IN-GROUND LUMINAIRES

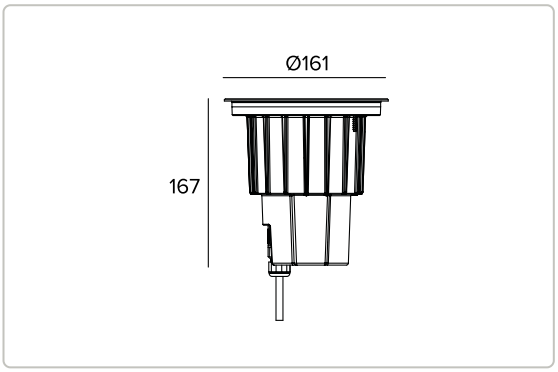
# Keplero 160 Zoom



Code
## E015ZMH840ELCCB

| LIGHT COLOUR | LIGHT DISTRIBUTION | OUTPUT |
|---|---|---|
| 4000K<br>80 | Multioptic Zoom<br>15°, 32°, 53°, 61° | 13W<br>669-1236lm |

| POWER SUPPLY CONTROL | COLOUR |
|---|---|
| 110-240V<br>ON-OFF | |




The figures on the drawing are expressed in mm.

1.31 IP66 IP67 IP68 IP69 IK10 CE

The fixture's photometric values can be found on the following pages

## Technical Data

### Concept

Compact inground adjustable projector equipped with LED sources.

### Source

| High efficiency Chip on Board LED Ra80. 3500K colour temperature available on request. | |
|---|---|
| Energy efficiency class | D |
| Nominal power | 12W |
| Nominal flux | 1946lm |
| Colour rendering index | 80 |
| Rf | 82 |
| Rg | 95 |
| CCT nominal | 4000K |
| Lifetime (L80/B10) | 72000h tq +25°C |
| Lifetime (L90/B10) | 72000h tq +25°C |

TARGETTI

CCIAA Firenze
Share Capital: € 500.000,00
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Due to the technological evolution of the electronic components, the data provided may be updated, and as such, confirmation must be requested during the order process.
Luminous flux and power supply have +/-10% tolerances with respect to the indicated value. tq +25°C (CIE 121).

We reserve the right to make technical changes.

## Technical Data

### Illuminotechnical characteristics

A hybrid lens and reflector Zoom optical system with variation of the beam opening in four positions (Spot, Flood, Medium Wide, Wide Flood). Aiming using a tilting system up to 20° on the vertical axis and 360° on the horizontal plane with a friction aim locking system.

| | |
|---|---|
| Optic | Multioptic Zoom |
| Beam angles | SP, FL, MWFL, WFL |
| Optical efficiency | See photometries |
| Fixture flux | See photometries |
| Luminous efficacy | See photometries |
| Photobiological safety | Compliant with RG1 low risk group |

### Mechanical characteristics

Die-cast aluminium body with 3 layers of protection: anodised, cataphoresis and black paint. Brushed stainless steel (AISI 316) ultra flat decorative ring with bevelled edge (copper bronze finish). Version with extra-clear protective glass. Anti theft stainless steel A4 Torx screws.

| | |
|---|---|
| Colour and finish | Copper bronze |
| Dimensions | ØxH 161x167mm |
| Weight | 1.31Kg |
| Version | Extra-clear glass |
| Degree of protection | IP66,IP67,IP68,IP69 |
| Mechanical Resistance | IK10 |

### Electrical characteristics

110-240Vac power supply with an ON-OFF integrated driver. Connection to the mains via IP68 watertight connectors for H07RN8-F cable (max 2x2.5mm$^2$).

| | |
|---|---|
| Fixture Power | 13W |
| Power supply | 110-240V 50/60Hz |
| Insulation Class | CLASS 2 |
| Type of driver / Control | ON-OFF |
| Driver included | YES |
| SAFE FLICKER | PstLM=<1 and SVM=<0.4 (IEC TR 61547-1 and IEC TR 63158), to ensure a more comfortable and safe light |
| Ambient temperature | -25°C / +35°C |

### Installation

Nylon installation sleeve to be ordered separately as an accessory. The sleeve is pre-set for both flush or straight edge installation. 20kN resistance to static load.

### Notes

All light fixtures must be completed with an installation sleeve. IP68: the fixture is not suitable for permanent underwater installation but can withstand temporary accidental immersion to a depth of 2 metres (max.24h). IP69: IEC/EN 60529 standard compliant. All versions of the KEPLERO family meet all the requirements of EN 60598-2-13 standard regarding drive-over and walk-over performances. Low temperatures on the glass make them suitable even for installation in "special areas", such as spaces for children. Uses the "Waterblock Smart" technical solution that involves resin coating the connection cables, limiting the risk of humidity reaching the driver or the fixture. 110-277Vac version available on request.

## Technical Data

### Regulations and Certifications

CE

### Warning

Luminaire designed for disposal/recycling at end-of-life. Replaceable (LED only) light source by a professional. Replaceable control gear by a professional.

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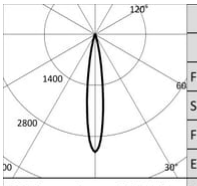
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# Photometries

## SP

| | |
|---|---|
| **Fixture flux** | 669lm |
| **Luminous efficacy** | 51lm/W |
| **Optical efficiency** | 34.39% |

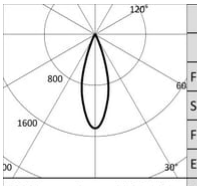



| 4000K | | H(m) | D(m) | Emax(lx) |
|---|---|---|---|---|
| Ra80 | | | 15° | |
| Fixture Power | 13W | 1 | 0.27 | 6266 |
| Source Flux | 1946lm | 2 | 0.54 | 1566 |
| Fixture Flux | 669lm | 3 | 0.82 | 696 |
| Efficacy | 51lm/W | 4 | 1.09 | 392 |
| Imax | 6266cd | 5 | 1.36 | 251 |

TS815 Imax=3220cd/klm

## FL

| | |
|---|---|
| **Fixture flux** | 887lm |
| **Luminous efficacy** | 68lm/W |
| **Optical efficiency** | 45.58% |

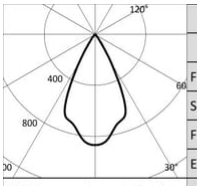



| 4000K | | H(m) | D(m) | Emax(lx) |
|---|---|---|---|---|
| Ra80 | | | 32° | |
| Fixture Power | 13W | 1 | 0.58 | 2859 |
| Source Flux | 1946lm | 2 | 1.15 | 715 |
| Fixture Flux | 887lm | 3 | 1.73 | 318 |
| Efficacy | 68lm/W | 4 | 2.30 | 179 |
| Imax | 2859cd | 5 | 2.88 | 114 |

TS816 Imax=1469cd/klm

## MWFL

| | |
|---|---|
| **Fixture flux** | 1146lm |
| **Luminous efficacy** | 88lm/W |
| **Optical efficiency** | 58.88% |

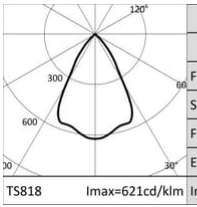



| 4000K | | H(m) | D(m) | Emax(lx) |
|---|---|---|---|---|
| Ra80 | | | 53° | |
| Fixture Power | 13W | 1 | 0.99 | 1684 |
| Source Flux | 1946lm | 2 | 1.98 | 421 |
| Fixture Flux | 1146lm | 3 | 2.97 | 187 |
| Efficacy | 88lm/W | 4 | 3.95 | 105 |
| Imax | 1684cd | 5 | 4.94 | 67 |

TS817 Imax=866cd/klm

## WFL

| | |
|---|---|
| **Fixture flux** | 1236lm |
| **Luminous efficacy** | 95lm/W |
| **Optical efficiency** | 63.5% |




| 4000K | | H(m) | D(m) | Emax(lx) |
|---|---|---|---|---|
| Ra80 | | | 61° | |
| Fixture Power | 13W | 1 | 1.18 | 1208 |
| Source Flux | 1946lm | 2 | 2.37 | 302 |
| Fixture Flux | 1236lm | 3 | 3.55 | 134 |
| Efficacy | 95lm/W | 4 | 4.74 | 76 |
| Imax | 1208cd | 5 | 5.92 | 48 |

TS818 Imax=621cd/klm

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## Related codes

### Sleeve



| CODE | H | Ø |
|---|---|---|
| 1E2521 | 200mm | 166mm |

Installation sleeve.
Grey Nylon casing.
For flush and semi-flush installation.

## Accessories

### Filter



| CODE | Ø |
|---|---|
| 1T1708 | 70mm |

Flat striped glass blade light refractive filter.
This makes the beam take on an oval shape and when combined with spotlights, the light blade appears more prominent.

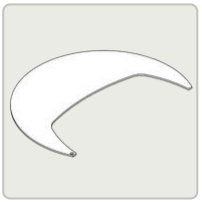
### Grid



| CODE | Ø |
|---|---|
| 1T1711 | 70mm |

Anti-glare louver.
Black painted metal honeycomb structure.

### Shutter



| CODE | COLOUR |
|---|---|
| 1E2523 | ● |

Black half-moon shutter.

### Tool



| CODE |
|---|
| 1E0388 |

Sucker tool to raise the glass.



| CODE |
|---|
| 1E2495 |

Features TORX HEAD, TX 30.

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**CODE**

**1E2524**

Metal handle for fixture removal

## Connector



**CODE**

**1E2769**

Linear connection box IP66/IP68.
5 poles max. wire section 1.5mm².
Cable diameter range from 7 to 12mm.

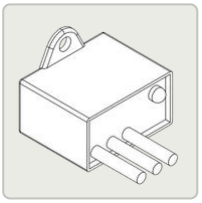


**CODE**

**1E2494**

Multiple connection box IP68.
1 IN - 3 OUT 4 poles max. wire section 2.5mm².
Cable diameter range from 6 to 12mm.

## Surge protector



**CODE**

**A013B**

Surge protector compatible with CLASS II lighting fixtures and electronic drivers.
Operating voltage 220-240Vac.
SPD type 2+3.
Max surge protection 10kV.
CLASS II
IP67

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