CITY ELEMENTS 180 BOLLARD

Made in Germany | Hess GmbH Licht + Form

CITY ELEMENTS 180 Bollard | Reference: ADAC . Munich . DE

CITY ELEMENTS 180 Bollard | Reference: ADAC . Munich . DE

In 1948,

Hess began as an industrial supplier of cast products in the city of Villingen, Black Forest. Today, its headquarters is still located where it all began and where pilot and custom products are designed, tested and manufactured.

It is also home to the administration, the marketing as well as to the research department and photometric laboratory.

CITY ELEMENTS 180 BOLLARD

Product Families

The completeness‘ of Hess product range is unique.

Many of the luminaires come in product families, including pole, wall and catenary mounted products. Hess‘ street and site furnishings complement the lighting products in function and design.

Holistic solutions can be realised with a uniform design vocabulary.

Hess – Enhancing urban spaces.

CITY ELEMENTS 180 BOLLARD

Laboratory

We perform all necessary photometric and electrical tests, e.g. VDE, CE or UL, in our own laboratory.

CITY ELEMENTS 180 BOLLARD

Light Control

Hess directs the light right to where it‘s needed with its own engineered optical systems. Precisely and effectively.

Using modern lamps and well-engineered reflector and lense technology.

LED-LEVO Q

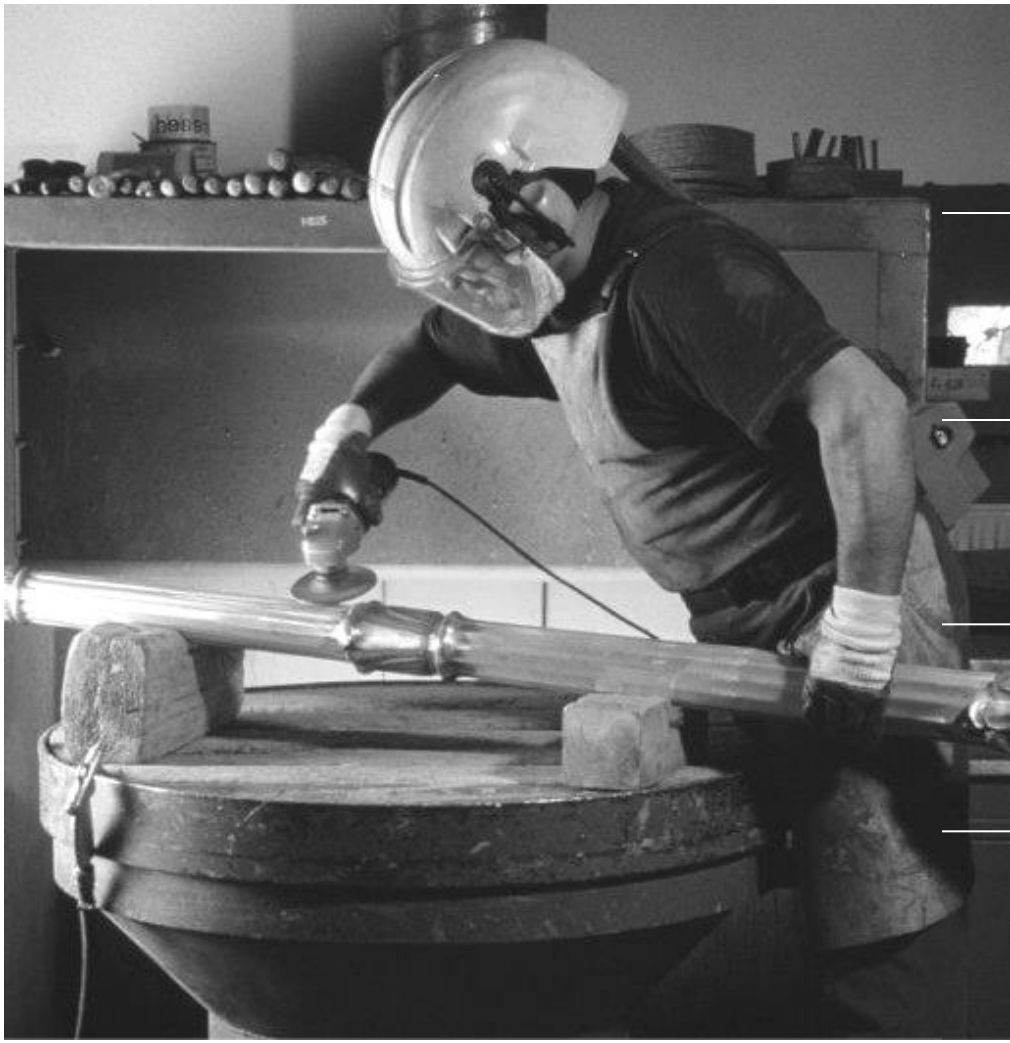
LED-LEVO

CITY ELEMENTS 180 BOLLARD

Finish

The high quality workmanship of aluminium and steel produces an immediately apparent, distinct surface character of our luminaires.

State-of-the-art finishing equips them with protection against weather and corrosion.



PRODUCT DETAILS

CITY ELEMENTS 180 Bollard

Cylindrical bollard with housing made of thick-walled aluminium section (min. 5 mm thickness), diameter 180 mm, total height 1200 mm above ground.

Synthetic cover made from UV-resistant Polycarbonat-Glass (PC) with 360° clear light exit.

All tightening screws are inlying for flawless appearance without visible screws.

Embedded base, 600 mm long with two cable entries. IP 65 | IK 10 | Safety class I | ULOR 1-2%

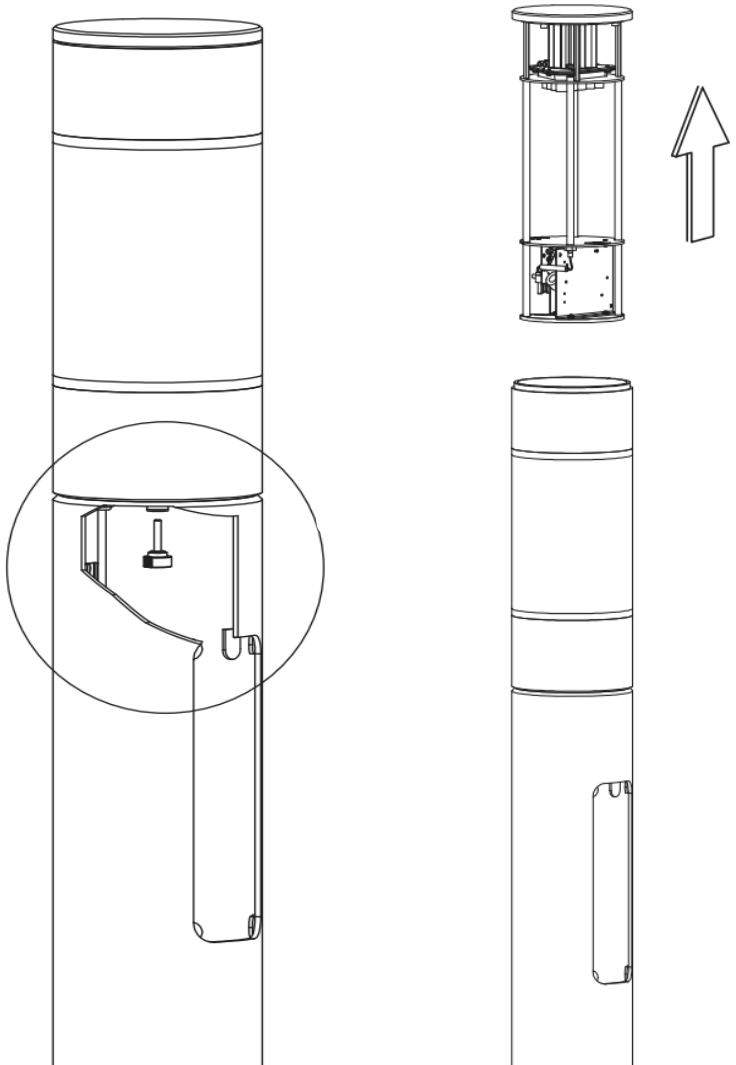
Two-layer painting components – Primer and top coating. Standard coating in wet paint according to ISO 12955-5 in corrosion category C 3 long (high), layer thickness 160µm.

CITY ELEMENTS 180 Bollard

Aluminium cylinder with a revision door with triangular lock an inlying C-rail for fuse box.

All screws and connection parts are made from stainless steel, V2A.

Maintenance friendly construction as the complete electrical unit can be taken out.



CORROSION PROTECTION

CITY ELEMENTS 180 BOLLARD

Materials used in manufacturing

Hess GmbH Licht+Form manufactures its products from the following materials:

- Steel – section and channel
- Cast iron
- Aluminium – section and channel
- Cast aluminium

The type of material and the specific requirements determine which type of corrosion protection is used.

- The requirements are derived from the DIN EN ISO 12944-2 corrosion site classes

CITY ELEMENTS 180 BOLLARD

The site classes (DIN EN ISO 12944-2)

Class	Characteristic Environment Indoor	Characteristic Environment Outdoor	Corrosive Influence
C1	Heated buildings with neutral environments, e.g. offices, commercial space, schools, hotels.	--	insignificant
C2	Unheated buildings in which condensation may occur, e.g. warehouses, indoor sport facilities.	Environments with minimum pollution, usually rural areas.	minimum
C3	Manufacturing spaces with high moisture and some degree of air pollutants, e.g. food processing plants, laundry/cleaning plants, breweries, creameries.	Urban and industrial environments, moderate sulphur dioxide pollution. Coastal areas with lower exposure to salt.	moderate
C4	Chemical plants, swimming pools, boot houses on salt water.	Industrial areas and coastal areas with moderate exposure to salt.	high
C5-I/M	Buildings or areas with virtually constant condensation and with a high level of exposure to pollutants.	Industrial areas with high dampness and aggressive atmosphere.	very high (industrial)
C5-M	Buildings or areas with virtually constant condensation and with a high level of exposure to pollutants.	Coastal and offshore areas with high exposure to salt.	very high (salt air, ocean)

CITY ELEMENTS 180 BOLLARD

Types of corrosion protection

Depending on the site class and the type of material Hess, employs the following methods of corrosion protection:

- DIN EN ISO 1461-compliant hot-dip galvanising
- DIN EN ISO 12944-compliant wet coating
- EN 12206-1- and EN 55633-compliant powder coating
- Duplex system, a combination of hot-dip galvanising and coating
- Special-purpose EN 40-compliant high-build coating

THANK YOU!