

## General Technical Data of Our Luminaires

Below we show the technical data of our LED City Luminaires. These data provide information about technical details applying to all our types of luminaires. Exceptions are mentioned under the respective model.

**In order to obtain an objective view of the real performance of our LED luminaires and their luminous flux, we always state the nominal value of the MCOB-LEDs and the single-chip LEDs used (in Lumen per Watt) and the effective value of our luminaires (in Lumen).**

All luminaires which are equipped with LED modules in MCOB technology have a nominal efficiency of 120 lm/W.

### Luminaire – Design and Material, Installation

- Enclosure: aluminium, powder coated according to DB 703 (graphite grey), on request all RAL colours
- Cover of illuminants: single-pane safety glass or plastic cover (PMMA / PC)
- Direct mounting on pole without extra work
- Spigot sizes: 42, 60, 76 mm
- Integrated pressure compensation valve
- Degree of protection of luminaire IP 66, optionally IP 68
- External bolted connections of high-grade steel
- Use of heat sink compound (alternatively heat conducting foil)

### Lighting Technology

- Multichip-on-board-LED or single-chip technology (see product groups)
- MCOB-LED qualified acc. to IESNA LM 80-08
- Lifetime LED: 50,000 h – L90, B10    100,000 h – L70, B10
- Highly efficient reflector technology (MIRO ultra-pure aluminium or chromed plastic reflectors)
- Needs-based light distribution (rotationally symmetric / symmetrical / asymmetrical)
- Colour temperatures: warm white (3000 K), neutral white (4000 K), daylight white (5000 K)
- The effective lumen output is mentioned under the respective model

### Electrics

- Voltage 195-265 V / 50 Hz
- Electronic constant current LED ballast, efficiency 93 %
- LED module and electronic ballast separately removable and plug-connected
- Power supply interference suppressed acc. to DIN EN 61000-6-3/-4, EN 55011, EN 55022 Cl. B, power factor corrected
- Protection class II acc. to VDE 0140 (DIN EN 61140), safety low voltage (SELV) acc. to EN 60950
- Power supply degree of protection IP 65
- Standard connection with Wieland plug series ST18
- Connecting cable pre-assembled (optionally)
- Voltage inhibitor 4 KV (optionally 10 KV)
- **ENEC 10 examined**
- Wired ready for operation acc. to EN 60598
- Night-time dimming (power reduction down to 50 % via 2<sup>nd</sup> phase)
- Optionally, the luminaires can be equipped with a telemanagement system

We would be pleased to prepare a detailed lighting calculation for you – according to your input. For this purpose we need the following specifications:

- a) Luminaire spacing
- b) Luminaire mounting height
- c) Road width
- d) Number of foot- and bicycle paths (if any)
- e) Classification acc. to DIN 13201
- f) Present lighting level
- g) For hall lighting we definitely need site maps and application purposes

In case you already decided on a model of our catalogue we would be pleased to prepare a free quotation for you. For this purpose we need:

- a) Type of luminaire (for example model 301)
- b) Colour of enclosure (for example DB 703)
- c) Luminaire performance in Watt (for example 42 Watt)
- d) Light colour (for example 4000 K)
- e) Light distribution (for example asymmetrical)
- f) Night-time dimming (yes/no)
- g) For the cable length to be offered we also require the luminaire mounting height

For orders, please use the order form of page 5-3 of this catalogue.

Subject to technical modifications