



DUST AND WATERPROOF INDUSTRIAL LUMINAIRES

2021

www.ibv.hu

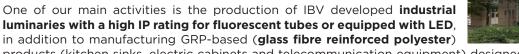
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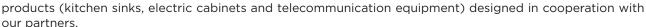






IBV Hungária Lighting and Plastic Processing Kft. - member of IBV Holding in Germany - was founded in 1991 in Hungary, Kiskunfélegyháza, a town with significant industrial heritage. Thanks to its dynamic development, today our company **is one of the leading producers of dust and waterproof luminaires in Europe**.





We have leading position on the international market of dust and waterproof luminaries. Our company has been recognized on the market as an **expert** in the field of plastic processing **producing excellent quality products** thanks to the vast experience acquired over 27 years. **More than 95% of our production volume is sold on international markets in more than 60 countries** of 5 continents.

Feedback from our partners on countless occasions confirms the **outstanding price/performance ratio** of our products we are able to offer thanks to two major factors: **German technology used in combination with professional know-how of Hungarian experts**.

The quality level of our products meets the requirements of **European standards (ENEC)** and the highest expectations of our customers. Our SAP integrated company management system gives framework to our activities, thus ensuring that we keep providing our customers with high-quality products. Our company's quality and environment management systems are certified and meet the requirements of the **ISO 9001** quality management system as well as the **ISO 14001** environment management system.

Briefly in figures:

Experience in lighting: 27 years

Product portfolio: 650 product variation Luminaires sold: 2.2 million pieces/year

GRP processing: 5500 ton/year

Number of employees: ~500 Built-up area: 35,000 m²

IBV Hungaria Introduction Movie









OUR COMPETENCIES

■ IBV Hungária Kft's quality management system guarantees that we deliver high-quality products with reliable operation. Our products meet the European standards as well as the highest expectations of our customers.

Since 2003 our manufacturing and supporting activities are regulated by the **ISO 9001 Quality Management**System and since 2013 also by the **ISO 14001 Environmental Management System**.



We can undertake a comprehensive quality inspection of our products during the sampling process as well as during production. **EMC** (electromagnetic compatibility), **IP** (ingress protection) and other product-specific tests are frequently run in our laboratory. Besides the basic dimensional measuring and impact resistance measuring we can inspect other product features through tests such as glow-wire, scratch resistance and components' water absorption.

Our products comply with the requirements set forth by the relevant European standards and therefore bear the **CE sign**. Furthermore, they are also certified by independent, accredited institutes and as such they also have the **ENEC** sign.

On today's market of luminaires a producer's success is determined by the quality of its products and whether they work safely and reliably. In the light of this, our production is driven by the principle of manufacturing good quality products, which is ensured by careful scrutiny and continuous improvement of our processes from purchase of components to delivery of our products. Our luminaires are equipped exclusively with good quality components and each single piece is tested using a 100% electricity test.

■ As one of Europe's largest **GRP** (glass fibre reinforced polyester) consumers, our company processes more than 5.000 tons of raw material annually. This makes us – after the automobile industry – the continent's largest consumer of GRP.

Thanks to our plant giving place to more than **40 pressing** machines (with a pressing force from 150t to 2000t), we are able to manufacture products of the size of a match-box to that of the size of a cabinet.

The GRP (called also SMC) is processed in high temperature and under great pressing force in the tool where it (after about 1.5-2 minutes) cures. As a result we get a product with perfect features.



Polyester belonging to the group of thermosetting plastics has great mechanical characteristics and its stability of size and shape at changing temperatures is excellent, far better than in case of other plastics (e.g. polycarbonate); additionally, it is also a good electrical insulator.

It is most widely used where there is a need for a component that is light yet and resistant such as in the automobile industry, aviation and ship industry and in the production of luminaires. Before pressing a special paint is applied on the surface of the mould - with PIMC technology - so we can manufacture wear- and chemical-resistant coloured-surface products that can even resist adverse weather conditions.



- We extended our machinery portfolio with a brand new **Thermoset Injection Moulding** (BMC) machine with 200 To press force. On this BMC machine we are able to produce various products for the middle voltage and home appliances markets made of **Bulk Moulded Compound (BMC)** material.
- With our three **injection moulding** machines (with a pressing force of 1.000 ton) we process several hundred tons of thermoplastics annually, such as **PC** (polycarbonate), **PMMA** (Polymethylmethacrylate), **SAN** (styrene acrylonitrile).



With these machines we produce UV resistant diffusers designed with respect to their optical characteristics. Our offer includes diffusers prepared with longitudinal prisms

We have vast experience in the production and handling of **transparent** as well as **opalised** thermoplastic polymers.

Apart from diffusers we can also extrude plain sheets as well as industrial curtains.

■ The **sealing** of our products is done through the use of a two-component **polyurethane foam** that

is applied with the help of an automatized production line. This allows us to manufacture products with an IP rating of 54, 65, 66 or 67, according to the needs of our customers. Benefits of this technology include swift production and reliable quality. In addition to our three foaming machines, a fourth one has been recently installed where we use a **silicone-based sealing** material.



■ The assembly of our luminaires takes place in our assembly workshop on highest level. The Kanban system ensures that all the necessary components are at disposal according to needs, thus contributing to an efficient assembly process. All of our assembled luminaires are 100% quality and functionality checked.

We also carry out the painting of our products in our painting workshops. This is where the components most exposed to strain get a

lacquer coat to enhance their aesthetic value as well as their ability to resist weather conditions.



Numerous European companies have transferred the production of their plastic products to us. We have assumed our partners' production successfully

whether it be GRP or thermoplastics processing. Nothing expresses the trust of our partners placed in us better than the fact that such projects resulting from production transfers accounts for 30% of our revenue.

We have gained great **experience in the maintenance and repair of moulds** producing plastic components, thanks to the fact that we look after our own as well as our partners' moulds. Our mould shop has all the facilities necessary for

maintaining and repairing the moulds, which helps us to provide ongoing maintenance work of several hundred moulds.

It is our extensive know-how, experience and expert knowledge acquired over the years that help us orchestrate a complex transfer of production very often requiring significant technological development – from design through sampling process to the successful realization of the project – in a professional manner ensuring our partner that the production is in safe and competent hands.







CUSTOMISED LUMINAIRES

IBV's expertise in tooling, luminaire housing manufacture, diffuser technology and electronics means we have all the skills, knowledge and capability to develop customised products for our partners.

You may have specific requirements for:

- Lighting levels to achieve
- Alternative design life
- Varying input voltages
- Need in built-sensors
- Emergency lighting, or
- Options for advanced controls

IBV will be your partner in developing a specific lighting product and/or a product range with all test certificates and supporting documentation.

ADVANCED LIGHTING SOLUTIONS

The world is rapidly changing with the drive for energy efficiency and IBV is constantly innovating and adapting to meet these changes for our partners and customers.

Today, IBV offers bespoke and customised lighting solutions for both new build projects and retrofit lighting to:

- Adjust colour temperatures during the day
- Harvest daylight with auto dimming
- Auto test emergency lighting

IBV luminaires can be provided with control options to include:

- 0-10V dimming, DALI
- Wireless
- Networked, PoE etc.

The following Table presents a summary of options available today by luminaire type.

Product family	Motion sensor	DALI	Daylight harvest	PoE	Wireless control	Extra long lifetime	Colour temperature changing	110 Volt	Strength- ened ceiling brackets	5-pole Connec- tors	3-pole Connec- tors	Available with LED tubes	Class II protection	Through wiring	Emergency kit
870-Inspire	~	~	Q	Q	Q	/	Q	Q	~	/	/	×	/	/	/
872-Entry	Q	~	×	×	×	Q	×	Q	~	/	~	X	Q	/	/
790-Xtrude	×	Q	Q	Q	Q	Q	Q	/	V	Q	~	X	Q	/	Q
792-XSlide	×	/	×	×	×	Q	×	Q	~	/	/	×	Q	/	/
771-Favourite	~	/	Q	Q	Q	V	Q	/ *	/	/	/	/	/	/	/
771-Farmer	×	Q	×	×	×	X	Q	×	/	×	×	×	Q	Q	×
771-Orien	~	/ *	Q	Q	Q	X	Q	Q	~	/	/	×	V	Q	×
771-Ventila	~	~	Q	Q	Q	X	Q	/ *	~	/	~	V *	V	/	×
771-Extreme -30	~	/ *	Q	Q	Q	/	Q	×	/	/	~	×	V	~	×
746-Clever	~	~	Q	Q	Q	/	Q	/ *	V	/	~	/	V	/	Q
775-PC	~	/	Q	Q	Q	V	Q	/ *	V	/	/	~	/	/	/

✓ Available X Not available Q On request

*The luminaires can be delivered after successful tests.



The marketing materials for the above, either printed or on-line, is ever changing. Therefore the overview below is just to highlight some of the main versions and devices, that can be combined/used with our luminaires. We would be pleased to develop your advanced lighting options upon your request.





Motion sensor, corridor function



DALI

Building lighting control





Daylight harvesting



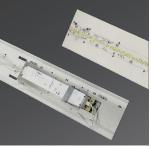


Power over Ethernet (PoE) Smart Network





Wireless communication





Extra long lifetime (100,000 hours)





Changing of correlated colour temperature





Mains voltage 110V





Strengthened mounting brackets





Special 5-pole connectors enabling quick (in-line) installation





Special 3-pole connectors enabling quick (in-line) installation





Available with LED tubes





Quick installation



Class II protection







Through wiring



EMERGENCY

Emergency lighting



LEGEND

Symbols concerning the application:



Luminaires with this symbol are double insulated (Class II protection)



Luminaires with this mark are suitable for direct installing on normal flammable building materials, according to DIN 4102 or similar materials, which have an ignition temperature of at least 200°



Luminaires bearing this symbol have limited surface temperature and are suitable for use in premises which are susceptible to dust and fibres.



Glow wire test 850°C



Protection level against external impact

Symbols concerning the built-in components:



Equipped with LED



T8 fluorescent tube ø 26mm with G13 lampholder



T5 fluorescent tube ø 16mm with G5 lampholder



Luminaires equipped with electronic control gear



Luminaires equipped with dimmable electronic control gear



Dimmable LED luminaires



1 phase through wiring



3 phase through wiring



Luminaires with emergency module

Symbols concerning IP protection:



- protected against splashing water





- protected against immersion (1m)



Protected against powerful water jets (heavy seas)



- dustproof



- dust-tight



RESISTANCE TO CHEMICALS

Since the aggressive agents in liquid or gas form can destroy the plastic parts of the lighting fixtures, increased attention must be paid to the selection of the proper materials. The following table will help in this selection. It contains the most frequently used chemicals. More information can be found on our website (www.ibv.hu).

CHEMICALS	PMMA diffuser	PC diffuser	GRP housing
ALCOHOLS Alcohol up to 30% Alcohol concentrate Methanol Glycerine Glycol	O +++	+++ 0 0 +++ +++	+++ 0 0 +++
AQUEOUS SOLUTIONS Sea water	O ns . +++	+++ ++ ++ +++	+++ 0 0 +++ +++
GASES Carbon dioxide Carbon monoxide		+++	+++
HYDROCARBONS Benzene Diesel oil Petroleum Ether Aliphatic Hydrocarbons Aromatic Hydrocarbons	+++	0 ++ ++ ++ 0	0 +++ +++ ++
Aniline Machine-tool oils Diesel oil Brake oil Flammable acid oils Camphor oil Lubricating oil Silicone oil Paraffin oil Saturated mineral oil	0 0 0 0 0 +++ +++	0 0 0 0 ++ 0 +++ +++	0 +++ +++ 0 +++ 0 +++ +++

INORGANIC ACIDS Battery acid Bromic acid	+++ O +++ +++ O +++ O +++ ++ O	PC diffuser housing ++++	GRP housing +++ 0 +++ +++ ++ 0 +++ +++ +++ +++
Acetic acid up to 5%	0 0 ++ ++ ++ +++ +++	+++ ++ +++ +++ 0 +++ 0	*** *** *** *** *** ***
Solivents Acetone Ketone Chlorofenol Chloroform Methylene Chloride Dioxane Ether Ethyl Acetate Phenol Methyl-ethyl ketone Turpentine Pyridine Carbon tetrachloride Xylene	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 +++ ++ 0

Before selecting the product, please check the chemical environment for the lighting application. The above table refers to an ambient temperature of $25^{\circ}\text{C}\pm10^{\circ}\text{C}$. The chemical resistance is only valid if there are no mechanical effects, which may cause surface deformation, elongation or evolution of capillary cracks.

Legend:

- resistant
 limited resistance
 not resistant
- * Occupational Exposure Limit -EC (2000)

It is recommended to consult the manufacturer before any product is selected for potentially chemically aggressive applications.



GENERAL CONDITIONS OF WARRANTY

Our products are continuously developing and hence we reserve the right to make technical modifications of the dimensions, technical data, weight and construction stated without prior written notice!

PRODUCT SEGMENTATION

LED products:

For our LED lighting products, we provide 5-3-2 years of warranty, depending on the product as detailed below:

Premium LED products with 5 years warranty:

- Our premium LED products with injected silicon-based gasket (except for the 771-Ventila product family).
- 771-Farmer product family in case the customer has ordered the product with the extended 5-year warranty
- Extruded luminaires (790-Xtrude and 792-XSlide) in case the customer has ordered the product with the extended 5-year warranty

Standard LED products with 3 years warranty:

- Our standard LED products with non-aging polyurethane gasket
- 771-Farmer product family in case the customer has ordered the product with the standard 3-year warranty
- Extruded luminaires (790-Xtrude and 792-XSlide) in case the customer has ordered the product with the standard 3-year warranty

Our LED products with 2 year warranty:

We provide a 2-year warranty on the 771-Ventila product family.

T5/T8 fluorescent tube products:

We provide a 2-year warranty on our luminaires for T5/T8 fluorescent tubes.

Remarks:

Regarding any other products not stated above and/or variations on a product - such as luminaires equipped with emergency battery kit or sensor - the above extended warranty period is not applicable.

In the case of versions other than the above, individual written contract with the client shall be applied.

Date of implementation*: 01.05.2021 (*Note: The warranty period must always be checked on the basis of the document in force at the time of the despatch of the product.)

The luminaires presented in this catalogue are available as unassembled sets (without electrical components) on request.







870-INSPIRE

High-end dust and waterproof luminaires with LED modules.

Synergy of art and technology

Inspiring design, trend-setting appearance with professional quality.

YOUR MAIN BENEFITS:

Gear tray integrated into the diffuser

Cost efficient and user-friendly, quick installation even without disassembling the luminaire



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environments.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting plug or venting cable gland is necessary, as well as the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant GRP glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- Diffuser: Available in PC injection moulded opalised Polycarbonate (high mechanical strength and high heat and shock resistance) or in Acrylic - injection moulded opalised PMMA (unique non-aging properties, high chemical resistance).

Further benefits:

- Extremely high light transmissivity (up to 90%)
- Homogenous, well-balanced light dispersing (no shadows)
- Keeping the usual, well known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.
- Universal width (no single and twin) simplifies the light calculation.
- The gasket between the diffuser and housing is injected silicone-based (Non-aging PU (polyurethane) endless foam is available on request.)
- **Fixing the diffuser to the body:** With stainless steel clips.
- Gear tray (reflector): The gear tray is integrated into the diffuser thus enabling a cost efficient and userfriendly installation even without disassembling the luminaire. White powder coated steel sheet, the LED modul mounting positions according to Zhaga standards or customized.
- Electrical components: The adequate power supply is ensured through electronic driver.











Option:

IP67















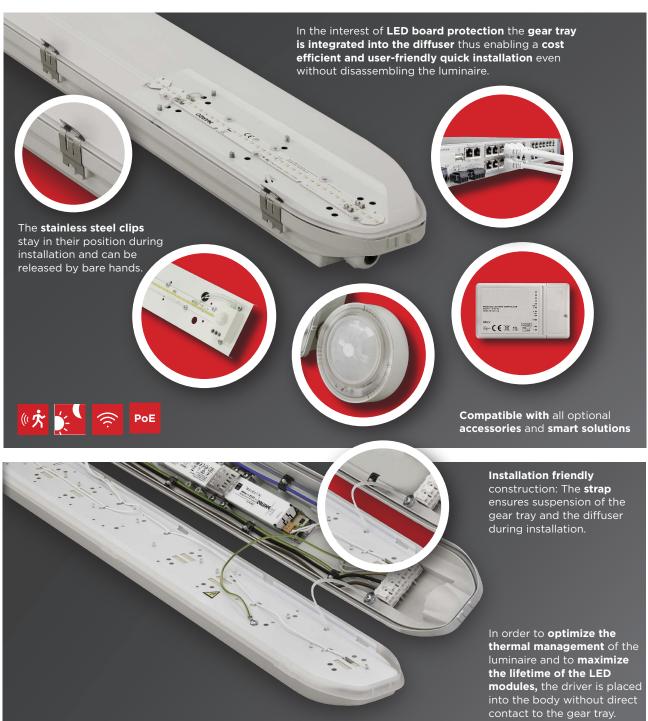


Our new opalised diffuser made of UV-stabilized material achieves an outstanding light transmissivity up to 90%. This great light permeability offers high efficacy (up to 160 lm/W) emitted from the luminaire.









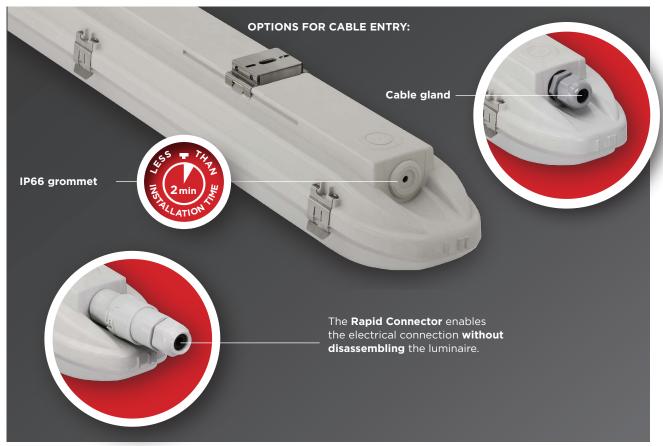
The gear tray, made of white powder coated steel sheet according to Zhaga standards, is integrated into the diffuser. With 870-Inspire - depending on customer requirements - we can reach different levels of luminous flux from 2700 up to 14000 lumen with maximum efficacy of 160 lm/W. Details see: Technical data.

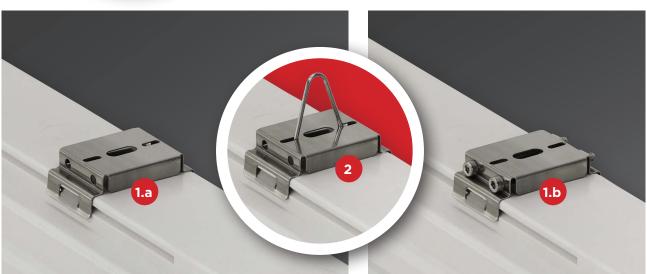




The injected silicon-based gasket with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP67.







Ways of installing (options):

- With strengthened (0,6 mm) stainless steel mounting
- 1.a They are easy-to-install onto the ceiling or the wall (in horizontal position).
- 1.b In case of vertical positioning, **position fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.
- 2. Suspension on chains, wire ropes etc. with stainless steel mounting brackets and with hooks.

Easy installation: Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)



Technical data (extract)

PMMA Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)
Lumnium EU 130	with O	sram driver									
870 4ft (1200mm)	24	5 years	3400	142	4000	>80	> 72 000 h *	>50 000 h*	1174	700 +/- 76	2
870 5ft (1500mm)	30	5 years	4300	143	4000	>80	> 72 000 h *	> 50 000 h *	1454	1000 +/- 76	2,2
870 4ft (1200mm)	37	5 years	5200	140	4000	>80	> 72 000 h *	> 50 000 h *	1174	700 +/- 76	2
870 5ft (1500mm)	51	5 years	7000	137	4000	>80	> 72 000 h *	> 50 000 h *	1454	1000 +/- 76	2,2
Lumnium EU PR	O 160 w	ith Osram o	driver								
870 4ft (1200mm)	22	5 years	3450	157	4000	>80	> 72 000 h	> 50 000 h	1174	700 +/- 76	2
870 5ft (1500mm)	27	5 years	4200	157	4000	>80	> 72 000 h	> 50 000 h	1454	1000 +/- 76	2,2
870 4ft (1200mm)	32	5 years	5000	158	4000	>80	> 72 000 h	> 50 000 h	1174	700 +/- 76	2
870 5ft (1500mm)	44	5 years	7000	160	4000	>80	> 72 000 h	> 50 000 h	1454	1000 +/- 76	2,2
Philips Fortimo I	HV5										
870 4ft (1200mm)	22	5 years	3400	153	4000	>80	> 72 000 h	> 70 000 h	1174	700 +/- 76	2
870 5ft (1500mm)	28	5 years	4300	153	4000	>80	> 72 000 h	> 70 000 h	1454	1000 +/- 76	2,2
870 4ft (1200mm)	39	5 years	5700	145	4000	>80	> 72 000 h	> 70 000 h	1174	700 +/- 76	2
870 5ft (1500mm)	50	5 years	7300	146	4000	>80	> 72 000 h	> 70 000 h	1454	1000 +/- 76	2,2
The application of		-			4000	>80	> /2 000 h	> /0 000 h	1454	1000 +/- /6	2,

with DIP Switch PMMA Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)
Lumnium EU 160	with O	sram driver									
870 4ft (1200mm)	19 23 27 32	5 years	3000 3700 4500 5200	162	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	2
870 5ft (1500mm)	25 32 38 44	5 years	4100 5200 6200 7200	163	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	2,2
РММА Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
PMMA Type	(W)	(years)	luminous flux - emitted (lm)	efficacy	colour temp	CRI	L70B50	L80B10			
	(W)	(years)	luminous flux - emitted (lm)	efficacy	colour temp	CRI >80	L70B50	L80B10			
Lumnium EU PR	(W) O 140 H	(years) F with Phili	luminous flux - emitted (lm) ps driver	efficacy (lm/W)	colour temp (Kelvin)		L70B50 (Ta=35°C) > 72 000 h	L80B10 (Ta=35°C)	(mm)	(mm)	(kg)
Lumnium EU PR 870 4ft (1200mm)	(W) O 140 H 61 77	(years) F with Phili 5 years	luminous flux - emitted (lm) ps driver 8300	efficacy (lm/W)	colour temp (Kelvin)	>80	L70B50 (Ta=35°C) > 72 000 h	L80B10 (Ta=35°C) > 50 000 h	(mm) 1174	(mm) 700+/-76	(kg)
Lumnium EU PR 870 4ft (1200mm) 870 5ft (1500mm)	(W) O 140 H 61 77	(years) F with Phili 5 years	luminous flux - emitted (lm) ps driver 8300	efficacy (lm/W)	colour temp (Kelvin)	>80	L70B50 (Ta=35°C) > 72 000 h	L80B10 (Ta=35°C) > 50 000 h > 50 000 h	(mm) 1174	(mm) 700+/-76	(kg)
Lumnium EU PR 870 4ft (1200mm) 870 5ft (1500mm) Philips Fortimo I	(W) O 140 H 61 77 HV6	(years) F with Phili 5 years 5 years	luminous flux - emitted (lm) ps driver 8300 10400	efficacy (lm/W) 136 135	colour temp (Kelvin) 4000 4000	>80 >80	L70B50 (Ta=35°C) > 72 000 h > 72 000 h	L80B10 (Ta=35°C) > 50 000 h > 50 000 h > 64 000 h	(mm) 1174 1454	(mm) 700+/-76 1000+/-76	(kg) 2 2,2
Lumnium EU PR 870 4ft (1200mm) 870 5ft (1500mm) Philips Fortimo I 870 4ft (1200mm)	(W) 0 140 H 61 77 HV6 60 75	(years) F with Phili 5 years 5 years 5 years 5 years	luminous flux - emitted (Im) ps driver 8300 10400 8800 11000	efficacy (lm/W) 136 135 146 146	4000 4000 4000 4000 4000	>80 >80 >80	L70B50 (Ta=35°C) > 72 000 h > 72 000 h > 100 000 h > 100 000 h	L80B10 (Ta=35°C) > 50 000 h > 50 000 h > 64 000 h > 64 000 h	(mm) 1174 1454 1174	700 +/- 76 1000 +/- 76 700 +/- 76 1000 +/- 76	2 2,2 2 2,2
Lumnium EU PR 870 4ft (1200mm) 870 5ft (1500mm) Philips Fortimo I 870 4ft (1200mm) 870 5ft (1500mm)	(W) 0 140 H 61 77 HV6 60 75	(years) F with Phili 5 years 5 years 5 years 5 years	luminous flux - emitted (Im) ps driver 8300 10400	efficacy (lm/W) 136 135	colour temp (Kelvin) 4000 4000	>80 >80 >80	L70B50 (Ta=35°C) > 72 000 h > 72 000 h > 100 000 h	L80B10 (Ta=35°C) > 50 000 h > 50 000 h > 64 000 h > 64 000 h	(mm) 1174 1454 1174	(mm) 700 +/- 76 1000 +/- 76 700 +/- 76	2 2,2 2 2,2 2

Further options:



















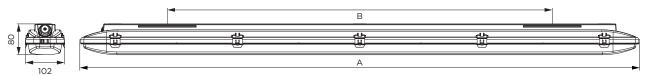






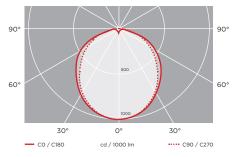


Schematic drawing with main dimensions

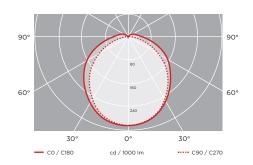


Photometric curves:

870-Inspire, 4ft, Philips Fortimo HV5, 22W, 3400 lm



870-Inspire, 5ft, Lumnium EU PRO 140 HF 77W, 10400lm



Luminaire customisation and the options of advanced controls are presented on page 7







872-ENTRY

Industrial dust and waterproof luminaires with LED modules

Trend-setting lighting in IP66 (option in IP67), quick installation. Specially developed for LED applications.

YOUR MAIN BENEFITS:

Size perfectly adapted to LED, easy to install, slim design



IP66









Option:













FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP66) against dust, contamination and water permeation. (Optionally available in IP67). In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environment. When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: Available in flame retardant glass fibre reinforced polyester, in light grey (RAL7035) colour (on request suitable for 850°C glow wire test too). Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
 - Available in PC injection moulded opalised Polycarbonate in light grey (RAL7035) colour (suitable for 850°C glow wire test too). Polycarbonate has high mechanical strength and high heat and shock resistance
- Diffuser: Available in PC injection moulded opalised Polycarbonate (high mechanical strength and high heat and shock resistance) or in Acrylic - injection moulded opalised PMMA (unique non-aging properties, high chemical resistance).

Further benefits:

- Extremely high lighting efficiency through high light permeability, unique on the market, up to 90%
- An excellent light uniformity through well-balanced light dispersing (no shadows)
- Elimination of the dazzling effect (no glare)
- Keeping the usual, well known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.
- Universal width (no single and twin) and slim shape simplifies the light calculation.
- The **gasket** between the diffuser and housing is available in two versions:
 - Injected silicone-based foam
 - Non-aging PU (polyurethane) foam
- Fixing the diffuser to the body: With tamper-proof (vandal-proof) stainless steel clips.
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: The adequate power supply is ensured through electronic driver, that is built into the luminaire.

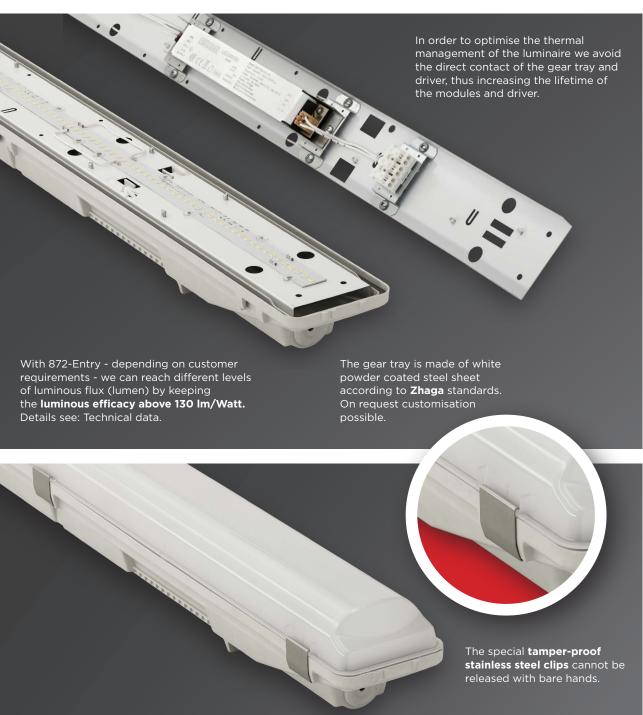


Our new **opalised** diffuser achieves an outstanding light transmissivity of up to 90%. With this great light permeability, it is an excellent choice for luminaires equipped with LED-modules.









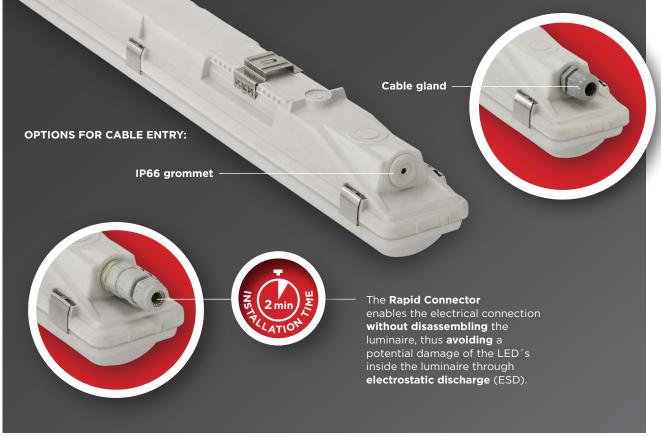
The opal diffusers are made of UV-stabilized material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the elimination of glare.

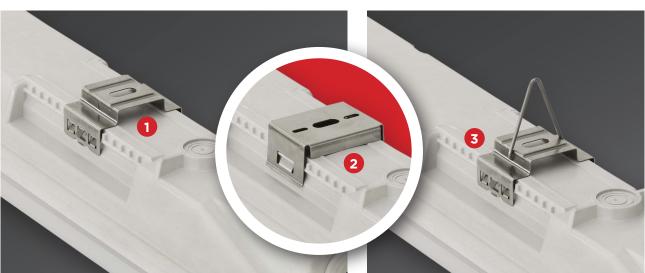




The injected silicon-based gasket with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. Non-aging polyurethane foam is optionally available.







Ways of installing (options):

- With **standard** (0,4 mm) stainless steel mounting brackets (easy-to-install) onto the ceiling.
- 2. With **strengthened** (0,6 mm) stainless steel mounting brackets. They are easy-to-install onto the ceiling or the wall (in horizontal position).
- 3. Suspension on chains, wire ropes etc. with stainless steel mounting brackets and with hooks.

The mounting brackets can be positioned with lateral flexibility for easy installation.



Technical data (extract)

РММА Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weigh (kg)
Lumnium EU 130	with O	sram drive									
872 2ft (600mm)	25	5 years	3200	128	4000	>80	> 72 000 h	> 50 000 h	605	238±23	0,9
872 4ft (1200mm)	26	5 years	3500	136	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	1,5
872 5ft (1500mm)	33	5 years	4500	137	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	1,8
872 4ft (1200mm)	39	5 years	5300	136	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	1,5
872 5ft (1500mm)	51	5 years	7000	137	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	1,8
Lumnium EU PR	O 160 w	ith Osram o	driver								
872 4ft (1200mm)	22	5 years	3500	159	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	1,5
872 5ft (1500mm)	27	5 years	4400	163	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	1,8
872 4ft (1200mm)	31	5 years	5000	161	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	1,5
872 5ft (1500mm)	41	5 years	6800	165	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	1,8
Osram Basic Lin	ear G3										
872 2ft (600mm)	21	5 years	2600	125	4000	>80	50.000 h	41.000 h	605	238±23	0,9
872 4ft (1200mm)	23	5 years	3000	130	4000	>80	50.000 h	46.000 h	1185	700±78	1,5
872 5ft (1500mm)	28	5 years	3900	140	4000	>80	50.000 h	50.000 h	1477	1000±78	1,8
872 4ft (1200mm)	39	5 years	5400	140	4000	>80	50.000 h	41.000 h	1185	700±78	1,5
872 5ft (1500mm)	47	5 years	6900	145	4000	>80	50.000 h	41.000 h	1477	1000±78	1,8
with DIP Switch PMMA Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weigh (kg)
Lumnium EU 130	HO wit	h Osram dı	river								
872 4ft (1200mm)	23 28 34 39	5 years	3400 4100 4800 5300	136	4000	>80	> 72 000 h	> 50 000 h	1185	700±78	1,5
872 5ft (1500mm)	30 37 44 51	5 years	4500 5500 6400 7000	137	4000	>80	> 72 000 h	> 50 000 h	1477	1000±78	1,8

Further options:











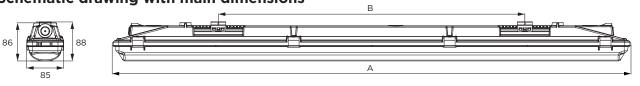






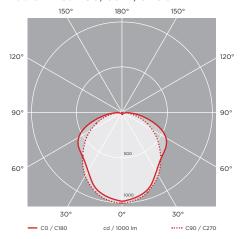


Schematic drawing with main dimensions

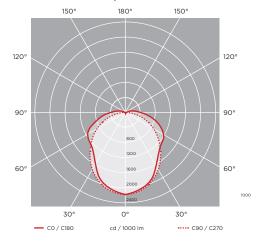


Photometric curves:

872-Entry 4ft (1200mm) PMMA, Osram Basic Linear G3, 39W, 5400lm



872-Entry 5ft (1500mm) PMMA, Lumnium EU PRO 160 41W,6800lm



Luminaire customisation and the options of advanced controls are presented on page 7







790-XTRUDE

Industrial dust and waterproof luminaires with LED modules

Unique appearance with easier, quick installation!

Extruded profile with outstanding light transmissivity! Specially developed for LED applications.

CE

YOUR MAIN BENEFITS:

Quick installation, length perfectly adapted to the size of the LED modules



IP65



















FIELD OF APPLICATION:

Thanks to the construction principles of gasket, end caps and the extruded profile our LED fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: Made of Polycarbonate (PC) by co-extrusion. The housing is made in light grey (RAL7035) colour. The diffusing (upper) part is opalised. Thanks to the used raw material the whole fitting shows very high mechanical strength and high heat and shock resistance (IKO8).
- The **co-extruded opal** diffuser offers you:
 - extremely high light transmissivity (up to 90%) unique on the market
 - homogenous, well-balanced light dispersing (no shadows)
 - elimination of the dazzling effect (no glare)
 - unique appearance and clean impression (no clips, no dots of the single LED´s)
 - **keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.
- **End caps:** Made of extremely resistant polyamide and glued to the housing.
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customized.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.





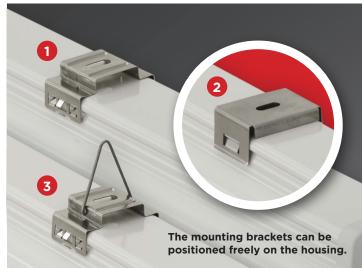
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards.







IP 65 protection is ensured by adhesive that is placed into the seal channel and it secures the end caps to the body.



Ways of installing:

- 1. With stainless steel mounting brackets (easy-to-install) onto the
- 2. With **strengthened** stainless steel mounting brackets. They are easy to install onto the wall or ceiling.
- 3. **Suspension on chains or rope** with stainless steel suspension brackets mounted with **hooks**.





Technical data (extract)

PC Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
Lumnium EU 130	SO with	Osram driv	er								
790 2ft (600mm)	25	5 years	3400	136	4000	>80	>72 000 h	>50 000 h	648	350	0,8
790 4ft (1200mm)	25	5 years	3400	136	4000	>80	>72 000 h	>50 000 h	1208	600	1,2
790 5ft (1500mm)	31	5 years	4200	135	4000	>80	>72 000 h	>50 000 h	1488	850	1,3
790 4ft (1200mm)	38	5 years	5100	134	4000	>80	>72 000 h	>50 000 h	1208	600	1,6
790 5ft (1500mm)	51	5 years	6800	133	4000	>80	>72 000 h	>50 000 h	1488	850	1,7
Lumnium EU PRO	160 SO	with Osran	n driver								
790 4ft (1200mm)	22	5 years	3300	150	4000	>80	>72 000 h	>50 000 h	1208	600	1,2
790 5ft (1500mm)	27	5 years	4100	151	4000	>80	>72 000 h	>50 000 h	1480	850	1,3
790 4ft (1200mm)	31	5 years	4800	154	4000	>80	>72 000 h	>50 000 h	1208	600	1,6
790 5ft (1500mm)	41	5 years	6400	156	4000	>80	>72 000 h	>50 000 h	1480	850	1,7
Lumnium EU PRO	140 HF	with Philip	s driver								
790 4ft (1200mm)	61	5 years	8100	132	4000	>80	>72.000 h	>50.000 h	1208	600	1,6
790 5ft (1500mm)	77	5 years	10000	130	4000	>80	>72.000 h	>50.000 h	1480	850	1,7
Osram Basic Line	ar G3										
790 2ft (600mm)	21	5 years	2600	116	4000	>80	>50 000 h	>41 000 h	648	350	0,9
790 4ft (1200mm)	23	5 years	2900	126	4000	>80	>50 000 h	>50 000 h	1208	600	1,45
790 5ft (1500mm)	28	5 years	3800	138	4000	>80	>50 000 h	>50 000 h	1488	850	1,72
790 4ft (1200mm)	28	5 years	3600	130	4000	>80	>50 000 h	>45 000 h	1208	600	1,45
790 5ft (1500mm)	35	5 years	4900	142	4000	>80	>50 000 h	>50 000 h	1488	850	1,72
790 4ft (1200mm)	38	5 years	5000	130	4000	>80	>50 000 h	>43 000 h	1208	600	1,45
790 5ft (1500mm)	47	5 years	6600	141	4000	>80	>50 000 h	>43 000 h	1488	850	1,72
Philips Fortimo L	ED Strip	HV6									
790 4ft (1200mm)	56	5 years	8200	143	4000	>80	>100 000 h	>64 000	1208	600	1,6
790 5ft (1500mm)	70	5 years	10000	142	4000	>80	>100 000 h	>64 000	1488	850	1,7

Further options:











On request:





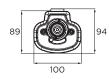


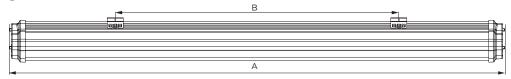






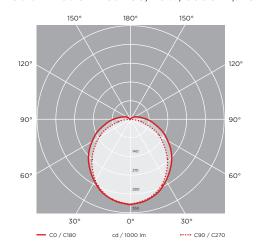
Schematic drawing with main dimensions



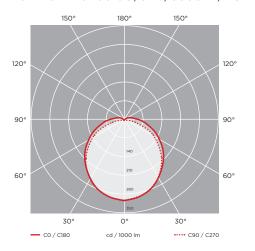


Photometric curves:

790-Xtrude, 4 ft (1200mm) Osram Basic Linear G3, 28W, 3600lm, PC



790-Xtrude, 5 ft (1500mm), Lumnium EU 130 SO, 51W, 6800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 7



792-XSLIDE

Industrial dust and waterproof luminaires with LED modules

YOUR MAIN BENEFITS:

Comfortable and quick installation without disassembling the luminaire

Extruded profile with outstanding light transmissivity

Slender design and clean impression, specially developed for LED applications

Glued end caps with pull-out (sliding) tray for easy connection

Economical and cost-efficient



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, end caps and the extruded profile our LED fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: Made of Polycarbonate (PC) by co-extrusion. The housing is made in light grey (RAL7035) colour. The diffusing (upper) part is opalised. Thanks to the used raw material the whole fitting shows very high mechanical strength and high heat and shock resistance (IKO8).
- The **co-extruded opal** diffuser offers you:
 - extremely high light transmissivity (up to 90%) unique on the market
 - homogenous, well-balanced light dispersing (no shadows)
 - elimination of the dazzling effect (no glare)
 - unique appearance and clean impression (no clips, no dots of the single LED's)
 - keeping the usual, well-known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.
- End caps: Made of extremely resistant polyamide and glued to the housing.
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customized.
- Electrical components: The adequate power supply is ensured through electronic driver, that is built into the luminaire.



CE

IP65











Option:

IP66











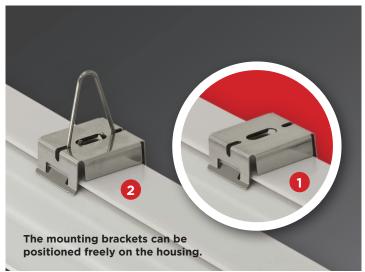


The gear tray is made of white powder coated steel sheet according to **Zhaga** standards.





IP 65 protection is ensured by adhesive that secures the end caps to the body.



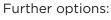
Ways of installing:

- 1. With **strengthened** stainless steel mounting brackets. They are easy to install onto the wall or ceiling.
- 2. Suspension on chains or rope with stainless steel suspension brackets mounted with hooks.



Technical data (extract)

PC Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
Lumnium EU 130	SO with	Osram driv	er								
792 2ft (600mm)	24	5 years	3000	125	4000	>80	>72 000 h	>50 000 h	610	230	0,91
792 4ft (1200mm)	25	5 years	3200	128	4000	>80	>72 000 h	>50 000 h	1180	860	1,49
792 5ft (1500mm)	30	5 years	4000	133	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79
792 4ft (1200mm)	38	5 years	4900	128	4000	>80	>72 000 h	>50 000 h	1180	860	1,49
792 5ft (1500mm)	50	5 years	6500	130	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79
Lumnium EU PRO	160 SO	with Osran	n driver								
792 4ft (1200mm)	22	5 years	3200	145	4000	>80	>72 000 h	>50 000 h	1180	860	1,49
792 5ft (1500mm)	27	5 years	4000	148	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79
792 4ft (1200mm)	31	5 years	4700	151	4000	>80	>72 000 h	>50 000 h	1180	860	1,49
792 5ft (1500mm)	41	5 years	6400	156	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79
Osram Basic Line	ar G3										
792 2ft (600mm)	21	5 years	2500	119	4000	>80	>50 000 h	>43 000 h	610	230	0,9
792 4ft (1200mm)	23	5 years	3000	131	4000	>80	>50 000 h	>50 000 h	1180	860	1,45
792 5ft (1500mm)	28	5 years	3800	138	4000	>80	>50 000 h	>50 000 h	1480	1160	1,72
792 4ft (1200mm)	39	5 years	5300	136	4000	>80	>50 000 h	>41 000 h	1180	860	1,45
792 5ft (1500mm)	47	5 years	6400	135	4000	>80	>50 000 h	>41 000 h	1480	1160	1,72









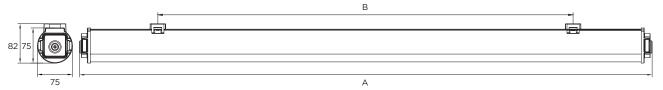




On request:

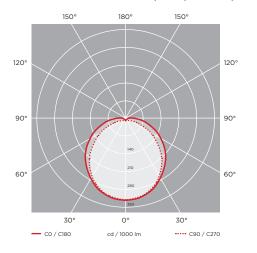


Schematic drawing with main dimensions

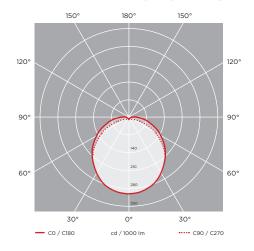


Photometric curves:

792-XSlide 4ft (1200mm) Osram Basic Linear G3, 39W, 5300lm, PC



792-XSlide 5ft (1500mm) Lumnium EU 130 HO, 51W, 6800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 7















771-FAVOURITE

Industrial dust and waterproof luminaires with LED modules

Now with a new, opalised diffuser with unique light transmissivity! **Specially developed for LED applications**



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65, IP66 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser:** Our LED luminaires with **opal** diffuser offer you:
 - extremely high light efficiency through high light permeability, unique on the market, (up to 93% light transmissivity)
 - an excellent light uniformity through well-balanced light dispersing (no shadows)
 - elimination of the dazzling effect (no glare)
 - aesthetical appearance (no dots of the single LEDs)
 - keeping the usual, well-known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.

Available in PC - injection moulded Polycarbonate (high mechanical strength and high heat and shock resistance) or in Acrylic - injection moulded PMMA (unique non-aging properties, high chemical resistance).

- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based, endless foam with enhanced resistance. Non-aging **PU** (polyurethane) foam is optionally available.
- Fixing the diffuser to the body: with highly resistant clips made of stainless steel (standard or tamperproof).
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: The adequate power supply is ensured through electronic driver, that is built into the luminaire.



Our opal diffuser has an outstanding light transmissivity up to 93%. With this great light permeability, it is an excellent choice for luminaires equipped with LED modules.





With 771-Favourite - depending on customer requirements - we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt). Details see: Technical data.

In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.



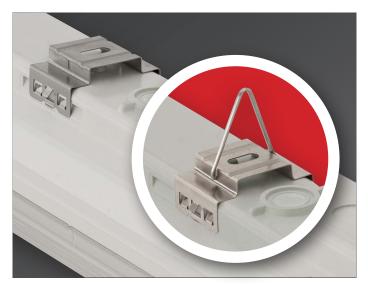




The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.







Ways of installing:

- 1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- 2. Suspension on chains with stainless steel suspension brackets mounted with hooks.



In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.





Technical data (extract)

РММА Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium EU 130	SO wit	th Osram d	lriver								
771 2ft (600mm)	25	5 years	3200	128	4000	>80	>72.000 h	> 50.000 h	669	360	1,3
771 4ft (1200mm)	25	5 years	3400	136	4000	>80	>72.000 h	> 50.000 h	1277	700	2,2
771 5ft (1500mm)	30	5 years	4200	138	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,5
771 4ft (1200mm)	36	5 years	5100	135	4000	>80	>72.000 h	> 50.000 h	1277	700	2,2
771 5ft (1500mm)	50	5 years	7000	136	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,5
Lumnium EU PRO	O 160 S	O with Osra	am driver								
771 4ft (1200mm)	22	5 years	3300	150	4000	>80	>72.000 h	> 50.000 h	1277	700	2,2
771 5ft (1500mm)	27	5 years	4200	155	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,5
771 4ft (1200mm)	31	5 years	4800	155	4000	>80	>72.000 h	> 50.000 h	1277	700	2,2
771 5ft (1500mm)	41	5 years	6500	158	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,5
Lumnium EU PRO	O 140 H	F with Phili	ips driver								
771 4ft (2x1200mm)*	58	5 years	8000	138	4000	>80	>72.000 h	> 50.000 h	1277	700	2,65
771 5ft (2x1500mm)*	73	5 years	10200	140	4000	>80	>72.000 h	> 50.000 h	1577	1000	3
Osram Basic Line	ear G3										
771 2ft (600mm)	21	5 years	2400	119	4000	>80	>50.000 h	>41.000 h	669	360	1,3
771 4ft (1200mm)	23	5 years	2900	124	4000	>80	>50.000 h	>50.000 h	1277	700	1,8
771 5ft (1500mm)	28	5 years	3700	132	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 4ft (1200mm)	28	5 years	3900	140	4000	>80	>50.000 h	>45.000 h	1277	700	2
771 5ft (1500mm)	35	5 years	4700	136	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 4ft (2x1200mm)*	39	5 years	5300	135	4000	>80	>50.000 h	>43.000 h	1277	700	2,5
771 5ft (2x1500mm)*	47	5 years	6800	144	4000	>80	>50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo L	ED Stri	p LV5									
771 2ft (600mm)	15	5 years	2100	138	4000	>80	>72.000 h	> 50.000 h	669	360	1,7
771 4ft (1200mm)	31	5 years	4500	143	4000	>80	>72.000 h	> 50.000 h	1277	700	2,2
771 5ft (1500mm)	38	5 years	5400	142	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,5
771 5ft (2x1500mm)*	49	5 years	6900	140	4000	>80	>72.000 h	> 50.000 h	1577	1000	2,7
Philips Fortimo L	.ED Stri	p HV6									
771 4ft (2x1200mm)*	56	5 years	8300	150	4000	>80	>100.000 h	> 64.000 h	1277	700	2,65
771 5ft (2x1500mm)*	70	5 years	10500	150	4000	>80	>100.000 h	> 64.000 h	1577	1000	3
771 4ft (2x1200mm)*	66	5 years	10000	153	4000	>80	>100.000 h	> 64.000 h	1277	700	2,65
771 5ft (2x1500mm)*	83	5 years	12700	153	4000	>80	>100.000 h	> 64.000 h	1577	1000	3

^{*} The LED strips are placed in one line in a twin (wider) housing.

Further options:























On request:





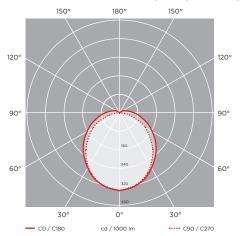


Schematic drawing with main dimensions



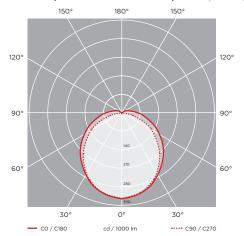
Photometric curves:

771-Favourite, 5ft (2x1500mm), Osram Basic Linear G3, 47W, 6800lm, PMMA



Photometric curves:

771-Favourite, 5ft (2x1500mm), Philips Fortimo LED Strip HV6, 70W, 10500lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 7



771-FARMER

Industrial dust and waterproof luminaires with LED modules

Specially developed for farming industry and chemically aggressive environment!

YOUR MAIN BENEFITS:

Solution in high IP protection for extremely harsh environment. Heavily armed with special components for long-term fight against chemicals. Perfectly applicable in agricultural industry.



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP 65, IP 66) against dust, contamination and water permeation. In accordance with their IP grade and high chemical resistance they are especially recommended for buildings where animals are kept and also for harsh environmental rooms.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass-fibre reinforced polyester, in light grey (RAL7035) colour. Glass-fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals. Its stability of size and shape at changing temperatures is excellent.
- Diffuser: The diffuser is available in injection moulded opal acrylic (PMMA) with unique non-aging properties and extremely high chemical resistance.
- Our LED-luminaires with **opal** diffuser offer you:
 - extremely high light transmissivity (up to 93%) unique on the market
 - homogenous, well-balanced light dispersing (no shadows)
- Gasket: silicon-based endless foam with enhanced resistance
- Fixing the diffuser to the body: with highly resistant tamper-proof clips made of stainless steel
- Gear tray (reflector): white powder coated steel sheet according to Zhaga standards or customised
- **Electrical components:** The adequate power supply is ensured through a special **hermetically sealed** electronic driver - LUMNIUM Farmer HV.







IP65











Option:

IP66





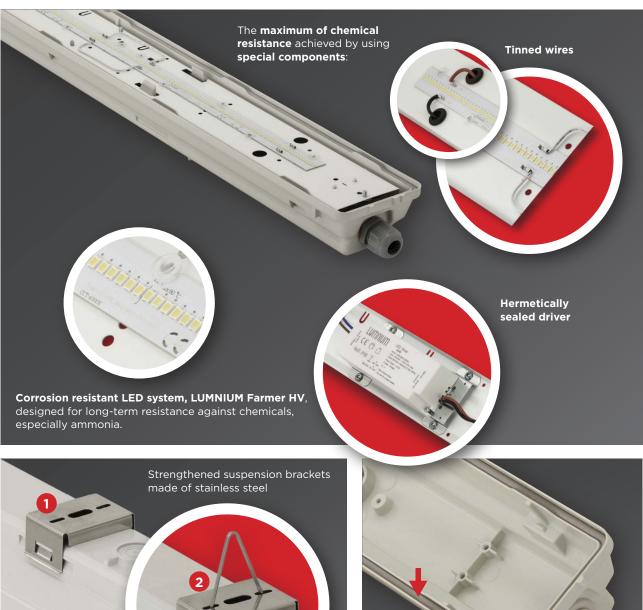






Our new opal diffuser has an **outstanding light** transmissivity up to 93%. Thanks to the wide beam angle, homogenous illumination even at low height of luminaire.





Ways of installing (options):

- 1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- 2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Endless silicone foam as sealing with enhanced resistance and extreme durability



Technical data (extract)

РММА Туре	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium3 Farmer HV											
771 2ft (600 mm)	14	3 years	1900	136	4000	>80	>50.000 h	>50.000 h	669	360	1,2
771 4ft (1200mm)	23	3 years	3800	164	4000	>80	>50.000 h	>50.000 h	1277	700	2
771 5ft (1500mm)	33	3 years	5000	152	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 5ft (2x1500mm)*	43	3 years	6600	154	4000	>80	>50.000 h	>40.000 h	1577	1000	2,2
Lumnium5 Farmer	HV										
771 2ft (600mm)	14	5 years	1900	136	4000	>80	>50.000 h	>50.000 h	669	360	1,2
771 4ft (1200mm)	23	5 years	3800	164	4000	>80	>50.000 h	>50.000 h	1277	700	2
771 5ft (1500mm)	33	5 years	5000	152	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 5ft (2x1500mm)*	43	5 years	6600	154	4000	>80	>50.000 h	>40.000 h	1577	1000	2,2

^{*} The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options: On request:

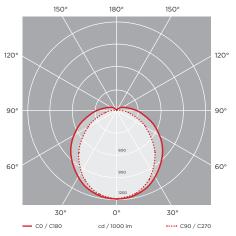


Schematic drawing with main dimensions

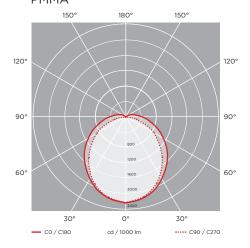


Photometric curves:

771-Farmer, 4ft, 1x1200m, Lumnium Farmer HV, 23W, 3800lm, PMMA



771-Farmer, 5ft, 2x1500mm, Lumnium Farmer HV, 43W, 6600lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 7





771-ORIENT

Industrial dust and waterproof luminaires with LED modules

771-Orient is available in the following sizes: 1200mm, 1500mm. Available in IP65

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements. Especially for applications where high heat resistance (up to Ta +50 °C) is required.



FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate spaces with dusty and humid environment. Thanks to its enhanced heat resistance, 771-Orient is especially suitable for applications, where error-free functioning at higher ambient temperature is desired.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in injection moulded opal polycarbonate (PC) with extremely high light permeability and well-balanced light dispersing. Main advantages: High mechanical strength and high heat and shock resistance and excellent transparency.

The diffusers are designed with respect to their optical characteristics and are UV resistant.

- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based foam with enhanced resistance. Nonaging PU (polyurethane) foam is optionally available.
- Fixing the diffuser to the body: with highly resistant stainless steel clips
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: in accordance with the requested specification suitable for LED technology, details see under technical data.



CE

IP65











Option:







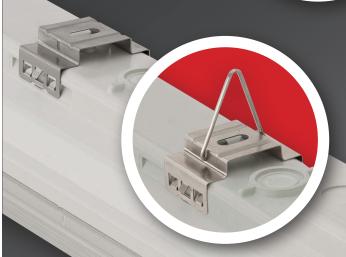




Our new opal diffuser has an outstanding light transmissivity of more than 90%. With this great light permeability, it is an excellent choice for luminaires equipped with LED modules.







Ways of installing:

- 1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- 2. Suspension on chains with stainless steel suspension brackets mounted with hooks.



Depending on customer requirements we can reach different levels of luminous flux (lumen) and high luminous efficacy (lm/Watt) of our LED luminaires. Details see attached overview.





The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.





In order to optimise the thermal management of the luminaire at high ambient temperatures, the driver is fixated to the gear tray with a heat sink plate. Thus heat sensitive LED components function properly up to Ta +50°C.



In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.





РС Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=50°C)	Lifetime L80B10 (Ta=50°C)	A (mm)	C (mm)	Weight (kg)
Philips Fortimo L	ED Strip	LV									
771 4ft (1200mm)	26	5 years	3400	132	4000	>80	>70.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	31	5 years	4200	135	4000	>80	>70.000 h	>50.000 h	1577	1000	2,5
771 5ft (2x1500mm)*	39	5 years	5 200	134	4000	>80	>70.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo L	ED Strip	HV6									
771 4ft (2x1200mm)*	59	5 years	8 100	137	4000	>80	>50.000 h	>50.000 h	1277	700	2,65
771 5ft (2x1500mm)*	70	5 years	9 900	141	4000	>80	>50.000 h	>50.000 h	1577	1000	3

The LED strips are placed in one line in a twin (wider) housing.







Further options:





















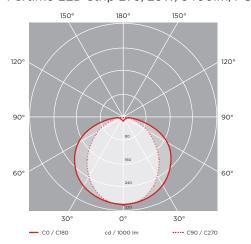


Schematic drawing with main dimensions

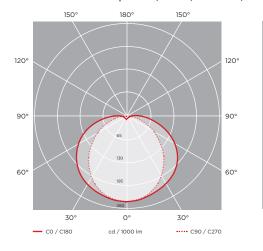


Photometric curves:

771-Orient +50°C 4ft 1200mm, Philips Fortimo LED Strip LV5, 26W, 3400lm, PC



771-Orient +50°C 5ft (2x1500mm)*, Philips Fortimo LED Strip HV6, 70W,9900lm, PC



Luminaire customisation and the options of advanced controls are presented on page 7



Other colour temperatures available on request

771-EXTREME -30°C

Industrial dust and waterproof luminaires with LED modules for ambient temperature down to Ta -30 °C

With a new, opalised diffuser with unique light transmissivity! Specially developed for LED applications

YOUR MAIN BENEFITS:

The shape of 771-Favourite adapted for extremely low (-30°C) ambient temperatures.



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation even at extremely low ambient temperature. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment down to Ta -30 °C.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Diffuser:** Our LED luminaires with opal diffuser offer you:
 - very good light efficiency through high light permeability, (up to 90% light transmissivity)
 - the usual, well-known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.

Available in PC - injection moulded Polycarbonate.

Main advantages: high mechanical strength and high heat and shock resistance

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- In order to ensure maximum temperature, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based foam with enhanced durability.
- Fixing of the diffuser to the body: with highly resistant stainless steel clips (standard or tamper-proof version).
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- **Electrical components:** in accordance with the requested specification suitable for LED technology, details see under technical data.



CE

IP65









Option:

IP66







Technical data (extract)

РС Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)		Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=-30°C)	Lifetime L80B10 (Ta=-30°C)	A (mm)	C (mm)	Weight (kg)
Philips Fortimo Li	ED Strip	HV6									
771 4ft (2x1200mm)*	55	5 years	7800	141	4000	>80	>50.000 h	>50.000 h	1277	700	2,65
771 5ft (2x1500mm)*	70	5 years	9900	141	4000	>80	>50.000 h	>50.000 h	1577	1000	3

^{*} The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options:

















On request:







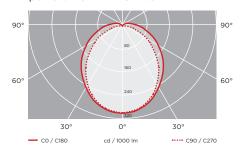


Schematic drawing with main dimensions

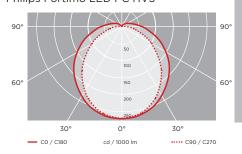


Photometric curves:

771-Extreme -30°C 2x1200mm 56W Philips Fortimo LED PC HV5



771-Extreme -30°C 2x1500mm 73W Philips Fortimo LED PC HV5



Luminaire customisation and the options of advanced controls are presented on page 7



771-VENTILA

Industrial dust and waterproof luminaires with LED modules

771-Ventila is available in the following sizes: 1x600mm, 1x1200mm, 1x1500mm, 2x600mm, 2x1200mm, 2x1500mm

YOUR MAIN BENEFITS:

A professional solution especially for outdoor applications. 771-Ventila withstands the impact of adverse weather conditions (sunlight, rain, wind etc.). Ta = -20 to +35°C Full range available in IP65 or IP66.



FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate areas with dusty and humid environment.

Thanks to its enhanced weather resistance, 771-Ventila is especially suitable for applications, where errorfree functioning in outdoor conditions is desired.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in injection moulded opal acrylic (PMMA) with extremely high light permeability and well-balanced light dispersing. Main advantages: weather resistance and extremely high light efficiency.
- The diffusers are designed with respect to their optical characteristics and are **UV resistant**.
- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based foam with enhanced durability.
- Fixing of the diffuser to the body: with highly resistant stainless steel clips (standard or tamper-proof version).
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: in accordance with the requested specification suitable for LED technology, details see under technical data.







IP65











Option:

IP66











Our opal diffuser has an outstanding light transmissivity of more than 93%. With this great light permeability, it is an **excellent** choice for luminaires equipped with LED modules.





The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.







Depending on customer requirements we can reach different levels of luminous flux (lumen) and high luminous efficacy (Im/Watt) of our LED luminaires. Details see attached overview.





Ways of installing:

- 1. In order to withstand the outdoor weather conditions (wind, storm), we recommend to use **strengthened** stainless steel suspension brackets. They are easy to install onto the wall and ceiling.
- 2. **Usual** suspension brackets, suitable for installation onto the **ceiling**, are available on request.





РММА Туре	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium EU 130	SO witl	h Osram dr	iver								
771 2ft (600mm)	25	5 years	3200	128	4000	>80	>72.000 h	>50.000 h	669	360	1,3
771 4ft (1200mm)	25	5 years	3400	136	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	30	5 years	4200	138	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
771 4ft (1200mm)	36	5 years	5100	135	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	50	5 years	7000	136	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
Lumnium EU PRO) 160 S	O with Osra	m driver								
771 4ft (1200mm)	22	5 years	3300	150	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	27	5 years	4200	155	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
771 4ft (1200mm)	31	5 years	4800	155	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	41	5 years	6500	158	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
Lumnium EU PRO	0 140 H	F with Phili	ps driver								
771 4ft (2x1200mm)*	58	5 years	8000	138	4000	>80	>72.000 h	>50.000 h	1277	700	2,65
771 5ft (2x1500mm)*	73	5 years	10200	140	4000	>80	>72.000 h	>50.000 h	1577	1000	3
Osram Basic Line	ear G3										
771 2ft (600mm)	21	5 years	2400	119	4000	>80	>50.000 h	>41.000 h	669	360	1,3
771 4ft (1200mm)	23	5 years	2900	124	4000	>80	>50.000 h	>50.000 h	1277	700	1,8
771 5ft (1500mm)	28	5 years	3700	132	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 4ft (1200mm)	28	5 years	3900	140	4000	>80	>50.000 h	>45.000 h	1277	700	2
771 5ft (1500mm)	35	5 years	4700	136	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 4ft (2x1200mm)*	39	5 years	5300	135	4000	>80	>50.000 h	>43.000 h	1277	700	2,5
771 5ft (2x1500mm)*	47	5 years	6800	144	4000	>80	>50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo L	ED Stri	p LV5									
771 2ft (600mm)	15	5 years	2100	138	4000	>80	>72.000 h	>50.000 h	699	360	1,7
771 4ft (1200mm)	31	5 years	4500	143	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
771 5ft (1500mm)	39	5 years	5400	142	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
771 5ft (2x1500mm)*	49	5 years	6900	140	4000	>80	>72.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo L	ED Stri	p HV6									
771 4ft (2x1200mm)*	56	5 years	8300	150	4000	>80	>100.000 h	>64.000 h	1277	700	2,65
771 5ft (2x1500mm)*	70	5 years	10500	150	4000	>80	>100.000 h	>64.000 h	1577	1000	3
771 4ft (2x1200mm)*	66	5 years	10000	153	4000	>80	>100.000 h	>64.000 h	1277	700	2,65
771 5ft (2x1500mm)*	83	5 years	12700	153	4000	>80	>100.000 h	>64.000 h	1577	1000	3

^{*} The LED strips are placed in one line in a twin (wider) housing.

Further options:



























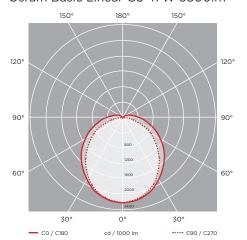


Schematic drawing with main dimensions

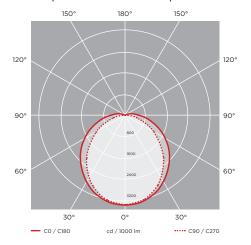


Photometric curves:

771-Ventila 5ft (2x1500mm) Osram Basic Linear G3 47W 6800lm



771-Ventila 5ft (2x1500mm) Philips Fortimo LED Strip HV6 70W 10500lm



Luminaire customisation and the options of advanced controls are presented on page 7



CE









746-CLEVER

Industrial dust and waterproof luminaires with LED modules

Now with a new, opalised diffuser with unique light transmissivity! **Specially developed for LED applications**



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65 or IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Diffuser:** Our LED luminaires with **opal** diffuser offer you:
 - extremely high light efficiency through high light permeability, unique on the market, (up to 93% light transmissivity)
 - an excellent light uniformity through well-balanced light dispersing (no shadows)
 - elimination of the dazzling effect (no glare)
 - aesthetical appearance (no dots of the single LEDs)
 - keeping the usual, well-known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.

Available in PC - injection moulded Polycarbonate (high mechanical strength and high heat and shock resistance) or in Acrylic - injection moulded PMMA (unique non-aging properties, high chemical resistance).

- Housing: It is made of flame retardant glass fibre reinforced polyester, in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based, endless foam with enhanced resistance. Non-aging PU (polyurethane) foam is optionally available.
- Fixing the diffuser to the body: with highly resistant clips made of stainless steel (standard or tamper-
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.



Our opal diffuser has an outstanding light transmissivity of up to 93%. With this great light permeability, it is an excellent choice for luminaires equipped with LED modules.





With 746-Clever - depending on customer requirements we can reach different levels of luminous flux (lumen) as well as luminous efficacy (Im/Watt). Details see attached overview.

In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.



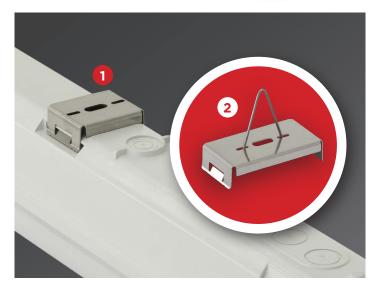




The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.









- 1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- 2. Suspension on chains with stainless steel suspension brackets mounted with hooks.



LED Version with motion sensor





РММА Туре	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/w)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L70B50 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
Lumnium EU 130	SO wit	h Osram dı	river								
746 2ft (600mm)	25	5 years	3200	128	4000	>80	>72.000 h	> 50.000 h	669	415	1,7
746 4ft (1200mm)	25	5 years	3400	136	4000	>80	>72.000 h	> 50.000 h	1277	800	2
746 5ft (1500mm)	30	5 years	4200	138	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,5
746 4ft (1200mm)	36	5 years	5100	135	4000	>80	>72.000 h	> 50.000 h	1277	800	2,2
746 5ft (1500mm)	50	5 years	7000	136	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,5
Lumnium EU PR	O 160 S	O with Osra	am driver								
746 4ft (1200mm)	22	5 years	3300	150	4000	>80	>72.000 h	> 50.000 h	1277	800	2,2
746 5ft (1500mm)	27	5 years	4200	155	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,5
746 4ft (1200mm)	31	5 years	4800	155	4000	>80	>72.000 h	> 50.000 h	1277	800	2,2
746 5ft (1500mm)	41	5 years	6500	158	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,5
Lumnium EU PR	O 140 H	F with Phil	ips driver								
746 4ft (2x1200mm)*	58	5 years	8000	138	4000	>80	>72.000 h	> 50.000 h	1277	800	2,65
746 5ft (2x1500mm)*	73	5 years	10200	140	4000	>80	>72.000 h	> 50.000 h	1577	1100	3
Osram Basic Lin	ear G3										
746 4ft (1200mm)	23	5 years	2900	124	4000	>80	>50.000 h	>50.000 h	1277	800	1,8
746 5ft (1500mm)	28	5 years	3700	132	4000	>80	>50.000 h	>50.000 h	1577	1100	2,2
746 4ft (1200mm)	28	5 years	3900	140	4000	>80	>50.000 h	>45.000 h	1277	800	2
746 5ft (1500mm)	35	5 years	4700	136	4000	>80	>50.000 h	>50.000 h	1577	1100	2,2
746 4ft (2x1200mm)*	39	5 years	5300	135	4000	>80	>50.000 h	>43.000 h	1277	800	2,5
746 5ft (2x1500mm)*	47	5 years	6800	144	4000	>80	>50.000 h	>43.000 h	1577	1100	2,7
Philips Fortimo	LED Stri	p LV5									
746 2 ft (600 mm)	15	5 years	2100	138	4000	>80	>72.000 h	> 50.000 h	669	415	1,7
746 4ft (1200mm)	31	5 years	4500	143	4000	>80	>72.000 h	> 50.000 h	1277	800	2,2
746 5ft (1500mm)	38	5 years	5400	142	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,5
746 5ft (2x1500mm)*	49	5 years	6900	140	4000	>80	>72.000 h	> 50.000 h	1577	1100	2,7
Philips Fortimo	LED Stri	p HV6									
746 4ft (2x1200mm)*	56	5 years	8300	150	4000	>80	>100.000 h	> 64.000 h	1277	800	2,65
746 5ft (2x1500mm)*	70	5 years	10500	150	4000	>80	>100.000 h	> 64.000 h	1577	1100	3
746 4ft (2x1200mm)*	66	5 years	10000	153	4000	>80	>100.000 h	> 64.000 h	1277	800	2,65
746 5ft (2x1500mm)*	83	5 years	12700	153	4000	>80	>100.000 h	> 64.000 h	1577	1100	3

^{*} The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options:























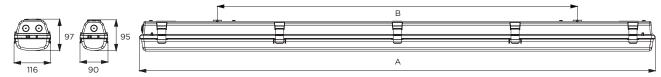
On request:





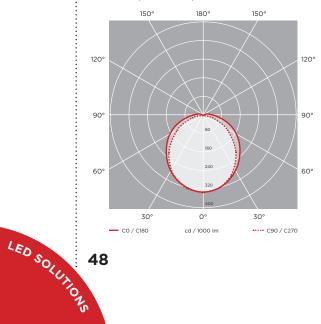


Schematic drawing with main dimensions

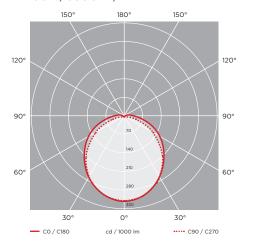


Photometric curves:

746-Clever, 4ft (2x1200mm), Osram Basic Linear G3, 39W, 5300lm, PMMA



746-Clever, 4ft (2x1200mm), Philips Fortimo LED Strip HV6, 55W, 8300lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 7





CE

775-PC

Industrial dust and waterproof luminaires

Equipped with LED modules. 775-PC is available in the following sizes: 2x600mm, 1x1200mm, 1x1500mm, 2x1200mm, 2x1500mm

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfils the strongest quality requirements. Especially for applications, where high impact resistance (IK rating) is required. Available in IP65 (or optionally also IP66 or IP67).



IP65











Option:

IP66 IP67









FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65 or IP66) against dust, contamination and water permeation. (Optionally available in IP67). In accordance with their IP-grade they can be used widely to illuminate spaces with dusty and humid environment. Thanks to its enhanced impact resistance, 775-PC is especially suitable for applications, where a high IK impact rating is required.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant injection moulded polycarbonate (PC) (suitable for 850°C glow wire test), in light grey (RAL7035) colour. This material has very high mechanical strength and allows us to reach an excellent shock resistance.
- The **diffuser** is available in the following versions: Injection moulded polycarbonate (PC), opal, with a shock resistance of IK10, with extremely high light permeability and well-balanced light dispersing. As option injection moulded acrylic (PMMA) diffuser in opal version is available. (not IK10)

The diffusers are designed with respect to their optical characteristics and are UV resistant.

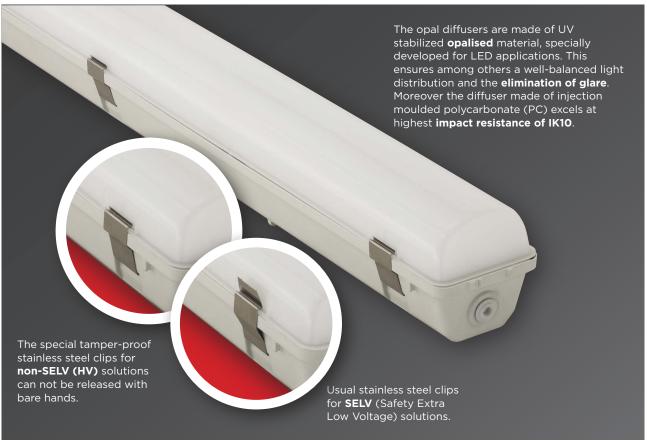
- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based, endless foam with enhanced resistance. Non-aging **PU** (polyurethane) foam is optionally available.
- Fixing of the diffuser to the body: with highly resistant clips made of stainless steel (standard or tamperproof).
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: in accordance with the requested specification suitable for LED technology, details see under technical data.





Our new opal diffuser has an outstanding light transmissivity of more than 90%. With this great light permeability, it is an excellent choice for luminaires equipped with LED modules.











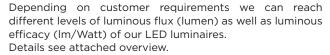
In order to ensure **maximum** heat, chemical and weather resistance even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.

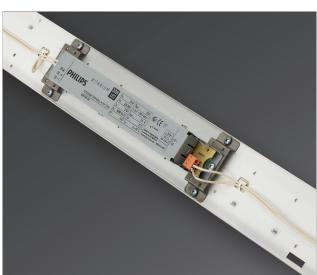












In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.



recilinear a		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
PC Type	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/w)	Colour temp. (K)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weigh (kg)
Lumnium EU 130	SO with	osram driv	ver .								
775 2ft (2x600mm)*	25	5 years	3200	128	4000	>80	>72.000 h	>50.000 h	669	360	1,7
775 4ft (1200mm)	25	5 years	3200	130	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
775 5ft (1500mm)	30	5 years	4000	133	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
775 4ft (1200mm)	36	5 years	4900	129	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
775 5ft (1500mm)	50	5 years	6600	129	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
Lumnium EU PI	RO 160 S	SO with Os	ram driver								
775 4ft (1200mm)	22	5 years	3200	145	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
775 5ft (1500mm)	27	5 years	4000	148	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
775 4ft (1200mm)	31	5 years	4600	148	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
775 5ft (1500mm)	41	5 years	6200	151	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
Lumnium EU PI	RO 140 I	HF with Phi	lips driver								
775 4ft (2x1200mm)*	58	5 years	7500	129	4000	>80	>72 000 h	>50.000 h	1277	700	2,65
775 5ft (2x1500mm)*	73	5 years	9600	131	4000	>80	>72 000 h	>50.000 h	1577	1000	3
Osram Basic Li	near G3										
775 2ft (2x600mm)*	21	5 years	2300	112	4000	>80	>50.000 h	>41.000 h	669	360	1,3
775 4ft (1200mm)	23	5 years	2800	119	4000	>80	>50.000 h	>50.000 h	1277	700	1,8
775 5ft (1500mm)	28	5 years	3500	126	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
775 4ft (1200mm)	28	5 years	3700	134	4000	>80	>50.000 h	>45.000 h	1277	700	2
775 5ft (1500mm)	35	5 years	4500	130	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
775 4ft (2x1200mm)*	39	5 years	5000	127	4000	>80	>50.000 h	>43.000 h	1277	700	2,5
775 5ft (2x1500mm)*	47	5 years	6400	136	4000	>80	>50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo	LED St	rip LV5									
775 2ft (2x600mm)*	15	5 years	2000	131	4000	>80	>72.000 h	>50.000 h	669	360	1,7
775 4ft (1200mm)	31	5 years	4300	136	4000	>80	>72.000 h	>50.000 h	1277	700	2,2
775 5ft (1500mm)	38	5 years	5200	136	4000	>80	>72.000 h	>50.000 h	1577	1000	2,5
775 5ft (2x1500mm)*	49	5 years	6500	128	4000	>80	>72.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo	LED St	rip HV6									
775 4ft (2x1200mm)*	56	5 years	7800	141	4000	>80	>100.000 h	>64.000 h	1277	700	2,65
775 5ft (2x1500mm)*	70	5 years	9900	141	4000	>80	>100.000 h	>64.000 h	1577	1000	3
775 4ft (2x1200mm)*	66	5 years	9400	144	4000	>80	>100.000 h	>64.000 h	1277	700	2,65
775 5ft (2x1500mm)*	83	5 years	12000	145	4000	>80	>100.000 h	>64.000 h	1577	1000	3

^{*} The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

On request:

Further options:





















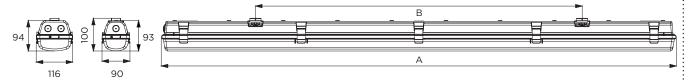






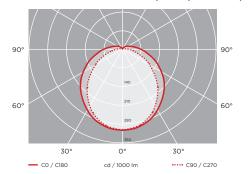


Schematic drawing with main dimensions

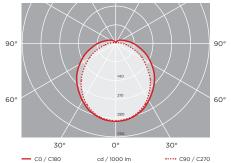


Photometric curves:

775-PC, 4ft (2x1200mm) Osram Basic Linear G3, 39W, 5000lm, PC



775-PC, 4ft (2x1200mm) Philips Fortimo LED Strip HV6, 55W, 7800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 7





CE

746-PRO LT

Industrial dust and waterproof luminaires

With 1 and 2 LED tubes.

YOUR MAIN BENEFITS:

This product family has been **designed for LED tubes**. Thanks to its special construction this model offers you an additional price advantage: It can be used without any gear tray.

Full range available in IP65 and IP66



IP65









Option:

IP66











FIELD OF APPLICATION:

Thanks to the construction principals of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in the following versions: Injection moulded acrylic (PMMA):

transparent, with longitudinal prisms, designed with respect to their optical characteristics.

Main advantages of PMMA: Very good transparency (better than the transparency of glass), unique

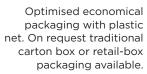
nonaging properties, chemical and UV-resistance. Injection moulded polycarbonate (PC):

transparent, with longitudinal internal prisms, designed with respect to their optical characteristics. Main advantages of PC: High mechanical strength and high heat and shock resistance.

- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam. An option with enhanced gasket resistance is available.
- **Fixing the diffuser to the body:** with stainless steel clips
- **Gear tray** (reflector): **No gear tray needed.** The electrical components are mounted directly into the housing. As option white powder coated steel sheet gear tray is available.
- **Way of installing:** direct (with screws) or with stainless steel mounting brackets (easy-to-install) onto the wall or ceiling or suspended.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built in into the LED tube.









The prismatic diffusers are designed with respect to their optical characteristics and are UV resistant.



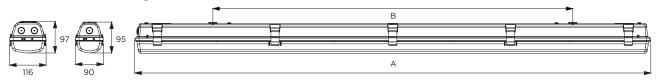
Fixing of the diffuser to the body: with highly resistant stainless steel clips.

Technical data (extract)

the LED tube itself.

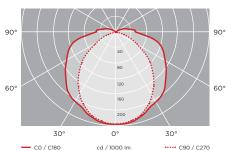
Туре	Lampholder	Power (W)	Luminous flux (lm)	Dimensions A (mm)	B (mm)	Weight (kg)
	746 Pro LT eq	uipped with I	Retrofit LED tube (Ph	ilips Core Pro LED tube)	
746 Pro LT 1x600mm	T8/G13	1x8	680*	699	435	1,19
746 Pro LT 1x1200mm	T8/G13	1x14,5	1360*	1277	800	2,47
746 Pro LT 1x1500mm	T8/G13	1x20	1870*	1577	1100	2,57
746 Pro LT 2x600mm	T8/G13	2x8	1360*	699	435	2,31
746 Pro LT 2x1200mm	T8/G13	2x14,5	2720*	1277	800	3,35
746 Pro LT 2x1500mm	T8/G13	2x20	3740*	1577	1100	3,37

Schematic drawing with main dimensions:

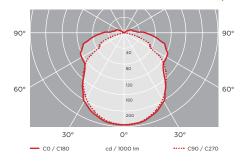


Photometric curves:

746 PRO LT 1x1200mm 1x14,5W (LED tube)



746 PRO LT 2x1500mm 2x20W (LED tube)







RETROFIT LED

Industrial dust and waterproof luminaires with LED tubes

With 1 and 2 LED tubes (Retrofit) For T8 (G13)

CE

Most of our luminaires can be equipped with extremely energy efficient LED tubes (so called Retrofit). The LED tube versions are available at following series: 771-Favourite, 775-PC Line, 746-Clever, 770-Classic.



IP65









Option:



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser (cover) our LED tube fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

See the relevant page of the chosen basic model

Electrical components: At luminaires equipped with retrofit LED tubes, an appropriate power supply is managed by an electronic driver built into the LED tube.









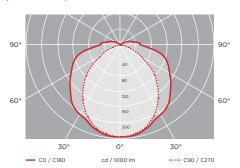
Туре	Lampholder	Power (W)	Luminous flux (lm)	A (mm)	B (mm)	C (mm)	Weight (kg)
77	1-Favouirte eq	uipped with	Retrofit LED tube (Ph	ilips Core P	ro LED tube)	
771 RLED 1x600mm	T8/G13	1x8	720*	699	460	360	1,19
771 RLED 1x1200mm	T8/G13	1x14,5	1440*	1 277	800	700	2,47
771 RLED 1x1500mm	T8/G13	1x20	1980*	1 577	1 100	1000	2,57
771 RLED 2x600mm	T8/G13	2x8	1440*	699	460	360	2,31
771 RLED 2x1200mm	T8/G13	2x14,5	2880*	1 277	800	700	3,37
771 RLED 2x1500mm	T8/G13	2x20	3960*	1 577	1 100	1000	3,37

Schematic drawing with main dimensions:

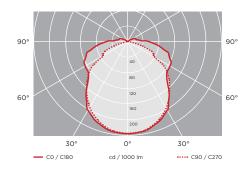
see on page with the corresponding basic type

Photometric curves:

771-Favourite RLED 1x1200mm 14,5W (LED tube)



771-Favourite RLED 2x1500mm 20W (LED tube)



The applying certification signs can vary at different types/versions.







771-FAVOURITE T8/T5

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T5 or T8 lamps

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements. Best price performance ratio. Best sold model.

Full range available in T8, T5, IP65, IP66 or IP67



FIELD OF APPLICATION:

Due to the construction principals of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in the following versions: Injection moulded polycarbonate (PC)

Main advantages: High mechanical strength and heat and shock resistance and excellent transparency. Injection moulded acrylic (PMMA)

Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties and chemical resistance.

Both diffusers are made with optically designed longitudinal, internal prisms and are UV resistant.

- The gasket between the diffuser and housing is made of non-aging PU (polyurethane) foam. As option gasket with enhanced resistance is available.
- Fixing the diffuser to the body: with stainless steel clips
- **Gear tray (reflector):** White powder coated steel sheet. As an option glossy aluminium reflector is possible.
- Electrical components: in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear.





IP65









Option:

IP66

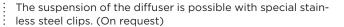
IP67







Option: Main technical options Through wiring Ways of installing: 1. Direct (with screws) onto the wall or 2. With stainless steel suspension brackets (easy-to-install) onto the ceiling. **3.** Suspension on chains with stainless steel suspension brackets mounted with hooks. Depending on installation options several possibilities for cable entry. IP67 protected (PC diffuser, cable gland, stainless steel clips and suspension brackets).



Option: To accelerate on-site installation rapid connectors can be ordered, which makes possible the electrical connection without disassembling the luminaire, and ensuring the same IP grade (IP65).





771-Favourite equipped with a new opalised diffuser with unique light transmissivity specially developed for LED applications. More information see in LED part of the catalogue.



Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.

Universal gear tray for both, T8 as well as T5 version









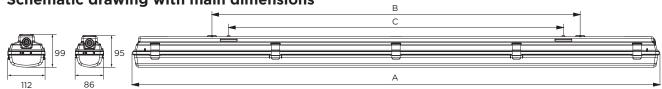




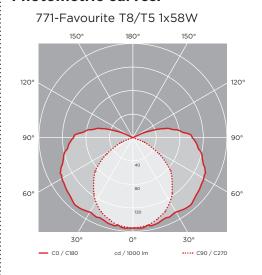


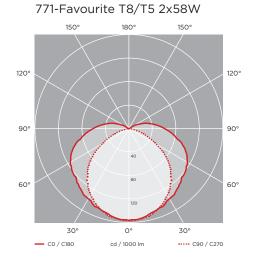
	•					
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	C (mm)	Weight (kg)
	With	electronic cont	trol gear for T8 fluoresce	nt tubes		
771 118 EVG	T8/G13	1 x 18	669	460	360	1,67
771 136 EVG	T8/G13	1 x 36	1 277	800	700	2,12
771 158 EVG	T8/G13	1 x 58	1 577	1 100	1000	2,38
771 218 EVG	T8/G13	2 x 18	669	460	360	2,24
771 236 EVG	T8/G13	2 x 36	1 277	800	700	2,66
771 258 EVG	T8/G13	2 x 58	1 577	1 100	1 000	2,96
	With elec	tronic control g	gear for T5 HE class fluor	escent tubes		
771 114 EVG	T5/G5	1 x 14	669	460	360	1,71
771 128 EVG	T5/G5	1 x 28	1 277	800	700	2,16
771 135 EVG	T5/G5	1 x 35	1 577	1 100	1000	2,39
771 214 EVG	T5/G5	2 x 14	669	460	360	2,25
771 228 EVG	T5/G5	2 x 28	1 277	800	700	2,52
771 235 EVG	T5/G5	2 x 35	1 577	1 100	1000	2,77
	With e	ectronic contro	ol gear for T5 HO fluores	cent tubes		
771 124 EVG	T5/G5	1 x 24	669	460	360	1,63
771 154 EVG	T5/G5	1 x 54	1 277	800	700	2,16
771 149 EVG	T5/G5	1 x 49	1 577	1 100	1000	2,53
771 180 EVG	T5/G5	1 x 80	1 577	1 100	1000	2,58
771 224 EVG	T5/G5	2 x 24	669	460	360	2,23
771 254 EVG	T5/G5	2 x 54	1 277	800	700	2,52
771 249 EVG	T5/G5	2 x 49	1 577	1 100	1000	2,77
771 280 EVG	T5/G5	2 x 80	1 577	1 100	1000	2,84

Schematic drawing with main dimensions



Photometric curves:







iv

CE

71-ORIENT T8/T5



IP65











771-ORIENT T8/T5

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T8 or T5 lamps

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements. Especially for applications, where **high heat resistance** (up to Ta +50 $^{\circ}$ C) is required. Available in IP65 or IP66



FIELD OF APPLICATION:

Field of application: Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be used widely to illuminate spaces with dusty and humid environment.

Thanks to its **enhanced heat resistance**, 771-Orient is especially suitable for applications, where **error-free functioning at higher ambient temperature** is desired.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** is available in injection moulded polycarbonate (PC).

 Main advantages: High mechanical strength and high heat and shock resistance and excellent transparency.

The diffusers are designed with respect to their optical characteristics and are UV resistant.

- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based foam** with enhanced resistance.

 Non-aging PU (polyurethane) foam is optionally available.
- Fixing the diffuser to the body: with highly resistant stainless steel clips
- Gear tray (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is possible.
- Electrical components: electronic control gear.

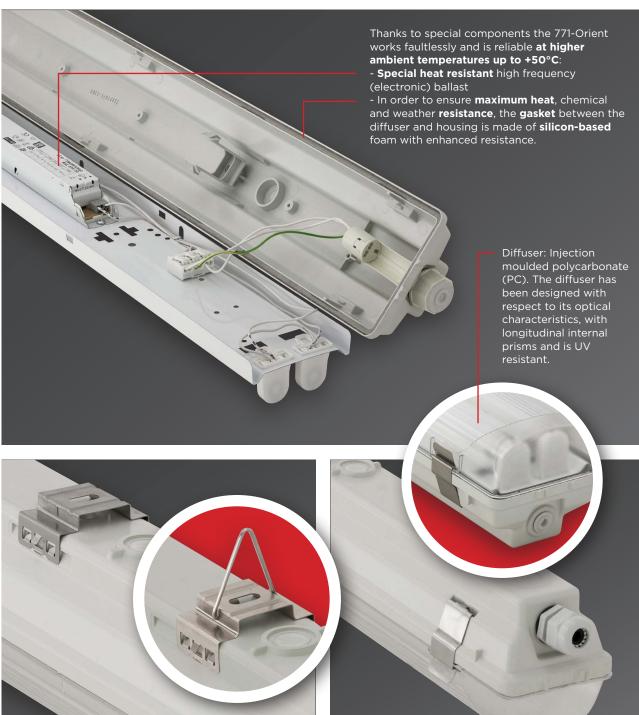
EVG

 \bigcirc

Main technical options

Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.





Ways of installing:

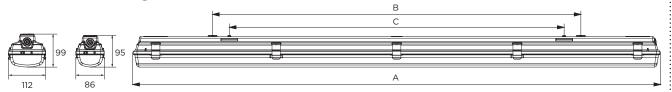
- 1. Direct (with screws) onto the wall or ceiling.
- **2.** With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- **3.** Suspension on chains with stainless steel suspension brackets mounted with hooks.

Fixing the diffuser to the body: With highly resistant stainless steel clips. Cable entry through grommets or through cable glands.

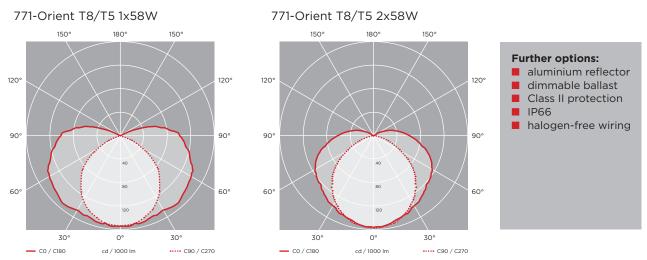


Туре	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	C (mm)	Weight (kg)
	With e	lectronic control	gear for T8 fluorescent	tubes		
Orient 136 EVG	T8/G13	1 x 36	1 277	800	700	2,12
Orient 158 EVG	T8/G13	1 x 58	1 577	1 100	1000	2,38
Orient 236 EVG	T8/G13	2 x 36	1 277	800	700	2,66
Orient 258 EVG	T8/G13	2 x 58	1 577	1 100	1000	2,96
	With electr	onic control gea	r for T5 HE class fluores	cent tubes		
Orient 128 EVG	T5/G5	1 x 28	1 277	800	700	2,16
Orient 135 EVG	T5/G5	1 x 35	1 577	1 100	1000	2,39
Orient 228 EVG	T5/G5	2 x 28	1 277	800	700	2,52
Orient 235 EVG	T5/G5	2 x 35	1 577	1 100	1000	2,77

Schematic drawing with main dimensions



Photometric curves:





CE

IP65



771-VENTILA T8/T5

Industrial dust and waterproof luminaires

With 1 or 2 fluorescent tubes in T8 or T5

YOUR MAIN BENEFITS:

A professional solution especially for outdoor applications. 771-Ventila withstands the impact of adverse weather conditions (sunlight, rain, wind etc.).

 $Ta = -20 \text{ to } +25^{\circ}C$

Full range available in IP65 or IP66.



FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be used widely to illuminate areas with dusty and humid environment.

Thanks to its enhanced weather resistance, 771-Ventila is especially suitable for applications, where errorfree functioning in outdoor conditions is desired.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in injection moulded acrylic (PMMA) with longitudinal internal prisms. Main advantages: extremely high transparency (better than the transparency of glass), unique non-aging properties and weather resistance.
- The diffusers are designed with respect to their optical characteristics and are UV resistant.
- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based foam with enhanced durability.
- Fixing of the diffuser to the body: with highly resistant stainless steel clips (standard or tamper-proof version).
- Gear tray (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- Electrical components: in accordance with electronic control gear (T5, T8)
- Conditions for applications at negative temperatures:
 - cold resistant fluorescent tube, (e.g. Polar)
 - cold resistant starter.



In order to ensure **maximum** heat, chemical and **weather resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced durability.





Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.

Universal gear tray for both, T8 as well as T5 version







Ways of installing:

- 1. In order to withstand the outdoor weather conditions (wind, storm), we recommend to use **strengthened** stainless steel suspension brackets. They are easy to install onto the **wall and ceiling**.
- 2. **Usual** suspension brackets, suitable for installation onto the **ceiling**, are available on request.



	Tub o // comb obdox	D (140)	Dimensions A (man)	6 (Mainh den
Туре	Tube/Lampholder	Power (W)	Dimensions A (mm)	C (mm)	Weight (kg)
			r T8 fluorescent tubes		
771 Vent 118 EVG	T8/G13	1 x 18	669	360	1,67
771 Vent 136 EVG	T8/G13	1 x 36	1 277	700	2,12
771 Vent 158 EVG	T8/G13	1 x 58	1 577	1 000	2,38
771 Vent 218 EVG	T8/G13	2 x 18	669	360	2,24
771 Vent 236 EVG	T8/G13	2 x 36	1 277	700	2,66
771 Vent 258 EVG	T8/G13	2 x 58	1 577	1000	2,96
	With electronic	control gear for T5	HE class fluorescent tub	es	
771 Vent 114 EVG	T5/G5	1 x 14	669	360	1,71
771 Vent 128 EVG	T5/G5	1 x 28	1 277	700	2,16
771 Vent 135 EVG	T5/G5	1 x 35	1 577	1000	2,39
771 Vent 214 EVG	T5/G5	2 x 14	669	360	2,25
771 Vent 228 EVG	T5/G5	2 x 28	1 277	700	2,52
771 Vent 235 EVG	T5/G5	2 x 35	1 577	1000	2,77
	With electron	nic control gear for	T5 HO fluorescent tubes		
771 Vent 124 EVG	T5/G5	1 x 24	669	360	1,63
771 Vent 154 EVG	T5/G5	1 x 54	1 277	700	2,16
771 Vent 149 EVG	T5/G5	1 x 49	1 577	1000	2,53
771 Vent 180 EVG	T5/G5	1 x 80	1 577	1000	2,58
771 Vent 224 EVG	T5/G5	2 x 24	669	360	2,23
771 Vent 254 EVG	T5/G5	2 x 54	1 277	700	2,52
771 Vent 249 EVG	T5/G5	2 x 49	1 577	1 000	2,77
771 Vent 280 EVG	T5/G5	2 x 80	1 577	1 000	2,84



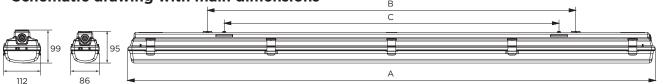




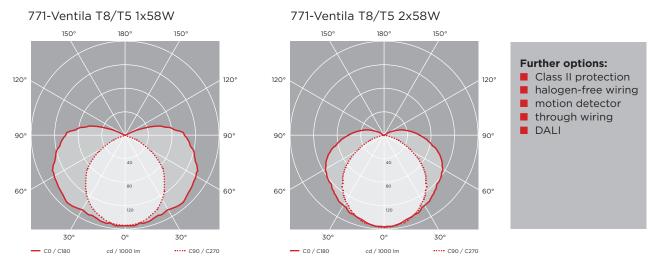




Schematic drawing with main dimensions



Photometric curves:





Option:

IP66

CE

775-PC LINE T8/T5

Industrial dust and waterproof luminaires

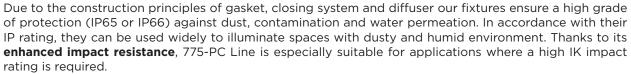
With 1 and 2 fluorescent tubes for T5 or T8 lamps, in IP65 or IP66 775-PC Line is available in the following sizes: 1x36W (1x1200 mm), 1x58W (1x1500 mm), 2x36W (2x1200 mm), 2x58W (2x1500 mm)

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements. Especially for applications, where high impact resistance (IK rating) is required.



FIELD OF APPLICATION: IP65



When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

Housing It is made of flame retardant injection moulded polycarbonate (PC) (suitable for 850°C glow wire test), in light grey (RAL7035) colour.

This material has very high mechanical strength and allows us to reach an excellent shock resistance.

The **diffuser** is available in the following versions: Injection moulded polycarbonate (PC), transparent, with a shock resistance of IK10. The internal prisms are designed with respect to their optical characteristics.

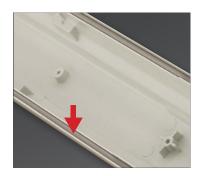
As option injection moulded acrylic (PMMA) diffuser is available. (not IK10) The diffusers are UV resistant.

- The gasket between the diffuser and housing is made of non-aging PU (polyurethane) foam. In order to ensure maximum chemical and weather resistance, silicon-based gasket with enhanced resistance is optionally available.
- Fixing of the diffuser to the body: with stainless steel clips.
- Gear tray (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is possible.
- Electrical components: in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear.

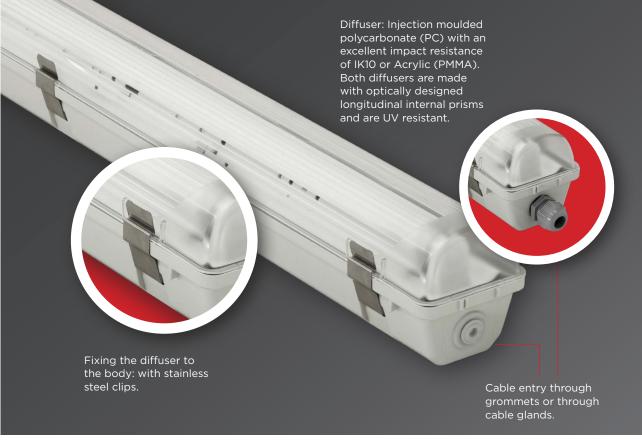
b IBV HUNGÁRIA Lighting and Plastic Processing



In order to ensure maximum chemical and weather resistance, silicon-based gasket with enhanced resistance is optionally available.





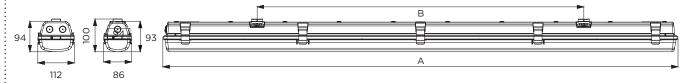




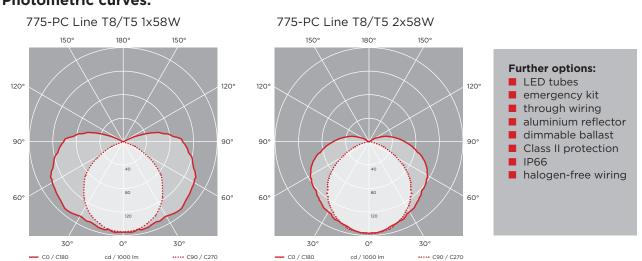


Туре	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)
	With elect	ronic control gear	for T8 fluorescent tubes		
775 136 EVG	T8/G13	1X36	1277	700	1,95
775 158 EVG	T8/G13	1X58	1577	1000	2,16
775 236 EVG	T8/G13	2X36	1277	700	2,48
775 258 EVG	T8/G13	2X58	1577	1000	2,72
	With electronic	control gear for	T5 HE class fluorescent tubes		
775 128 EVG	T5/G5	1X28	1277	700	1,99
775 135 EVG	T5/G5	1X35	1577	1000	2,17
775 228 EVG	T5/G5	2X28	1277	700	2,34
775 235 EVG	T5/G5	2X35	1577	1000	2,53
	With electro	nic control gear f	or T5 HO fluorescent tubes		
775 154 EVG	T5/G5	1X54	1277	700	1,99
775 149 EVG	T5/G5	1X49	1577	1000	2,31
775 254 EVG	T5/G5	2X54	1277	700	2,34
775 249 EVG	T5/G5	2X49	1577	1000	2,53

Schematic drawing with main dimensions



Photometric curves:





CE

IP65







Option:





746-CLEVER T8/T5

Industrial dust and waterproof luminaires

In **basic** version (without gear tray) with 1 and 2 fluorescent tubes for **T8** lamps or with **LED tubes**. In version with gear tray with 1 and 2 fluorescent tubes for **T5** or **T8** lamps

YOUR MAIN BENEFITS:

Beauty and functionality go hand in hand with reasonable price. Thanks to its special construction this model offers you an **additional price advantage**: It **can be used without any gear tray** (the electrical components are mounted onto the housing directly). A clever solution. Full **range available** in T8, T5, IP65



FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environment. In order to reach the optimal cost-performance ratio **the basic version of 746-Clever has been developed without a gear tray**. The electrical components are mounted directly into the housing.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser is available in the following versions: Injection moulded acrylic (PMMA):

nonaging properties, chemical and UV-resistance.

transparent, with longitudinal prisms, designed with respect to their optical characteristics.

Main advantages of PMMA: Very good transparency (better than the transparency of glass), unique

Injection moulded polycarbonate (PC):

transparent, with longitudinal internal prisms, designed with respect to their optical characteristics. Main advantages of PC: High mechanical strength and high heat and shock resistance.

- The gasket between the diffuser and housing is made of non-aging PU (polyurethane) foam. As option gasket with enhanced resistance is available.
- Fixing the diffuser to the body: with stainless steel clips
- Gear tray (reflector): As option white powder coated steel sheet gear tray or glossy aluminium reflector.
- Way of installing: direct (with screws) onto the wall or ceiling or suspended.
- **Electrical components:** in basic version (without gear tray) low power factor. In case of construction with gear tray, in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear in T8 or T5.



Main technical options



746-Clever can be used in two versions: without gear tray (basic) as well as with gear tray (enhanced)





Optimised economical packaging with plastic net. On request traditional single carton box or a large box option is available to package 4 luminaires.



746-Clever equipped with LED tubes



Ø 16

EVG



Several possibilities for cable entry.





Ways of installing:

- 1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
- 2. Suspension on chains with stainless steel suspension brackets mounted with hooks.
- 3. Direct (with screws) onto the wall or ceiling.



Technical data (extract)

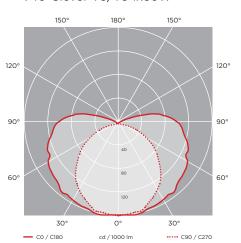
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)			
With electronic control gear for T8 fluorescent tubes, version without gear tray								
746 118 EVG	T8/G13	1 x 18	669	415	0,89			
746 136 EVG	T8/G13	1 x 36	1 277	800	1,37			
746 158 EVG	T8/G13	1 x 58	1 577	1 100	1,67			
746 218 EVG	T8/G13	2 x 18	669	415	1,09			
746 236 EVG	T8/G13	2 x 36	1 277	800	1,79			
746 258 EVG	T8/G13	2 x 58	1 577	1 100	2,13			

Schematic drawing with main dimensions

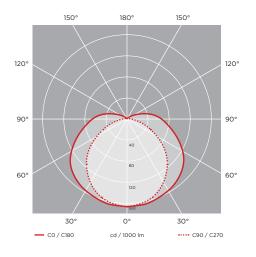


Photometric curves:

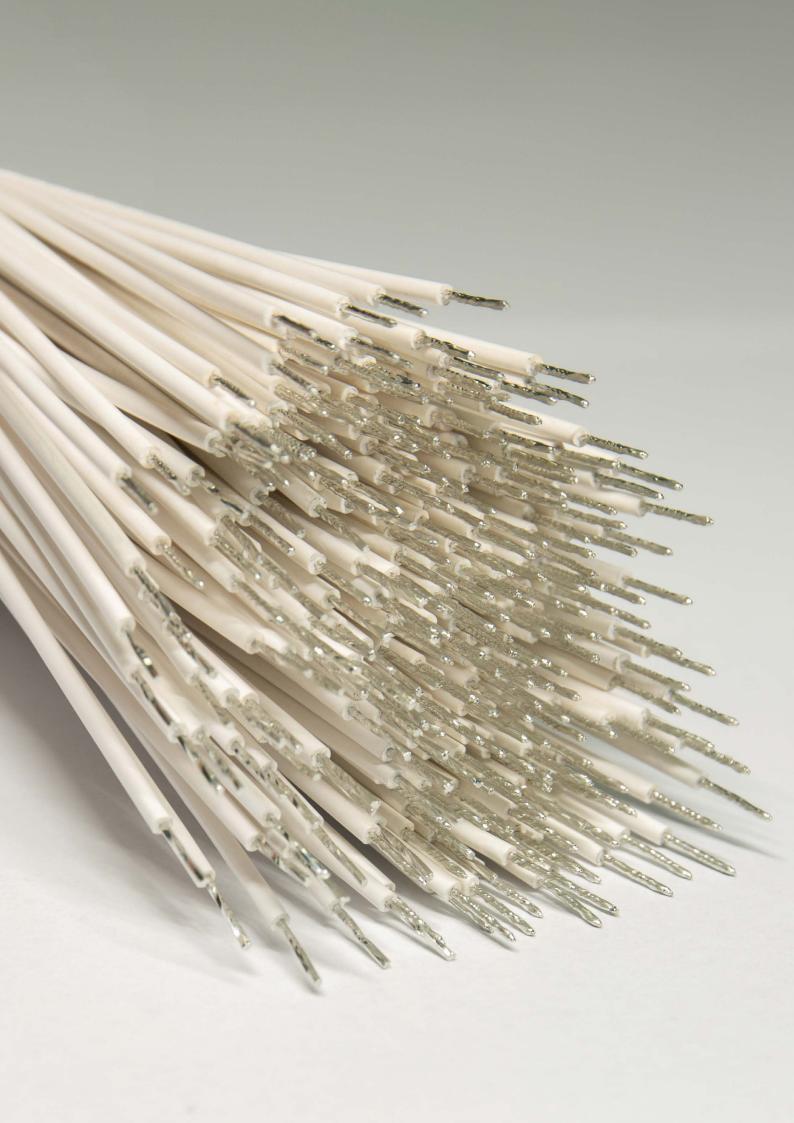
746-Clever T8/T5 1x36W



746-Clever T8/T5 2x36W







770-CLASSIC T8/T5

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T5 or T8 lamps or with LED tubes

YOUR MAIN BENEFITS:

Highest class luminaire in traditional construction. Premium product! Full range available in T8, T5, IP65



FIELD OF APPLICATION:

Thanks to the gasketed fixtures our diffuser covered fittings ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP rating, they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- Housing: It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The diffuser can be ordered with injection moulded styrene acrylonitrile (SAN). Main advantages: strong, resistant, deformable in very slight degree only, transparent. All diffusers are optically designed and are UV resistant.
- The gasket between the diffuser and the housing is ensured by anti-aging PU (polyurethane) foam or silicone sealing.
- Fixing the diffuser to the body: with highly resistant clips made of Polyoxymethylene (POM) or with stainless steel clips
- Gear tray (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is available.
- Electrical components: in accordance with the requested specification: low power factor, high power factor, electronic control gear or LED tubes.

IP65









Option:





Main technical options



Ways of installing: The fittings can be installed direct (with screws) onto wall, ceiling or suspended on chains





Gear tray (reflector): white painted steel sheet, which is fixed to the housing by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation



On request mirror aluminium reflector made of anodised aluminium available $% \left(1\right) =\left(1\right) \left(1\right)$







Equipped with Retrofit LED tubes. More information on LED products see in LED part of the catalogue.





Further options:

- LED tubes
- dimmable ballast
- Class II protection
- through wiring
- rapid connector
 - halogen-free wiring

Upon request, 1 or 3 hour emergency battery kits can be ordered.











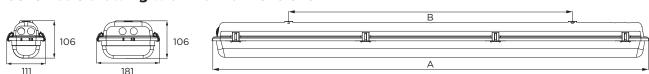




Technical data (extract)

Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)				
With electronic control gear for T8 fluorescent tubes									
770 118 EVG	T8/G13	1 x 18	670	460	1,35				
770 136 EVG	T8/G13	1 x 36	1 278	800	2,32				
770 158 EVG	T8/G13	1 x 58	1 578	1100	2,75				
770 218 EVG	T8/G13	2 x 18	670	460	1,55				
770 236 EVG	T8/G13	2 x 36	1 278	800	3,29				
770 258 EVG	T8/G13	2 x 58	1 578	1100	3,99				
With electronic control gear for T5 HE class fluorescent tubes									
770 114 EVG	T5/G5	1 x 14	670	460	1,37				
770 128 EVG	T5/G5	1 x 28	1 278	800	2,86				
770 135 EVG	T5/G5	1 x 35	1 578	1100	2,77				
770 214 EVG	T5/G5	2 x 14	670	460	1,84				
770 228 EVG	T5/G5	2 x 28	1 278	800	3,33				
770 235 EVG	T5/G5	2 x 35	1 578	1100	3,99				
	With	electronic control gea	ar for T5 HO fluorescent t	ubes					
770 124 EVG	T5/G5	1 x 24	670	460	1,36				
770 154 EVG	T5/G5	1 x 54	1 278	800	2,89				
770 149 EVG	T5/G5	1 x 49	1 578	1100	2,96				
770 180 EVG	T5/G5	2 x 80	1 578	1100	2,84				
770 224 EVG	T5/G5	2 x 24	670	460	1,93				
770 254 EVG	T5/G5	2 x 54	1 278	800	3,44				
770 249 EVG	T5/G5	2 x 49	1 578	1100	4,08				
770 280 EVG	T5/G5	2 x 80	1 578	1100	4,13				

Schematic drawing with main dimensions











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