

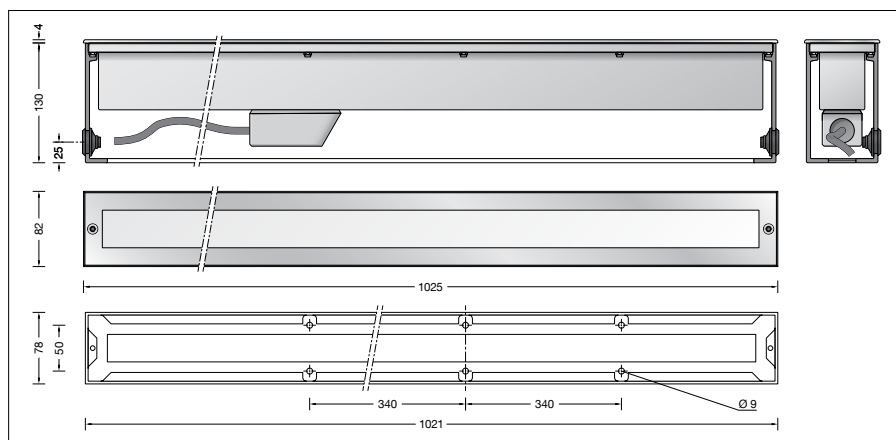
**BEGA****84 166**

In-ground luminaire



Project · Reference number

Date



## Product data sheet

### Product description

Luminaire made of aluminium alloy,  
aluminium and stainless steel  
Cover frame made of stainless steel,  
steel grade number 1.4301  
Recess housing with cable entry for cable  
conduit, max  $\varnothing$  20 mm  
Matt safety glass  
BEGA Vortex Optics®  
Reflector surface made of pure aluminium  
1,8 m water-resistant connecting cable  
07RN8-F 5 G 1<sup>□</sup> with implemented water  
stopper and 1.2 m PVC cable conduit  
BEGA Ultimate Driver®  
LED power supply unit  
220-240 V ~ 0/50-60 Hz  
DC 176-264 V  
DALI controllable  
A basic isolation exists between power cable  
and control line  
BEGA Thermal Control®  
Temporary thermal regulation to protect  
temperature-sensitive components without  
switching off the luminaire  
Safety class I  
Protection class IP 67  
Dust-tight and protection against temporary  
immersion  
Pressure load 1,000 kg (~10 kN)  
Impact strength IK09  
Protection against mechanical  
impacts < 10 joule  
Maximum surface temperature 30 °C  
(measured according to EN 60598 of  $t_a$  15 °C)  
**CE** – Conformity mark  
 – Safety mark  
Weight: 10.0 kg  
This product contains light sources of energy  
efficiency classes C

### Application

Floodlight with symmetrical light distribution.  
For recessed mounting in compacted surfaces,  
paths and places.  
Drive-over luminaire for vehicles with pneumatic  
tyres.

#### Please note:

Luminaire must not be used for installation in  
road lanes, where the fixture is exposed to a  
horizontal strain due to braking, acceleration  
and change of direction.

### Lamp

|                                               |                      |
|-----------------------------------------------|----------------------|
| Module connected wattage                      | 31.6 W               |
| Luminaire connected wattage                   | 35.6 W               |
| Rated temperature                             | $t_a = 25$ °C        |
| Ambient temperature                           | $t_{a \max} = 35$ °C |
| When installed in heat-insulating<br>material | $t_{a \max} = 30$ °C |

### 84 166 K27

|                               |                 |
|-------------------------------|-----------------|
| Module designation            | 4x LED-0771/827 |
| Colour temperature            | 2700 K          |
| Colour rendering index        | CRI > 80        |
| Module luminous flux          | 5720 lm         |
| Luminaire luminous flux       | 3542 lm         |
| Luminaire luminous efficiency | 99,5 lm/W       |

### 84 166 K3

|                               |                 |
|-------------------------------|-----------------|
| Module designation            | 4x LED-0771/830 |
| Colour temperature            | 3000 K          |
| Colour rendering index        | CRI > 80        |
| Module luminous flux          | 5900 lm         |
| Luminaire luminous flux       | 3654 lm         |
| Luminaire luminous efficiency | 102,6 lm/W      |

### 84 166 K4

|                               |                 |
|-------------------------------|-----------------|
| Module designation            | 4x LED-0771/840 |
| Colour temperature            | 4000 K          |
| Colour rendering index        | CRI > 80        |
| Module luminous flux          | 6060 lm         |
| Luminaire luminous flux       | 3757 lm         |
| Luminaire luminous efficiency | 105,5 lm/W      |

### Inrush current

Inrush current: 5 A / 100  $\mu$ s  
Maximum number of luminaires of this  
type per miniature circuit breaker:  
B 10A: 42 luminaires  
B 16A: 68 luminaires  
C 10A: 42 luminaires  
C 16A: 68 luminaires

### Lighting technology

Half beam angle 55°  
Luminaire data for the DIALux lighting design  
program for outdoor lighting, street lighting  
and indoor lighting, as well as luminaire data in  
EULUMDAT and IES format are available on our  
website at [www.bega.com](http://www.bega.com).

### Service life · Ambient temperature

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| Rated temperature $t_a = 25$ °C |                                                |
| LED psu:                        | > 50,000 h                                     |
| LED module:                     | 196,000 h (L 80 B 50)<br>100,000 h (L 90 B 50) |

|                                                |                       |
|------------------------------------------------|-----------------------|
| Ambient temperature max. $t_a = 35$ °C (100 %) |                       |
| LED psu:                                       | 50,000 h              |
| LED module:                                    | 105,000 h (L 80 B 50) |

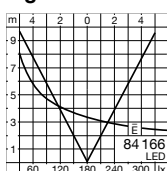
|                                               |                        |
|-----------------------------------------------|------------------------|
| Ambient temperature max. $t_a = 50$ °C (85 %) |                        |
| LED psu:                                      | > 50,000 h             |
| LED module:                                   | > 50,000 h (L 70 B 50) |

BEGA Thermal Control® protects temperature-  
sensitive luminaire components by  
temporarily limiting the nominal power at high  
temperatures.

### BEGA Vortex Optics®

BEGA Vortex Optics® features newly  
developed twisted reflectors with a surface  
made of pure aluminium.  
The more intense concentration of the light  
enables perfect light deflection.  
This makes it possible to achieve optimal light  
distribution without artefacts.  
Thanks to excellent glare control, BEGA Vortex  
Optics® offers outstanding visual comfort.  
The interaction with the LED modules produces  
extraordinary lighting results.

### Light distribution



**Article No. 84 166**

LED colour temperature optionally 2700 K,

3000 K or 4000 K

2700 K – Article number + **K2**

3000 K – Article number + **K3**

4000 K – Article number + **K4**

**Accessories**

Distribution box for installation in soil

**70 730** Distribution box with 7 cable entries

Connection terminals 5 x 4<sup>□</sup>

**71 053** Distribution box with 10 cable entries

Connection terminals 6 x 16<sup>□</sup>