

# 746-CLEVER LED

Industrial dust- and waterproof luminaires



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



746 - CLEVER LED

## 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 or IP 66) 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:

- **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 glaring)
  - **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 (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.
- The **gasket** between the diffuser and housing is made of non-aging **PU (polyurethane)** foam. In order to ensure **maximum** chemical and weather **resistance** even under tough conditions, **silicon-based gasket** with enhanced resistance is optionally available.
- **Fixing the diffuser to the body:** with highly resistant polyamide clips or with stainless steel clips. Anti-vandal stainless steel clips available on request.
- **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.

IP65



Option:

IP66



## Technical options

Our new 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**.



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Usual stainless steel clips for **SELV** (Safety Extra Low Voltage) solutions.

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

The special "antivandal" stainless steel clips for **non-SELV (HV)** solutions can be released with an additional tool only.



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

In order to optimize 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.



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



Further accessories: cable gland, different connectors enabling the electrical connection **without disassembling** the luminaire, thus **avoiding** a potential damage of the LED's inside the luminaire through **electrostatic discharge (ESD)**.

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



LED-Version with motion sensor



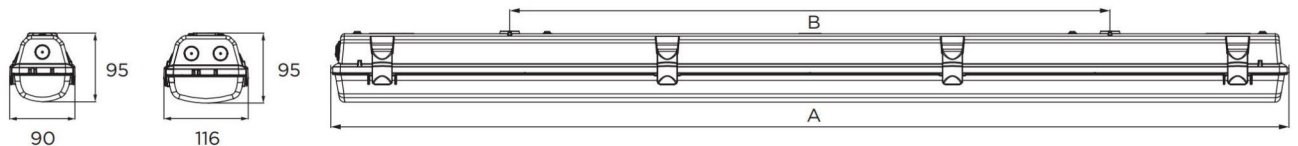
## Technical Data

Type	Power (W)	LED luminous flux (lm)	luminaire total luminous flux (lm)	luminous efficacy (lm/w)	colour temp (Kelvin)	CRI	lifetime <small>L70B50 @ Ta=35°C</small>
<b>Philips Fortimo LED Strip LV3</b>							
746 1x600 mm	16	2200	1930	118	4000	>80	>50.000 h
746 1x1200mm	30	4400	4050	128	4000	>80	>50.000 h
746 1x1500mm	39	5500	4850	124	4000	>80	>50.000 h
746 2x1500mm*	50	6600	6100	123	4000	>80	>50.000 h
<b>Philips Fortimo LED Line HV2</b>							
746 2x1200mm*	54	8000	7400	137	4000	>80	>50.000 h
746 2x1500mm*	66,5	10000	9180	138	4000	>80	>50.000 h
<b>Osram PrevaLED Slim 2</b>							
746 1x600 mm	17,5	2100	1950	113	4000	>80	>50.000 h
746 1x1200mm	36	4200	3850	108	4000	>80	>50.000 h
746 1x1500mm	40	4800	4400	110	4000	>80	>50.000 h
<b>Osram PrevaLED Value 2</b>							
746 1x600 mm	22	2600	2400	108	4000	>80	50.000 h
746 1x1200mm	39	4800	4500	115	4000	>80	50.000 h
746 1x1500mm	45	5700	5250	116	4000	>80	50.000 h
746 2x1500mm*	52	6700	6200	120	4000	>80	50.000 h
<b>Philips Certaflux HV2</b>							
746 1x1200mm	28	3400	2880	104	4000	>80	>30.000 h
746 1x1500mm	37	4130	3800	104	4000	>80	>30.000 h

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

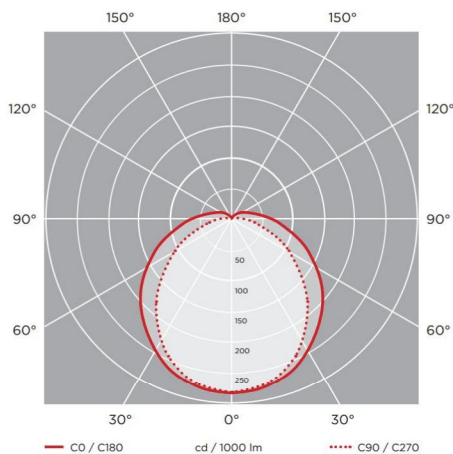
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## Schematic drawing with main dimensions

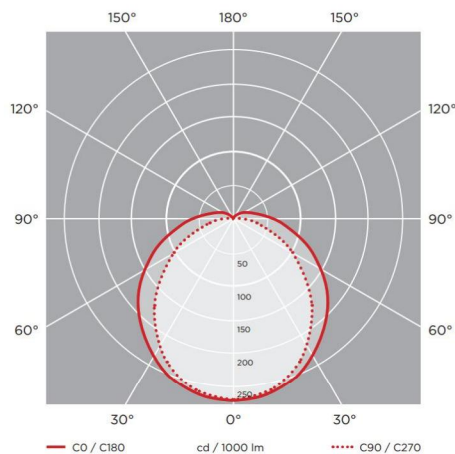


## Photometric curves:

746-Clever LED 39 W (PrevaLED)



746-Clever LED 32 W (Fortimo)



### Further options:

- emergency kit
- through wiring
- dimmable driver
- IP 66
- protection class II
- halogen-free wiring
- motion sensor