louis poulsen

# Environmental Product Specifications

— Keglen Pendant

# Product description

- Cone shaped product in a large family of variants.
- Minimalistic design with distinct design details.
- Four dimension (bottom diameter).

# Product info

### Mounting

Suspension type: Cable and wire, 2x0,75mm²
Canopy: Yes. Cable length: 4m.

### Finish

Black or white, matt, wet painted.

### Light source

LED 2700K 5.5W, Lumen: 276.

### Sizes and weights

Width x Height x Length (mm)
400 x 270 x 400 Max 4.9 kg
175 x 134 x 175 Max 2.4 kg
250 x 270 x 250 Max 3.7 kg
650 x 270 x 650 Max 6.6 kg

### Class

Ingress protection IP20. Electric shock protection I.

# Product family

Keglen Wall

Keglen Table

Keglen Floor

# Product variants

| Dimension | Colour | Cable type | Light source | Lumen | Lighting control |
|---|---|---|---|---|---|
| Ø 175 | ● Black | Blk tex/wire | LED 2700K 21W | 1195 | Dali |
| Ø 250 | ○ White | Wht tex/wire | LED 2700K 31W | 1231 | Phase dimming (mains dimm) |
| Ø 400 | | | LED 2700K 5.5W | 1357 | |
| Ø 650 | | | LED 2700K 8W | 1398 | |
| | | | LED 3000K 21W | 2035 | |
| | | | LED 3000K 31W | 2104 | |
| | | | LED 3000K 5.5W | 2180 | |
| | | | LED 3000K 8W | 2254 | |
| | | | | 276 | |
| | | | | 287 | |
| | | | | 360 | |
| | | | | 371 | |
| | | | | 381 | |
| | | | | 390 | |
| | | | | 462 | |
| | | | | 472 | |

# 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 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

Cardboard is made from min. 65% recycled fibre 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 | Machined aluminium | DK – Denmark | 6,7% |
| **A** | Painting | Powder coating | AT – Austria | 0,4% |
| **B** | Screws | Stainless steel | CN – China | 0,9% |
| **C** | Wire gripper | Machined stainless steel | DE – Germany | 0,1% |
| **D** | Terminals | Variety of components | DE – Germany | 0,2% |
| **E** | Strain relief | PP | NO – Norway | 0,0% |
| **F** | Driver | Variety of components | US – United States | 1,8% |
| **G** | Nuts and washers | Machined stainless steel | CN – China | 0,1% |
| **H** | Grommet | PE | DK – Denmark | 0,0% |
| **I** | Stud tab | Tin plated brass | US – United States | 0,0% |
| **J** | Electrical wiring | Variety of components | IT – Italy | 1,1% |
| **J** | Tin solder | Tin | DK – Denmark | 0,0% |
| **K** | Pendant 400 BLK | Machined aluminium | CN – China | 83,5% |
| **L** | LED Board | Variety of components | CN – China | 1,7% |
| **M** | Labels and instructions | Paper | DK – Denmark | 0,3% |
| **N** | Packaging | Corrugated cardboard | DK – Denmark | 2,0% |
| **O** | Inserts | Corrugated cardboard | DK - Denmark | 1,0% |
| | | | | **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.

European Commission

### 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.

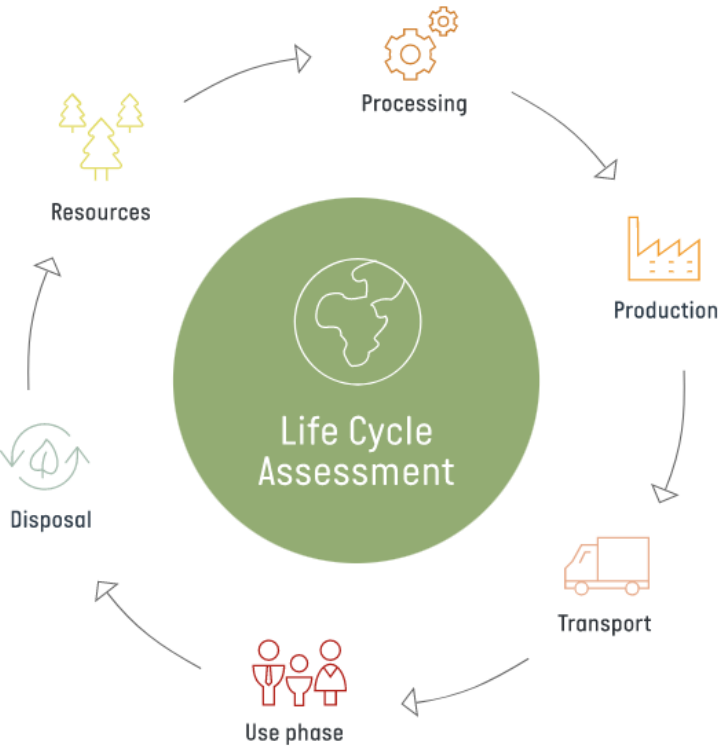
The electricity is based on the European energy mix, with data from: the European Environment Agency Greenhouse gas emission intensity of electricity generation.

### 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:**

Keglen Pendant, Ø400, Black, LED 2700K, 21WI

**Production of the product**

Average climate emission:

## 100 KG CO2-e

Lower boundary: 3,1 CO2-e
Upper boundary: 530 CO2-e

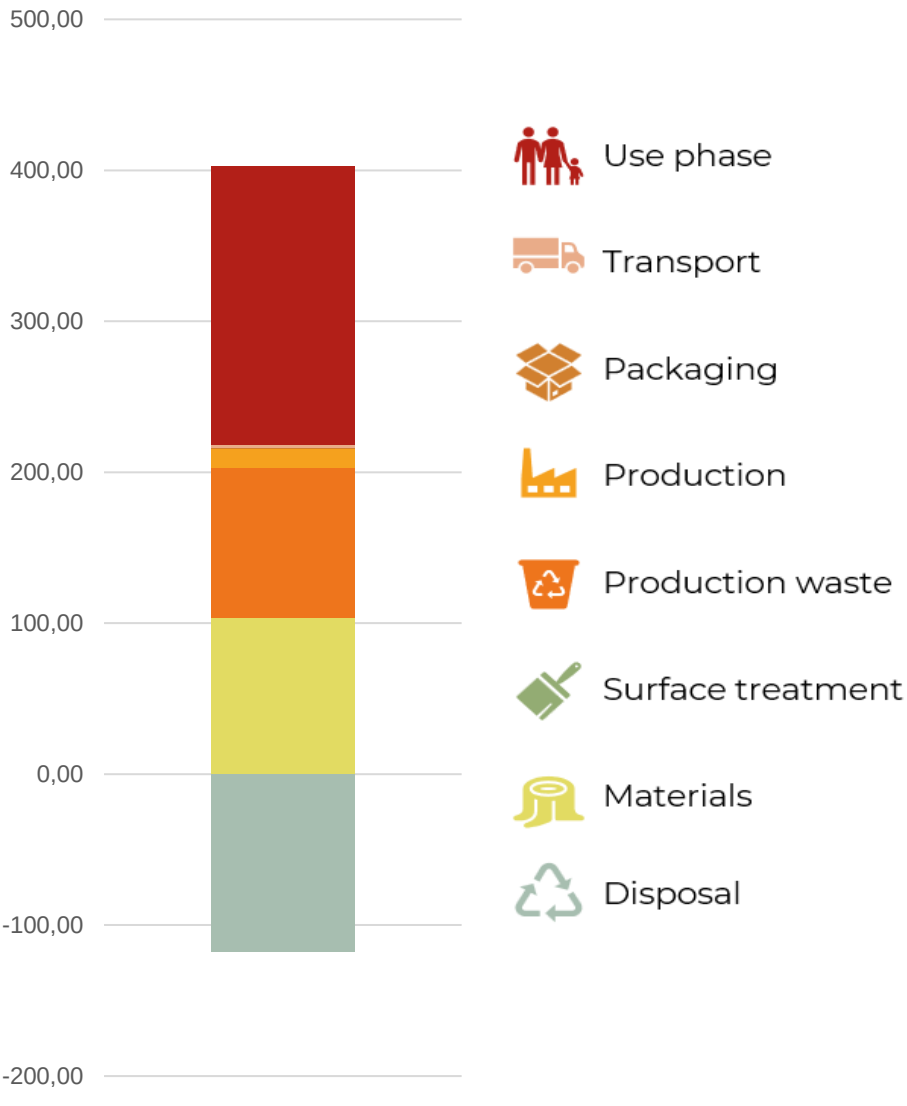
**Production of the product and use stage**

Average climate emission:

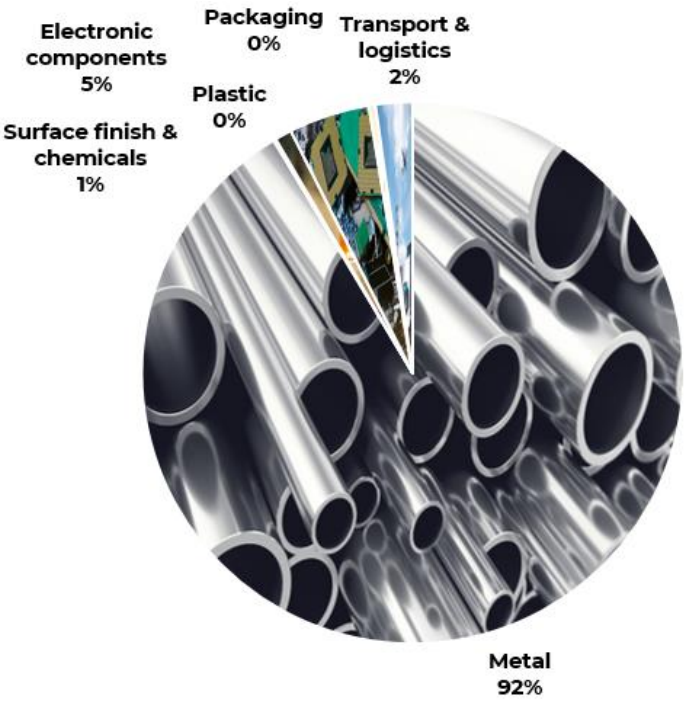
## 290 KG CO2-e

Lower boundary: 180 CO2-e
Upper boundary: 710 CO2-e

**Carbon stages**



## Main emission sources *(pr material group)**

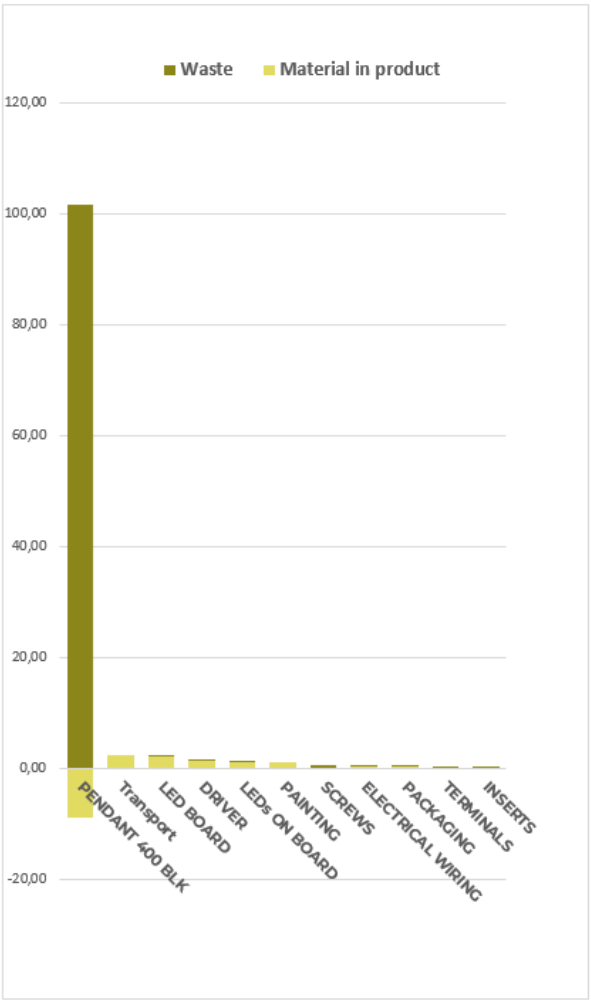



| Group | Total impact | | |
|---|---|---|---|
| Solid Wood | **0,00** | *kg CO2-e* | **0,0%** |
| Wood based board | **0,00** | *kg CO2-e* | **0,0%** |
| Metal | **91,91** | *kg CO2-e* | **91,4%** |
| Plastic | **0,14** | *kg CO2-e* | **0,1%** |
| Glass / Stone / Ceramics | **0,00** | *kg CO2-e* | **0,0%** |
| Surface finish & chemicals | **1,02** | *kg CO2-e* | **1,0%** |
| Upholstery | **0,00** | *kg CO2-e* | **0,0%** |
| Cover | **0,00** | *kg CO2-e* | **0,0%** |
| Electronic components | **4,86** | *kg CO2-e* | **4,8%** |
| Packaging | **0,40** | *kg CO2-e* | **0,4%** |
| Transport & logistics | **2,20** | *kg CO2-e* | **2,2%** |

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 | |
|---|---|---|---|
| PENDANT 400 BLK | Alu. Machined | **92,68** | *kg CO2-e* |
| Transport | Total emission from transport - all steps | **2,20** | *kg CO2-e* |
| LED BOARD | 1 layer aluminium (1,6mm thicknesss) PCB surface mount | **2,05** | *kg CO2-e* |
| DRIVER | Power supply with cables + connectors | **1,30** | *kg CO2-e* |
| LEDs ON BOARD | LED 3,5x3,5x2,0mm (59mg) | **1,12** | *kg CO2-e* |
| PAINTING | Or kg powder consumed | **1,02** | *kg CO2-e* |
| SCREWS | Stainless steel screws/bolts | **0,41** | *kg CO2-e* |
| ELECTRICAL WIRING | Electric cable (PVC) | **0,39** | *kg CO2-e* |
| PACKAGING | Corrugated cardboard box printed sustainable fiber | **0,23** | *kg CO2-e* |
| TERMINALS | Polycarbonate PC | **0,13** | *kg CO2-e* |
| INSERTS | Corrugated cardboard box | **0,12** | *kg CO2-e* |




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

Waste)