SWARCO FUTURIT, world leader in the development and production of LED-based traffic signal heads, once more demonstrates its pioneering approach and innovative capability. FUTURLUX is an innovative approach to the use of LEDs in street lighting. With more than 15 years of experience in LED-based traffic signalling, SWARCO FUTURIT is now applying our expertise to street lighting.

The technical progress in the luminous intensity of LEDs combined with SWARCO FUTURIT’s expertise in optics and LED applications make this light source an interesting alternative to conventional illumination techniques, allowing significantly reduced power consumption, and major energy-savings.

MODULAR DESIGN FOR MAXIMUM FLEXIBILITY

The modular design of FUTURLUX offers maximum adaptability to individual lighting applications.

Thanks to the smart design of Futurlux, the luminaires elegantly integrate into the cityscape. FUTURLUX represents the future of street lighting, providing market leading efficiency and optimal environmental compatibility.

More brightness and safety with less energy input.

- **FUTURLUX HEAD**: Latest LED technology within an elegant luminaire assimilating with the urban environment. The modern and compact alternative to conventional street lights, available in several sizes.

- **FUTURLUX BEAM**: An innovative design approach to street lighting. The LED arrangement is mounted longitudinally to the road ensuring the street lighting assists with the guidance.
FUTURLUX
INNOVATIVE LED ILLUMINATION WITH MODULAR DESIGN AND SUPERIOR OPTICAL CONCEPT

We have applied our experience gained over the last 15 years of developing LED technology to the innovative optical concept and the modular design of the FUTURLUX.

Innovative features:

- up to 80% energy saving compared to other lighting techniques
- standard dimming features: control with voltage lowering or with phase switching
- optimum compliance with EN 13201
- life time > 70,000 operating hours (L 80)
- Multi-Layer-Lighting-Technology
- optimised thermal management for lowest LED degradation
- no contamination and reduced maintenance costs thanks to the sealed LED unit
- quick and easy installation
- excellent longitudinal uniformity of luminance
- in case if single LED failures, the luminaire is equipped with a bridging circuit to keep rest of LED’s active
- full light output immediately after switching on the lighting system
- significant decrease in light pollution – dark sky friendly
- easily replaceable electronic ballast and/or LED unit on site if necessary
- high grade materials: Aluminium, stainless steel and safety glass
- good colour rendering
- combined post-top / side entry pole adaptor with adjustable tilting angle to +/- 20°
- comfortable neutral white 4000K as standard (others on request)
- IDC-Intelligent Degradation Compensation
- advanced functions with Control Device Module

COST-SAVING LED TECHNOLOGY

With FUTURLUX you will not only save energy and greenhouse gases, you will also gain better lighting quality on the road. Dimming without losing efficiency and the nearly maintenance-free construction are the main benefits of FUTURLUX.
FUTURLUX
TECHNICAL DETAILS

Body
coated die-cast aluminium

Colour
silver-grey

LEDs
High Power LEDs
Correlated colour temperature: Neutral white 4000K (3000K or 5700K optional)

CRI
≥ 65

Operation temperature
-40° to +50°C

Operational voltage
230V AC 50Hz; +10%/-25%

Power factor
≥ 0,95 (bei 230V AC / 50Hz)

Power consumption* (initial value)
1 module: 18 W
3 modules: 44 W
5 modules: 70 W
2 modules: 31 W
4 modules: 57 W
6 modules: 83 W

Dimming (Power reduction)
Via voltage lowering
With control input (switched phase)

Luminous flux**
1 module: 1500 lm
3 modules: 4500 lm
5 modules: 7500 lm
2 modules: 3000 lm
4 modules: 6000 lm
6 modules: 9000 lm

Ingress protection
IP66 according to EN60598

Class
Electrical class II according to EN60598

Impact resistance
IK 08 according to EN50102

Mounting
Post-top or side entry for 42, 60, 76 mm diameter bracket
Penetration 120mm
Tilting angle adjustable in 5° steps: +/- 20°

Weight
FUTURLUX HEAD
1, 2, 3, 4 modules: 13 kg
5, 6 modules: 15 kg
FUTURLUX BEAM
1 module: 9 kg
2 modules: 10 kg
4 modules: 13 kg
6 modules: 15 kg

Options
Central monitoring, extended dimming functions
Integration into traffic management systems

* 20% increase during the first 70,000 operating hours
** typical, constant luminous flux during 70,000 operating hours

LIGHT DISTRIBUTION

<table>
<thead>
<tr>
<th>C-PLANE</th>
<th>$I_{max}$ cd/km</th>
<th>Gamma °</th>
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</thead>
<tbody>
<tr>
<td>C0/180</td>
<td>339</td>
<td>66</td>
</tr>
<tr>
<td>C90/270</td>
<td>396</td>
<td>17</td>
</tr>
<tr>
<td>C168/12</td>
<td>540</td>
<td>63</td>
</tr>
</tbody>
</table>
SWARCO FUTURIT is the leading global player in LED-based signalling technology. The company specialises in traffic lights, variable message signs, street lighting and railway signals using the very latest developments in light emitting diode (LED) technology offering ecological friendliness and the advantages of low failure rate, energy-saving and a long operating life.

 Customers in over 60 countries around the world rely on the outstanding quality of SWARCO FUTURIT products, made in Austria to the highest standards and supporting road safety and improved traffic flows.

FUTURLUX HEAD & FUTURLUX BEAM

DIMENSIONS

<table>
<thead>
<tr>
<th>FUTURLUX HEAD</th>
<th>1 / w / h [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4 modules</td>
<td>744 / 304 / 233</td>
</tr>
<tr>
<td>5, 6 modules</td>
<td>859 / 304 / 233</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUTURLUX BEAM</th>
<th>1 / w / h [mm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 module</td>
<td>478 / 389 / 233</td>
</tr>
<tr>
<td>2 modules</td>
<td>478 / 581 / 233</td>
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<tr>
<td>4 modules</td>
<td>478 / 1075 / 233</td>
</tr>
<tr>
<td>6 modules</td>
<td>478 / 1569 / 233</td>
</tr>
</tbody>
</table>

Your local contact:


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