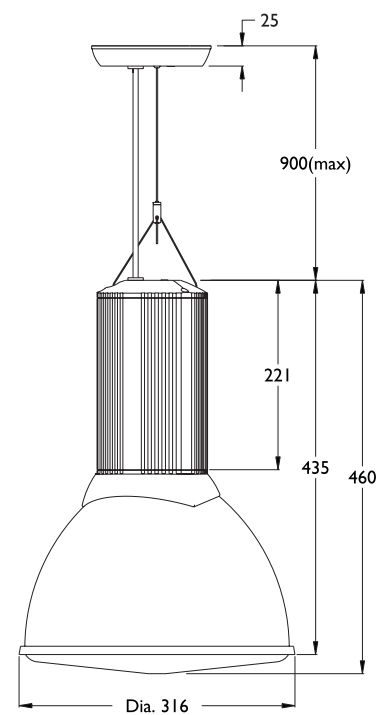
- Housing made up of extruded Al with silver gray powder coating.
- The luminaire is supplied along with special prismatic Polycarbonate dome for providing functional as well as Uplighting to create a good visual ambience.
- Gear Tray inside housing contains all the electrical accessories, all pre-wired up to terminal block.
- Special suspension with micrometric clutch for height adjustment.

Applications

- Small independent shops
- Department stores and fashion shops
- Discount stores, Hyper / Supermarkets
- Reception and public service areas

Installation

- Designed for mounting on ceiling with suspension wire along with ceiling mounting plate.
- 1 metre "Y" type suspension with micrometric clutch adjustment of height Polycarbonate prismatic dome with serrations from inside for more uniform lighting, less dust deposition and higher maintained light output.



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FPK550 1XPL-C/4P26W HFB	1XPL-C/4P26W	240	0.12	0.95
FPK550 1XPL-C/2P26W I 240V	1XPL-C/2P26W	240	0.37	0.45
FPK550 2XPL-C/4P26W HFB	2XPL-C/4P26W	240	0.24	0.95
FPK550 2XPL-C/2P26W I	2XPL-C/2P26W	240	0.74	0.45
MPK550 1XCDCM-T70W HF PR	1XCDCM-T70W	240	0.34	0.95
MPK550 1XCDCM-T70W EM PR	1XCDCM-T70W	240	0.45	0.85

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FPK550 1XPL-C/4P26W HFB	919015255258	1	310x215x215	2.12	2.78	0.014
FPK550 1XPL-C/2P26W I 240V	919015255259	1	310x215x215	2.12	2.78	0.014
FPK550 2XPL-C/4P26W HFB	919015255260	1	310x215x215	2.64	3.41	0.014
FPK550 2XPL-C/2P26W I	919015255266	1	310x215x215	2.64	3.41	0.014
MPK550 1XCDCM-T70W EB	919015255256	1	310x215x215	2	2.64	0.014
MPK550 1XCDCM-T70W IC 240V	919015255257	1	310x215x215	2.95	3.7	0.014
GPK550 PCR	919015255264	5	310x315x315	2.95	3.58	0.030
ZPK550 PC	919015255267	10	320x320x160	2.76	3.33	0.016



TBS 207

Retail
Application

Page 21



Product description

Recess mounted luminaire suitable for TLD and PLL 36W lamps for vertical lighting with asymmetric light distribution for indoor application.

Showcasing the merchandise is a key requirements in retail environment. The merchandise is arranged on vertical spaces in majority of the cases. TBS 207 with it's asymmetric distribution and variety of lamp options in T5, TLD and DLL range offers the perfect solution.

Features

- Housing made up of CRCA sheet steel, powder coated white accommodating all electrical accessories pre-wired up to a terminal block.
- Asymmetric light distribution offers high vertical light levels for rack / shelf.
- Suitable for TLD / PLL 36W in twin lamp version.

Applications

- Discount stores, hyper / supermarkets
- High end fashion shops, boutiques
- Departmental stores, fashion shops
- Reception and public service areas

Mounting Type

Downlights and Accents

Installation

Designed for mounting on POP ceilings.

Compliances

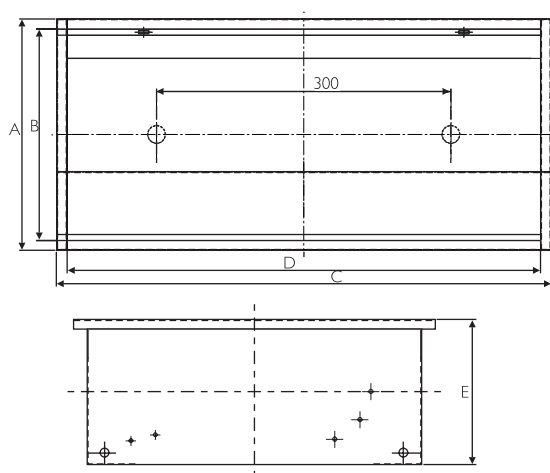
- IP 20
- Class I



FBS 207

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS207 2XTL-D36W HF A	2XTL-D36W	240	0.3	0.98
TBS207 1XTL-D36W HFB A	1XTL-D36W	240	0.16	0.98
TBS 207 2XTLD 36W A HF EBT 236	2XTLD 36W	240	0.3	0.98
FBS207 2XPL-L36W EB A				



Product	A	B	C	D	E
TBS 207 / 236	295	271	1246	1224	119
FBS 207 / 236	295	271	524	500	119

Technical Drawing



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS207 2XTL-D36W HF A	919015042994	2	1285x330x280	3.6	8.4	0.118
TBS207 1XTL-D36W HFB A	919015042997	2	1285x330x280	3.6	8.4	0.118
TBS 207 2XTLD 36W A HF EBT 236	919015810230	2	1285x330x280	3.6	8.4	0.118
FBS207 2XPL-L36W EB A	441536074811	2	565x330x280	3.3	7.8	0.118





Product specification

Product description and technical details





















Office

Product specification

Office Luminaires

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Sereno - TPH 824 / TPS 814

Office
Application

Page 07



Product description

Philips Sereno, a range of office luminaires with a wide range of optics specially designed to meet the highest standard of work place lighting.

Sereno luminaires offer the latest technology for high comfort and optical efficiency in a miniature profile. Sereno is available in surface / suspended and wall mounted versions in a variety of dedicated optics such as D8 Mirrors, Opal Diffuser and indirect optics.

Sereno offers the best combination of performance, energy efficiency, aesthetics and flexibility of designing.

SUSPENDED



TPH 824 OD HF



TPH 824 OD HF



TPH 824 I HF



TPS 814/414 D8 HF



TPS 814/414 D8 HF

Features

- Suitable for surface / suspension / wall mounting (depending on version).
- D8 Micro-optics with excellent glare control, designed for UGR 19 (in D8 versions).
- OD optics for diffused direct lighting (in OD versions).
- Indirect optics for high comfort indirect lighting (in indirect versions).
- The high efficiency optical system offers the best package for excellent uniformity and glare control.

Applications

- Software offices / Corporate offices
- Receptions and lobbies
- Schools and colleges
- Open plan offices / Executive cabins
- Conference rooms

Mounting Type

Surface mounted / suspended luminaires

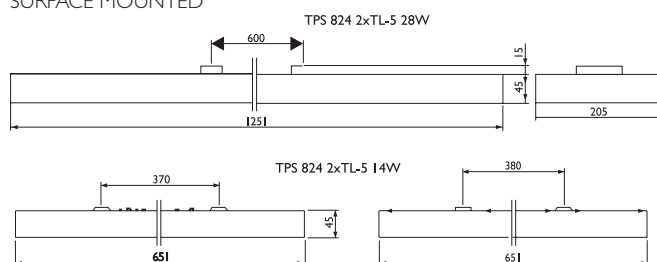
Installation

- Suspension arrangement for TPH 824 range with optional suspension accessory.
- Wall mounting arrangement for TPH 824 range with optional wall mounting bracket.
- Direct surface mounting for TPS 814 range.

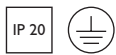
Compliances

- IP 20
- Class I

SURFACE MOUNTED

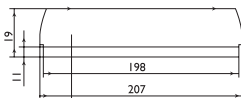
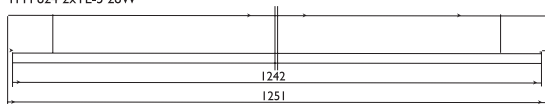


Technical Drawing

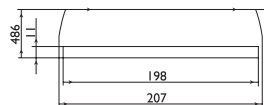
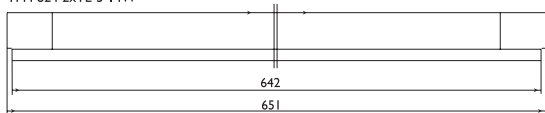


SUSPENDED

TPH 824 2xTL-5 28W



TPH 824 2xTL-5 14W



FOR INDIRECT & CD VERSIONS VIEW & DIMENSIONS WILL BE SAME

Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
Surface Mounted				
TPS814 4XTL5-14W EBP D8	4XTL5-14W	240	0.28	0.98
TPS814 2XTL5-28W EBP D8	2XTL5-28W	240	0.27	0.98
TPS814 2XTL5-54W EBP D8	2XTL5-54W	240	0.5	0.98
Recessed Mounted				
TPH824 2XTL5-28W EBP D/I D8	2XTL5-28W	240	0.27	0.98
TPH824 2XTL5-14W EBP D/I D8	2XTL5-14W	240	0.14	0.98
TPH824 2XTL5-54W EBP D/I D8	2XTL5-54W	240	0.5	0.98
TPH824 2XTL5-28W EBP IND	2XTL5-28W	240	0.27	0.98
TPH824 2XTL5-14W HF IND	2XTL5-14W	240	0.14	0.98
TPH824 2XTL5-54W EBP IND	2XTL5-54W	240	0.5	0.98
TPH824 2XTL5-14W HF OD	2XTL5-14W	240	0.14	0.98
TPH824 2XTL5-28W EBP OD	2XTL5-28W	240	0.27	0.98
TPH824 2XTL5-54W EBP OD	2XTL5-54W	240	0.5	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
Surface Mounted						
TPS814 4XTL5-14W EBP D8	919015067126	2	720x720x130	5.3	12	0.094
TPS814 2XTL5-28W EBP D8	919015067127	2	1320x275x130	4	9.5	0.047
TPS814 2XTL5-54W EBP D8	919015067135	2	1320x275x130	4	9.5	0.047
Suspended						
TPH824 2XTL5-28W EBP D/I D8	919015067124	2	1350x307x130	3	7.4	0.053
TPH824 2XTL5-14W EBP D/I D8	919015067125	2	750x307x130	2	5.5	0.053
TPH824 2XTL5-54W EBP D/I D8	919015067132	2	1350x307x130	3	7.4	0.053
TPH824 2XTL5-28W EBP IND	919015067128	2	1350x307x130	2.6	6.5	0.053
TPH824 2XTL5-14W HF IND	919015067129	2	750x307x130	2	5	0.029
TPH824 2XTL5-54W EBP IND	919015067134	2	1350x307x130	2.6	6.5	0.053
TPH824 2XTL5-14W HF OD	919015067130	2	750x307x130	2	5	0.053
TPH824 2XTL5-28W EBP OD	919015067131	2	1350x307x130	2.7	6.8	0.053
TPH824 2XTL5-54W EBP OD	919015067133	2	1350x307x130	2.7	6.8	0.053
ZPH524 SM2	919015940114	1	170x155x75	0.2	0.3	-
ZPH525 CP	919015940115	4 SETS	170x155x75	0.5	0.7	-
ZWH526 MBW	919015940116	2	270x75x75	-	-	-
ZWH527 MBW	919015940117	2	370x75x75	-	-	-

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Artisto

Office
Application

Page 07



Product description

Sleek and asthetically superior suspended luminaires with Direct / Indirect lighting options suitable for TL-5 28 watt and T1-5 54 Watt lamps.

Artisto is a comprehensive family of suspended range of T5 luminaires for office lighting applications. Extruded aluminium housing with asthetic PDC end caps and PMMA diffuser offer an excellent ambient light experience. Artisto is avaiable in four different shapes.



TPS 610



TPS 611



TPS 618



TPS 643

Features

- The housing is made of extruded aluminium with pressure die-cast aluminium end caps (wherever applicable), which gives it a smooth as well as rich look.
- The diffuser is made of thick PMMA of very high quality to get excellent diffused lighting experience. The PMMA is easy to handle as well as simple to maintain.
- 'Artisto' is designed for TL5 - 28W and TL5 - 54W lamp options, with electronic Ballasts only.
- Electronic, high frequency performer Ballast is provided with the luminaires. Power factor would be approx. 0.99.
- Aesthetically designed and modern 2 suspension system with micrometric clutch for height adjustment along with suspension cups are provided with the luminaires. The suspension system is safe, easy to handle, simple to install and trouble free.

Applications

- Office
- Conference Rooms

Mounting Type

Suspended

Installation

Direct mounting on ceiling.

Compliances

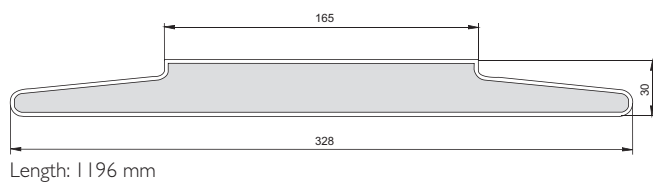
- IP 20
- Class I



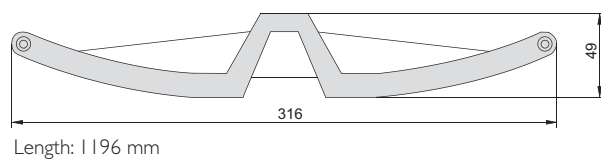
Technical data

Type	For lamp	Nominal voltage (V)	Recommended Ballast	Main current (A)	Nominal power factor
TPS 610 2x28W TL-5 DI HFP	2 x 28W TL-5	240	1 X HFP 14-35 TL5	0.27	0.99
TPS 611 2x28W TL-5 DI HFP	2 x 28W TL-5	240	1 X HFP 14-35 TI5	0.27	0.99
TPS 618 2x28W TL-5 DI EBP	2 x 28W TL-5	240	1 X EBP 228	0.27	0.99
TPS 643 2x28W TL-5 IND EBP	2 x 28W TL-5	240	1 X EBP 228	0.27	0.99
TPS 610 2x54W TL-5 DI HFP	2 x 54W TL-5	240	1 X HFP 254 TI5	0.50	0.99
TPS 611 2x54W TL-5 DI HFP	2 x 54W TL-5	240	1 X HFP 254 TL5	0.50	0.99
TPS 618 2x54W TL-5 DI EBP	2 x 54W TL-5	240	1 X EBP 254	0.46	0.99
TPS 643 2x54W TL-5 IND EBP	2 x 54W TL-5	240	1 X EBP 254	0.46	0.99

TPS 610



TPS 611



Technical Drawing

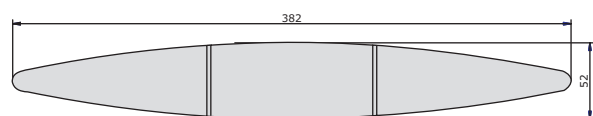
Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TPS 610 2x28WTL-5 DI HFP	9190 158 10139	1	1280 x 400 x 85	5.0	6.0	0.0430
TPS 611 2x28WTL-5 DI HFP	9190 158 10140	1	1280 x 400 x 120	2.5	3.5	0.0614
TPS 618 2x28WTL-5 DI EBP	9190 158 10141	1	1280 x 470 x 130	2.2	5.5	0.0782
TPS 618 2x28WTL-5 DI EBP	9190 158 10142	1	1380 x 220 x 90	1.6	2.6	0.0273
TPS 610 2x54WTL-5 DI HFP	9190 158 10157	1	1280 x 400 x 85	5.0	6.0	0.0430
TPS 611 2x54WTL-5 DI HFP	9190 158 10158	1	1280 x 400 x 120	2.5	3.5	0.0614
TPS 618 2x54WTL-5 DI EBP	9190 158 10159	1	1280 x 470 x 130	2.2	5.5	0.0782
TPS 643 2x54WTL-5 IND EBP	9190 158 10160	1	1380 x 220 x 90	1.6	2.6	0.0273

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

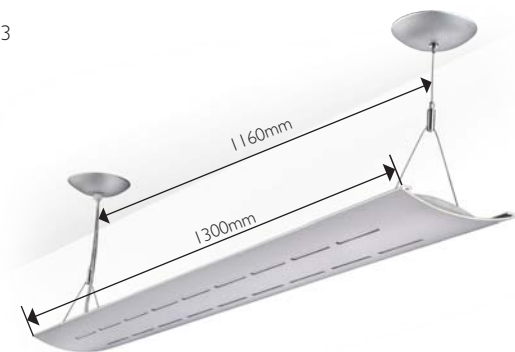


TPS 618



Length: 1196 mm

TPS 643



Length: 1300 mm

Technical Drawing

X-tend - TCS 398

Office
Application

Page 07



Product description

High performance surface mounted mirror optic range for T8 and T5 lamps. X-tend family uses the patented revolutionary technology of 3D OLC (Omni-directional Luminance Control) lamellae which make the X-tend system very efficient and achieve excellent glare control. X-tend is available with 4 different lamellae options.

Surface mounted X-tend is single compartment version TBS 399.



TCS 399 2xTL-D36 M2



TCS 399 2xTL-D M6

Features

- Compact luminaire height of 79 mm.
- Suitable for surface mounting on ceilings.
- 3 types of louvers M2, M6 and D6.
- 3D OLC lamellae, with excellent glare control, provides freedom in interior design.
- The concave shapes of the lamellae provides excellent light technical performance i.e. high efficiency and good uniformity.
- Housing made of epoxy polyester powder coated CRCA sheet, with perforated in-fill panel.
- Choice of optics in
 - M2 : Decorative optic with high efficiency, realised via the side and end reflectors, optimised geometry, and matte aluminium cross lamellae of fine quality material, with a concaved lower contour and a tapered ripple effect which provide pleasant illuminance over the optics opening.
 - M6 : Matte optic for all round glare and beam control. This makes the optic specially suited to areas with occasional monitor use. The high efficiency of this optic is realised via the side and end reflector's optimised geometry, and registered, uniquely designed 3D cross lamellae with a Fresnel structure on the lamellae saddle and a concaved lower contour. This matte OLC optic better the glare recommendations.
 - D6 : High-gloss optic for all round glare and beam control. This makes this optic specially suited to areas with intensive monitor use. The high efficiency of this optic is realised via the side and end reflector's optimised geometry, and the registered, uniquely designed 3D cross lamellae, with a Fresnel structure on the lamellae saddle and a concaved lower contour. The high gloss OLC optic better the glare recommendations.

Applications

- Representative offices • Reception and public service areas
- General offices, schools • Recreational areas (restaurants, cafeterias)
- Corridors and staircases • Department stores, boutiques

Mounting Type

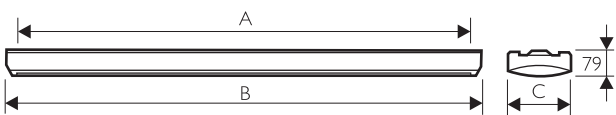
Surface mounted luminaires

Installation

Suspension via hooks or chains

Compliances

- IP 20 • Class I



Type	A	B	C
TCS 399 2xTL-D 36W	1263	1310	195
TCS 398 2xTL-D 36W	1263	1310	311

Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCS398 M 2XTL-D36W IC M2	2xTL-D36W	240	0.46	0.9
TCS398 M 2XTL-D36W IC M6	2xTL-D36W	240	0.46	0.9
TCS398 M 2XTL-D36W IC D6	2xTL-D36W	240	0.46	0.9
TCS398 M 2XTL-D36W IC M-DGN	2xTL-D36W	240	0.46	0.9
TCS398 2XTLD 36W D6 EBT	2xTL-D36W	240	0.32	0.98
TCS398 2XTLD 36W MDGN EBT	2xTL-D36W	240	0.32	0.98
TCS398 2XTLD 36W M2 EBT	2xTL-D36W	240	0.32	0.98
TCS398 2XTLD 36W M6 EBT	2xTL-D36W	240	0.32	0.98
TCS399 M 2XTL-D36W IC HIL M2	2xTL-D36W	240	0.46	0.9
TCS399 M 2XTL-D36W IC HIL M6	2xTL-D36W	240	0.46	0.9
TCS399 M 2XTL-D36W IC HIL D6	2xTL-D36W	240	0.46	0.9
TCS399 2XTLD-36W IC HIL M-DGN	2xTL-D36W	240	0.46	0.9
TCS399 2XTLD 36W D6 EBT	2xTL-D36W	240	0.32	0.98
TCS399 2XTLD 36W M6 EBT	2xTL-D36W	240	0.32	0.98
TCS399 2XTLD 36W M2 EBT	2xTL-D36W	240	0.32	0.98
TCS399 2XTLD-36W EBT HIL M-DGN	2xTL-D36W	240	0.32	0.98

*TCS 399 is a compact version of surface mounted X-tend with twin lamps placed in single lamp compartment.

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS398 M 2XTL-D36W IC M2	919015088208	1	1390x325x90	5.2	6.2	0.040
TCS398 M 2XTL-D36W IC M6	919015088210	1	1390x325x90	5.2	6.2	0.040
TCS398 M 2XTL-D36W IC D6	919015088212	1	1390x325x90	5.2	6.2	0.040
TCS398 M 2XTL-D36W IC M-DGN	919015088336	1	1390x325x90	5.2	6.2	0.040
TCS398 2XTLD 36W D6 EBT	919015810203	1	1390x325x90	5	6	0.040
TCS398 2XTLD 36W MDGN EBT	919015810204	1	1390x325x90	5	6	0.040
TCS398 2XTLD 36W M2 EBT	919015810208	1	1390x325x90	5	6	0.040
TCS398 2XTLD 36W M6 EBT	919015810209	1	1390x325x90	5	6	0.040
TCS399 M 2XTL-D36W IC HIL M2	919015088214	1	1390x207x90	4.1	5	0.025
TCS399 M 2XTL-D36W IC HIL M6	919015088216	1	1390x207x90	4.1	5	0.025
TCS399 M 2XTL-D36W IC HIL D6	919015088218	1	1390x207x90	4.1	5	0.025
TCS399 2XTLD-36W IC HIL M-DGN	919015088341	1	1390x207x90	4.1	5	0.025
TCS399 2XTLD 36W D6 EBT	919015810206	1	1390x207x90	3.9	4.9	0.025
TCS399 2XTLD 36W M6 EBT	919015810207	1	1390x207x90	3.9	4.9	0.025
TCS399 2XTLD 36W M2 EBT	TBA	1	1390x207x90	3.9	4.9	0.025
TCS399 2XTLD-36W EBT HIL M-DGN	TBA	1	1390x207x90	3.9	4.9	0.025

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Line Light

Office
Application

Page 07

Retail
Application

Page 21



Product description

Linear lighting solution for surface, suspended and recessed mounting suitable for energy efficient TL-5 28 Watt and TL-5 54 Watt. Single and twin lamp version available.

Line Light lighting solution is linear lighting solution suitable for use in variety of Indoor applications. It's sleek design, elegant looks complement any interior architecture and visual effect. Line Light offers the unique flexibility of continuous mounting or standalone mounting in lengths of 4ft and 8ft. Linelight comes with the option of MI and diffused O.D. optics.



TBX Range Diffused

TPX Range Mirror

Features

- The housing is made of extruded aluminium with pressure die-cast aluminium end caps (wherever applicable), which gives it a smooth as well as rich look.
- The diffuser is made of thick PMMA of very high quality to get excellent diffused lighting experience. The PMMA is easy to handle as well as simple to maintain.
- 'Artisto' is designed for TL5 - 28W and TL5 - 54W lamp options, with electronic ballasts only.
- Electronic, high frequency performer ballast is provided with the luminaires. Power factor would be approx. 0.99.
- Aesthetically designed and modern 2 suspension system with micrometric clutch for height adjustment along with suspension cups are provided with the Luminaires. The suspension system is safe, easy to handle, simple to install and trouble free.

Applications

- Office • Corridors • Retails • General interiors

Mounting Type

- Surface mounted suspended • Recessed

Installation

- Direct suspension/mounting on ceiling with the help of suspension system.
- Recessed mounting.

Line Light 8feet and continuous version

Line Light 8 ft and continuous version are available in both recessed as well as surface/suspended mounting option either with mirror optics or with diffuser. Both single lamp per luminaire or twin lamps per luminaire option is available. Joining plates are used for perfectly aligning the successive units of Line Light in continuous version. The total length of the housing in case of 8 ft version is 2233mm for single lamp per luminaire series and 2485mm for twin lamp per luminaire series. The length of the individual housing units in case of continuous version is 1200mm, for all variants. Continuous line of Line Light luminaires are formed by joining successive housing units of Line Light with joining plates and then by attaching the required Gear Trays and end plates. In both 8 ft as well as continuous version, the housing and Gear Tray are designed in such a way that the lamps within the luminaires overlap with each other to eradicate any possibility of dark patch between luminaire units.

Accessories



Mounting Clamp

Durable, stainless steel mounting clamps are provided with Line Light units. The clamps are aesthetically superior and are easy to install and maintain. The position of the clamps are adjustable and can be varied as per requirement by gliding the clamps through the clamp slots provided in the housing.



Optics

Both diffuser and MI mirror options are available across 8ft as well as continuous versions.

Diffusers

High quality acrylic diffusers are provided with Line Light - diffused versions for shielding the lamps within the Luminaire units and for providing an excellent diffused lighting experience. The diffusers have high durability and are flushed with the housing in such a way that they are easy to remove for Lamp maintenance.



MI mirror version

Aesthetically superior painted lamellae are provided in the MI mirror optics version.



In 8feet and continuous versions, the Gear Trays of successive housing units overlap with each other. As a consequence, the lamps also overlap with each other thus eradicating the possibility of any dark patch, between the luminaire units.



End plates

CRCA end plates, powder coated of high durability are provided with Line Light units. The end plates are fixed at the ends of the last luminaire units on both sides in both 8ft and continuous versions.



Line Light Unit

A continuous Line Light system is formed by joining the required number of individual Line Light units (of continuous type) together with the help of joining plates. The joining plates ensure that the alignment of the successive luminaire units are perfect.

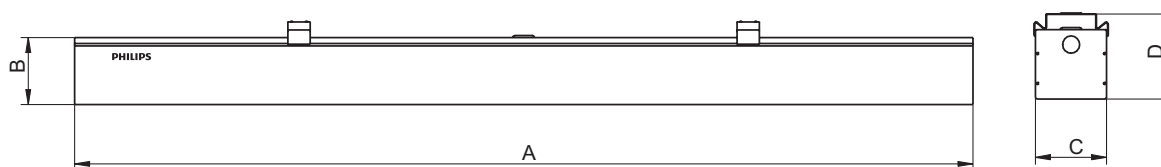
Accessories



Gear Tray

Gear Tray made of CRCA and painted with high reflective paint is provided with Line Light units. Four different Gear Tray options are available in the Line Light range which are GGX 310, GGX 320, GGX 610 and GGX 620. GGX 310 and GGX 320 are single lamp Gear Trays for Line Light single lamp per luminaire series, for diffuser version and mirror version respectively. Similarly GGX 610 and GGX 620 are twin lamp Gear Trays for Line Light twin lamp per luminaire series for diffuser version and mirror version respectively. Same Gear Trays are used in both 8ft. and continuous version.

TPX 321 RANGE

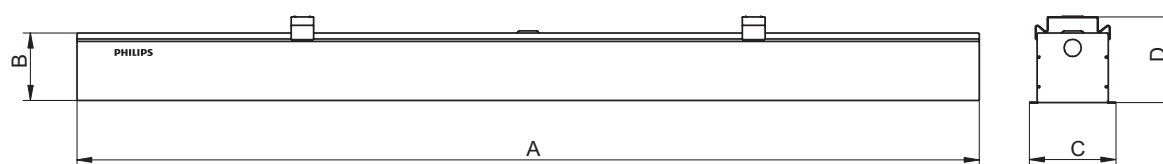


	A (mm)	B (mm)	C (mm)	D (mm)
TPX310/TPX320	1200	90	95	112
TPX311/TPX321	1183	90	95	112
TPX312/TPX322	2233	90	95	112
TPX610/TPX620	1200	90	150	112
TPX611/TPX621	1183	90	150	112
TPX612/TPX622	2485	90	150	112

Technical Drawing



TPX 31 I RANGE



	A (mm)	B (mm)	C (mm)	D (mm)
TBX310/TBX320	1200	90	110	112
TBX311/TBX321	1183	90	110	112
TBX312/TBX322	2233	90	110	112
TBX610/TBX620	1200	90	160	112
TBX611/TBX621	1183	90	160	112
TBX612/TBX622	2485	90	160	112

Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Recommended ballast	Main current (A)	Nominal power factor
TPX 310 1X28/54WTL-5 O-SAT	—	—	—	—	—
TPX 311 1X28WTL-5 EBP O-SAT	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
TPX 312 1X28/54WTL-5 O-SAT	—	—	—	—	—
TPX 320 1X28/54WTL-5 MI	—	—	—	—	—
TPX 321 1X28WTL-5 EBP MI	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
TPX 322 1X28/54WTL-5 MI	—	—	1 x EBP 128	—	—
TPX 610 2X28/54WTL-5 O-SAT	—	—	—	—	—
TPX 611 2X54WTL-5 EBP O-SAT	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
TPX 612 2X28/54WTL-5 O-SAT	—	—	—	—	—
TPX 620 2X28/54WTL-5 MI	—	—	—	—	—
TPX 621 2X54WTL-5 EBP MI	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
TPX 622 2X28/54WTL-5 MI	—	—	—	—	—
TBX 310 1X28/54WTL-5 O-SAT	—	—	—	—	—
TBX 311 1X28WTL-5 EBP O-SAT	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
TBX 312 1X28/54WTL-5 O-SAT	—	—	—	—	—
TBX 320 1X28/54WTL-5 -MI	—	—	—	—	—
TBX 321 1X28WTL-5 EBP MI	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
TBX 322 1X28/54WTL-5 MI	—	—	—	—	—
TBX 610 2X28/54WTL-5 O-SAT	—	—	—	—	—
TBX 611 2X54WTL-5 EBP O-SAT	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
TBX 612 2X28/54WTL-5 O-SAT	—	—	—	—	—
TBX 620 2X28/54WTL-5 MI	—	—	—	—	—
TBX 621 2X54WTL-5 EBP MI	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
TBX 622 2X28/54WTL-5 MI	—	—	—	—	—
GGX 310 1X28WTL -5 EBP O- SAT	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
GGX 310 1X54WTL -5 EBP O- SAT	1 x TL5 54W	240	1 x EBP 154	0.25	0.99
GGX 320 1X28WTL -5 EBP MI	1 x TL5 28W	240	1 x EBP 128	0.135	0.99
GGX 320 1X54WTL -5 EBP MI	1 x TL5 54W	240	1 x EBP 154	0.25	0.99
GGX 610 2X28WTL -5 EBP O- SAT	2 x TL5 28W	240	1 x EBP 228	0.27	0.99
GGX 610 2X54WTL -5 EBP O- SAT	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
GGX 620 2X28WTL -5 EBP MI	2 x TL5 28W	240	1 x EBP 228	0.27	0.99
GGX 620 2X54WTL-5 EBP MI	2 x TL5 54W	240	1 x EBP 254	0.5	0.99
ZTX 310 EP	—	—	—	—	—
ZTX 320 EP	—	—	—	—	—
9190 158 10165 ZTX 610 EP	—	—	—	—	—
9190 158 10170 ZTX 620 EP	—	—	—	—	—

Note: Details of all other 1 x TL5 28W, 2 x TL5 28W, 1 x TL5 54W and 2 x TL5 54W Line Light luminaire codes would be made available on request.

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TPX 310 1X28/54WTL-5 O-SAT	9190 158 10133	4	1255x275x265	2.43	14.00	0.089
TPX 311 1X28WTL-5 EBP O-SAT	9190 158 10134	4	1255x275x265	3.42	17.98	0.089
TPX 312 1X28/54WTL-5 O-SAT	9190 158 10135	2	1255x275x265	4.61	13.53	0.089
TPX 320 1X28/54WTL-5 MI	9190 158 10136	4	1255x275x265	2.51	14.36	0.089
TPX 321 1X28WTL-5 EBP MI	9190 158 10137	4	1255x275x265	3.28	17.42	0.089
TPX 322 1X28/54WTL-5 MI	9190 158 10138	2	1255x275x265	4.81	13.91	0.089
TPX 610 2X28/54WTL-5 O-SAT	9190 158 10171	4	1290x390x235	3.73	19.37	0.094
TPX 611 2X54WTL-5 EBP O-SAT	9190 158 10172	4	1290x390x235	5.10	24.85	0.094
TPX 612 2X28/54WTL-5 O-SAT	9190 158 10173	2	1290x390x235	7.37	19.18	0.094
TPX 620 2X28/54WTL-5 MI	9190 158 10174	4	1290x390x235	3.69	19.21	0.094
TPX 621 2X54WTL-5 EBP MI	9190 158 10175	4	1290x390x235	4.93	24.17	0.094
TPX 622 2X28/54WTL-5 MI	9190 158 10176	2	1290x390x235	7.29	19.02	0.094
TBX 310 1X28/54WTL-5 O-SAT	9190 158 10114	4	1255x275x265	2.48	14.22	0.089
TBX 311 1X28WTL-5 EBP O-SAT	9190 158 10117	4	1255x275x265	3.49	18.25	0.089
TBX 312 1X28/54WTL-5 O-SAT	9190 158 10145	2	1255x275x265	4.93	14.16	0.089
TBX 320 1X28/54WTL-5 -MI	9190 158 10129	4	1255x275x265	2.70	15.07	0.089
TBX 321 1X28WTL-5 EBP MI	9190 158 10131	4	1255x275x265	3.30	17.49	0.089
TBX 322 1X28/54WTL-5 MI	9190 158 10132	2	1255x275x265	5.11	14.52	0.089
TBX 610 2X28/54WTL-5 O-SAT	9190 158 10161	4	1290x390x235	3.72	19.28	0.094
TBX 611 2X54WTL-5 EBP O-SAT	9190 158 10163	4	1290x390x235	5.03	24.55	0.094
TBX 612 2X28/54WTL-5 O-SAT	9190 158 10164	2	1290x390x235	7.60	19.65	0.094
TBX 620 2X28/54WTL-5 MI	9190 158 10166	4	1290x390x235	3.78	19.57	0.094
TBX 621 2X54WTL-5 EBP MI	9190 158 10168	4	1290x390x235	5.02	24.52	0.094
TBX 622 2X28/54WTL-5 MI	9190 158 10169	2	1290x390x235	11.86	28.16	0.094
GGX 310 1X28WTL -5 EBP O- SAT	9190 158 10115	4	1200x155x105	0.68	3.75	0.019
GGX 310 1X54WTL -5 EBP O- SAT	9190 158 10275	4	1200x155x105	0.68	3.75	0.019
GGX 320 1X28WTL -5 EBP MI	9190 158 10130	4	1200x155x105	0.68	3.75	0.019
GGX 320 1X54WTL -5 EBP MI	9190 158 10276	4	1200x155x105	0.68	3.75	0.019
GGX 610 2X28WTL -5 EBP O- SAT	9190 158 10428	4	1325x270x110	1.32	6.93	0.039
GGX 610 2X54WTL -5 EBP O- SAT	9190 158 10162	4	1325x270x110	1.32	6.93	0.039
GGX 620 2X28WTL -5 EBP MI	9190 158 10429	4	1325x270x110	1.32	6.93	0.039
GGX 620 2X54WTL-5 EBP MI	9190 158 10167	4	1325x270x110	1.32	6.93	0.039
ZTX 310 EP	9190 158 10118	8	205x185x67	0.19	1.74	0.0025
ZTX 320 EP	9190 158 10150	8	205x185x67	0.17	1.63	0.0025
ZTX 610 EP	9190 158 10165	8	205x185x67	0.19	1.74	0.0025
ZTX 620 EP	9190 158 10170	8	205x185x67	0.17	1.63	0.0025

Note: Details of all other 1 XTL5 28W, 2 XTL5 28W, 1 XTL5 54W and 2 XTL5 54W Line Light luminaire codes would be made available on request.

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

X-tend - TPS 498

Office
Application

Page 07



Product description

Suspended range of luminaires for T8 and T5 lamps using 3D OLC (Omni-directional Luminance Control) technology for optimal glare control and distribution.

Option of MDGN lamelle for good aesthetics combined with direct as well as direct / indirect distribution options help in designing great office spaces.



MDGN

D6

Features

- Suitable for suspended mounting for direct / indirect lighting.
- 3D OLC lamellae, with excellent glare control, provides freedom in interior design.
- The concave shapes of the lamellae provides excellent light technical performance i.e. high efficiency and good uniformity.
- Housing made of 0.6 mm epoxy polyester powder coated extruded aluminium sheet.
- Choice of optics in D6 : High-gloss optic for all round glare and beam control. This makes this optic specially suited to areas with intensive monitor use. The high efficiency of this optic is realised via the side and end reflector's optimised geometry, and the registered, uniquely designed 3D cross lamellae, with a Fresnel structure on the lamellae saddle and a concaved lower contour. The high gloss OLC optic betters the glare recommendations.

Applications

- Representative offices • Reception and public service areas
- General offices, schools • Recreational areas (restaurants, cafeterias)
- Corridors and staircases • Department stores, boutiques

Mounting Type

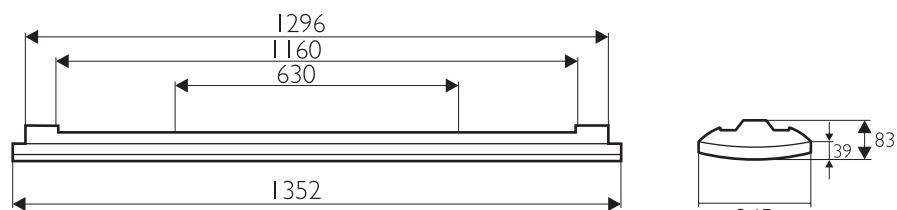
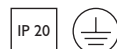
Surface mounted luminaires

Installation

- Suspension via hooks or chains in combination with the universal suspension set ZPH 300 US
- Also possible to join luminaires linearly

Compliances

- IP 20
- Class I



Technical Drawing



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TPS498 M 1TL-D36W IC D/I D6	1XTL-D 36W	240	0.23	0.9
TPS498 M 2XTL-D36W IC D/I D6	2XTL-D 36W	240	0.46	0.9
TPS 498 2XTLD 36W D6 HF EBT 236	2XTL-D 36W	240	0.32	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TPS498 M 1TL-D36W IC D/I D6	919015066121	1	1560x270x100	4.6	6	0.042
TPS498 M 2XTL-D36W IC D/I D6	919015066122	1	1560x270x100	5.1	6.5	0.042
TPS 498 2XTLD 36W D6 HF EBT 236	919015810211	1	1560x270x100	4.7	5.8	0.042

Ordering data for T5 version and for 28 Watt available on request.

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

TCS 306

Office
Application

Page 07



Product description

Widespread mirror optics luminaire for surface as well as recessed mounting suitable for TLD & TL-5 lamps. Single and twin lamp versions are available.

Features

- Housing made of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- Innovative corner brackets made of engineering plastic to enhance the aesthetics.
- Specially designed optical system of high purity aluminium, with matte lamellae. The reflector is fixed to the housing by mirror holding clips and can be hinged to the housing during installation / maintenance.
- High efficiency mirror optic reflector of high quality aluminium with diffuse lamellae designed for high optical efficiency and widespread light distribution.

Applications

- Small offices
- Conference rooms
- Reception and public service areas
- Recreational areas (restaurants, cafeterias)
- Shops and boutiques

Mounting Type

Surface mounted luminaires

Installation

Provision for recessed mounting or direct on surface.

Can also be pendent mounted.

Compliances

- IP 20



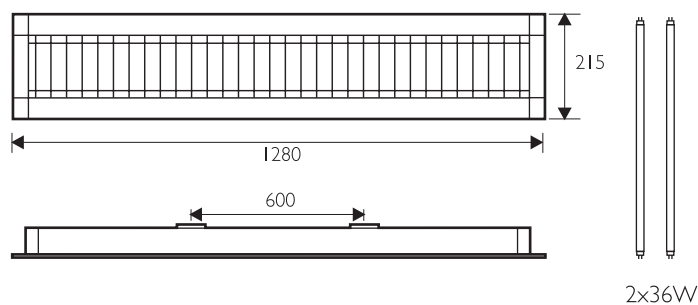
TCS 306 1xTL-D36W

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCS306 2XTL-D36W IC	2xTL-D36W	240	0.46	0.9
TCS306 1XTL-D36W IC	1xTL-D36W	240	0.23	0.9
TCS306 2XTLD 36W EBT	2xTL-D36W	240	0.32	0.98
TCS306 1XTLD 36W EBT	1xTL-D36W	240	0.17	0.98



IP 20



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS306 2XTL-D36W IC	919015084121	2	1330x275x205	4.3	10	0.074
TCS306 1XTL-D36W IC	919015084124	2	1330x275x205	4	9	0.074
TCS306 2XTLD 36W EBT	919015810202	2	1330x275x205	3.8	10	0.074
TCS306 1XTLD 36W EBT	TBA	2	1330x275x205	3.5	9	0.074

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



TCS 150

Office
Application

Page 07



Product description

Surface / suspended mounted mirror optics suitable for TL-5 28 Watt and TL-5 HO 54 Watt. Single and twin lamps version are available.

TCS 150 is a visually appealing, sleek, efficient surface / suspended mounting luminaire with high light output level and uses environment friendly high efficiency TL5 lamps. The luminaire helps in creating a vivacious ambience which can energize people and help them in delivering great results.

Features

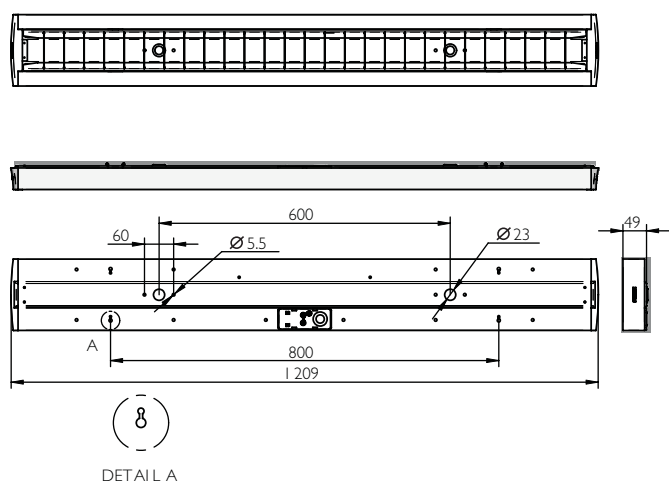
- 45% energy saving vs. 40W TL lamp.
- Ultra slim, BatWing profile for maximum light output.
- Instant start, flicker-free, electronic operation.

Applications

- Home
- Hotels
- Colleges
- Schools
- Guest houses
- Officer interiors
- General ambient lighting, furniture and under-cabinet, mirror sides, corridors.

Installation

Design for surface mounting, this luminaire can be fixed on wall or ceiling by means of installer provided along with the luminaire.



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Recommended ballast	Main current (A)	Nominal power factor
TCSI50 2xTL-5 28W MIEBT 228	2 x TL-5 28W	240	1 x EBT 228 TL5	0.27	0.98
TCSI50 1xTL-5 28W MIEBT 128	2 x TL-5 28W	240	1 x EBT 128 TL5	0.14	0.98
TCSI50 2xTL-5 28W MIEBT 254	2 x TL-5 54W	240	1 x EBT 254 TL5	0.5	0.99
TCSI50 1xTL-5 28W MIEBT 154	2 x TL-5 54W	240	1 x EBT 154 TL5	0.25	0.99

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS 150 2xTL-5 28W MI EBT 228	9190 158 10430	2	125 x 17 x 14	2.8	6.5	0.029
TCS 150 1xTL-5 28W MI EBT 228	9190 158 10452	2	125 x 17 x 14	2.8	6.5	0.029
TCS 150 2xTL-5 54W MI EBT 254	9190 158 10453	2	125 x 17 x 14	2.8	6.5	0.029
TCS 150 1xTL-5 54W MI EBT 154	9190 158 10454	2	125 x 17 x 14	2.8	6.5	0.029

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Maxlite - TCS 350 / FCS 350

Office
Application

Page 07



Product description

Functional surface / suspended mounted luminaire suitable for TL-D 36W TL-5 14W / 28W and PL-L 36W / 18W lamps option.

Maxlite family is sleek, trendy, easy to install and maintain range. Option of TL-D, TL-5 and PLL lamps make it a preferred option for different sorts of surface mounting application. It's simple design and robust construction ensure long life and easy experience.

Features

- Sleek housing design for attractive appearance.
- Decorative end caps provide unique identity and trendy looks.
- Housing made up of CRCA sheet steel with epoxy polyester powder coated white for durability and reliability.
- Specially stepped housing provides higher rigidity to the luminaire.
- Efficient optics with a option of darklight reduces the number of light points as well as improves the visual comfort.
- Option of using wide range of lamps viz, linear fluorescent lamps TL-5 14W / 28W, TL-D 18 / 36W, compact fluorescent lamps PL-L 18W / 36W, manifests wide usage.

Applications

- Office
- Corridors
- General interiors

Mounting Type

Surface mounted

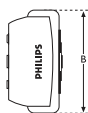
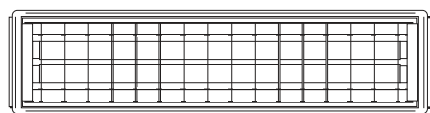
Installation

Direct mounting on ceiling.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCS350 2xTL-D36W IC MI	2xTL-D36W	240	0.46	0.9
TCS350 2xTL-D36W IC C5	2xTL-D36W	240	0.46	0.9
TCS 350 2xTLD 36W MI HF EBT 236	2xTLD 36W	240	0.30	0.98
TCS 350 2xTLD 36W C5 HF EBT 236	2xTLD 36W	240	0.30	0.98
TCS350 2xTL5-28W EBE MI	2xTL5-28W	240	0.27	0.95
TCS350 2xTL5-28W EBE C5	2xTL5-28W	240	0.27	0.95
TCS350 2xTL-D36W EBE MI	2xTL-D36W	240	0.30	0.95
TCS350 2xTL-D36W EBE C5	2xTL-D36W	240	0.30	0.95
TCS350 2xTL5-28W EBT MI	2xTL5-28W	240	0.27	0.98
TCS350 2xTL5-28W EBT C5	2xTL5-28W	240	0.27	0.98
TCS350 2xTL5-14W HF-E	2xTL5-14W	240	0.14	0.95
FCS350 2xPL-L18W IC MI	2xPL-L18W	240	0.23	0.6
FCS 350 2xPLL 36W MI HF EBT 236	2xPLL 36W	240	0.18	0.98

IP 20



Luminaire Type	A	B	C
FCS 350/218	415	162	80
FCS 350/236	480	162	80
TCS 350/214	610	162	80
TCS 350/218	654	162	80
TCS 350/228	1210	162	80
TCS 350/236	1264	162	80

Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS350 2XTL-D36W IC MI	919015065124	2	1350x240x230	4.4	10.2	0.074
TCS350 2XTL-D36W IC C5	919015065126	2	1350x240x230	4.4	10.2	0.074
TCS 350 2XTLD 36W MI HF EBT 236	919015810232	2	1350x240x230	3.6	9.2	0.074
TCS 350 2XTLD 36W C5 HF EBT 236	919015810231	2	1350x240x230	3.6	9.2	0.074
TCS350 2XTL5-28W EBE MI	919015065153	2	1300x240x230	3.6	9.2	0.071
TCS350 2XTL5-28W EBE C5	TBA	2	1300x240x230	3.6	9.2	0.071
TCS350 2XTL-D36W EBE MI	919015065156	2	1350x240x230	3.6	9.2	0.074
TCS350 2XTL-D36W EBE C5	TBA	2	1350x240x230	3.6	9.2	0.074
TCS350 2XTL5-28W EBT MI	TBA	2	1300x240x230	3.6	9.2	0.071
TCS350 2XTL5-28W EBT C5	TBA	2	1300x240x230	3.6	9.2	0.071
TCS350 2XTL5-14W HF-E	919015810023	2	690x240x230	3.5	9	0.038
FCS350 2XPL-L18W IC MI	919015065129	2	490x240x230	4.9	9	0.0329
FCS 350 2XPLL 36W MI HF EBT 236	919015810228	2	560x240x230	3.8	8	0.0322

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

TCS 605 - Flatlite

Office
Application

Page 07



Product description

Mirror optics luminaire suitable for surface mounting on ceilings. This range is suitable for TLD lamps and is available in single and twin lamp versions.

Features

- Housing made of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- End plates / moulded end plates with white paint.
- Designed for surface mounting.
- High efficiency mirror optics of high quality aluminium with faceted side reflectors and diffusing white lamellae.

Applications

- Small offices
- Conference rooms
- Reception and public service areas
- Recreational areas (restaurants, cafeterias)
- Shops and boutiques
- Vertical displays

Mounting Type

Surface mounted luminaires

Installation

Provision for pendant mounting or direct on surface.

Compliances

- IP 20

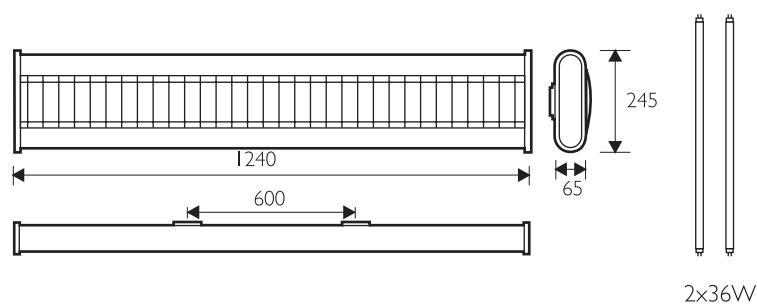
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCS605 2XTL-D36W IC M1	2xTL-D36W	240	0.46	0.9
TCS605 1XTL-D36W IC M1	1xTL-D36W	240	0.23	0.9
TCS605 2XTLD 36W EBT	2xTL-D36W	240	0.32	0.98
TCS605 1XTLD 36W EBT	1xTL-D36W	240	0.17	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS605 2XTL-D36W IC M1	919015081121	2	1295x280x200	7.5	17.4	0.072
TCS605 1XTL-D36W IC M1	919015081122	2	1295x280x200	7	16.4	0.072
TCS605 2XTLD 36W EBT	919015810233	2	1295x280x200	6.2	14.5	0.072
TCS605 1XTLD 36W EBT	TBA	2	1295x280x200	6	14	0.072

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing



Opalite - TCS 019

Office
Application

Page 07



Product description

Functional glare free luminaires for surface mounting in ceilings suitable for TLD / TL fluorescent lamps.

Features

- Housing made of CRCA sheet steel, powder coated gray accommodating all electrical accessories pre-wired up to a terminal block.
- Cover made of opal acrylic.
- Designed for surface mounting on ceilings.

Applications

- Small offices
- Reception and public service areas
- Recreational areas (restaurants, cafeterias)
- Shops

Mounting Type

Surface mounted luminaires

Installation

Provision for suspension through Ø19mm conduit or direct on surface.

Compliances

- IP 20

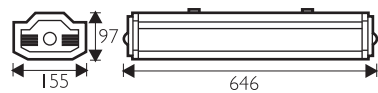
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCS019 1XTL-D18W I O	1xTL-D18W	240	0.23	0.44
TCS019 1XTL-D36W I O	1xTL-D36W	240	0.23	0.44
TCS019 2XTL40W I O	2xTL-D40W	240	0.46	0.44
TCS019 2XTL-D18W IC O	2xTL-D18W	240	0.23	0.9
TCS019 2XTL-D36W IC O	2xTL-D36W	240	0.46	0.9
TCS019 1XTL-D36W IC O	1xTL-D36W	240	0.23	0.9
TCS 019 2XTLD 36W EBT	2xTL-D36W	240	0.32	0.98
TCS 019 1XTLD 36W EBT	1xTL-D36W	240	0.16	0.98



IP 20

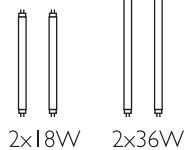
TCS 019 2xTL-D 18W



TCS 019 1xTL-D 36W



TCS 019 2xTL-D 36W



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCS019 1XTL-D18W I O	441536074171	4	700x410x310	1.2	6.8	0.088
TCS019 1XTL-D36W I O	919015079121	4	1350x170x209	1.85	9.1	0.048
TCS019 2XTL40W I O	919015071121	4	1360x325x232	3	13.4	0.102

TCS019 2XTL-D18W IC O	919015071081	4	700x410x310	2	9.5	0.088
TCS019 2XTL-D36W IC O	919015071122	4	1360x325x232	3	13.4	0.102
TCS019 1XTL-D36W IC O	919015071129	4	1350x170x209	1.88	9.2	0.048

TCS 019 2XTLD 36W EBT	919015810213	4	1360x325x232	2	9.4	0.102
TCS 019 1XTLD 36W EBT	919015810212	4	1350x170x209	2	9.7	0.048

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



FCS 31

Office
Application

Page 07



Product description

Surface mounted luminaire suitable for use with PL-S 9W / 11W compact fluorescent lamps.

Features

- Housing made of MS CRCA sheet steel, painted white, accommodating all electrical accessories pre-wired up to a terminal block.
- A reflector assembly, made of high purity aluminium sheet, electrochemically brightened and anodised, fitted with aluminium lamellae.
- Stainless spring clips for fixing the reflector to the housing.

Applications

- Representatives offices
- Conference rooms
- Small offices
- General open plan offices
- Reception and public service areas
- Corridors and staircases
- Recreational areas (sport halls, restaurants, cafeterias)
- Department stores, fashion shops
- Small independent food / non-food shops

Mounting Type

Surface mounted luminaires

Installation

Designed for surface mounting on ceilings.

Compliances

- IP 20
- Class I

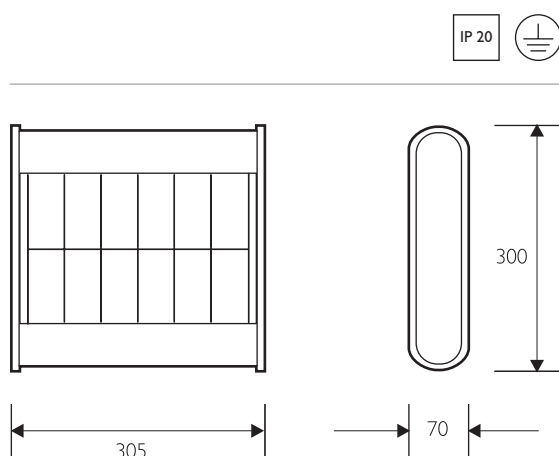
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FCS031 2xPL-5 / 2P9W 1240V	2 X PL-S 9 W	240	0.15	0.45
FCS031 2xPL-5 / 2P11W 1140V	2 X PL-S 11 W	240	0.30	0.45

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FCS031 2xPL-5 / 2P9W 1240V	919015564001	2	390 x 325 x 175	2,60 x 2	6,50	0,022
FCS031 2xPL-5 / 2P11W 1140V	919015564001	2	390 x 325 x 175	2,60 x 2	6,50	0,022

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing





Lotus - FCS 518

Office
Application

Page 07



Product description

Surface mounted luminaire suitable for use with 2 X PLS 9 / 11 / 18W compact fluorescent lamps.

Features

- Aesthetically designed 3D profile, high grade engineering plastic housing.
- Ventilation slits to provide better thermal performance, and add to the interior ambiance.
- Imported pre-anodised optically designed mirrors for efficient and uniform lighting effect.
- Mirror assembly and lamellae are integrated with the housing, and is click fixed with the Gear Tray with 4 cam springs.

Applications

- Reception and public service areas
- High-end offices
- Conference rooms
- Recreational areas
- Departmental stores
- Shops, boutiques
- Staircase landings

Mounting Type

Surface mounted luminaires

Installation

Designed for surface mounting on ceilings.

Compliances

- IP 20
- Class I

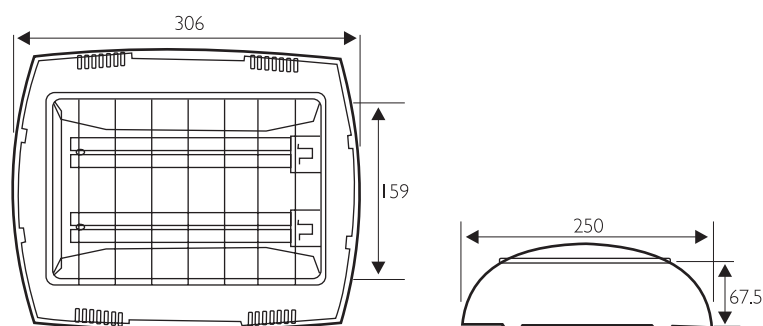
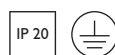
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FCS518 2XPL-S/2P11W 240V	2XPL-S/2P11W	240	0.3	0.45
FCS518 2XPL-S/2P9W 240V	2XPL-S/2P9W	240	0.15	0.45
FCS518 2XPL-L18W 240V	2XPL-L18W	240	0.4	0.48

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FCS518 2XPL-S/2P11W 240V	919215000146	4	700x590x165	1.5	8	0.068
FCS518 2XPL-S/2P9W 240V	919215000147	4	700x590x165	1.25	7	0.068
FCS518 2XPL-L18W 240V	441536071041	4	700x590x165	1.7	9	0.068

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing



Sereno - TBS 869

Office
Application

Page 07



Product description

Advanced recessed luminaires with D8 Micro-optics specially designed for T5 Lamps. These luminaires offer the best combination of performance and energy efficiency.

Sereno luminaires offer the latest technology for high comfort and optical efficiency in a miniature profile.



TBS 869 / 228 D8 HF

Features

- Suitable for recess mounting in modular ceilings for direct lighting.
- D8 Micro-optics, with excellent glare control (designed for UGR 19).
- 3 dimensional smooth interrupted arch contour offers high efficiency levels.
- The high efficiency optical system offers the best package for excellent uniformity and glare control.
- Housing made of powder coated CRCA.

Applications

- Software offices / Corporate offices
- Receptions and lobbies
- Schools and colleges
- Open plan offices / Executive cabins
- Conference rooms

Mounting Type

Recessed luminaires

Installation

- Suitable for recess mounting in modular false ceiling systems with 600x600 mm module.
- Resting on T-Bar.
- Additional provision suspension with chain / hook.

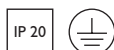
Compliances

- IP 20
- Class I

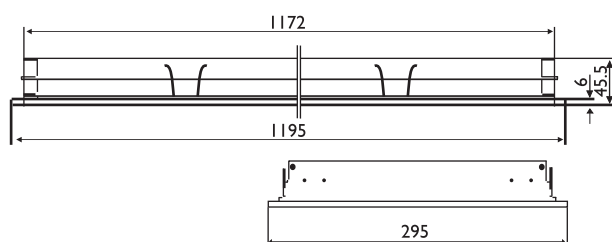


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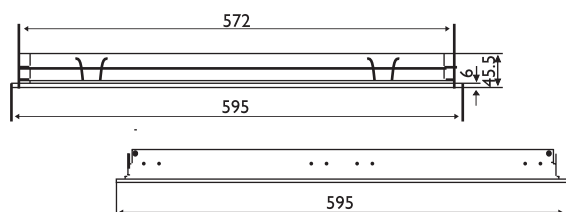
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS 869 4xTL-5 14W EBP D8	4 x TL5 14W	240	0.28	0.96
TBS 869 2xTL-5 28W EBP D8	2 x TL5 28W	240	0.27	0.98
TBS 869 2xTL-5 54W EBP D8	2 x TL5 54W	240	0.27	0.98



TBS 869 2xTL-528W



TBS 869 4xTL-514W



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS 869 4xTL-5 14W EBP D8	919015067122	2	675 x 665 x 120	3.80	9.20	0.0539
TBS 869 2xTL-5 28W EBP D8	919015067123	2	1280 x 365 x 120	4.00	9.50	0.0561
TBS 869 2xTL-5 54W EBP D8	919015810099	2	1280 x 365 x 120	4.00	9.50	0.0561

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

X-tend - TBS 369

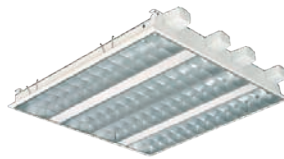
Office
Application

Page 07



Product description

High performance recess mounted mirror optic family suitable for TLD lamps. This family uses the patented 3D OLC (Omni-directional Luminaire Control) lamellae helping the luminaire deliver very efficient lighting performance. The family is also available with different lamellae options.



TBS 369 / 418 M6



TBS 369 / 418 M2

Features

- Compact luminaire height of 72.5mm.
- Suitable for metric ceilings type of 600mm module.
- 3 types of louvers M2, M6 and D6
- 3D OLC lamellae, with excellent glare control provides freedom in interior design.
- The concave shapes of the lamellae provides excellent light-technical performance i.e. high efficiency and good uniformity.
- Housing made of 0.6 mm epoxy polyester powder coated CRCA sheet, with perforated in-fill panel.
- Choice of optics in
 - M2 : Decorative optic with high efficiency, realised via the side and end reflectors, optimised geometry, and matte aluminium cross lamellae of fine quality material, with a concaved lower contour and a tapered ripple effect which provide pleasant illuminance over the optics opening.
 - M6 : Matte optic for all round glare and beam control. This makes the optic specially suited to areas with occasional monitor use. The high efficiency of this optic is realised via the side and end reflectors optimised geometry, and registered uniquely designed 3D cross lamellae with a Fresnel structure on the lamellae saddle and a concaved lower contour.
 - D6 : High - gloss optic for all round glare and beam control. This makes this optic specially suited to areas with intensive monitor use. The high efficiency of this optic is realised via the side and end reflectors optimised geometry, and the registered uniquely designed 3D cross lamellae, with a Fresnel structure on the lamellae saddle and a concaved lower contour. The high gloss OLC optic betters the glare recommendations.

Applications

- Representative offices • Reception and public service areas
- General offices, schools • Recreational areas (restaurants, cafeterias)
- Corridors and staircases • Department stores, boutiques

Mounting Type

Recessed luminaires

Installation

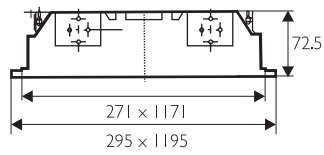
- Resting on T-Bar • Suspension via hooks or chains
- Hanging via swing-out bracket

Compliances

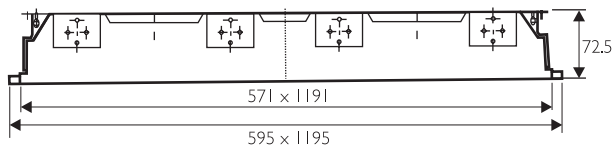
- IP 20 • Class I



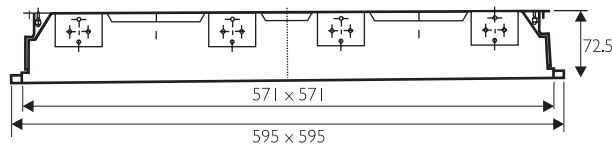
TBS 369 2xTL-D 36W



TBS 369 4xTL-D 36W



TBS 369 4xTL-D 18W



Technical Drawing



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS369 M 2XTL-D36W IC M2	2xTL-D36W	240	0.46	0.9
TBS369 M 2XTL-D36W IC M6	2xTL-D36W	240	0.46	0.9
TBS369 M 2XTL-D36W IC D6	2xTL-D36W	240	0.46	0.9
TBS369 M 2XTL-D36W IC M-DGN	2xTL-D36W	240	0.46	0.9
TBS 369 2XTLD 36W D6 HF EBT 236	2xTL-D36W	240	0.32	0.98
TBS 369 2XTLD 36W M2 HF EBT 236	2xTL-D36W	240	0.32	0.98
TBS 369 2XTLD 36W M6 HF EBT 236	2xTL-D36W	240	0.32	0.98
TBS 369 2XTLD 36W MDGN HF EBT 236	2xTL-D36W	240	0.32	0.98
240				
TBS369 M 4XTL-D18W IC M2	4xTL-D18W	240	0.46	0.9
TBS369 M 4XTL-D18W IC M6	4xTL-D18W	240	0.46	0.9
TBS369 M 4XTL-D18W IC D6	4xTL-D18W	240	0.46	0.9
TBS369 M 4XTL-D18W IC M-DGN	4xTL-D18W	240	0.46	0.9
TBS369 M 4XTL-D18W EBS M2	4xTL-D18W	240	0.32	0.98
TBS369 M 4XTL-D18W EBS M6	4xTL-D18W	240	0.32	0.98
TBS369 M 4XTL-D18W EBS D6	4xTL-D18W	240	0.32	0.98
TBS369 M 4XTL-D36W IC M2	4xTL-D36W	240	0.92	0.9
TBS369 M 4XTL-D36W IC M6	4xTL-D36W	240	0.92	0.9
TBS369 M 4XTL-D36W IC D6	4xTL-D36W	240	0.92	0.9
TBS369 M 4XTL-D36W EBS D6	4xTL-D36W	240	0.64	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS369 M 2XTL-D36W IC M2	919015088153	1	1335x320x85	5.1	5.8	0.036312
TBS369 M 2XTL-D36W IC M6	919015088157	1	1335x320x85	5.1	5.8	0.036312
TBS369 M 2XTL-D36W IC D6	919015088158	1	1335x320x85	5.1	5.8	0.036312
TBS369 M 2XTL-D36W IC M-DGN	919015088326	1	1335x320x85	5.1	5.8	0.036312
TBS 369 2XTLD 36W D6 HF EBT 236	919015810196	1	1335x320x85	5.1	5.8	0.036312
TBS 369 2XTLD 36W M2 HF EBT 236	919015810197	1	1335x320x85	5.1	5.8	0.036312
TBS 369 2XTLD 36W M6 HF EBT 236	919015810201	1	1335x320x85	5.1	5.8	0.036312
TBS 369 2XTLD 36W MDGN HF EBT 236	919015810198	1	1335x320x85	5.1	5.8	0.036312
TBS369 M 4XTL-D18W IC M2	919015088154	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W IC M6	919015088162	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W IC D6	919015088163	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W IC M-DGN	919015088327	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W EBS M2	919015088358	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W EBS M6	919015810022	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D18W EBS D6	919015088353	1	730x615x85	4.8	5.8	0.038161
TBS369 M 4XTL-D36W IC M2	919015088173	1	1335x615x85	9	10.8	0.064037
TBS369 M 4XTL-D36W IC M6	919015088175	1	1335x615x85	9	10.8	0.064037
TBS369 M 4XTL-D36W IC D6	919015088177	1	1335x615x85	9	10.8	0.064037
TBS369 M 4XTL-D36W EBS D6	919015088366	1	1335x615x85	9	10.8	0.064037

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Aura - TBS 088

Office
Application

Page 07



Product description

Functional and sleek mirror optics luminaires for recessed mounting in modular strip ceilings suitable for TLD fluorescent lamps.



TBS 088 / 236 M2

Features

- Housing made of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- A choice of mirror optics to suit specific requirements.
- Designed for mounting into modular ceilings of 300 mm module.
- Adjustable luminaire positioning on the ceiling for easy and flexible installation.
- The optical system is fixed on the luminaire by four stainless steel spring clips and can be suspended on the spring during re-lamping / maintenance.
- Choice of optics
 - M2 : High efficiency mirror optics of high quality aluminium with faceted side reflectors and serrated cross lamellae enhancing uniformity.
 - C5 : High glass improved efficiency mirror optics of high quality aluminium with parabolic side reflection and parabolic lamellae.

Applications

- Small offices
- Conference rooms, reception and public service areas
- Recreational areas (restaurants, cafeterias)
- Normal industries
- General open plan offices
- Super markets / departmental stores
- Shops and boutiques

Mounting Type

Recessed luminaires

Installation

- Resting on T-Bar.
- Suspension by means of hooks or chain.

Compliances

- IP 20

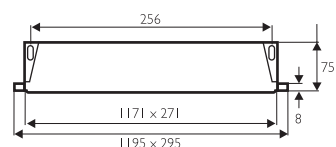


Technical data

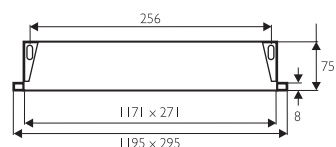
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS088 M 2XTL-D36W IC M2	2xTL-D36W	240V	0.46	0.9
TBS088 M 2XTL-D36W IC C5	2xTL-D36W	240V	0.46	0.9
TBS 088 2XTLD 36W C5 HF EBT	2xTL-D36W	240V	0.31	0.9
TBS 088 2XTLD 36W M2 HF EBT	2xTL-D36W	240V	0.31	0.9
TBS088 M 4XTL-D18W IC M2	4xTL-D18W	240V	0.46	0.98
TBS088 M 4XTL-D18W IC C5	4xTL-D18W	240V	0.46	0.98
TBS088 4XTL-D18W EBS M2	4xTL-D18W	240V	0.31	0.98
TBS088 4XTL-D18W EBS C5	4xTL-D18W	240V	0.31	0.98
TBS088 4XTL5-14W EBP M2	4xTL-514W	240V	0.28	0.98
TBS088 4XTL5-14W EBP C5	4xTL-514W	240V	0.28	0.98
TBS088 2XTL5-28W EBP M2	2xTL-528W	240V	0.27	0.98
TBS088 M 2XTL5-28W EBP C5	2xTL-528W	240V	0.27	0.98



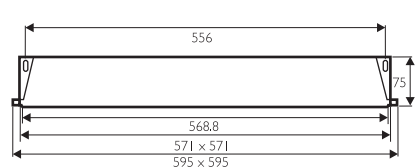
TBS 088 2xTL-D 36W



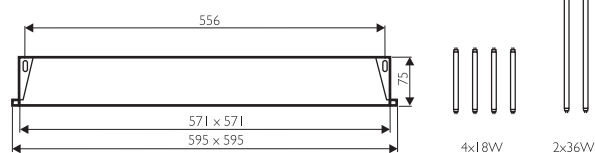
TBS 088 2xTL-D 36W



TBS 088 4xTL-D 18W



TBS 088 4xTL-D 18W



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS088 M 2XTL-D36W IC M2	919015089121	2	1320x360x180	5	11	0.085
TBS088 M 2XTL-D36W IC C5	919015089124	2	1310x355x170	4.5	10	0.078
TBS 088 2XTLD 36W C5 HF EBT	919015810195	2	1310x355x170	4.5	10	0.078
TBS 088 2XTLD 36W M2 HF EBT	919015810229	2	1320x360x180	4	9	0.085
TBS088 M 4XTL-D18W IC M2	919015089122	2	680x710x180	5.2	11.5	0.086
TBS088 M 4XTL-D18W IC C5	919015089123	2	655x710x170	4.5	10.0	0.079
TBS088 4XTL-D18W EBS M2	919015088361	2	680x710x180	4.75	10,5	0.086
TBS088 4XTL-D18W EBS C5	919015088356	2	655x710x170	4.5	9.0	0.079
TBS088 4XTL5-14W EBP M2	919015810011	2	680x710x180	5.2	11.5	0.086
TBS088 4XTL5-14W EBP C5	919015810012	2	655x710x170	4.5	10.0	0.079
TBS088 2XTL5-28W EBP M2	919015810007	2	1320x360x180	4.5	10.0	0.085
TBS088 M 2XTL5-28W EBP C5	919015810008	2	1310x355x170	4	9	0.078

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

X-tend - TBS 669

Office
Application

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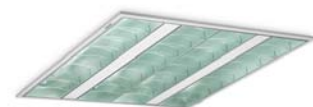


Product description

High performance recess mounted mirror optic family suitable for TLD lamps. This family uses the patented 3D OLC (Omni-directional Luminaire Control) lamellae helping the luminaire deliver very efficient lighting performance.



TBS 669 3xTL-5 14W



TBS 669 4xTL-5 14W

Features

- Housing made up of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- Offered with 3D OLC lamellae, with excellent glare control for freedom in interior design. M6 and D6 versions of mirrors are with concave shapes for high efficiency and good uniformity.
- Housing made of epoxy polyester powder coated CRCA sheet with perforated in-fill panel.
- Choice of optics
 - M2 : Decorative optic with high efficiency, realized via the side and end reflectors, optimized geometry, and matte aluminium cross lamellae of fine quality material, with a concave louver contour and tapered ripple effect which provide pleasant illuminance over the optics opening.
 - M6 : Matte optic for all round glare and beam control. The high efficiency of this optic is realized via the side and end reflectors, optimized geometry, and uniquely designed 3D cross lamellae with Fresnel structure on the lamellae saddle and a concaved lower contour.
 - D6 : High gloss matte optic for all-round glare and beam control. The high efficiency of this optics is realized via the side and end reflectors, optimized geometry, and uniquely designed 3D cross lamellae with Fresnel structure on the lamellae saddle and a concaved lower contour.
- Housing dimensions of 595mm x 595mm and 295mm x 1195mm for mounting on metric ceilings type Armstrong / US gypsum.
- Available with high frequency electronic Ballast for energy conservation and instant start. Regulating electronic Ballast can also be used with lighting controls for dimming and flexibility.

Applications

- General offices
- Call centres
- Recreational areas
- Software offices
- Departmental stores

Mounting Type

Recessed luminaires

Installation

- Resting on T-bar of false ceiling



- Suspension via hooks or chains
- Hanging via swing-out brackets

Compliances

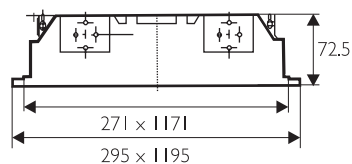
- IP 20
- Class I

Technical data

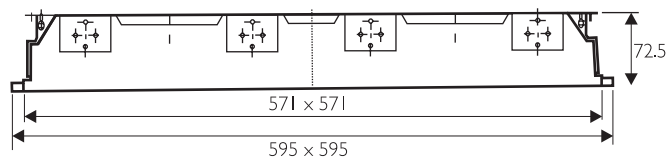
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS669 M 2XTL5-28W HF D6	2xTL-528W	240	0.28	0.98
TBS669 M 4XTL5-14W EBP D6	4xTL-514W	240	0.28	0.98
TBS669 M 3XTL5-14W EBP D6	3xTL-514W	240	0.28	0.98



TBS 669 2xTL-5 28W



TBS 669 4xTL-5 14W



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS669 M 2XTL5-28W HF D6	919015088360	1	1335x615x85	4.3	5.3	0.069
TBS669 M 4XTL5-14W EBP D6	919015088371	1	730x615x85	4.3	5.3	0.069
TBS669 M 3XTL5-14W EBP D6	919615810027	1	730x615x85	4.3	5.3	0.069

Ordering details of M2 version available on request.

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

TBS 495

Office
Application

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Product description

Semi-recessed mounted luminaire suitable for high efficient T5 14W lamps with diffused optics.

Features

- Semi-recessed construction where in the diffuser is protruded from the ceiling offering an excellent ambience and volumetric lighting.
- The luminaire has a combination of both diffuser as well as mirror optics for optimizing comfort and efficiency.
- The diffuser is made of PMMA and is UV stabilized. Glossy mirror is provided for higher efficiency.
- The luminaire is suitable for recessed mounting in grid ceiling.
- Sturdy CRCA housing, white powder coated.

Applications

- Office
- General interiors

Mounting Type

Recessed mounted

Installation

Suitable for mounting in grid ceiling of 600mm x 600mm.

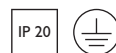
Technical data

Type	For lamp	Nominal voltage (V)	Recommended ballast	Main current (A)	Nominal power factor
TBS 495 4x14WTL-5 EBP 414	4 x 14WTL-5	240	1 x EBP 414 TL5	0.29	0.99

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS 495 4x14WTL-5 EBP 414	9190 158 10459	1	67 x 67 x 18	6.5	8.5	0.080

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Dimensional details



Wing-C DX Quadra

Office
Application

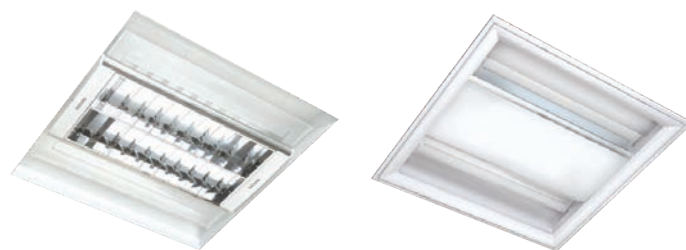
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Product description

Wing-C Quadra meets the diverse needs of the workspace and creates an atmosphere that is encouraging and lively.

Philips introduces a special frame fortifying the luminaire, which redefines and miniaturizes the luminaire size seamlessly integrating the same with modular ceiling systems. Quadra is the range of such luminaires with direct / indirect light distribution and can use the most efficient lamp varieties of 2 X PL-L 36 / 55W, or 4 X TL-5 14 W lamps. It offers a choice of high efficiency 3D OLC optics or UFD optics rendering shadow-less lighting.



Quadra - with Central Mirrors

Quadra - with UFD

Features

- Special decorative frame with an inherent curved profile which creates a new visual appearance, miniaturizing the light opening. The frame is seamlessly integrated with the modular ceiling system, avoiding abrupt light pockets in the ceiling.
- A curved shallow housing with highly reflective paint provides more indirect lighting.
- Special aluminium extrusions ensure reliable and error-free mounting of optics and wings as well as help to generate modular luminaire varieties.
- A choice of high efficiency, low-glare 3D OLC (three dimensional Omni-directional Luminance Control) optics which reduces the number of luminaires in the installation, is available as well as a choice of UFD (Uniform Flux Distribution) optics to create a soothing shadow-less comfortable ambience.
- The indirect light from the housing falls on the wings with 'Opti-grain Technology' to provide diffused refracted light for improved visual comfort.
- Wide, decorative, Polycarbonate, anti-static wings with a robust construction, provide an elegant look, with ease of cleaning. The wings are in Magic Mist or Graphite Gray colors.
- The luminaires use energy efficient compact fluorescent lamps of 2 X PL-L 36 / 55W or slim linear fluorescent lamps 4 X TL-5 14W.
- A wide range of luminaire choices are available with visually distinct design options for variety of usage.

Applications

- Offices • Corporate areas • Software centres • Hospitals
- Cabins • Meeting room • Open plan

Mounting Type

Recessed luminaires

Installation

Suitable for installation in 600 x 600 modular ceiling systems

Compliances

- IP 20



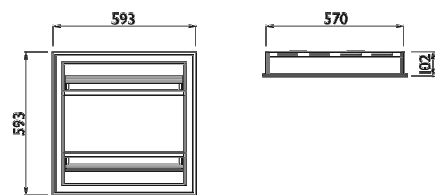
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS570 2xPL-L36W EBT D6 DF-WH	2xPL-L36W	240	0.32	0.98
FBS570 2xPL-L36W EBT OD DF-WH	2xPL-L36W	240	0.32	0.98
FBS571 2xPL-L36W EBT D6 DF-WH	2xPL-L36W	240	0.32	0.98
FBS570 2xPL-L36W IC D6 DF-WH	2xPL-L36W	240	0.46	0.9
FBS570 2xPL-L36W IC OD DF-WH	2xPL-L36W	240	0.46	0.9
FBS571 2xPL-L36W IC D6 DF-WH	2xPL-L36W	240	0.46	0.9
TBS570 4XTL5-14W HF O DF-WH	4XTL5-14W	240	0.29	0.98
TBS570 4XTL5-14W HF D6 DF-WH	4XTL5-14W	240	0.29	0.98
TBS570 4XTL5-14W HF OD DF-WH	4XTL5-14W	240	1.29	0.98
TBS571 4xTL5-14W HF D6 DF-WH	4XTL5-14W	240	1.29	0.98

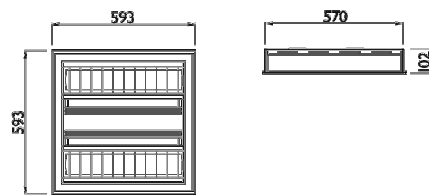
570 : central mirror , 571 : side Mirror



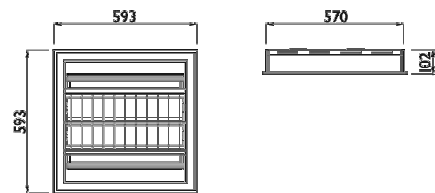
QUADRA - UFD



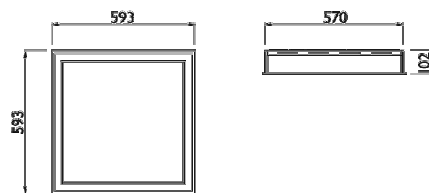
QUADRA - WITH SIDE MIRRORS



QUADRA - WITH CENTRAL MIRRORS



QUADRA - CLOSED



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS570 2xPL-L36W EBT D6 DF-WH	919015810181	2	655X655X215	12	16.2	0.09224
FBS570 2xPL-L36W EBT OD DF-WH	919015810182	2	655X655X215	12	16.2	0.09224
FBS571 2xPL-L36W EBT D6 DF-WH	919015810181	2	655X655X215	12	16.2	0.09224
FBS570 2xPL-L36W IC D6 DF-WH	919015043040	2	655X655X215	12.5	16.2	0.09224
FBS570 2xPL-L36W IC OD DF-WH	919015043041	2	655X655X215	12.5	16.2	0.09224
FBS571 2xPL-L36W IC D6 DF-WH	919015043058	2	655X655X215	12.5	16.2	0.09224
TBS570 4XTL5-14W HF O DF-WH	919015043127	2	655X655X215	12	16.2	0.09224
TBS570 4XTL5-14W HF D6 DF-WH	919015043001	2	655X655X215	12	16.2	0.09224
TBS570 4XTL5-14W HF OD DF-WH	919015043002	2	655X655X215	12	16.2	0.09224
TBS571 4xTL5-14W HF D6 DF-WH	919015043003	2	655X655X215	12	16.2	0.09224

570 : central mirror; 571 : side mirror

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Wing-C DX Linea - Recessed with UFD

Office
Application

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Product description

Wing-C Linea compliments the decor with its unconventional design and unique play of light.

The Linea range of luminaires has a central attachment, with decorative end caps, with the possibility of mounting recessed in the false ceiling, protruded and suspended positions. The central attachment comprises of optics as well as wings for diffused lighting. Linea is the range of luminaires with direct / indirect light distribution and is suitable for use with 2 X PL-L 36W compact fluorescent lamp.



Linea - Recessed with Mirrors



Linea - Semi-recessed



Linea - Suspended

Features

- A curved shallow housing with highly reflective paint provides more indirect lighting.
- Special aluminium extrusions ensure reliable and error free mounting of optics and wings. Most of the Linea range of luminaires are offered with UFD (Uniform Flux Distribution) technology optics to create a soothing, shadow-less comfortable ambience. For higher efficiency, the option of using 3D OLC Optics is also provided.
- The indirect light from the housing falls on the wings with 'Opti-grain Technology' to provide diffused refracted light for improved visual comfort.
- Wide, decorative, Polycarbonate, anti-static wings with a robust construction, provide an elegant look, with ease of cleaning. The wings are in Magic Mist or Graphite Gray colors.
- These luminaires use energy efficient compact fluorescent lamps of 2 X PL-L 36W.
- A wide range of luminaire choices are available with visually distinct design options for variety of usage.

Applications

- Offices
- Corporate areas
- Software centres
- Hospitals
- Cabins
- Meeting room
- Open plan

Mounting Type

Recessed luminaires

Installation

Suitable for installation in 600 x 600 modular ceiling systems

Compliances

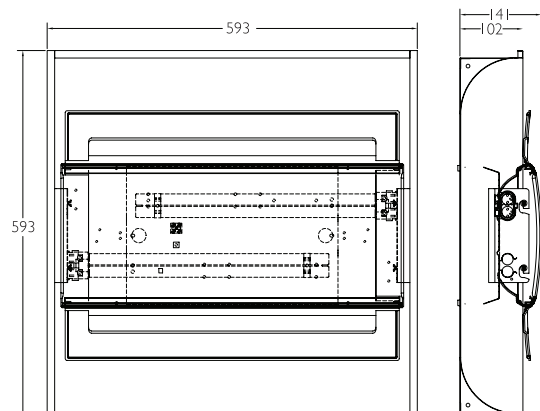
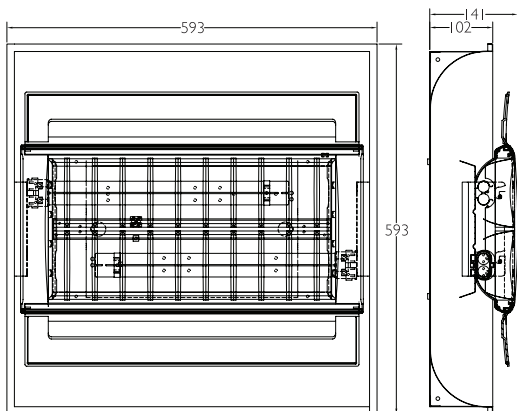
- IP 20



IP 20

FBS 580 D6

FBS 580 BWF



Technical Drawing

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
LINEA - RECESSED				
FBS 580 2XPLL 36W EBT D6 DF-WH	2XPLL 36W	240	0.32	0.98
FBS 580 2XPLL 36W EBT OD DF-WH	2XPLL 36W	240	0.32	0.98
FBS580 2XPL-L36W IC D6 DF-WH	2XPLL 36W	240	0.46	0.9
FBS580 2XPL-L36W IC OD DF-WH	2XPLL 36W	240	0.46	0.9
LINEA - SEMI RECESSED				
FBS 580I 2XPLL 36W EBT D6 DF-WH	2XPLL 36W	240	0.32	0.98
FBS 58I 2XPLL 36W EBT OD DF-WH	2XPLL 36W	240	0.32	0.98
FBS58I 2XPL-L36W IC D6 DF-WH	2XPLL 36W	240	0.46	0.9
FBS58I 2XPL-L36W IC OD DF-WH	2XPLL 36W	240	0.46	0.9
LINEA- SUSPENDED				
FBS 590 2XPLL 36W EBT OD DF-WH	2XPLL 36W	240	0.32	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
LINEA - RECESSED						
FBS 580 2XPLL 36W EBT D6 DF-WH	919015810184	2	655x655x215	6	16.2	0.09224
FBS 580 2XPLL 36W EBT OD DF-WH	919015810185	2	655x655x215	6	16.2	0.09224
FBS580 2XPL-L36W IC D6 DF-WH	919015043081	2	655x655x215	6	16.2	0.09224
FBS580 2XPL-L36W IC OD DF-WH	919015043082	2	655x655x215	6	16.2	0.09224
LINEA - SEMI RECESSED						
FBS 580 2XPLL 36W EBT D6 DF-WH	919015810186	2	655x655x215	6	16.2	0.09224
FBS 580 2XPLL 36W EBT OD DF-WH	919015810187	2	655x655x215	6	16.2	0.09224
FBS581 2XPL-L36W IC D6 DF-WH	TBA	2	655x655x215	6	16.2	0.09224
FBS581 2XPL-L36W IC OD DF-WH	TBA	2	655x655x215	6	16.2	0.09224
LINEA- SUSPENDED						
FBS 590 2XPLL 36W EBT OD DF-WH	919015810188	2	600x430x180	5	15	0.04644

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Wing-C

Office
Application

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Product description

Exclusive direct-indirect decorative efficient luminaire suitable for modular ceiling system and suitable for lamp 2 X PL-L 36 W compact fluorescent lamp.



FBS 470/236 D6 (PW)

FBS 470/236 D6 (FA)

Features

- Housing-cum-reflector made up of CRCA sheet steel powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- Housing Dimensions of 595mm X 595mm for mounting on metric ceilings type Armstrong / US gypsum.
- 2 types of louvers, M6 and D6 for multiple options in direct downward lighting and high luminaire efficiency.
- 3 D OLC lamellae provides excellent glare control and light distribution.
- Specially designed side caps for louvers assembly for distinct looks.
- Decorative 'Wings' with fins comprising of translucent engineering plastics for diffused light and floating effect.
- Parabolic back reflector of matte finish high purity aluminium for indirect light and creation of a bath of light.
- Available with high frequency electronic ballast for energy conservation and instant start. Regulating electronic ballast can also be used with lighting controls for dimming and flexibility.

Applications

- Offices
- Call centres
- Hospitals and clinics
- Software offices
- Restaurants
- Shops

Mounting Type

Recessed luminaires

Installation

- Resting on T-bar of false ceiling
- Suspension via hooks or chains

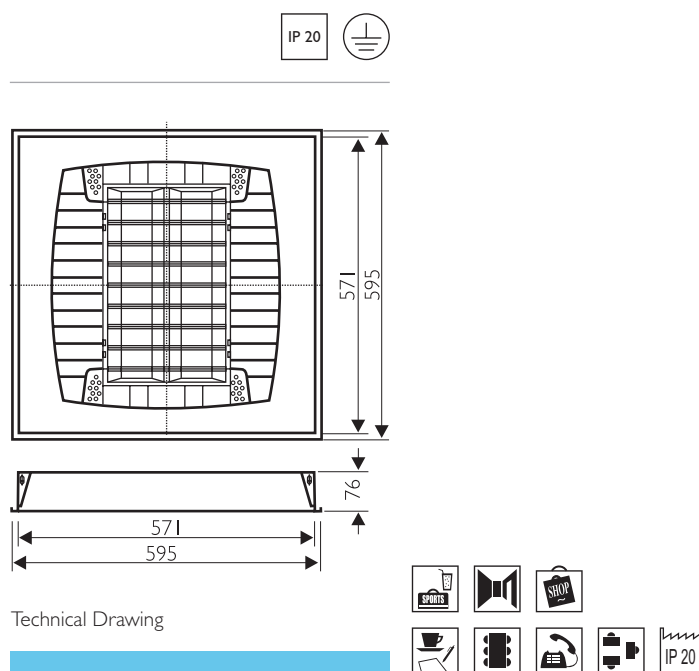
Compliances

- IP 20
- Class I



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS 470 2XPLL 36W M6 FA HF EBT 236	2xPLL-36W	240	0.32	0.98
FBS 470 2XPLL 36W M6 FA HF EBT 236	2xPLL-36W	240	0.32	0.98
FBS 470 2XPLL 36W D6 PW HF EBT 236	2xPLL-36W	240	0.32	0.98
FBS 470 2XPLL 36W D6 AG HF EBT 236	2xPLL-36W	240	0.32	0.98
FBS 470 2XPLL 36W M6 PW HF EBT 236	2xPLL-36W	240	0.32	0.98
FBS 470 2XPLL 36W M6 AG HF EBT 236	2xPLL-36W	240	0.32	0.98



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS 470 2XPLL 36W M6 FA HF EBT 236	919015810180	2	720x665x165	4.3	10.5	0.079
FBS 470 2XPLL 36W M6 FA HF EBT 236	919015810180	2	720x665x165	4.3	10.5	0.079
FBS 470 2XPLL 36W D6 PW HF EBT 236	919015810189	2	720x665x165	4.3	10.5	0.079
FBS 470 2XPLL 36W D6 AG HF EBT 236	919015810190	2	720x665x165	4.3	10.5	0.079
FBS 470 2XPLL 36W M6 PW HF EBT 236	919015810191	2	720x665x165	4.3	10.5	0.079
FBS 470 2XPLL 36W M6 AG HF EBT 236	919015810192	2	720x665x165	4.3	10.5	0.079

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Wing-C LX

Office
Application

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Product description

Designed to create soothing direct and indirect lighting conditions by efficient brightness control. This keeps the optimal lighting efficiency with excellent aesthetics. This range is suitable for 2xPLL-36W.



FBS 450 2xPLL 36 P5

FBS 450 2xPLL 36W PW

Features

- Ingenious design provides perfect make-up for contemporary work spaces.
- Optimum glare control for improved visual comfort.
- Multiple optics, wings and gear options for greater flexibility.
- Higher efficiency leading to use of fewer luminaires reduce total cost of ownership.
- Aesthetically appealing and distinguished looks.
- Option of lamp dimming provides mood / scene creation flexibility.
- Efficiently designed gear mounting for ease of maintenance and re-lamping.

Applications

- BPOs, software companies
- Private corporates
- Hotels and restaurants
- Shops
- Application areas like workstations, passages, lobbies, reception areas and other breakaway zones.

Mounting Type

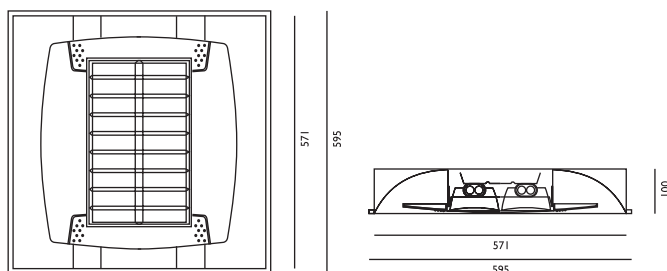
Recessed luminaires

Installation

- Resting on T-bar of false ceiling
- Suspension via hooks or chains

Compliances

- IP 20
- Class I



Technical Drawing



Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS450 2XPL-L36W IC P5 DF-GN	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC P5 DF-WH	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC P5 DF-OR	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC M2 DF-WH	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC M2 DF-OR	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC M2 DF-OR	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC D6 DF-GN	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC D6 DF-WH	2xPL-L36W	240	0.46	0.9
FBS450 2XPL-L36W IC D6 DF-OR	2xPL-L36W	240	0.46	0.9
FBS 450 2XPLL 36W D6 FA EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W D6 PW EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W D6 AG EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W M2 FA EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W M2 PW EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W M2 AG EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W P5 AG EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W P5 FA EBT 236	2xPL-L36W	240	0.32	0.98
FBS 450 2XPLL 36W P5 PW EBT 236	2xPL-L36W	240	0.32	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS450 2XPL-L36W IC P5 DF-GN	919015085160	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC P5 DF-WH	919015085162	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC P5 DF-OR	919015085164	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC M2 DF-WH	919015085156	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC M2 DF-OR	919015085158	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC M2 DF-OR	919015085158	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC D6 DF-GN	919015085142	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC D6 DF-WH	919015085144	2	675x675x230	5.1	13.6	0.104
FBS450 2XPL-L36W IC D6 DF-OR	919015085146	2	675x675x230	5.1	13.6	0.104
FBS 450 2XPLL 36W D6 FA EBT 236	919015810219	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W D6 PW EBT 236	919015810220	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W D6 AG EBT 236	919015810227	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W M2 FA EBT 236	919015810222	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W M2 PW EBT 236	919015810223	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W M2 AG EBT 236	919015810221	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W P5 AG EBT 236	919015810224	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W P5 FA EBT 236	919015810225	2	675x675x230	4.1	11.6	0.104
FBS 450 2XPLL 36W P5 PW EBT 236	919015810226	2	675x675x230	4.1	11.6	0.104

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

FBS 300 P5

Office
Application

Page 07



Product description

Recessed aesthetic luminaires suitable for use with 2 / 3 X PL-L 36W and 2 X 18 W PL-L compact fluorescent lamps.

Features

- Housing made of single piece powder coated CRCA sheet steel accommodating all electrical accessories pre-wired up to a terminal block.
- The perimeter of the luminaire is provided with perforations of 2 mm diameter with 3 mm orthocyclic pitch to add aesthetic appeal.
- A reflector assembly, made of metalized polystyrene paralite PS type louvers.

Applications

- Representatives offices and conference rooms
- Small offices and general open plan offices
- Corridors and staircases
- Recreational areas, sport halls, restaurants, cafeterias
- Department stores, shops and boutiques

Mounting Type

Recessed luminaires

Installation

- Resting on T-bar of false ceiling
- Suspension via hooks on chains

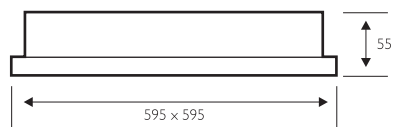
Compliances

- IP 20
- Class I

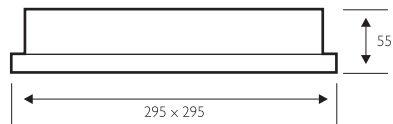
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS300 M 3XPL-L36W IC P5	3XPL-L36W	240	0.65	0.9
FBS300 M 2XPL-L36W IC P5	2XPL-L36W	240	0.46	0.9
FBS300 M 3XPL-L36W EBP P5	3XPL-L36W	240	0.3	0.98
FBS 300 2XPLL 36W P5 EBT	2XPL-L36W	240	0.46	0.98

FBS 300 3xPL-L 36W



FBS 300 2xPL-L 18W



Technical Drawing



Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS300 M 3XPL-L36W IC P5	919015087130	2	660x660x170	5.6	11.8	0.074
FBS300 M 2XPL-L36W IC P5	919015088291	2	660x660x170	6.4	13.4	0.074
FBS300 M 3XPL-L36W EBP P5	919015088391	2	660x660x170	4.7	10	0.074
FBS 300 2XPLL 36W P5 EBT 236	919015810177	2	660x660x170	4.5	9.6	0.074

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



FBS 440

Office
Application

Page 07



Product description

Recessed mounted luminaire with MI optics specially designed for twin T5 and T8 Lamps. This family is offered only in electronic version offering nest of energy efficiency and performance.

Features

- Sturdy housing made from CRAC.
- TL5 lamps options for energy saving and high light output.
- Easy to install, easy to maintain.
- Advanced lamellae for glare control.
- Available in 2x36 / 2x38 and 2x54 versions.

Applications

- Small offices
- Receptions and public service rooms
- Recreational areas
- General open plan office

Mounting Type

Recessed mounted

Installation

Provision for suspension through conduit or chain suspension.

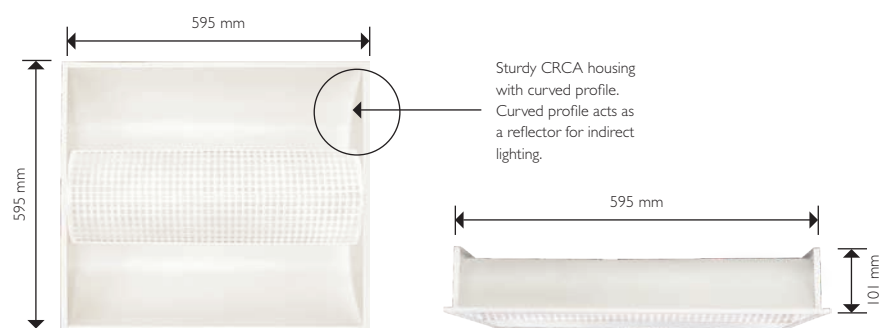
Compliance

IP 20

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS 440 2XPLL 36W OB EBW	2XPLL 36W	240	0.3	0.98
FBS 440 2XPLL 40W OB EBP	2XPLL 40W	240	0.38	0.98
FBS 440 2XPLL 55W OB HFP	2XPLL 55W	240	0.46	0.98
TBS 440 4XTL-5 I 4W OB EBP	4xTL-5 54W	240	0.29	0.98

IP 20



Dimensional details

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS 440 2XPLL 36W SP EBW	919015810247	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W RP EBW	919015810248	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W RL EBW	919015810249	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W OL EBW	919015810250	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W OP EBW	919015810251	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W OS EBW	919015810252	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 36W OB EBW	919015810253	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W SP EBP	919015810254	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W RP EBP	919015810255	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W RL EBP	919015810256	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W OL EBP	919015810257	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W OP EBP	919015810258	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W OS EBP	919015810259	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W OS EBP	919015810259	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 40W OB EBP	919015810260	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W SP HFP	919015810261	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W RP HFP	919015810262	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W RL HFP	919015810263	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W OL HFP	919015810264	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W OP HFP	919015810265	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W OS HFP	919015810266	2	650x650x230	4	9.5	0.097
FBS 440 2XPLL 55W OB HFP	919015810267	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W SP EBP	919015810268	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W RP EBP	919015810269	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W RL EBP	919015810270	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W OL EBP	919015810271	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W OP EBP	919015810272	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W OS EBP	919015810273	2	650x650x230	4	9.5	0.097
TBS 440 4XTL5 14W OB EBP	919015810274	2	650x650x230	4	9.5	0.097

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

FBS 430

Office
Application

Page 07



Product description

Recessed luminaire suitable for modular ceiling system and lamp options of 2xPL-L36W, 2xPL-L40W, 2xPL-L55W compact fluorescent lamp.

Features

- Housing-cum-reflector made up of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- Detachable curved white powder coated perforated CRCA sheet with polyester film inside.
- Option of detachable curved white powder coated perforated CRCA sheet with wide paralite P5 louvers to achieve direct lighting with low glare / high efficiency D6 option or aesthetic MDGN option.
- Available with high frequency electronic and conventional ballast (are applicable).
- Option of using regulating electronic ballast with suitable lighting controls for greater flexible and energy conservation.

Applications

- Offices
- Hospitals and clinics
- Schools and lecture rooms
- Retail

Mounting Type

Recessed luminaires

Installation

- Resting on T-bar of false ceiling
- Suspension via hooks or chains
- Hanging via swing-out brackets

Compliances

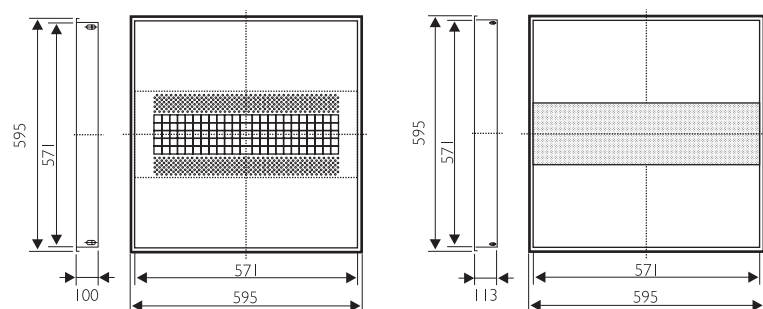
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS430 M 2XPL-L36W IC P5	2xPL-L36W	240	0.46	0.9
FBS430 M 2XPL-L36W IC	2xPL-L36W	240	0.46	0.9
FBS 430 2XPLL 36W P5 HF EBT 236	2xPL-L36W	240	0.32	0.98
FBS 430 2XPLL 36W HF EBT 236	2xPL-L36W	240	0.32	0.98
FBS 430 P 2XPLL 40W P5 EBP P3019	2xPL-L40W	240	0.36	0.98



FBS 430 / FBS 430 P5



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS430 M 2XPL-L36W IC P5	919015084126	2	650x650x230	4.5	12	0.089
FBS430 M 2XPL-L36W IC	919015084127	2	650x650x230	4.5	12	0.089
FBS 430 2XPLL 36W P5 HF EBT 236	919015810179	2	650x650x230	4	11	0.089
FBS 430 2XPLL 36W HF EBT 236	919015810218	2	650x650x230	4	11	0.089
FBS 430 P 2XPLL 40W P5 EBP P3019	919615810213	2	650x650x230	4	11	0.089

Other variants available on request.

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



TBS 90

Office
Application

Page 07



Product description

Functional widespread luminaires for recessed mounting in modular strip ceilings suitable for TLD / TL fluorescent lamps.

Features

- Housing made of CRCA sheet steel, powder coated white, accommodating all electrical accessories pre-wired up to a terminal block.
- Designed for mounting into modular strip ceilings. Adjustable luminaire positioning on the ceiling for easy and flexible installation.
- The optical system is fixed on the luminaire by four spring clips and can be suspended during re-lamping / maintenance.
- Optical system having high efficiency mirror optics of standard quality aluminium with faceted side reflectors and diffuse white lamellae.

Applications

- Small offices
- Conference rooms
- Reception and public service areas
- Recreational areas (restaurants, cafeterias)
- Departmental stores
- Shops and boutiques

Mounting Type

Recessed luminaires

Installation

Provision for suspension through chain or Ø19mm conduit.

Compliances

- IP 20

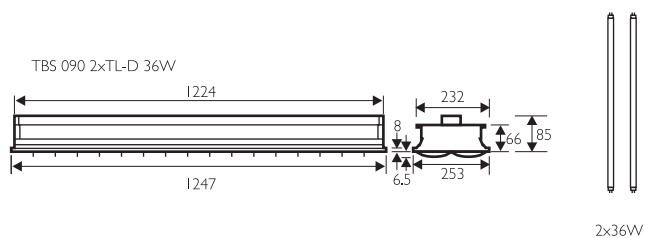
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS 90 2xTL-D 6 IC	36W / 'TL' 40W	240	0.46	0.90

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS 90 2xTL-D 6 IC		2	1275x295x205	4.0	9.3	0.077

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing



TBS 520

Office
Application

Page 07



Product description

Recessed mounted luminaire with MI optics specially designed for twin T5 and T8 lamps. This family is offered only in electronic version offering nest of energy efficiency and performance.

Features

- Sturdy housing made from CRAC.
- TL5 lamps options for energy saving and high light output.
- Easy to install, easy to maintain.
- Advanced lamellae for glare control.
- Available in 2x36 / 2x38 and 2x54 versions.

Applications

- Office
- General interiors
- Retail outlets

Mounting Type

Recessed mounted

Installation

Provision for suspension through conduit or chain suspension.

Compliance

IP 20

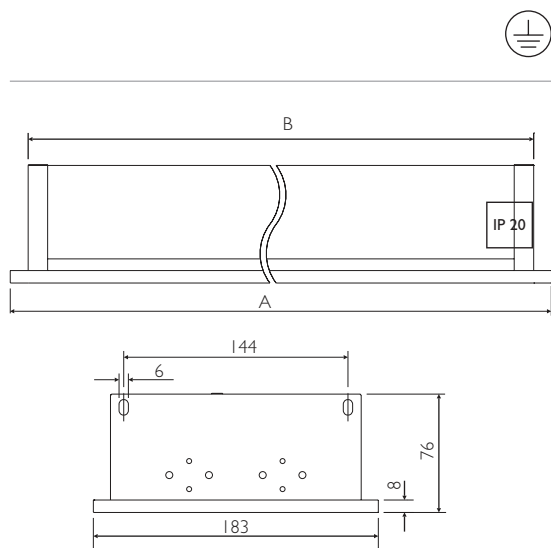
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TBS 520 2xTL-D 36W WMIEBE	2xTL-D 36W	240	0.3	0.95
TBS 520 2xTL-5 28W EBEM	2xTL-5 28W	240	0.3	0.95

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TBS 520 2xTL-D 36W MIEBE	919015010093	2	1290x235	3.1	7.5	0.060
TBS 520 2xTL-5 28W MIEBE	919015010094	2	1290x200	3.1	7.5	0.060

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



ITEM	A	B
TBS 520/236 MI	1248	1224
TBS 520/228 MI	1191	1167
TBS 520/254 MI	1191	1167

Technical Drawing



FBS 518

Office
Application

Page 07



Product description

Recessed luminaires suitable for use with PL-S 9W / 11W compact fluorescent lamps.

Features

- Housing made of CRCA sheet steel, painted white, accommodating all electrical accessories pre-wired up to a terminal block.
- A reflector assembly, made of high purity aluminium sheet, electrochemically brightened and anodised, fitted with painted aluminium lamellae.
- Stainless spring clips for fixing the reflector to the housing.

Applications

- Representatives offices and conference rooms
- Small offices and general open plan offices
- Reception and public service areas
- Corridors and staircases
- Recreational areas (sport halls, restaurants, cafeterias)
- Department stores, shops and boutiques

Mounting Type

Recessed luminaires

Installation

Designed for recessed mounting on modular strip ceilings.

Compliances

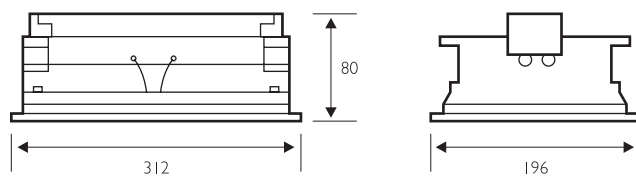
- IP 20
- Class I

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS518 2XPL-S/2P11W 240V	2XPL-S/2P11W	240	0.3	0.45
FBS518 2XPL-S/2P9W 240V	2XPL-S/2P9W	240	0.15	0.45

Ordering data available on request.

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing



FBS 285

Office
Application

Page 07



Product description

Recessed luminaires suitable for use with PL-S 9W / 11W compact fluorescent lamp(s).

Features

- Housing made of CRCA sheet steel, painted white, accommodating all electrical accessories pre-wired up to a terminal block.
- A reflector assembly, made of high purity aluminium sheet, electrochemically brightened and anodised, fitted with painted aluminium lamellae.
- Stainless spring clips for fixing the reflector to the housing.

Applications

- Representatives offices and conference rooms
- Small offices, general open plan offices
- Reception, corridors and staircases
- Recreational areas, sport halls, restaurants, cafeterias
- Department stores, shops, high-end fashion boutiques

Mounting Type

Recessed luminaires

Installation

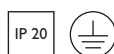
Designed for recessed mounting on modular strip ceilings. The luminaire can also be mounted with the help of a set of 4 numbers swing-out brackets (ZBS 305).

Compliances

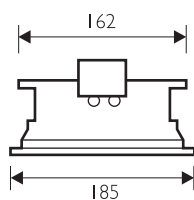
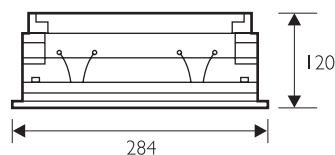
- IP 20
- Class I

Technical data

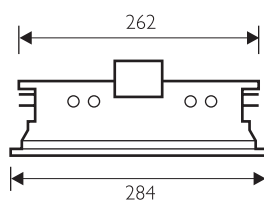
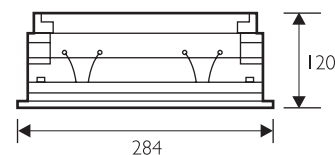
Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
FBS285 2XPL-S/2P9W 240V	2XPL-S/2P9W	240	0.15	0.48
FBS285 2XPL-S/2P11W 240V	2XPL-S/2P11W	240	0.3	0.48
FBS285 2XPL-S/2P11W 240V C5	2XPL-S/2P11W	240	0.3	0.48
FBS285 2XPL-S/2P9W 240V C5	2XPL-S/2P9W	240	0.15	0.48
FBS285 2XPL-L/2P18W 240V	2XPL-L/2P18W	240	0.32	0.48
FBS185 1XPL-S/2P9W 240V	1XPL-S/2P9W	240	0.17	0.35
FBS185 1XPL-S/2P9W 240V C5	1XPL-S/2P9W	240	0.17	0.35



FBS 185



FBS 285



Technical Drawing

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
FBS285 2XPL-S/2P9W I 240V	919215000059	2	330x225x195	1.3	3.8	0.0144
FBS285 2XPL-S/2PI1W I 240V	919215000086	2	330x225x195	1.65	4.2	0.0144
FBS285 2XPL-S/2PI1W I 240V C5	919215000087	2	330x225x195	1.4	4	0.0144
FBS285 2XPL-S/2P9W I 240V C5	919215000088	2	330x225x195	1.7	4.4	0.0144
FBS285 2XPL-L/2PI8W I 240V	919215000137	2	330x225x195	1.65	4.2	0.0144
FBS185 1XPL-S/2P9W I 240V	919215000058	2	320x225x195	1.05	2.9	0.0144
FBS185 1XPL-S/2P9W I 240V C5	919215000089	2	320x225x195	1.1	3	0.0144

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Adreno neo

Office
Application

Page 07



Product description

Slim, robust, non-corrosive. Safer and lighter decoBatten with instant start, flicker free, energy saving, wider operating range, high power factor.

Features

- 45% energy saving vs. 40W TL lamp.
- Ultra slim, BatWing profile for maximum light output.
- Instant start, flicker-free, electronic operation.

Applications

- Home
- Hotels
- Colleges
- Schools
- Guest houses
- Officer interiors
- General ambient lighting, furniture and under-cabinet, mirror sides, corridors.

Installation

Design for surface mounting, this luminaire can be fixed on wall or ceiling by means of installer provided along with the luminaire.

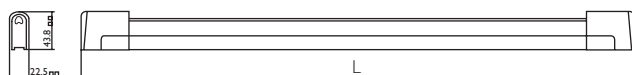
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TWG204 IXTL5-14W/865	T5 14W	230V	0.13	0.60
TWG204 IXTL5-14W/830	T5 14W	230V	0.13	0.60
TWG204 IXTL5-28W/865	T5 28W	230V	0.17	0.98
TWG204 IXTL5-28W/840	T5 28W	230V	0.17	0.98
TWG204 IXTL5-28W/830	T5 28W	230V	0.17	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TWG204 IXTL5-14W/865	I35025775	30	685 × 280 × 200	0.274 × 30	11.344	0.0383
TWG204 IXTL5-14W/830	I35027175	30	685 × 280 × 200	0.274 × 30	11.344	0.0383
TWG204 IXTL5-28W/865	I35025755	30	1285 × 280 × 200	0.526 × 30	21.134	0.0732
TWG204 IXTL5-28W/840	I35025785	30	1285 × 280 × 200	0.526 × 30	21.134	0.0732
TWG204 IXTL5-28W/830	I35027155	30	1285 × 280 × 200	0.526 × 30	21.134	0.0732

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Type	L (mm)	W (mm)	H (mm)
TWG204 IXTL5-14W	665	52	30
TWG204 IXTL5-28W	1265	52	30

Technical Drawing

Miroлта Slim - 36W & 18W

Office
Application

Page 07



Product description

Sleek and electronic DecoBatten with colored End Cap adds to the aesthetics suitable for use with 1 X TL D 36W Fluorescent lamp.

Features

- Slim and sleek.
- 25% energy saving as compared to 40W conventional Batten.
- HPF (High Power Factor) Batten, PF>.9.
- Pre-phosphated and powder coated CRCA steel channel complete with all the electrical accessories like electronic ballast, lamp holders and pre-wired up to a terminal block.
- Aesthetically designed dual color end caps.
- Operates from 140V to 270V.
- Single Piece construction.

Applications

- Office interiors • Horeca
- Budget hotel rooms • Shops

Installation

Designed for surface mounting, this luminaire can be fixed on wall or ceiling by means of installer provided along with the luminaire.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMS520/I 36 HF	IXTLD 36W	240V	0.16 A	0.9
TMS520/I 18 HF	IXTLD 18W	240V	0.08 A	0.9

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMS520/I 36 HF	919215810005	10	1330 × 230 × 140	0.61	7.6	0.0428
TMS520/I 18 HF	919215810013	10	730 × 230 × 140	0.35	4.3	0.0235

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Miroлта Slim T5 - 28W

Office
Application

Page 07



Product description

Bright, slim and efficient with colored end caps and robust body aesthetically designed to suite office space.

Features

- Bright, slim and efficient.
- Designed to Inspire : Aesthetically designed dual color end caps.
Design registered by Philips.
- 45% Energy saving.
- High Power Factor (HPF) >0.98.
- Long lasting metal body.
- Warm start operation: helps in longevity of lamp life.
- Automatic deactivation ensures complete safety.
- One of most energy efficient fluorescent system:
delivers 78 lumen / Watt.

Applications

- Office interiors
- Budget hotel rooms
- Shops

Installation

Designed for surface mounting, this luminaire can be fixed on wall or ceiling by means of installer provided along with the luminaire.

Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMS540 IXTL5 28W HF/865	IXT5 28W	240V	0.17	>0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMS540 IXTL5 28W HF/865	919215810017	20	1310 X 220 X 140	0.52	13	0.0403

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.

Tarang Electronic

Office
Application

Page 07



Product description

Energy saving electronic striplite suitable for use with 1 x TL'D / TL fluorescent lamp.

Features

- Saves 25% energy as compared to conventional electromagnetic ballast with 40W lamp.
- Operates from 170V to 270V.
- Instant start without any lamp flickering.
- Silent operation.
- Negligible heat generation and avoids wall blackening.
- 100% Prephospated and powder coated CRCA steel channel with all accessories like energy saving electronic ballast, lamp holders pre-wired up to a terminal block.
- Specially designed click fix safe contact lampholders and impact resistant Polycarbonate brackets makes the luminaire suitable for easy use with any make lamp.
- Easy to install mounting holes.
- Available in 2ft and 4ft versions.
- Protective product shrink-wrapping.

Applications

- Homes • Shops • Schools / universities / colleges
- Small cafeterias / restaurants / hotels • Office interiors
- Common area lighting • Parking areas / corridors / basements

Installation

Designed for surface mounting, this luminaire can be fixed on wall or ceiling by means of holes provided on the channel.

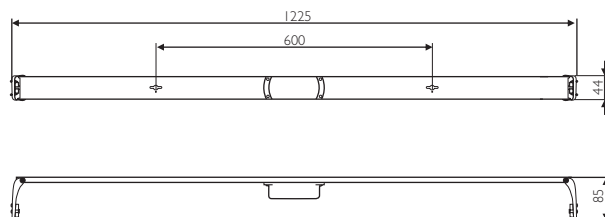
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TMC 090/136	IXTL'D 36W or IXTL 40W	230V	0.16 A	0.90
TMC 090/118	IXTL'D 18W or IXTL 20W	240V	0.08 A	0.90

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TMS520/136 HF	919215810005	10	1330 X 230 X 140	0.61	7.6	0.0428
TMS520/118 HF	919215810013	10	730 X 230 X 140	0.35	4.3	0.0235

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Technical Drawing

Vector neo

Office
Application

Page 07



Product description

Slim, robust, non-corrosive. Safer and lighter DecoBatten with instant start, flicker free, energy saving, wider operating range, high power factor.

Features

- 45% energy saving.
- T5 electronic Batten.
- Slim, robust, non-corrosive.
- Full light output.
- Instant flicker free start.

Applications

- Display racks • Suspended lighting • Cove lighting
- Shop windows • Light lines • Office • Shop
- Partition light

Installation

Design for surface mounting, this luminaire can be fixed on wall or ceiling by means of installer provided along with the luminaire. Please do not install this Batten by paralleled together.

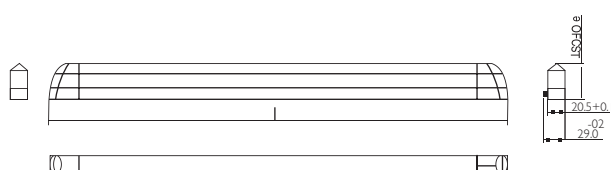
Technical data

Type	For lamp	Nominal voltage (V)	Main current (A)	Nominal power factor
TCH204 IXTL5-14W/865	T5 14W	230V	0.13	0.60
TCH204 IXTL5-14W/830	T5 14W	230V	0.13	0.60
TCH204 IXTL5-28W/865	T5 28W	230V	0.17	0.98
TCH204 IXTL5 28W/840	T5 28W	230V	0.17	0.98
TCH204 IXTL5 28W/830	T5 28W	230V	0.17	0.98

Ordering data

Type	Ordering data	Quantity per box	Dimensions (mm)	Net weight (kg)	Gross weight (kg)	Volume (m3)
TCH204 IXTL5-14W/865	I35025705	30	685 × 280 × 200	0.227 × 30	9.934	0.0383
TCH204 IXTL5-14W/830	I35027235	30	685 × 280 × 200	0.227 × 30	9.934	0.0383
TCH204 IXTL5-28W/865	I35025685	30	1285 × 280 × 200	0.427 × 30	18.164	0.0732
TCH204 IXTL5 28W/840	I35025715	30	1285 × 280 × 200	0.427 × 30	18.164	0.0732
TCH204 IXTL5 28W/830	I35027215	30	1285 × 280 × 200	0.427 × 30	18.164	0.0732

Dimmable version with 0-10 v dc Analog dimming and Digital Dali 'DALI' are available on request.



Type	L (mm)	W (mm)	H (mm)
TCH204 IXTL5-14W	665	52	30
TCH204 IXTL5-28W	1265	52	30

Technical Drawing



Technical Data

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Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
Fluorescent lamps								
MASTER TL5 ActiViva								
TL5-24W/451	MASTER TL5 ActiViva Natural 24W	G5	8000	82	1650			20000
TL5-49W/451	MASTER TL5 ActiViva Natural 49W	G5	8000	82	4100			20000
TL5-54W/451	MASTER TL5 ActiViva Natural 54W	G5	8000	82	4250			20000
TL5-24W/452	MASTER TL5 ActiViva Active 24W	G5	17000	82	1550			20000
TL5-49W/452	MASTER TL5 ActiViva Active 49W	G5	17000	82	3700			20000
TL5-54W/452	MASTER TL5 ActiViva Active 54W	G5	17000	82	3800			20000
MASTER TL5 Circular								
TL5C-22W/827	MASTER TL5 Circular 22W/827	2GX13	2700	85	1800			12000
TL5C-22W/830	MASTER TL5 Circular 22W/830	2GX13	3000	85	1800			12000
TL5C-22W/840	MASTER TL5 Circular 22W/840	2GX13	4000	85	1800			12000
TL5C-40W/827	MASTER TL5 Circular 40W/827	2GX13	2700	85	3300			12000
TL5C-40W/830	MASTER TL5 Circular 40W/830	2GX13	3000	85	3300			12000
TL5C-40W/840	MASTER TL5 Circular 40W/840	2GX13	4000	85	3300			12000
TL5C-55W/827	MASTER TL5 Circular 55W/827	2GX13	2700	85	4200			12000
TL5C-55W/830	MASTER TL5 Circular 55W/830	2GX13	3000	85	4200			12000
TL5C-55W/840	MASTER TL5 Circular 55W/840	2GX13	4000	85	4200			12000
TL5C-60W/827	MASTER TL5 Circular 60W/827	2GX13	2700	85	5000			12000
TL5C-60W/830	MASTER TL5 Circular 60W/830	2GX13	3000	85	5000			12000
TL5C-60W/840	MASTER TL5 Circular 60W/840	2GX13	4000	85	5000			12000
MASTER TL5 High Efficiency								
TL5-14W/827	MASTER TL5 HE 14W/827	G5	2700	85	1200			20000
TL5-14W/830	MASTER TL5 HE 14W/830	G5	3000	85	1200			20000
TL5-14W/835	MASTER TL5 HE 14W/835	G5	3500	85	1200			20000
TL5-14W/840	MASTER TL5 HE 14W/840	G5	4000	85	1200			20000
TL5-14W/850	MASTER TL5 HE 14W/850	G5	5000	85	1100			20000
TL5-14W/865	MASTER TL5 HE 14W/865	G5	6500	85	1100			20000
TL5-21W/827	MASTER TL5 HE 21W/827	G5	2700	85	1900			20000
TL5-21W/830	MASTER TL5 HE 21W/830	G5	3000	85	1900			20000
TL5-21W/835	MASTER TL5 HE 21W/835	G5	3500	85	1900			20000
TL5-21W/840	MASTER TL5 HE 21W/840	G5	4000	85	1900			20000
TL5-21W/865	MASTER TL5 HE 21W/865	G5	6500	85	1750			20000
TL5-28W/827	MASTER TL5 HE 28W/827	G5	2700	85	2600			20000
TL5-28W/830	MASTER TL5 HE 28W/830	G5	3000	85	2600			20000
TL5-28W/835	MASTER TL5 HE 28W/835	G5	3500	85	2600			20000
TL5-28W/840	MASTER TL5 HE 28W/840	G5	4000	85	2600			20000
TL5-28W/850	MASTER TL5 HE 28W/850	G5	5000	85	2400			20000
TL5-28W/865	MASTER TL5 HE 28W/865	G5	6500	85	2400			20000
TL5-35W/827	MASTER TL5 HE 35W/827	G5	2700	85	3300			20000
TL5-35W/830	MASTER TL5 HE 35W/830	G5	3000	85	3300			20000
TL5-35W/835	MASTER TL5 HE 35W/835	G5	3500	85	3300			20000
TL5-35W/840	MASTER TL5 HE 35W/840	G5	4000	85	3300			20000
TL5-35W/865	MASTER TL5 HE 35W/865	G5	6500	85	3100			20000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTER TL5 High Output

TL5-24W/827	MASTER TL5 HO 24W/827	G5	2700	85	1750			20000
TL5-24W/830	MASTER TL5 HO 24W/830	G5	3000	85	1750			20000
TL5-24W/835	MASTER TL5 HO 24W/835	G5	3500	85	1750			20000
TL5-24W/840	MASTER TL5 HO 24W/840	G5	4000	85	1750			20000
TL5-24W/865	MASTER TL5 HO 24W/865	G5	6500	85	1650			20000
TL5-39W/827	MASTER TL5 HO 39W/827	G5	2700	85	3100			20000
TL5-39W/830	MASTER TL5 HO 39W/830	G5	3000	85	3100			20000
TL5-39W/835	MASTER TL5 HO 39W/835	G5	3500	85	3100			20000
TL5-39W/840	MASTER TL5 HO 39W/840	G5	4000	85	3100			20000
TL5-39W/865	MASTER TL5 HO 39W/865	G5	6500	85	2950			20000
TL5-49W/827	MASTER TL5 HO 49W/827	G5	2700	85	4300			20000
TL5-49W/830	MASTER TL5 HO 49W/830	G5	3000	85	4300			20000
TL5-49W/840	MASTER TL5 HO 49W/840	G5	4000	85	4300			20000
TL5-49W/865	MASTER TL5 HO 49W/865	G5	6500	85	4100			20000
TL5-54W/827	MASTER TL5 HO 54W/827	G5	2700	85	4450			20000
TL5-54W/830	MASTER TL5 HO 54W/830	G5	3000	85	4450			20000
TL5-54W/840	MASTER TL5 HO 54W/840	G5	4000	85	4450			20000
TL5-54W/850	MASTER TL5 HO 54W/850	G5	5000	85	4250			20000
TL5-54W/865	MASTER TL5 HO 54W/865	G5	6500	85	4250			20000
TL5-80W/827	MASTER TL5 HO 80W/827	G5	2700	85	6150			20000
TL5-80W/830	MASTER TL5 HO 80W/830	G5	3000	85	6150			20000
TL5-80W/840	MASTER TL5 HO 80W/840	G5	4000	85	6150			20000
TL5-80W/865	MASTER TL5 HO 80W/865	G5	6500	85	5850			20000

MASTER TL5 High Output 90 De Luxe

TL5-24W/940	MASTER TL5 HO De Luxe 24W/940	G5	4000	91	1400			20000
TL5-24W/950	MASTER TL5 HO De Luxe 24W/950	G5	5200	93	1400			20000
TL5-24W/965	MASTER TL5 HO De Luxe 24W/965	G5	6800	93	1400			20000
TL5-49W/940	MASTER TL5 HO De Luxe 49W/940	G5	4000	91	3700			20000
TL5-49W/950	MASTER TL5 HO De Luxe 49W/950	G5	5200	93	3700			20000
TL5-49W/965	MASTER TL5 HO De Luxe 49W/965	G5	6800	93	3700			20000
TL5-54W/940	MASTER TL5 HO De Luxe 54W/940	G5	4000	91	3800			20000
TL5-54W/950	MASTER TL5 HO De Luxe 54W/950	G5	5200	93	3800			20000
TL5-54W/965	MASTER TL5 HO De Luxe 54W/965	G5	6800	93	3800			20000

MASTER TL5 High Efficiency Secura, MASTER TL5 High Output Optiview, MASTER TL5 High Output Secura,**MASTER TL5 High Output Xtra, MASTER TL5 Colored** - For data refer to <http://www.lampsandgear.philips.com>**MASTER TL-D ActiViva**

TL-D18W/45I	MASTER TL-D ActiViva Natural 18W	G13	8000	82	1300		15000	20000
TL-D36W/45I	MASTER TL-D ActiViva Natural 36W	G13	8000	82	3100		15000	20000
TL-D58W/45I	MASTER TL-D ActiViva Natural 58W	G13	8000	82	5000		15000	20000

MASTER TL Mini Super 80

TL13W/827	MASTER TL Mini Super 80 13W/827	G5	2700	82	1000		8000	8000
TL13W/830	MASTER TL Mini Super 80 13W/830	G5	3000	85	1000		8000	8000
TL13W/840	MASTER TL Mini Super 80 13W/840	G5	4000	85	1000		8000	8000

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTER TL-D Super 80								
TL-D15W/827	MASTER TL-D Super 80 15W/827	G13	2700	85	1000		15000	20000
TL-D15W/830	MASTER TL-D Super 80 15W/830	G13	3000	85	1000		15000	20000
TL-D15W/840	MASTER TL-D Super 80 15W/840	G13	4000	85	1000		15000	20000
TL-D18W/827	MASTER TL-D Super 80 18W/827	G13	2700	85	1350		15000	20000
TL-D18W/830	MASTER TL-D Super 80 18W/830	G13	3000	85	1350		15000	20000
TL-D18W/835	MASTER TL-D Super 80 18W/835	G13	3500	85	1350		15000	20000
TL-D18W/840	MASTER TL-D Super 80 18W/840	G13	4000	85	1350		15000	20000
TL-D18W/865	MASTER TL-D Super 80 18W/865	G13	6500	85	1300		15000	20000
TL-D30W/827	MASTER TL-D Super 80 30W/827	G13	2700	85	2400		15000	20000
TL-D30W/830	MASTER TL-D Super 80 30W/830	G13	3000	85	2400		15000	20000
TL-D30W/840	MASTER TL-D Super 80 30W/840	G13	4000	85	2400		15000	20000
TL-D30W/865	MASTER TL-D Super 80 30W/865	G13	6500	85	2300		15000	20000
TL-D36W/827	MASTER TL-D Super 80 36W/827	G13	2700	85	3350		15000	20000
TL-D36W/830	MASTER TL-D Super 80 36W/830	G13	3000	85	3350		15000	20000
TL-D36W/835	MASTER TL-D Super 80 36W/835	G13	3500	85	3350		15000	20000
TL-D36W/840	MASTER TL-D Super 80 36W/840	G13	4000	85	3350		15000	20000
TL-D36W/865	MASTER TL-D Super 80 36W/865	G13	6500	85	3250		15000	20000
TL-D38W/830	MASTER TL-D Super 80 38W/830	G13	3000	85	3350		15000	20000
TL-D38W/840	MASTER TL-D Super 80 38W/840	G13	4000	85	3350		15000	20000
TL-D58W/827	MASTER TL-D Super 80 58W/827	G13	2700	85	5200		15000	20000
TL-D58W/830	MASTER TL-D Super 80 58W/830	G13	3000	85	5200		15000	20000
TL-D58W/835	MASTER TL-D Super 80 58W/835	G13	3500	85	5200		15000	20000
TL-D58W/840	MASTER TL-D Super 80 58W/840	G13	4000	85	5200		15000	20000
TL-D58W/865	MASTER TL-D Super 80 58W/865	G13	6500	85	5000		15000	20000
MASTER TL-D 90 De Luxe								
TL-D18W/930	MASTER TL-D 90 De Luxe 18W/930	G13	3000	92	1100		15000	20000
TL-D18W/940	MASTER TL-D 90 De Luxe 18W/940	G13	4000	91	1200		15000	20000
TL-D18W/950	MASTER TL-D 90 De Luxe 18W/950	G13	5300	93	1150		15000	20000
TL-D18W/965	MASTER TL-D 90 De Luxe 18W/965	G13	6500	93	1150		15000	20000
TL-D30W/930	MASTER TL-D 90 De Luxe 30W/930	G13	3000	92	1950		15000	20000
TL-D36W/930	MASTER TL-D 90 De Luxe 36W/930	G13	3000	92	2800		15000	20000
TL-D36W/940	MASTER TL-D 90 De Luxe 36W/940	G13	4000	91	2800		15000	20000
TL-D36W/950	MASTER TL-D 90 De Luxe 36W/950	G13	5300	93	2800		15000	20000
TL-D36W/965	MASTER TL-D 90 De Luxe 36W/965	G13	6500	93	2800		15000	20000
TL-D58W/930	MASTER TL-D 90 De Luxe 58W/930	G13	3000	92	4350		15000	20000
TL-D58W/940	MASTER TL-D 90 De Luxe 58W/940	G13	4000	91	4600		15000	20000
TL-D58W/950	MASTER TL-D 90 De Luxe 58W/950	G13	5300	93	4550		15000	20000
TL-D58W/965	MASTER TL-D 90 De Luxe 58W/965	G13	6500	93	4550		15000	20000
MASTER TL-D Secura								
Remarks *For optimum safety it is advisable to replace the lamps after 10000 hours if any damage in the coating is apparent								
TL-DS18W/830	MASTER TL-D Secura 18W/830	G13	3000	85	1300		15000*	20000*
TL-DS18W/840	MASTER TL-D Secura 18W/840	G13	4000	85	1300		15000*	20000*
TL-DS30W/830	MASTER TL-D Secura 30W/830	G13	3000	85	2350		15000*	20000*
TL-DS30W/840	MASTER TL-D Secura 30W/840	G13	4000	85	2350		15000*	20000*
TL-DS36W/830	MASTER TL-D Secura 36W/830	G13	3000	85	3200		15000*	20000*

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
TL-DS36W/840	MASTER TL-D Secura 36W/840	G13	4000	85	3200		15000*	20000*
TL-DS58W/830	MASTER TL-D Secura 58W/830	G13	3000	85	5000		15000*	20000*
TL-DS58W/840	MASTER TL-D Secura 58W/840	G13	4000	85	5000		15000*	20000*

MASTER TL-D Xtra

TL-D-XA18W/830	MASTER TL-D Xtra 18W/830	G13	3000	85	1350		28000	55000
TL-D-XA18W/840	MASTER TL-D Xtra 18W/840	G13	4000	85	1350		28000	55000
TL-D-XA18W/865	MASTER TL-D Xtra 18W/865	G13	6500	85	1250		28000	55000
TL-D-XA30W/830	MASTER TL-D Xtra 30W/830	G13	3000	85	2400		28000	55000
TL-D-XA30W/840	MASTER TL-D Xtra 30W/840	G13	4000	85	2400		28000	55000
TL-D-XA36W/830	MASTER TL-D Xtra 36W/830	G13	3000	85	3250		28000	55000
TL-D-XA36W/840	MASTER TL-D Xtra 36W/840	G13	4000	85	3250		28000	55000
TL-D-XA36W/865	MASTER TL-D Xtra 36W/865	G13	6500	85	3200		28000	55000
TL-D-XA58W/830	MASTER TL-D Xtra 58W/830	G13	3000	85	5200		28000	55000
TL-D-XA58W/840	MASTER TL-D Xtra 58W/840	G13	4000	85	5200		28000	55000
TL-D-XA58W/865	MASTER TL-D Xtra 58W/865	G13	6500	85	5000		28000	55000

MASTER TL-D Xtreme

TL-D-XE18W/830	MASTER TL-D Xtreme 18W/830	G13	3000	85	1350		47000	79000
TL-D-XE18W/840	MASTER TL-D Xtreme 18W/840	G13	4000	85	1350		47000	79000
TL-D-XE18W/865	MASTER TL-D Xtreme 18W/865	G13	6500	85	1250		47000	79000
TL-D-XE30W/830	MASTER TL-D Xtreme 30W/830	G13	3000	85	3000		47000	79000
TL-D-XE30W/840	MASTER TL-D Xtreme 30W/840	G13	4000	85	3000		47000	79000
TL-D-XE36W/830	MASTER TL-D Xtreme 36W/830	G13	3000	85	3250		47000	79000
TL-D-XE36W/840	MASTER TL-D Xtreme 36W/840	G13	4000	85	3250		47000	79000
TL-D-XE36W/865	MASTER TL-D Xtreme 36W/865	G13	6500	85	3150		47000	79000
TL-D-XE58W/830	MASTER TL-D Xtreme 58W/830	G13	3000	85	5150		47000	79000
TL-D-XE58W/840	MASTER TL-D Xtreme 58W/840	G13	4000	85	5150		47000	79000
TL-D-XE58W/865	MASTER TL-D Xtreme 58W/865	G13	6500	85	5000		47000	79000

MASTER TL-D 90 Graphica, MASTER TL-D Food, MASTER TL-D Food Secura, MASTER TL-D Optiview, MASTER TL-D Xtra Polar, MASTER TL-D Xtra Secura,

MASTER TL-D Xtreme Polar, MASTER TL-D Xtreme Secura - For data refer to <http://www.lampsandgear.philips.com>

Compact fluorescent lamps without integrated gear**MASTER PL-C 2 Pin**

PL-C/2P10W/827	MASTER PL-C 10W/827/2P	G24d-1	2700	82	600		10000	
PL-C/2P10W/830	MASTER PL-C 10W/830/2P	G24d-1	3000	82	600		10000	
PL-C/2P10W/840	MASTER PL-C 10W/840/2P	G24d-1	4000	82	600		10000	
PL-C/2P13W/827	MASTER PL-C 13W/827/2P	G24d-1	2700	82	900		10000	
PL-C/2P13W/830	MASTER PL-C 13W/830/2P	G24d-1	3000	82	900		10000	
PL-C/2P13W/840	MASTER PL-C 13W/840/2P	G24d-1	4000	82	900		10000	
PL-C/2P13W/865	MASTER PL-C 13W/865/2P	G24d-1	6500	80	900		10000	
PL-C/2P18W/827	MASTER PL-C 18W/827/2P	G24d-2	2700	82	1200		10000	
PL-C/2P18W/830	MASTER PL-C 18W/830/2P	G24d-2	3000	82	1200		10000	
PL-C/2P18W/835	MASTER PL-C 18W/835/2P	G24d-2	3500	82	1200		10000	
PL-C/2P18W/840	MASTER PL-C 18W/840/2P	G24d-2	4000	82	1200		10000	
PL-C/2P18W/865	MASTER PL-C 18W/865/2P	G24d-2	6500	80	1200		10000	
PL-C/2P26W/827	MASTER PL-C 26W/827/2P	G24d-3	2700	82	1800		10000	
PL-C/2P26W/830	MASTER PL-C 26W/830/2P	G24d-3	3000	82	1800		10000	

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
PL-C/2P26W/835	MASTER PL-C 26W/835/2P	G24d-3	3500	82	1800		10000	
PL-C/2P26W/840	MASTER PL-C 26W/840/2P	G24d-3	4000	82	1800		10000	
PL-C/2P26W/865	MASTER PL-C 26W/865/2P	G24d-3	6500	80	1800		10000	

MASTER PL-C Xtra 2 Pin - For data refer to <http://www.lampsandgear.philips.com>

MASTER PL-C 4 Pin

PL-C/4P10W/827	MASTER PL-C 10W/827/4P	G24q-1	2700	82	600			13000
PL-C/4P10W/830	MASTER PL-C 10W/830/4P	G24q-1	3000	82	600			13000
PL-C/4P10W/840	MASTER PL-C 10W/840/4P	G24q-1	4000	82	600			13000
PL-C/4P13W/827	MASTER PL-C 13W/827/4P	G24q-1	2700	82	900			13000
PL-C/4P13W/830	MASTER PL-C 13W/830/4P	G24q-1	3000	82	900			13000
PL-C/4P13W/840	MASTER PL-C 13W/840/4P	G24q-1	4000	82	900			13000
PL-C/4P18W/827	MASTER PL-C 18W/827/4P	G24q-2	2700	82	1200			13000
PL-C/4P18W/830	MASTER PL-C 18W/830/4P	G24q-2	3000	82	1200			13000
PL-C/4P18W/840	MASTER PL-C 18W/840/4P	G24q-2	4000	82	1200			13000
PL-C/4P26W/827	MASTER PL-C 26W/827/4P	G24q-3	2700	82	1800			13000
PL-C/4P26W/830	MASTER PL-C 26W/830/4P	G24q-3	3000	82	1800			13000
PL-C/4P26W/835	MASTER PL-C 26W/835/4P	G24q-3	3500	82	1800			13000
PL-C/4P26W/840	MASTER PL-C 26W/840/4P	G24q-3	4000	82	1800			13000

MASTER PL-C Xtra 4 Pin - For data refer to <http://www.lampsandgear.philips.com>

MASTER PL-L 4 Pin

PL-L18W/827	MASTER PL-L 18W/827/4P	2G11	2700	82	1200		15000	20000
PL-L18W/830	MASTER PL-L 18W/830/4P	2G11	3000	82	1200		15000	20000
PL-L18W/835	MASTER PL-L 18W/835/4P	2G11	3500	82	1200		15000	20000
PL-L18W/840	MASTER PL-L 18W/840/4P	2G11	4000	82	1200		15000	20000
PL-L18W/865	MASTER PL-L 18W/865/4P	2G11	6500	80	1200		15000	20000
PL-L24W/827	MASTER PL-L 24W/827/4P	2G11	2700	82	1800		15000	20000
PL-L24W/830	MASTER PL-L 24W/830/4P	2G11	3000	82	1800		15000	20000
PL-L24W/835	MASTER PL-L 24W/835/4P	2G11	3500	82	1800		15000	20000
PL-L24W/840	MASTER PL-L 24W/840/4P	2G11	4000	82	1800		15000	20000
PL-L24W/865	MASTER PL-L 24W/865/4P	2G11	6500	80	1800		15000	20000
PL-L36W/827	MASTER PL-L 36W/827/4P	2G11	2700	82	2900		15000	20000
PL-L36W/830	MASTER PL-L 36W/830/4P	2G11	3000	82	2900		15000	20000
PL-L36W/835	MASTER PL-L 36W/835/4P	2G11	3500	82	2900		15000	20000
PL-L36W/840	MASTER PL-L 36W/840/4P	2G11	4000	82	2900		15000	20000
PL-L36W/850	MASTER PL-L 36W/850/4P	2G11	5000	82	2900		15000	20000
PL-L36W/865	MASTER PL-L 36W/865/4P	2G11	6500	80	2900		15000	20000
PL-L40W/830	MASTER PL-L 40W/830/4P	2G11	3000	82	3500			20000
PL-L40W/835	MASTER PL-L 40W/835/4P	2G11	3500	82	3500			20000
PL-L40W/840	MASTER PL-L 40W/840/4P	2G11	4000	82	3500			20000
PL-L55W/827	MASTER PL-L 55W/827/4P	2G11	2700	82	4800			20000
PL-L55W/830	MASTER PL-L 55W/830/4P	2G11	3000	82	4800			20000
PL-L55W/835	MASTER PL-L 55W/835/4P	2G11	3500	82	4800			20000
PL-L55W/840	MASTER PL-L 55W/840/4P	2G11	4000	82	4800			20000
PL-L55W/865	MASTER PL-L 55W/865/4P	2G11	6500	80	4800			20000
PL-L80W/827	MASTER PL-L 80W/827/4P	2G11	2700	82	6000			20000
PL-L80W/830	MASTER PL-L 80W/830/4P	2G11	3000	82	6000			20000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
PL-L80W/835	MASTER PL-L 80W/835/4P	2G11	3500	82	6000			20000
PL-L80W/840	MASTER PL-L 80W/840/4P	2G11	4000	82	6000			20000

MASTER PL-L de Luxe 4 Pin

PL-L18W/930	MASTER PL-L 18W/930/4P	2G11	3000	90	950		15000	20000
PL-L18W/940	MASTER PL-L 18W/940/4P	2G11	4000	90	950		15000	20000
PL-L18W/950	MASTER PL-L 18W/950/4P	2G11	5300	90	950		15000	20000
PL-L24W/930	MASTER PL-L 24W/930/4P	2G11	3000	90	1500		15000	20000
PL-L24W/940	MASTER PL-L 24W/940/4P	2G11	4000	90	1500		15000	20000
PL-L24W/950	MASTER PL-L 24W/950/4P	2G11	5300	90	1500		15000	20000
PL-L36W/930	MASTER PL-L 36W/930/4P	2G11	3000	90	2350		15000	20000
PL-L36W/940	MASTER PL-L 36W/940/4P	2G11	4000	90	2350		15000	20000
PL-L36W/950	MASTER PL-L 36W/950/4P	2G11	5300	90	2350		15000	20000
PL-L55W/930	MASTER PL-L 55W/930/4P	2G11	3000	90	3650			20000
PL-L55W/940	MASTER PL-L 55W/940/4P	2G11	4000	90	3650			20000
PL-L55W/950	MASTER PL-L 55W/950/4P	2G11	5300	90	3650			20000

MASTER PL-L Polar 4 Pin, MASTER PL-L Xtra 4 Pin - For data refer to <http://www.lampsandgear.philips.com>

PL-Q 2 Pin

PL-Q/2P16W/827	PL-Q 16W/827/2P	GR8	2700	82	1050		10000	
PL-Q/2P16W/830	PL-Q 16W/830/2P	GR8	3000	82	1050		10000	
PL-Q/2P16W/835	PL-Q 16W/835/2P	GR8	3500	82	1050		10000	
PL-Q/2P28W/827	PL-Q 28W/827/2P	GR8	2700	82	2050		10000	
PL-Q/2P28W/830	PL-Q 28W/830/2P	GR8	3000	82	2050		10000	
PL-Q/2P28W/840	PL-Q 28W/840/2P	GR8	4000	82	2050		10000	

PL-Q 4 Pin

PL-Q/4P16W/827	PL-Q 16W/827/4P	GR10q	2700	82	1050			12000
PL-Q/4P16W/830	PL-Q 16W/830/4P	GR10q	3000	82	1050			12000
PL-Q/4P16W/835	PL-Q 16W/835/4P	GR10q	3500	82	1050			12000
PL-Q/4P28W/827	PL-Q 28W/827/4P	GR10q	2700	82	1800			12000
PL-Q/4P28W/830	PL-Q 28W/830/4P	GR10q	3000	82	1800			12000
PL-Q/4P28W/835	PL-Q 28W/835/4P	GR10q	3500	82	1800			12000
PL-Q/4P28W/840	PL-Q 28W/840/4P	GR10q	4000	82	1800			12000
PL-Q/4P38W/827	PL-Q 38W/827/4P	GR10q	2700	82	2800			12000
PL-Q/4P38W/830	PL-Q 38W/830/4P	GR10q	3000	82	2800			12000
PL-Q/4P38W/835	PL-Q 38W/835/4P	GR10q	3500	82	2800			12000
PL-Q/4P38W/840	PL-Q 38W/840/4P	GR10q	4000	82	2800			12000

MASTER PL-S 2 Pin

PL-S/2P7W/827	MASTER PL-S 7W/827/2P	G23	2700	82	400		10000	
PL-S/2P7W/830	MASTER PL-S 7W/830/2P	G23	3000	82	400		10000	
PL-S/2P7W/840	MASTER PL-S 7W/840/2P	G23	4000	82	400		10000	
PL-S/2P9W/827	MASTER PL-S 9W/827/2P	G23	2700	82	600		10000	
PL-S/2P9W/830	MASTER PL-S 9W/830/2P	G23	3000	82	600		10000	
PL-S/2P9W/840	MASTER PL-S 9W/840/2P	G23	4000	82	600		10000	
PL-S/2P11W/827	MASTER PL-S 11W/827/2P	G23	2700	82	900		10000	
PL-S/2P11W/830	MASTER PL-S 11W/830/2P	G23	3000	82	900		10000	
PL-S/2P11W/840	MASTER PL-S 11W/840/2P	G23	4000	82	900		10000	

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTER PL-S 4 Pin

PL-S/4P7W/827	MASTER PL-S 7W/827/4P	2G7	2700	82	400			13000
PL-S/4P7W/830	MASTER PL-S 7W/830/4P	2G7	3000	82	400			13000
PL-S/4P7W/840	MASTER PL-S 7W/840/4P	2G7	4000	82	400			13000
PL-S/4P9W/827	MASTER PL-S 9W/827/4P	2G7	2700	82	600			13000
PL-S/4P9W/830	MASTER PL-S 9W/830/4P	2G7	3000	82	600			13000
PL-S/4P9W/840	MASTER PL-S 9W/840/4P	2G7	4000	82	600			13000
PL-S/4P11W/827	MASTER PL-S 11W/827/4P	2G7	2700	82	900			13000
PL-S/4P11W/830	MASTER PL-S 11W/830/4P	2G7	3000	82	900			13000
PL-S/4P11W/840	MASTER PL-S 11W/840/4P	2G7	4000	82	900			13000

MASTER PL-T 2 Pin

PL-T/2P13W/827	MASTER PL-T 13W/827/2P	GX24d-1	2700	82	875		10000	
PL-T/2P13W/830	MASTER PL-T 13W/830/2P	GX24d-1	3000	82	875		10000	
PL-T/2P13W/840	MASTER PL-T 13W/840/2P	GX24d-1	4000	82	875		10000	
PL-T/2P18W/827	MASTER PL-T 18W/827/2P	GX24d-2	2700	82	1200		10000	
PL-T/2P18W/830	MASTER PL-T 18W/830/2P	GX24d-2	3000	82	1200		10000	
PL-T/2P18W/840	MASTER PL-T 18W/840/2P	GX24d-2	4000	82	1200		10000	
PL-T/2P26W/827	MASTER PL-T 26W/827/2P	GX24d-3	2700	82	1800		10000	
PL-T/2P26W/830	MASTER PL-T 26W/830/2P	GX24d-3	3000	82	1800		10000	
PL-T/2P26W/840	MASTER PL-T 26W/840/2P	GX24d-3	4000	82	1800		10000	

MASTER PL-T 4 Pin

PL-T/4P13W/827	MASTER PL-T 13W/827/4P	GX24q-1	2700	82	900			13000
PL-T/4P13W/830	MASTER PL-T 13W/830/4P	GX24q-1	3000	82	900			13000
PL-T/4P13W/840	MASTER PL-T 13W/840/4P	GX24q-1	4000	82	900			13000
PL-T/4P18W/827	MASTER PL-T 18W/827/4P	GX24q-2	2700	82	1200			13000
PL-T/4P18W/830	MASTER PL-T 18W/830/4P	GX24q-2	3000	82	1200			13000
PL-T/4P18W/840	MASTER PL-T 18W/840/4P	GX24q-2	4000	82	1200			13000
PL-T/4P26W/827	MASTER PL-T 26W/827/4P	GX24q-3	2700	82	1800			13000
PL-T/4P26W/830	MASTER PL-T 26W/830/4P	GX24q-3	3000	82	1800			13000
PL-T/4P26W/840	MASTER PL-T 26W/840/4P	GX24q-3	4000	82	1800			13000
PL-T/4P32W/827	MASTER PL-T 32W/827/4P	GX24q-3	2700	82	2400			13000
PL-T/4P32W/830	MASTER PL-T 32W/830/4P	GX24q-3	3000	82	2400			13000
PL-T/4P32W/840	MASTER PL-T 32W/840/4P	GX24q-3	4000	82	2400			13000
PL-T/4P42W/827	MASTER PL-T 42W/827/4P	GX24q-4	2700	82	3200			13000
PL-T/4P42W/830	MASTER PL-T 42W/830/4P	GX24q-4	3000	82	3200			13000
PL-T/4P42W/840	MASTER PL-T 42W/840/4P	GX24q-4	4000	82	3200			13000
PL-T/4P57W/827	MASTER PL-T 57W/827/4P	GX24q-5	2700	82	4300			13000
PL-T/4P57W/830	MASTER PL-T 57W/830/4P	GX24q-5	3000	82	4300			13000
PL-T/4P57W/840	MASTER PL-T 57W/840/4P	GX24q-5	4000	82	4300			13000

Compact fluorescent lamps with integrated gear

MASTER PL-Electronic, MASTER PL-Electronic Automatic, MASTER PL-Electronic Dimmable,

MASTER PL-Electronic Polar - For data refer to <http://www.lampsandgear.philips.com>

Halogen lamps

Accentline - For data refer to <http://www.lampsandgear.philips.com>

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
Aluline 37/56								
HAL-R37-6-15W/6V-CL	Aluline 15W 6V R37 6D CL	BA15d	3000	100		5200	2000	
HAL-R37-6-20W/12V-CL	Aluline 20W 12V R37 6D CL	BA15d	3000	100		6400	2000	
HAL-R37-18-20W/12V-CL	Aluline 20W 12V R37 18D CL	BA15d	3000	100		1500	2000	
HAL-R37-18-20W/12V-FR	Aluline 20W 12V R37 18D FR	BA15d	3000	100		1000	2000	
HAL-R37-32-20W/12V-CL	Aluline 20W 12V R37 32D CL	BA15d	3000	100		750	2000	
HAL-R37-32-20W/12V-FR	Aluline 20W 12V R37 32D FR	BA15d	3000	100		350	2000	
HAL-R56-4-15W/6V-CL	Aluline 15W 6V R56 4D CL	B15	3000	100		11000	2000	
HAL-R56-6-35W/6V-CL	Aluline 35W 6V R56 6D CL	B15	3000	100		18000	2000	
HAL-R56-10-50W/12V-CL	Aluline 50W 12V R56 10D CL	B15	3000	100		12000	2000	
HAL-R56-14-15W/6V-CL	Aluline 15W 6V R56 14D CL	B15	3000	100		1900	2000	
HAL-R56-14-35W/6V-CL	Aluline 35W 6V R56 14D CL	B15	3000	100		4400	2000	
HAL-R56-22-50W/12V-FR	Aluline 50W 12V R56 22D FR	B15	3000	100		2000	2000	
HAL-R56-25-50W/12V-CL	Aluline 50W 12V R56 25D CL	B15	3000	100		2500	2000	
Aluline 111								
HAL-R111-8-50W	Aluline 111 50W 12V 8D	G53	3000	100		23000	3000	
HAL-R111-24-50W	Aluline 111 50W 12V 24D	G53	3000	100		4000	3000	
HAL-R111-8-75W	Aluline 111 75W 12V 8D	G53	3000	100		30000	3000	
HAL-R111-24-75W	Aluline 111 75W 12V 24D	G53	3000	100		5300	3000	
HAL-R111-45-75W	Aluline 111 75W 12V 45D	G53	3000	100			3000	
HAL-R111-8-100W	Aluline 111 100W 12V 8D	G53	3000	100		48000	3000	
HAL-R111-24-100W	Aluline 111 100W 12V 24D	G53	3000	100		8500	3000	
HAL-R111-45-100W	Aluline 111 100W 12V 45D	G53	3000	100			3000	
Brilliantline Alu								
HAL-AR50-36-20W	Brilliantline Alu 20W 12V MR16 36D	GU5.3	3000	100		700	4000	
HAL-AR50-36-35W	Brilliantline Alu 35W 12V MR16 36D	GU5.3	3000	100		1500	4000	
HAL-AR50-36-50W	Brilliantline Alu 50W 12V MR16 36D	GU5.3	3000	100		2100	4000	
Brilliantline Dichroic								
HAL-PR35-10-20W	Brilliantline Dichroic 20W 12V MR11 10D	GU4	3000	100		4800	4000	
HAL-PR35-30-20W	Brilliantline Dichroic 20W 12V MR11 30D	GU4	3000	100		690	4000	
HAL-PR35-10-35W	Brilliantline Dichroic 35W 12V MR11 10D	GU4	3000	100		7000	4000	
HAL-PR35-30-35W	Brilliantline Dichroic 35W 12V MR11 30D	GU4	3000	100		1300	4000	
HAL-PR50-10-20W	Brilliantline Dichroic 20W 12V MR16 10D	GU5.3	3000	100		5000	4000	
HAL-PR50-24-20W	Brilliantline Dichroic 20W 12V MR16 24D	GU5.3	3000	100		1800	4000	
HAL-PR50-36-20W	Brilliantline Dichroic 20W 12V MR16 36D	GU5.3	3000	100		780	4000	
HAL-PR50-60-20W	Brilliantline Dichroic 20W 12V MR16 60D	GU5.3	3000	100		350	4000	
HAL-PR50-10-35W	Brilliantline Dichroic 35W 12V MR16 10D	GU5.3	3000	100		8000	4000	
HAL-PR50-24-35W	Brilliantline Dichroic 35W 12V MR16 24D	GU5.3	3000	100		3100	4000	
HAL-PR50-36-35W	Brilliantline Dichroic 35W 12V MR16 36D	GU5.3	3000	100		1500	4000	
HAL-PR50-60-35W	Brilliantline Dichroic 35W 12V MR16 60D	GU5.3	3000	100		700	4000	
HAL-PR50-10-50W	Brilliantline Dichroic 50W 12V MR16 10D	GU5.3	3000	100		13000	4000	
HAL-PR50-24-50W	Brilliantline Dichroic 50W 12V MR16 24D	GU5.3	3000	100		4400	4000	
HAL-PR50-36-50W	Brilliantline Dichroic 50W 12V MR16 36D	GU5.3	3000	100		2200	4000	
HAL-PR50-60-50W	Brilliantline Dichroic 50W 12V MR16 60D	GU5.3	3000	100		1100	4000	

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
Diamondline								
HAL-DR50-10-35W	Diamondline 35W 4100K 12V 10D	GU5.3	4100	100		5400	4000	
HAL-DR50-24-35W	Diamondline 35W 4100K 12V 24D	GU5.3	4100	100		1700	4000	
HAL-DR50-36-35W	Diamondline 35W 4100K 12V 36D	GU5.3	4100	100		1000	4000	
HAL-DR50-10-50W	Diamondline 50W 4100K 12V 10D	GU5.3	4100	100		6400	4000	
HAL-DR50-24-50W	Diamondline 50W 4100K 12V 24D	GU5.3	4100	100		2700	4000	
HAL-DR50-36-50W	Diamondline 50W 4100K 12V 36D	GU5.3	4100	100		1200	4000	
Halogen 12V Dichroic 2Year - For data refer to http://www.lampsandgear.philips.com								
Halogen 12V Dichroic 4Year								
HAL-R50-10-20W/GU4	Halogen Dichroic 4yr 20W 12V 10D	GU4	3000	100		4800	4000	
HAL-R50-30-20W/GU4	Halogen Dichroic 4yr 20W 12V 30D	GU4	3000	100		690	4000	
HAL-R50-30-35W/GU4	Halogen Dichroic 4yr 35W 12V 30D	GU4	3000	100		1300	4000	
HAL-R50-10-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 10D	GU5.3	3000	100		5000	4000	
HAL-R50-24-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 24D	GU5.3	3000	100		1800	4000	
HAL-R50-36-20W/GU5.3	Halogen Dichroic 4yr 20W 12V 36D	GU5.3	3000	100		780	4000	
HAL-R50-36-35W/GU5.3	Halogen Dichroic 4yr 35W 12V 36D	GU5.3	3000	100		1500	4000	
HAL-R50-10-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 10D	GU5.3	3000	100		13000	4000	
HAL-R50-24-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 24D	GU5.3	3000	100		4400	4000	
HAL-R50-36-50W/GU5.3	Halogen Dichroic 4yr 50W 12V 36D	GU5.3	3000	100		2200	4000	
Halogen 12V Dichroic Essential - For data refer to http://www.lampsandgear.philips.com								
HalogenA PARI 6								
HAL-P16-30-25W	HalogenA PARI 6 25W 230V 30D	E14	2700	100		800	2000	
HAL-P16-25-40W	HalogenA PARI 6 40W 230V 25D	E14	2700	100		950	2000	
HalogenA PAR20								
HAL-P20-10-50W	HalogenA PAR20 50W 230V 10D	E27	2800	100		2250	2000	
HAL-P20-25-50W	HalogenA PAR20 50W 230V 25D	E27	2800	100		850	2000	
HalogenA PAR30S								
HAL-P30S-10-75W	HalogenA PAR30S 75W 230V 10D	E27	2800	100		5525	2000	
HAL-P30S-30-75W	HalogenA PAR30S 75W 230V 30D	E27	2800	100		1700	2000	
HAL-P30S-10-100W	HalogenA PAR30S 100W 230V 10D	E27	2800	100		9000	2500	
HAL-P30S-30-100W	HalogenA PAR30S 100W 230V 30D	E27	2800	100		3000	2500	
HalogenA PAR38								
HAL-P38-12-50W	HalogenA PAR38 50W 230V 12D	E27	2800	100		3100	2500	
HAL-P38-30-50W	HalogenA PAR38 50W 230V 30D	E27	2800	100		1200	2500	
HAL-P38-12-65W	HalogenA PAR38 65W 230V 12D	E27	2800	100		4700	2500	
HAL-P38-30-65W	HalogenA PAR38 65W 230V 30D	E27	2800	100		1800	2500	
HAL-P38-10-75W	HalogenA PAR38 75W 230V 10D	E27	2800	100		7800	2000	
HAL-P38-10-100W	HalogenA PAR38 100W 230V 10D	E27	2800	100		8500	2000	
HAL-P38-30-100W	HalogenA PAR38 100W 230V 30D	E27	2800	100		3100	2500	
MASTER PAR20 E								
HAL-P20E-10-20W	MASTER PAR-E 20W 230V 10D	E27	2900	100		7000	5000	
HAL-P20E-25-20W	MASTER PAR-E 20W 230V 25D	E27	2900	100		1200	5000	
MASTERLine ES								
HAL-MR50-8-20W	MASTERLine ES 20W 12V 8D	GU5.3	3000	100		6500	5000	
HAL-MR50-36-20W	MASTERLine ES 20W 12V 36D	GU5.3	3000	100		1000	5000	
HAL-MR50-8-30W	MASTERLine ES 30W 12V 8D	GU5.3	3000	100		11000	5000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTERLine ES								
HAL-MR50-24-30W	MASTERLine ES 30W 12V 24D	GU5.3	3000	100		3350	5000	
HAL-MR50-36-30W	MASTERLine ES 30W 12V 36D	GU5.3	3000	100		1600	5000	
HAL-MR50-60-30W	MASTERLine ES 30W 12V 60D	GU5.3	3000	100		750	5000	
HAL-MR50-8-35W	MASTERLine ES 35W 12V 8D	GU5.3	3000	100		13500	5000	
HAL-MR50-24-35W	MASTERLine ES 35W 12V 24D	GU5.3	3000	100		4400	5000	
HAL-MR50-36-35W	MASTERLine ES 35W 12V 36D	GU5.3	3000	100		2200	5000	
HAL-MR50-60-35W	MASTERLine ES 35W 12V 60D	GU5.3	3000	100		1050	5000	
HAL-MR50-8-45W	MASTERLine ES 45W 12V 8D	GU5.3	3000	100		16000	5000	
HAL-MR50-24-45W	MASTERLine ES 45W 12V 24D	GU5.3	3000	100		5450	5000	
HAL-MR50-36-45W	MASTERLine ES 45W 12V 36D	GU5.3	3000	100		2850	5000	
HAL-MR50-60-45W	MASTERLine ES 45W 12V 60D	GU5.3	3000	100		1300	5000	
MASTERLine Plus								
HAL-R50-10-20W	MASTERLine Plus 20W 12V 10D	GU5.3	3100	100		6500	4000	
HAL-R50-24-20W	MASTERLine Plus 20W 12V 24D	GU5.3	3100	100		1700	4000	
HAL-R50-38-20W	MASTERLine Plus 20W 12V 38D	GU5.3	3100	100		800	4000	
HAL-R50-60-20W	MASTERLine Plus 20W 12V 60D	GU5.3	3100	100		350	4000	
HAL-R50-10-35W	MASTERLine Plus 35W 12V 10D	GU5.3	3100	100		11000	4000	
HAL-R50-24-35W	MASTERLine Plus 35W 12V 24D	GU5.3	3100	100		3500	4000	
HAL-R50-38-35W	MASTERLine Plus 35W 12V 38D	GU5.3	3100	100		1600	4000	
HAL-R50-60-35W	MASTERLine Plus 35W 12V 60D	GU5.3	3100	100		700	4000	
HAL-R50-10-50W	MASTERLine Plus 50W 12V 10D	GU5.3	3200	100		15000	4000	
HAL-R50-24-50W	MASTERLine Plus 50W 12V 24D	GU5.3	3200	100		5200	4000	
HAL-R50-38-50W	MASTERLine Plus 50W 12V 38D	GU5.3	3200	100		2300	4000	
HAL-R50-60-50W	MASTERLine Plus 50W 12V 60D	GU5.3	3200	100		1100	4000	
MASTERLine III								
HAL-MR111-8-30W	MASTERLine III 30W 12V 8D	G53	3000	100		23000	4000	
HAL-MR111-24-30W	MASTERLine III 30W 12V 24D	G53	3000	100		4000	4000	
HAL-MR111-45-30W	MASTERLine III 45W 12V 8D	G53	3000	100		33000	4000	
HAL-MR111-24-45W	MASTERLine III 45W 12V 24D	G53	3000	100		5300	4000	
HAL-MR111-45-45W	MASTERLine III 45W 12V 45D	G53	3000	100		1900	4000	
HAL-MR111-8-60W	MASTERLine III 60W 12V 8D	G53	3000	100		48000	4000	
HAL-MR111-24-60W	MASTERLine III 60W 12V 24D	G53	3000	100		8500	4000	
HAL-MR111-45-60W	MASTERLine III 60W 12V 45D	G53	3000	100		2800	4000	
MASTERLine TC								
HAL-TC45W	MASTERLine TC 45W 12V	G8.5	3050	100		1100	5000	
HAL-TC60W	MASTERLine TC 60W 12V	G8.5	3050	100		1600	5000	
Twistline Alu 2000 hrs								
HAL-R-25-25W-GU10	Twistline Alu 2000h 25W 230V 25D	GU10	2800	100		280	2000	
HAL-R-50-25W-GU10	Twistline Alu 2000h 25W 230V 50D	GU10	2800	100			2000	
HAL-R-20-35W-GU10	Twistline Alu 2000h 35W 230V 20D	GU10	2800	100		500	2000	
HAL-R-40-35W-GU10	Twistline Alu 2000h 35W 230V 40D	GU10	2800	100		250	2000	
HAL-R-25-40W-GU10	Twistline Alu 2000h 40W 230V 25D	GU10	2800	100		550	2000	
HAL-R-50-40W-GU10	Twistline Alu 2000h 40W 230V 50D	GU10	2800	100		350	2000	
HAL-R-20-50W-GU10	Twistline Alu 2000h 50W 230V 20D	GU10	2800	100		1000	2000	
HAL-R-25-50W-GU10	Twistline Alu 2000h 50W 230V 25D	GU10	2800	100		1000	2000	

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
HAL-R-40-50W-GU10	Twistline Alu 2000h 50W 230V 40D	GU10	2800	100		400	2000	
HAL-R-50-50W-GU10	Twistline Alu 2000h 50W 230V 50D	GU10	2800	100		500	2000	
Twistline Alu 3000 hrs								
HAL-TR-25-50W-GU10	Twistline Alu 3000h 50W 230V 25D	GU10	2800	98		1000	3000	
HAL-TR-50-50W-GU10	Twistline Alu 3000h 50W 230V 50D	GU10	2800	98		600	3000	
Twistline Dichro 2000 hrs								
HAL-R-25-50W-GZ10	Twistline Dichro 2000h 50W 230V 25D	GZ10	2900	100		1000	2000	
HAL-R-50-50W-GZ10	Twistline Dichro 2000h 50W 230V 50D	GZ10	2900	100		600	2000	
Twistline Dichro 3000 hrs								
HAL-TR-25-50W-GZ10	Twistline Dichro 3000h 50W 230V 25D	GZ10	2800	98		1000	3000	
HAL-TR-50-50W-GZ10	Twistline Dichro 3000h 50W 230V 50D	GZ10	2800	98		600	3000	
Capsuleline								
HAL-C5W/12V-G4-ST	Capsuleline 5W G4 12V CL 4000h	G4	2800	100	60		4000	
HAL-C10W/12V-G4-SI	Capsuleline 10W G4 12V FR 4000h	G4		100	140		4000	
HAL-C10W/12V-G4-SU	Capsuleline 10W G4 12V CL 4000h	G4	2850	100	140		4000	
HAL-C20W/12V-G4-SI	Capsuleline 20W G4 12V FR 4000h	G4	3000	100	310		4000	
HAL-C20W/12V-G4-SU	Capsuleline 20W G4 12V CL 4000h	G4	3000	100	310		4000	
HAL-C20W/24V-G4-ST	Capsuleline 20W G4 24V CL 4000h	G4	3000	100	300		4000	
HAL-C20W/12V-GY6.35-SI	Capsuleline 20W GY6.35 12V FR 4000h	GY6.35	3000	100	300		4000	
HAL-C20W/12V-GY6.35-SU	Capsuleline 20W GY6.35 12V CL 4000h	GY6.35	3000	100	300		4000	
HAL-C35W/12V-GY6.35-SI	Capsuleline 35W GY6.35 12V FR 4000h	GY6.35	3000	100	600		4000	
HAL-C35W/12V-GY6.35-SU	Capsuleline 35W GY6.35 12V CL 4000h	GY6.35	3000	100	600		4000	
HAL-C50W/12V-GY6.35-SI	Capsuleline 50W GY6.35 12V FR 4000h	GY6.35	3000	100	950		4000	
HAL-C50W/12V-GY6.35-ST	Capsuleline 50W GY6.35 12V CL 3000h	GY6.35	3000	100	935		3000	
HAL-C50W/12V-GY6.35-SU	Capsuleline 50W GY6.35 12V CL 4000h	GY6.35	3000	100	880		4000	
HAL-C50W/24V-GY6.35-SU	Capsuleline 50W GY6.35 24V CL 4000h	GY6.35	3000	100	850		4000	
HAL-C75W/12V-GY6.35-SU	Capsuleline 75W GY6.35 12V CL 4000h	GY6.35	3000	100	1575		4000	
HAL-C100W/12V-GY6.35-ST	Capsuleline 100W GY6.35 12V CL 4000h	GY6.35	3000	100	2550		4000	
HAL-C100W/12V-GY6.35-SU	Capsuleline 100W GY6.35 12V CL 4000h	GY6.35	3000	100	2100		4000	
HAL-C100W/24V-GY6.35-SU	Capsuleline 100W GY6.35 24V CL 3000h	GY6.35	3000	100	2200		3000	
Capsuleline MV B15d								
HAL-MC75W-CL	Capsuleline 75W 230V CL	B15d	2800	100	975		2000	
HAL-MC75W-FR	Capsuleline 75W 230V FR	B15d	2800	100	910		2000	
HAL-MC100W-CL	Capsuleline 100W 230V CL	B15d	2800	100	1400		2000	
HAL-MC100W-FR	Capsuleline 100W 230V FR	B15d	2800	100	1300		2000	
HAL-MC150W-CL	Capsuleline 150W 230V CL	B15d	2800	100	2250		2000	
HAL-MC150W-FR	Capsuleline 150W 230V FR	B15d	2800	100	2100		2000	
MASTERCapsule								
HAL-C20W/12V-GY6.35-MS	MASTERCapsule 20W 12W IR	GY6.35	3000	100	420		4000	
HAL-C30W/12V-GY6.35-MS	MASTERCapsule 30W 12W IR	GY6.35	3000	100	750		4000	
HAL-C45W/12V-GY6.35-MS	MASTERCapsule 45W 12W IR	GY6.35	3000	100	1250		4000	
HAL-C60W/12V-GY6.35-MS	MASTERCapsule 60W 12W IR	GY6.35	3000	100	1700		4000	
Plusline Small (double ended)								
HAL-TDS150W	Plusline Small 150W 230V	R7s	2900	100	2250		2000	
HAL-TDS200W	Plusline Small 200W 230V	R7s	2900	100	3520		2000	
HAL-TDS300W	Plusline Small 300W 230V	R7s	2900	100	5600		2000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

HalogenA 4Year BTT46-shape - For data refer to <http://www.lampsandgear.philips.com>

Reflector

NR50-40W	Reflector 40W 230V NR50 30D	E14		100		400	1000	
NR50-60W	Reflector 60W 230V NR50 30D	E14		100		600	1000	
NR63-40W	Reflector 40W 230V NR63 30D	E27		100		420	1000	
NR63-60W	Reflector 60W 230V NR63 30D	E27		100		750	1000	
NR80-40W	Reflector 40W 230V NR80 25D	E27		100		600	1000	
NR80-60W	Reflector 60W 230V NR80 25D	E27		100		1000	1000	
NR80-75W	Reflector 75W 230V NR80 25D	E27		100		1600	1000	
NR80-100W	Reflector 100W 230V NR80 25D	E27		100		2000	1000	

Reflector Crown Mirror

PC45-40W-SI-CL	Reflector Crown Mirror 40W 230V PC45 SI-CL	E14		100		330	1000	
NR60-40W-SI-CL	Reflector Crown Mirror 40W 230V NR60 SI-CL	E27		100		330	1000	
NR60-60W-SI-CL	Reflector Crown Mirror 60W 230V NR60 SI-CL	E27		100		530	1000	
A60-B60W-SI-CL	Reflector Crown Mirror 60W 230V A60 SI-CL	E27		100		6630	1000	
A65-B100W-SI-CL	Reflector Crown Mirror 100W 230V A65 SI-CL	E27		100		1150	1000	

PAR38 Economy

PAR38-12-60W	PAR38 60W 230V SP 12D	E27		100		3100	2000	
PAR38-30-60W	PAR38 60W 230V FL 30D	E27		100		1200	2000	
PAR38-12-80W	PAR38 80W 230V SP 12D	E27		100		4700	2000	
PAR38-30-80W	PAR38 80W 230V FL 30D	E27		100		1800	2000	
PAR38-30-100W	PAR38 100W 230V FL 30D	E27		100		3600	2000	
PAR38-12-120W	PAR38 120W 230V SP 12D	E27		100		8200	2000	
PAR38-30-120W	PAR38 120W 230V FL 30D	E27		100		3100	2000	

PAR38 Cool Beam

PAR38CB-12-120W	PAR38 Cool Beam 120W 230V CSP	E27		100		8200	2000	
PAR38CB-30-120W	PAR38 Cool Beam 120W 230V CFL	E27		100		3100	2000	

PAR56

PAR56-12-300W	PAR56 300W 230V SP	GX16d		100		40000	2000	
PAR56-25-300W	PAR56 300W 230V FL	GX16d		100		22000	2000	
PAR56-40-300W	PAR56 300W 230V WFL	GX16d		100		9000	2000	

Induction lamps

MASTER QL System

Remarks * It is advisable to replace the lamps at 70% of their lumen output

QL55W/827	MASTER QL 55W/827		2600	80	3550			60000*
QL55W/830	MASTER QL 55W/830		2900	80	3650			60000*
QL55W/840	MASTER QL 55W/840		3750	80	3650			60000*
QL85W/827	MASTER QL 85W/827		2250	80	6100			60000*
QL85W/830	MASTER QL 85W/830		2900	80	6200			60000*
QL85W/840	MASTER QL 85W/840		3750	80	6300			60000*
QL165W/827	MASTER QL 165W/827		2600	80	11000			60000*
QL165W/830	MASTER QL 165W/830		3000	80	12000			60000*
QL165W/840	MASTER QL 165W/840		3850	80	12000			60000*

High-intensity discharge lamps

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTERColour CDM-R								
CDM-R20-10-35W/830	MASTERColour CDM-R 35W/830 PAR20 10D	E27	3000	81		23000		7500
CDM-R20-30-35W/830	MASTERColour CDM-R 35W/830 PAR20 30D	E27	3000	81		5000		7500
CDM-R20-10-35W/942	MASTERColour CDM-R 35W/942 PAR20 10D	E27	4200	92		21500		6000
CDM-R20-30-35W/942	MASTERColour CDM-R 35W/942 PAR20 30D	E27	4200	92		5000		6000
CDM-R30-10-35W/830	MASTERColour CDM-R 35W/830 PAR30L 10D	E27	3000	81		44000		7500
CDM-R30-30-35W/830	MASTERColour CDM-R 35W/830 PAR30L 30D	E27	3000	81		7400		7500
CDM-R30-10-70W/830	MASTERColour CDM-R 70W/830 PAR30L 10D	E27	3000	83		68000		11000
CDM-R30-30-70W/830	MASTERColour CDM-R 70W/830 PAR30L 30D	E27	3000	83		13500		11000
CDM-R30-40-70W/830	MASTERColour CDM-R 70W/830 PAR30L 40D	E27	3000	83		10000		11000
CDM-R30-10-70W/942	MASTERColour CDM-R 70W/942 PAR30L 10D	E27	4200	94		63000		9000
CDM-R30-30-70W/942	MASTERColour CDM-R 70W/942 PAR30L 30D	E27	4200	94		13000		9000
CDM-R30-40-70W/942	MASTERColour CDM-R 70W/942 PAR30L 40D	E27	4200	94		9000		9000
MASTERColour CDM-R III								
CDM-R III-10-20W/830	MASTERColour CDM-R III 20W/830 10D	GX8.5	3000	85		20000		9000
CDM-R III-24-20W/830	MASTERColour CDM-R III 20W/830 24D	GX8.5	3000	85		4500		9000
CDM-R III-10-35W/830	MASTERColour CDM-R III 35W/830 10D	GX8.5	3000	81		35000		11000
CDM-R III-24-35W/830	MASTERColour CDM-R III 35W/830 24D	GX8.5	3000	81		8500		11000
CDM-R III-40-35W/830	MASTERColour CDM-R III 35W/830 40D	GX8.5	3000	81		4000		11000
CDM-R III-10-70W/830	MASTERColour CDM-R III 70W/830 10D	GX8.5	3000	84		50000		9000
CDM-R III-24-70W/830	MASTERColour CDM-R III 70W/830 24D	GX8.5	3000	84		15000		9000
CDM-R III-40-70W/830	MASTERColour CDM-R III 70W/830 40D	GX8.5	3000	84		9000		9000
CDM-R III-10-70W/942	MASTERColour CDM-R III 70W/942 10D	GX8.5	4200	95		50000		11000
CDM-R III-24-70W/942	MASTERColour CDM-R III 70W/942 24D	GX8.5	4200	95		15000		11000
CDM-R III-40-70W/942	MASTERColour CDM-R III 70W/942 40D	GX8.5	4200	95		9000		11000
MASTERColour CDM-T								
CDM-T35W/830	MASTERColour CDM-T 35W/830	G12	3000	81	3300			12000
CDM-T35W/942	MASTERColour CDM-T 35W/942	G12	4200	90	3300			6000
CDM-T70W/830	MASTERColour CDM-T 70W/830	G12	3000	84	6600			12000
CDM-T70W/942	MASTERColour CDM-T 70W/942	G12	4200	92	6600			12000
CDM-T150W/830	MASTERColour CDM-T 150W/830	G12	3000	85	14000			12000
MASTERColour CDM-T								
CDM-T150W/942	MASTERColour CDM-T 150W/942	G12	4200	96	12700			12000
CDM-T250W/830	MASTERColour CDM-T 250W/830	G12	3000	89	23000			11000
CDM-T250W/942	MASTERColour CDM-T 250W/942	G12	4200	94	23000			6000

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]

MASTERColour CDM-TC

CDM-TC35W/830	MASTERColour CDM-TC 35W/830	G8.5	3000	81	3300			9000
CDM-TC35W/942	MASTERColour CDM-TC 35W/942	G8.5	4200	90	3300			6000
CDM-TC70W/830	MASTERColour CDM-TC 70W/830	G8.5	3000	83	6500			10000
CDM-TC70W/942	MASTERColour CDM-TC 70W/942	G8.5	4400	90	5900			6000

MASTERColour CDM-TD

CDM-TD70W/830	MASTERColour CDM-TD 70W/830	RX7s	3000	82	6500			16000
CDM-TD70W/942	MASTERColour CDM-TD 70W/942	RX7s	4200	92	6000			16000
CDM-TD150W/830	MASTERColour CDM-TD 150W/830	RX7s	3000	88	13250			16000
CDM-TD150W/942	MASTERColour CDM-TD 150W/942	RX7s	4200	96	14200			16000

MASTERColour CDM-T Elite

CDM-T35W/930	MASTERColour CDM-T Elite 35W/930	G12	3000	90	3500			12000
CDM-T70W/930	MASTERColour CDM-T Elite 70W/930	G12	3000	90	7300			12000

MASTERColour CDM-Tm Mini

CDM-Tm20W/830	MASTERColour CDM-Tm Mini 20W/830	PGJ5	3000	85	1650			12000
CDM-Tm35W/930	MASTERColour CDM-Tm Mini 35W/930	PGJ5	3000	90	3000			6000

MASTERColour CDM-TP

CDM-TP70W/830	MASTERColour CDM-TP 70W/830	PG12-2	3200	81	6000			16000
CDM-TP70W/942	MASTERColour CDM-TP 70W/942	PG12-2	4200	90	5800			16000
CDM-TP150W/830	MASTERColour CDM-TP 150W/830	PGX12-2	2950	85	13000			16000
CDM-TP150W/942	MASTERColour CDM-TP 150W/942	PGX12-2	4200	95	12000			16000

Low-wattage metal halide lamps**MHN/W-TD**

MHN-TD70W	MHN-TD 70W/842	RX7s	4200	80	5700		10500	
MHN-TD150W	MHN-TD 150W/842	RX7s	4200	85	12900		10500	
MHN-TD250W	MHN-TD 250W/842	FC2	4200	85	20000		10500	
MHW-TD70W	MHN-TD 70W/730	RX7s	3000	75	6200			
MHW-TD150W	MHN-TD 150W/730	RX7s	3000	75	13800			

MASTER HPI Plus on HPL gear

HPI-P250W-BU	MASTER HPI Plus 250W/745 BU	E40	4500	69	18000		20000	
HPI-P250W-BU-P	MASTER HPI Plus 250W/745 BU-P	E40	4500	69	18000		20000	
HPI-P400W-BU	MASTER HPI Plus 400W/745 BU	E40	4500	69	32500		20000	
HPI-P400W-BU-P	MASTER HPI Plus 400W/745 BU-P	E40	4500	69	32500		20000	
HPI-P400W-BUS	MASTER HPI Plus 400W/745 BUS	E40	4500	69	32500		20000	
HPI-P400W-BUS-P	MASTER HPI Plus 400W/745 BUS-P	E40	4500	69	32500		20000	

MASTER HPI Plus on SON gear

HPI-P250W-BU	MASTER HPI Plus 250W/745 BU	E40	3500	69	25500		20000	
HPI-P250W-BU-P	MASTER HPI Plus 250W/745 BU-P	E40	3500	69	25500		20000	
HPI-P400W-BU	MASTER HPI Plus 400W/745 BU	E40	3500	69	42500		20000	
HPI-P400W-BU-P	MASTER HPI Plus 400W/745 BU-P	E40	3500	69	42500		20000	

MASTER HPI-T Plus on HPL gear

HPI-TP250W	MASTER HPI-T Plus 250W/645	E40	4500	69	20500		20000	
HPI-TP400W	MASTER HPI-T Plus 400W/645	E40	4500	69	34000		20000	

MASTER HPI-T Plus on SON gear

HPI-TP250W	MASTER HPI-T Plus 250W/645	E40	4000	69	25000		20000	
HPI-TP400W	MASTER HPI-T Plus 400W/645	E40	4000	69	42500		20000	

High-pressure mercury lamps

Lamp Survey

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
HPL Comfort								
HPL-C50W	HPL Comfort 50W/534	E27	3400	58	1800		16000	
HPL-C80W	HPL Comfort 80W/534	E27	3400	57	3600		16000	
HPL-C125W	HPL Comfort 125W/534	E27	3400	55	6200		16000	
HPL-C250W	HPL Comfort 250W	E40	3300	51	14200		16000	
HPL-C400W	HPL Comfort 400W	E40	3500	47	24200		20000	
HPL-N								
HPL-N50W	HPL-N 50W/542	E27	4200	49	1800		16000	
HPL-N80W	HPL-N 80W/542	E27	4200	48	3700		16000	
HPL-N125W	HPL-N 125W/542	E27	4200	46	6200		16000	
HPL-N250W	HPL-N 250W/542	E40	4100	45	12700		16000	
HPL-N400W	HPL-N 400W/542	E40	3900	45	22000		16000	
HPL-N700W	HPL-N 700W/542	E40	3900	45	38500		12000	
HPL-N1000W	HPL-N 1000W/542	E40	3900	36	58500		12000	
High-pressure sodium lamps								
SON								
SON50W	SON 50W/220	E27	2000	25	3500		24000	
SON70W	SON 70W/220	E27	2000	25	5600		24000	
SON100W	SON 100W/220	E27	2000	25	8500		28000	
SON150W	SON 150W/220	E40	2000	25	14500		28000	
SON250W	SON 250W/220	E40	2000	25	27000		28000	
SON400W	SON 400W/220	E40	2000	25	48000		28000	
SON1000W	SON 1000W/220	E40	2000	25	130000		16000	
MASTER SON PIA Hg-Free								
SON-P150W	MASTER SON PIA Hg Free 150W/221	E40	2150	25	14500		32000	
SON-P250W	MASTER SON PIA Hg Free 250W/221	E40	2150	25	27000		32000	
SON-P400W	MASTER SON PIA Hg Free 400W/221	E40	2150	25	48000		32000	
MASTER SON PIA Plus								
SON-PP70W	MASTER SON PIA Plus 70W/220	E27	1900	20	5900		28000	
SON-PP100W	MASTER SON PIA Plus 100W/220	E40	2000	25	10200		32000	
SON-PP150W	MASTER SON PIA Plus 150W/220	E40	2000	25	17000		32000	
SON-PP250W	MASTER SON PIA Plus 250W/220	E40	2000	25	31100		32000	
SON-PP400W	MASTER SON PIA Plus 400W/220	E40	2000	25	55500		32000	
SON-T								
SON-T70W	SON-T 70W/220	E27	2000	25	6000		24000	
SON-T100W	SON-T 100W/220	E40	2000	25	9000		28000	
SON-T150W	SON-T 150W/220	E40	2000	25	15000		28000	
SON-T250W	SON-T 250W/220	E40	2000	25	28000		28000	
SON-T400W	SON-T 400W/220	E40	2000	25	48000		28000	
SON-T Comfort								
SON-TC150W	SON-T Comfort 150W/621	E40	2150	65	13000		20000	
SON-TC250W	SON-T Comfort 250W/621	E40	2150	65	23000		20000	
SON-TC400W	SON-T Comfort 400W/621	E40	2150	65	38000		20000	

Lamp family code in luminaire product designation	Lamp type	Cap	Color temperature	Color rendering index (Ra)	Lumen output	Maximum luminous intensity	Rated average lifetime (conv.)	Rated average lifetime (electr.)
			[K]		[lm]	[cd]	[hrs]	[hrs]
MASTER SON-T PIA Hg-Free								
SON-TP100W	MASTER SON-T PIA Hg-Free 100W/221	E40	2150	25	9000		32000	
SON-TP150W	MASTER SON-T PIA Hg-Free 150W/221	E40	2150	25	15000		32000	
SON-TP250W	MASTER SON-T PIA Hg-Free 250W/221	E40	2150	25	28000		32000	
SON-TP400W	MASTER SON-T PIA Hg-Free 400W/221	E40	2150	25	48000		32000	
MASTER SON-T PIA Plus								
SON-TPP50W	MASTER SON-T PIA Plus 50W/220	E27	2000	25	4400		28000	
SON-TPP70W	MASTER SON-T PIA Plus 70W/220	E27	2000	25	6600		28000	
SON-TPP100W	MASTER SON-T PIA Plus 100W/220	E40	2000	25	10700		32000	
SON-TPP150W	MASTER SON-T PIA Plus 150W/220	E40	2000	25	17500		32000	
SON-TPP250W	MASTER SON-T PIA Plus 250W/220	E40	2000	25	33200		32000	
SON-TPP400W	MASTER SON-T PIA Plus 400W/220	E40	2000	25	56500		32000	
SON-TPP600W	MASTER SON-T PIA Plus 600W/220	E40	2000	25	90000		28000	
High-pressure White SON lamps								
MASTER SDW-T								
SDW-T35W	MASTER SDW-T 35W/825	PG12-I	2500	83	1300		10000	
SDW-T50W	MASTER SDW-T 50W/825	PG12-I	2500	83	2300		10000	
SDW-T100W	MASTER SDW-T 100W/825	PG12-I	2550	83	5000		10000	
MASTER SDW-TG Mini								
SDW-TG50W	MASTER SDW-TG Mini 50W/825	GX12-I	2550	81	2400		10000	
SDW-TG100W	MASTER SDW-TG Mini 100W/825	GX12-I	2550	83	4900		10000	

Glossary of lighting terminology

Average illuminance

Illuminance averaged over a specified surface.

Unit: lux (lx) = lm/m²

Symbol: E_{ave}

Ballast

Electrical device used with discharge lamps for stabilising the current in the discharge.

Beam spread

Angle in the plane through the beam axis over which the luminous intensity drops to a stated percentage (e.g. 50%) of its peak intensity.

Brightness

Attribute of visual sensation according to which an area appears to emit more or less light. Brightness according to the definition is also an attribute of color. In British recommendations the term "brightness" is now reserved for descriptions of color. Luminosity should be used in other instances.

Candela

The standard unit of light intensity, abbreviated to "cd", which is one lumen per steradian.

CDM

See MASTERColour CDM.

Color change

The facility to change the color temperature of a lighting installation makes it possible to create a more comfortable working environment or to introduce dynamic lighting effects.

Color rendering

Ability of a light source to render colors naturally, without distorting the hues seen under a full spectrum radiator (like daylight or incandescent lamps). The color rendering index (CRI) ranges from 0 to 100. For further details see 'Specification data lamps'.

Color rendering index CRI

See Color rendering.

Color temperature

Temperature in kelvin of a full spectrum radiator most closely approximate to the color appearance of a light source at the same brightness. For further details of Philips lamps see under 'Specification data lamps'.

Unit: kelvin, K

Symbol: Tc

Contrast C (between two parts of a visual field)

The relevant luminance difference between two parts in accordance with the formula:

$$C = \frac{L1 - L2}{L2}$$

Where the size of the two parts differs greatly and where:

L1 = luminance of the smallest part (object)

L2 = luminance of the largest part (background).

DALI

Digital Addressable Lighting Interface, a standardized communication interface to regulate lighting levels and to switch electronic HFD ballasts on and off.

Daylight linking

Using natural light saves energy and is beneficial to individual users. Daylight linking is a technique that regulates the light output of luminaires in accordance with daylight conditions, thus maintaining a constant level of indoor lighting and ensuring comfort at all times.

Diffuser

Optical element used to mix light rays to improve uniformity or reduce glare. An opal cover is an example of a diffuser.

Direct lighting

Lighting by means of luminaires with a light distribution such that 90 – 100% of the emitted luminous flux reaches the working plane directly, assuming that this plane is unbounded.

Disability glare

Glare that impairs vision.

Discomfort glare

Glare that causes discomfort without necessarily impairing vision.

Dust-proof luminaire

Luminaire constructed so that dust of a specified nature and fineness cannot enter when it is used in a dust-laden atmosphere.

Fresnel lens or reflector

A Fresnel lens or reflector is an optical element of reduced height. By means of discrete steps, the basic shape is flattened yet the optical characteristics are retained.

Glare

See disability glare and discomfort glare, and the chapter entitled 'Information - Lighting technique'.

Halogen lamp

Incandescent lamp in which the inclusion of halogens in the gas filling and a high-temperature quartz envelope promote the tungsten halogen cycle, permitting a higher filament temperature. The result is a higher color temperature and a significantly extended life.

Halogen HV

“High voltage” 230V halogen lamp, which does not require a ballast or a transformer.

Halogen LV

“Low voltage” 6V, 12V or 24V halogen lamp. An electronic or electromagnetic transformer is required to operate low-voltage halogen lamps and is often integrated into the luminaire.

HFD

Electronic regulating ballast which enables the light to be dimmed. Ballast functions according to the DALI protocol.

HFD-T

Electronic regulating DALI ballast for various fluorescent lamps. With this new-style electronic ballast standard push-buttons can be used to dim the light output down to 3%. The lamp can also be switched on or off using the push-button control.

Ballast functions according to the DALI protocol.

HFM

Compactly built electronic ballast for various compact fluorescent lamp types. See also ‘Specification data luminaires’.

HFP

Electronic ballast for various fluorescent lamp types with warm-start principle. See also ‘Specification data luminaires’.

HFR

Electronic regulating ballast for various fluorescent lamp types by which light dimming is possible. The main ranges of HFR ballasts allow step-less dimming down to 3%. See also ‘Specification data luminaires’.

Horizontal illuminance (E_{hor})

Illuminance incident on the horizontal surface.

Unit: lux (lx) = lm/m²

Symbol: E_{hor}

HPI Plus lamp

Metal-halide high-intensity discharge lamp combining high luminous efficacy with white light of moderate color rendering. Main indoor applications are big industrial halls and lighting of discount stores, hyper-/supermarkets and DIY shops. HPI Plus lamps are usually applied in high-bay luminaires and floodlights.

Illuminance

The luminous flux density at the surface being lit. The illuminance in the full summer sun is approx. 100 000 lux. Recommended illuminances for work places range from 200 lux for rough work to 2000 lux for detailed or critical work.

Unit: lux (lx) = lm/m²

Symbol: E

Infrared remote control

In offices and meeting rooms where the lighting requirement changes frequently, wireless infrared control offers the flexibility to set the lighting and change it at any time.

Indirect lighting

Lighting by means of luminaires with a light distribution such that not more than 10 per cent of the emitted luminous flux reaches the working plane directly, assuming that this plane is unbounded.

Induction lighting QL

Electrode-less induction lighting system characterized by good light quality, high luminous efficacy and a phenomenal life (60 000 hours).

Jet-proof luminaire

Luminaire constructed to withstand a direct jet of water from any direction.

LED

Light Emitting Diode used as a light source. Solid-state semiconductor device that converts electrical energy directly into light of a specific color or white light.

Light output ratio (LOR)

Ratio of the total light emitted by a luminaire to the total light output of the lamp(s) it contains measured at standard operating conditions.

Lumen depreciation

The decline in the light output of a light source during its lifetime.

Luminaire

Appliance that distributes, filters or transforms the light given by a light source (LED or lamp), and which contains all the necessary elements for fixing and protecting the light source(s) and facilitates their power supply and operating conditions.

Luminance

The light intensity per square meter of apparent area of the light source, luminaire or illuminated surface. Where surfaces are lit, the luminance depends upon both lighting level and reflection characteristics of the luminous surface.

Unit: cd/m²

Symbol: L

Glossary of lighting terminology

Luminous efficacy

The quantity of light that a light source emits per unit of electrical energy consumed. Notice that the luminous efficacy can be specified for a light source or for a lighting system (lamp and ballast).

The luminous efficacy of a system is lower than that of the light source.

Unit: *lm/W*

Luminous flux

The total light output emitted by a light source. Also the total light falling on a surface. The light output of a light source is measured in lumen.

Unit: *lumen*

Symbol: *f*

Luminous intensity

The luminous flux in a given direction, e.g. from a floodlight or projector.

Unit: *candela (cd) = one lumen per steradian*

Symbol: *I*

Lux

The standard unit of illuminance of a surface being lit. One lux equals one lumen per square meter.

Maintained emergency lighting

Emergency lighting where the lamps are operated from the normal supply during standard conditions. In an emergency situation the emergency lamp (usually one lamp in luminaires of two or more lamps) remains in operation.

Maintained illuminance

Value below which the average illuminance on the specified surface is not allowed to fall. The maintained illuminance is specified at the end of the maintenance cycle, taking into consideration the maintenance factor.

It is one of the main specification elements for the lighting designer. In the various standards the maintained illuminance is specified for various activities.

Unit: *lux*

Symbol: E_m

Maintenance factor

Correction factor used in lighting design to compensate for the rate of lumen depreciation, caused by lamp ageing (lumen depreciation and lamp failure) and dirt accumulation (luminaire and environment).

It determines the maintenance cycle needed to ensure that illuminance does not fall below the maintained value.

MASTERColour CDM lamp

Series of metal-halide discharge lamps with excellent color rendering and a warm or neutral color impression. MASTERColour lamps, also

available as reflector lamps, are applied in projectors and downlights for shop and office applications.

Mercury lamp

High-intensity discharge lamp for use in industry and large public spaces. Higher quality light characteristics are obtained by applying metal-halide lamps.

Metal-halide lamp

Single- or double-ended discharge lamp for use in industry, public spaces and shops. Metal-halide lamps combine a natural white color with a pleasant light and a high luminous intensity.

Movement detection

Sensing of occupancy by movement detection ensures lights are activated only when needed and enables the lighting in a specific area to be controlled.

Non-maintained emergency lighting

Emergency lighting where the emergency lighting lamps come into operation only when the power supply to normal lighting fails.

OLC

Omnidirectional Lighting Control, a Philips-patented series of optics for TL5 and TL-D lamps offering optimal lighting efficiency in combination with excellent glare and luminance control all around the luminaire.

Optic

A device that changes the direction of a beam of light, usually by reflection, diffusion or refraction by a lens. The optic may include louvers for reduction of glare.

PL lamp

Single-ended compact fluorescent lamp in which the discharge tube is folded into two, four or six limbs. PL lamps are characterized by unusually high light output for their length. They are applied in compact luminaires for professional and domestic use. Also available with integrated ballast.

Power factor

Ratio of the circuit power in watts over the product of the root-mean-square values of voltage and current. For sinusoidal waveforms, it is equal to the cosine of the angle of phase difference between voltage and current. For electronic ballasts the power factor is 0.95 so that no additional phase compensation is required.

QL lamp

See Induction lighting.

Refractor

Optical element used to concentrate light rays to focus or improve the direction of light. A prismatic cover is an example of a refractor.

RGB

Red, green and blue, used to specify the colors of a light source.

SDW-T

White SON or SDW-T lamps offer a high luminous efficacy in combination with warm-white light. The color rendering is excellent. SDW-T lamps are applied in shops and public spaces where the atmosphere should be warm and cosy.

Sodium lamp, SON lamp

High-pressure discharge lamp with a yellowish color appearance and an extremely high efficiency. SON and SON Comfort lamps, with improved color characteristics, are mainly applied in high-bay industrial applications.

Solid-state lighting

Description of a lighting device that does not contain moving parts or parts that can break, rupture, shatter, leak or contaminate the environment (such as a lamp).

Starter

Device for starting a discharge lamp, in particular a fluorescent lamp, that preheats the electrodes and/or causes a voltage surge in combination with the series ballast.

Switching and dimming control

As more and more light sources can be dimmed economically, lighting controls need to provide both switching and light regulating capabilities.

TL5

Linear double-ended fluorescent lamp with a diameter of 16 mm. In combination with OLC optics and high-frequency ballasts the TL5 system offers a superb performance, both in terms of lighting technology and energy consumption.

TL-D

Linear double-ended fluorescent lamp with a diameter of 26 mm. Available in a range of colors and color rendering characteristics.

Uniformity ratio

Ratio of the minimum over the average illuminance for a specified area (E_{\min}/E_{ave}). When defined as such, the uniformity ratio is also the ratio of the minimum over the maximum illuminance for a specified surface area (E_{\min}/E_{\max}).

Utilisation factor

Utilisation factor (UF) of a lighting installation represents the percentage of the luminous flux of the lamp(s) that reaches the defined working plane. UF can be seen as the efficiency of the lighting installation. UF is used to calculate the number of luminaires required.

Vertical illuminance

Illuminance incident on the vertical surface.

Unit: lux (lx) = lm/m²

Symbol: E_{vert}

Visual guidance

The sum of the measures taken to give the user of a space an unambiguous and immediately recognisable picture of the course of the path ahead. Visual guidance is important in shops and other public buildings. The lighting designer takes the demands for visual guidance into consideration.