

louis poulsen



Environmental Product Specifications

— Waterfront

Product description

- A head divided in four light openings completed by a half sphere top.
- A light opening is built up by an inclined reflector cone, two conic shaped supports and a lamp enclosure.
- Different colour variants.
- The bottom of the fixture head serves as heat sink.
- The head is turn able for fine-tuning of the light distribution.
- The fixture head can work without the post by use of an intermediate ring.



Product info

Mounting

In-ground struts: Yes. Terminal block positioning: In fixture head. Looping: Approved, max 5x2,5mm². Driver positioning: In fixture head. Max. installation cable: 1 or 2x5x2,5mm² or depending on installation box. Post f/inground installation: Height excluding fixture head: 1195mm, including 600mm below ground. Bollard with base plate for surface mounting: Height excluding fixture head: 595mm. Post diameter 210mm.

Finish

Aluminium coloured with textured surface or graphite with textured surface, powder coated.

Light source

LED 3000K 28W, Lumen: 670.



Sizes and weights

Width x Height x Length (mm)
265 x 865 x 265 Max 19.3 kg

Class

Ingress protection IP65. Electric shock protection I w. ground, II w/o ground. IK10.

Product variants

Colour	Light source	Lumen	Class	Pole type
 Aluminium colour texture	LED 3000K 28W	570	I	POST F/IN-GROUND INSTALLATION
 Graphite grey texture	LED 4000K 28W	597	II	POST W/BASE PLATE
		670		
		702		

Material information

RoHS

This product is compliant with the requirements contained in the European Directives, RoHS Directive 2011/65 and 2015/863.

REACH candidate List

To the best of our knowledge and based on the information provided by our suppliers, the product does not contain more than 0.1 percent (in weight terms) of any deliberately added SVHCs.

Packaging

The product is packaged in a plastic bag with a cardboard. The packaging material can be easily sorted and treated in waste recycling channels. The packaged product is delivered on a returnable wooden pallet.

Recycled raw material

The aluminium material is sourced from min. 90% authentic, refined, recycled aluminium. Cardboard is made from min. 65% recycled fiber mass. Additional cardboard material comes from an FSC approved sources.

Recycling

We encourage everyone to take care of the product - even at the end of the product's lifetime. We also offer spare parts, so that we can extend the product lifetime even further.

The luminaires contain valuable materials. They therefore have to be decommissioned and dismantled for reuse of materials in other products.

This product is designed so that 100% of the product can be disassembled and reused.

Louis Poulsen is part of ELRETUR which ensures that electronic waste (WEEE) across of Europa is reused.

This product must be treated as electronic waste:



Material list

Positions number	Part description	Included substances and materials	Country of origin	Weight% (of the entire product)
A	Aluminium parts	Die-casted aluminium	DK - Denmark	39,8%
A	Painting	Powder coating	DE – Germany	3,0%
A	Painting	Powder coating	CH – Switzerland	1,3%
B	Aluzinc parts	Aluzinc	DK – Denmark	2,4%
C	Shade diffuser	PC	DK – Denmark	0,8%
D	Screws, nuts and washers	Stainless steel	CN – China	1,5%
E	Aluminium parts	Machined aluminium	DK – Denmark	38,0%
F	LED board	Variety of components	CN - China	0,0%
G	Wires	Variety of components	IT – Italy	0,2%
H	Fuse	Variety of components	FR – France	0,3%
I	Driver	Variety of components	CN – China	1,2%
J	Ceramic fuse	Variety of components	CN – China	0,0%
K	Plastic parts	CR/NBR	DK – Denmark	0,3%
L	Plastic parts	PA	SE – Sweden	0,3%
M	Grommet	PVC	FR – France	0,1%
N	Plastic parts	PA	DE – Germany	0,6%
O	Plastic parts	EPDM	DE – Germany	0,0%
P	LED diffuser	PMMA	DK – Denmark	0,2%
Q	Labels and instructions	Paper	DK – Denmark	0,1%
R	Packaging	Corrugated cardboard	DK – Denmark	5,6%
S	Inserts	Corrugated cardboard	DK – Denmark	3,9%
T	Plastic bag	LDPE	LT – Lithuania	0,1%
U	Tube plastic	LDPE	NL – Netherlands	0,5%
				100%

Life Cycle Screening

Background

Our carbon footprint is the total quantity of greenhouse gas (GHG) emissions associated with the full lifecycle of the product. This includes the impacts associated with raw materials and emissions from manufacturing (materials and resources), transport, in use (cleaning) impacts and impacts at end of life (reuse, recycling, incineration, landfill etc.).

Basis of calculation

This is calculated according to the EU Product Environmental Footprint and presented according to ISO 14067 (Carbon footprint of products).

EU Product Environmental Footprint (PEF)

The PEF methodology is a new standard, introduced by the European Commission. The mission: to strengthen the (European) market for green alternatives and ensure that environmental impact is transparently assessed.



Use stage

The product use stage is calculated for a lifetime of 15 years with 1,000 hours of use each year in Europa, as required by the reference in PEF.

The electricity is based on the European energy mix, with data from: the European Environment Agency Greenhouse gas emission intensity of electricity generation.

Transport

1.200 km national or 3.500 km for export transport is calculated for the product from factory to end customer as required by the reference in PEF.

Uncertainties associated with these calculations

Calculation of emission levels is associated with uncertainty. This means that results may vary from actual levels. By using the PEF method, uncertainties are embedded in the Life Cycle Screening result using statistical methods.



Life Cycle Screening results

Product that has been calculated as a reference for the product family:

WATERFRONT BOLLARD, ALUMINIUM COLOURED STRUCTURE, LED 3000K 28 W, CL. I

Production of the product

Average climate emission:

55 KG CO₂-e

Lower boundary: 32,2 CO₂-e

Upper boundary: 310 CO₂-e

Production of the product and use stage

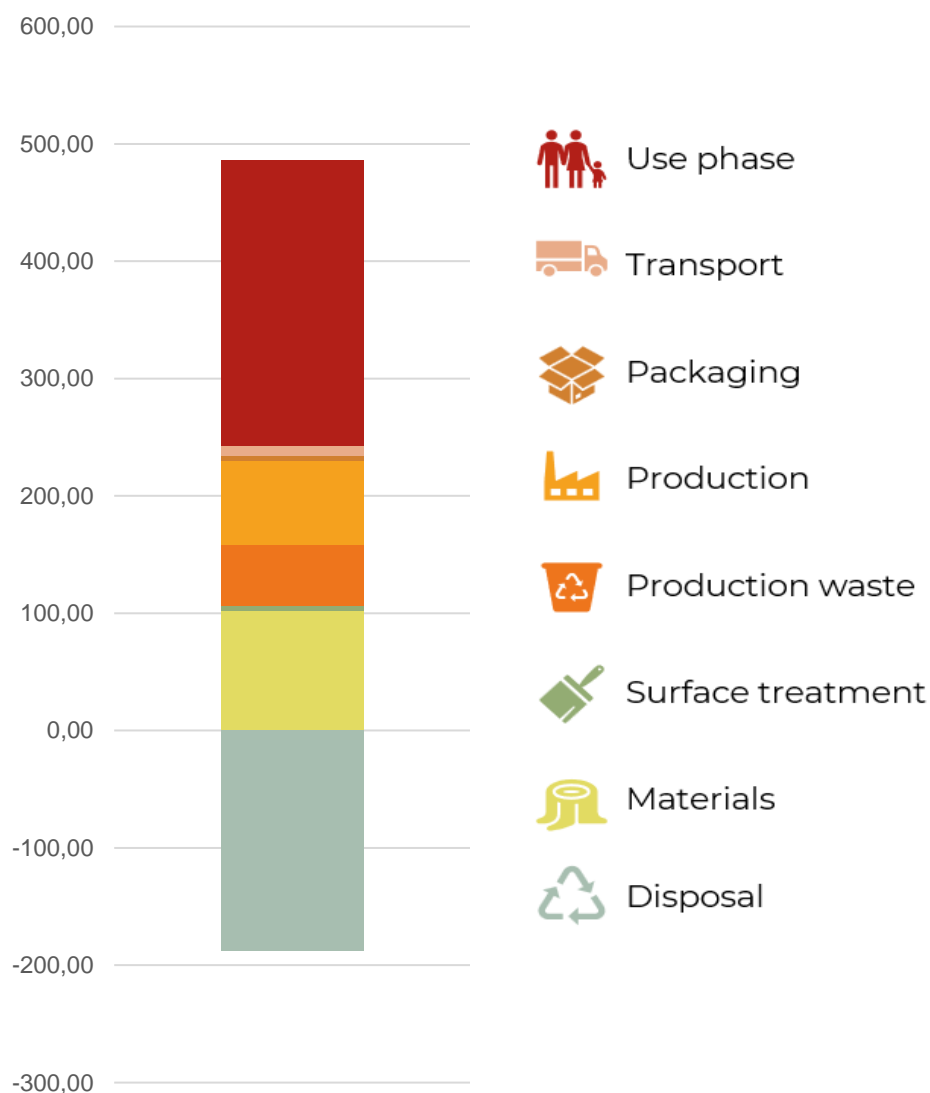
Average climate emission:

300 KG CO₂-e

Lower boundary: 210 CO₂-e

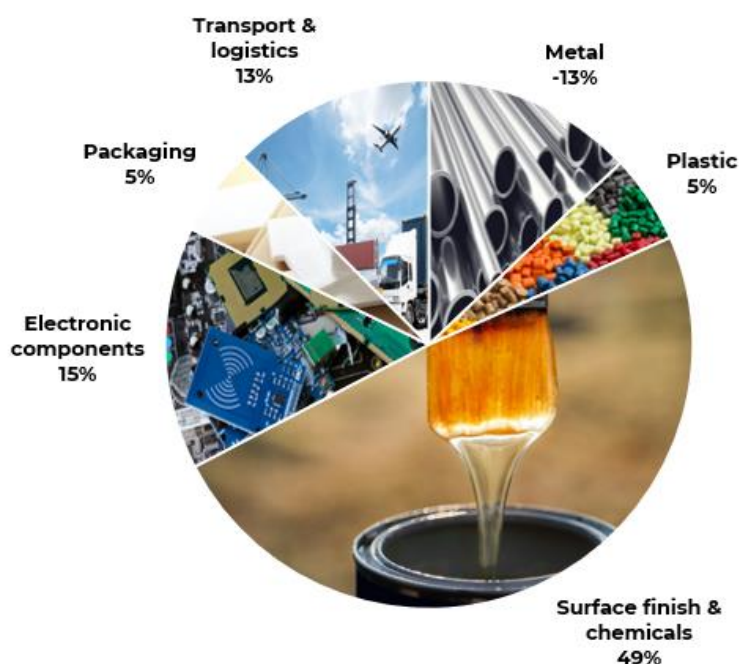
Upper boundary: 550 CO₂-e

Carbon stages



Main emission sources (pr material group)*

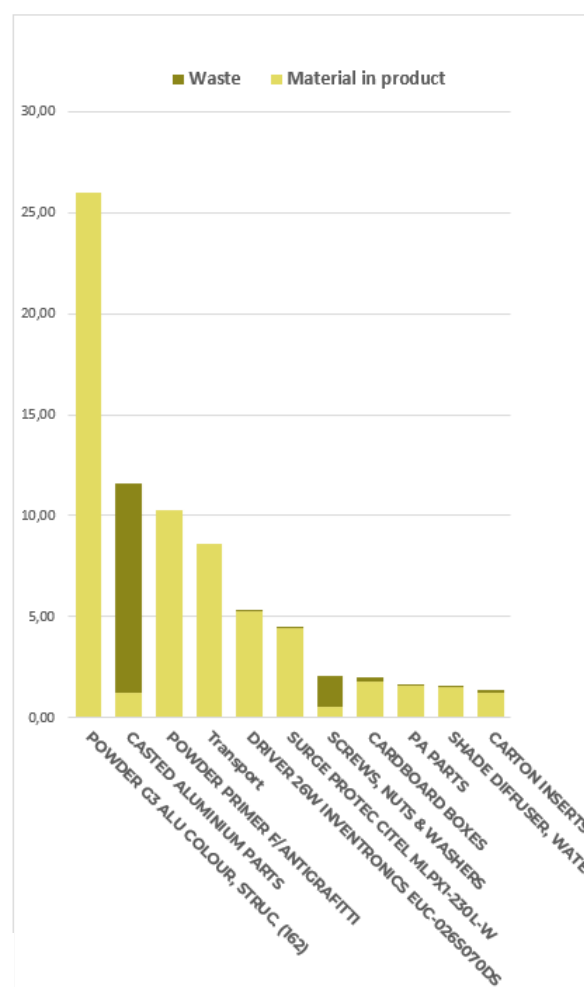
Group	Total impact		
Solid Wood	0,00	kg CO2-e	0,0%
Wood based board	0,00	kg CO2-e	0,0%
Metal	-9,57	kg CO2-e	-17,5%
Plastic	4,00	kg CO2-e	7,3%
Glass/Stone/Ceramics	0,00	kg CO2-e	0,0%
Surface finish & chemicals	36,21	kg CO2-e	66,1%
Upholstery	0,00	kg CO2-e	0,0%
Cover	0,00	kg CO2-e	0,0%
Electronic components	10,97	kg CO2-e	20,0%
Packaging	3,95	kg CO2-e	7,2%
Transport & logistics	9,21	kg CO2-e	16,8%



The values presented here represent total emissions per material group (incl. material, production, transport, waste, CO2e uptake)

Main emission sources (pr element)*

Element	Material	Total impact
POWDER G3 ALU COLOUR, STRUC. (162)	Or kg powder consumed	25,96 kg CO2-e
CASTED ALUMINIUM PARTS	Alu. cast	11,62 kg CO2-e
POWDER PRIMER F/ANTIGRAFITTI	Or kg powder consumed	10,25 kg CO2-e
Transport	Total emission from transport - all steps	8,64 kg CO2-e
DRIVER 26W	Power supply with cables + connectors	5,33 kg CO2-e
INVENTRONICS EUC-SURGE PROTEC CITEL MLPX1-230L-W	Unspecified PCB surface mounted	4,50 kg CO2-e
SCREWS, NUTS & WASHERS	Stainless steel screws/bolts	2,08 kg CO2-e
CARDBOARD BOXES	Corrugated cardboard box printed sustainable fiber	1,98 kg CO2-e
PA PARTS	Polyamide (PA6)	1,68 kg CO2-e
SHADE DIFFUSER, WATERFRONT	Polycarbonate PC	1,59 kg CO2-e
CARTON INSERTS	Corrugated cardboard inlay	1,39 kg CO2-e



The values presented here represent total emissions per element (incl. material, production, transport, waste, CO2e uptake)