



**ELCA**  
PROFESSIONAL LIGHTING

# INSTALLATION INSTRUCTIONS

## Underwater Light



| Power | Volt   | IP |
|-------|--------|----|
| 8 W   | 24 VDC | 68 |
| 12 W  | 24 VDC | 68 |
| 24 W  | 24 VDC | 68 |
| 36 W  | 24 VDC | 68 |

### Electrical

- 24 VDC

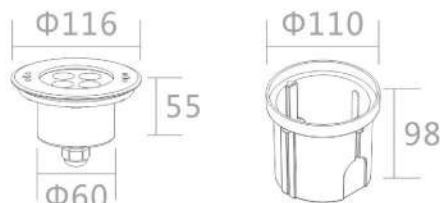
### Requirements

- IP66/IP68 Connector / Junction Box  
- Power Supply 24 V Constant Voltage

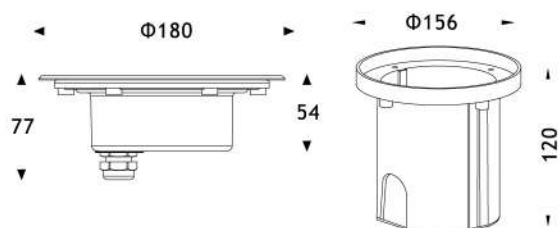
### Dimension - 8 W



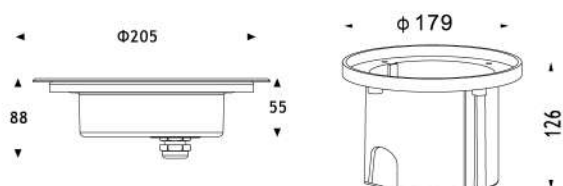
### Dimension - 8 W Serie 2



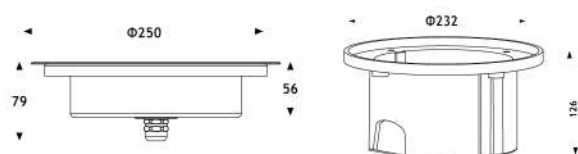
### Dimension - 12 W



### Dimension - 24 W



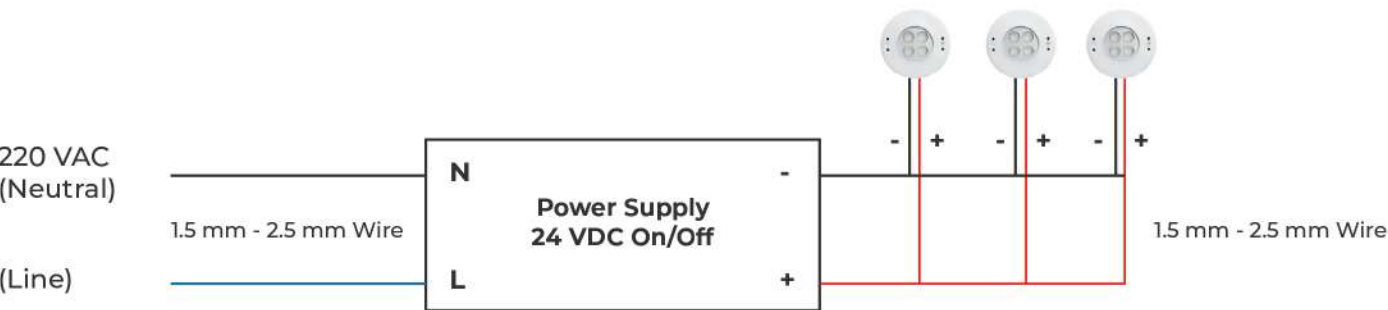
### Dimension - 36 W



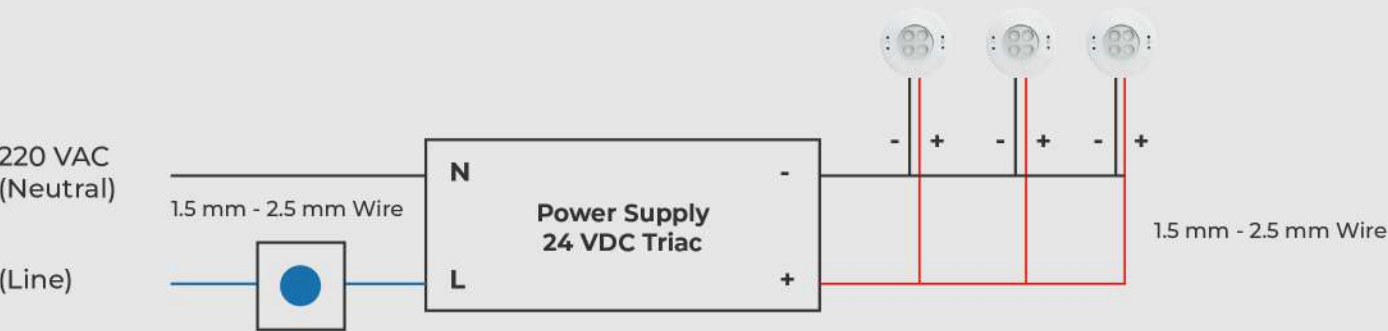
## PERINGATAN

1. Ikuti petunjuk instalasi, garansi tidak berlaku jika instalasi tidak sesuai dengan petunjuk
2. Lampu 24 VDC, diperlukan power supply 24 V untuk pemasangan
3. Pastikan sumber listrik mati sebelum pemasangan instalasi lampu
4. Setiap koneksi kabel harus kering dan menggunakan IP66/IP68 konektor, garansi tidak berlaku jika instalasi tidak sesuai dengan petunjuk
5. Dilarang membuka komponen isi lampu, garansi tidak berlaku jika lampu telah dibuka

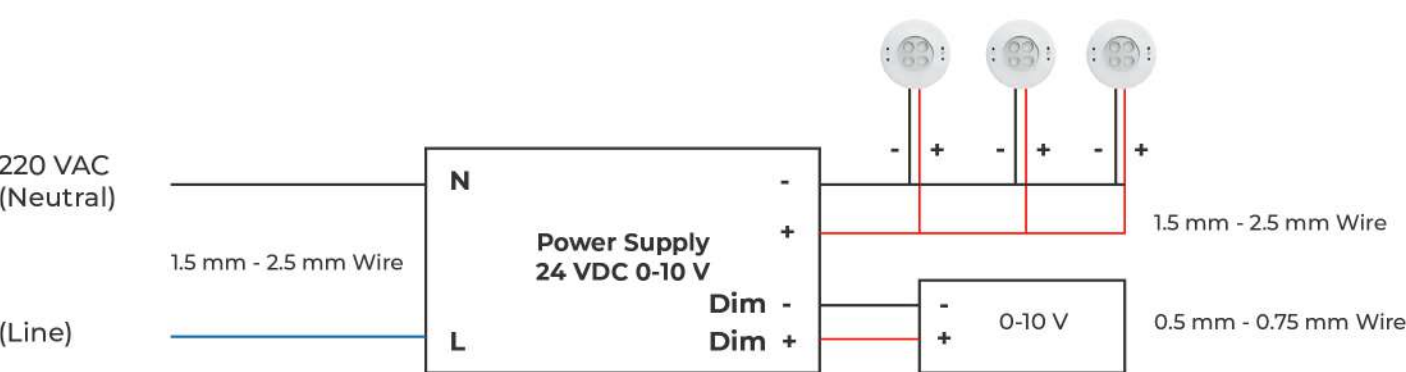
## 24 VDC – On/Off Installation



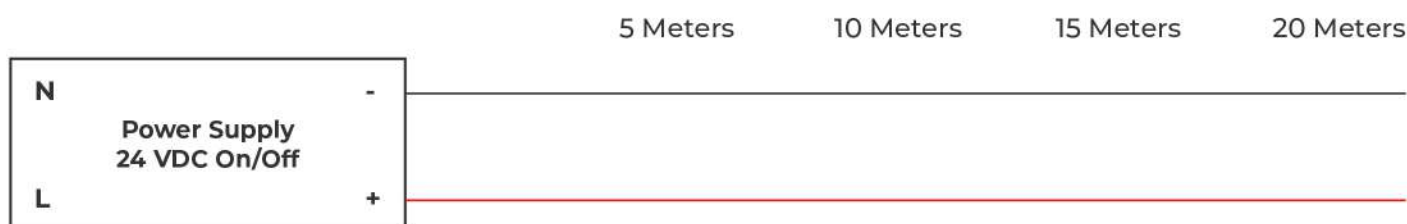
## 24 VDC – Triac Installation



## 24 VDC – 0-10 V Installation



## Voltage Drop Estimation



| Conductor | Cable Thickness (Diameter) | 5 Meters<br>24 VDC Voltage Drop<br>@ 3 Ampere | 10 Meters<br>24 VDC Voltage Drop<br>@ 3 Ampere | 15 Meters<br>24 VDC Voltage Drop<br>@ 3 Ampere | 20 Meters<br>24 VDC Voltage Drop<br>@ 3 Ampere |
|-----------|----------------------------|-----------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Copper    | 2 x 1.45 mm (15 AWG)       | 1.3 %                                         | 2.6 %                                          | 3.9 %                                          | 5.2 %                                          |
| Copper    | 2 x 2.58 mm (10 AWG)       | 0.4 %                                         | 0.8 %                                          | 1.2 %                                          | 1.6 %                                          |
| Copper    | 2 x 3.66 mm (7 AWG)        | 0.2 %                                         | 0.4 %                                          | 0.6 %                                          | 0.8 %                                          |

(Disclaimer : Cable type, length, thickness, open air/buried installation, power supply type, load, volt, number of luminaire may affect the result)

## Power Supply Capacity & Maximum Amount of Luminaire

| Maximum Power Supply Capacity Used < 75% = < 75 W | Luminaire Power | Maximum Luminaire | Total Power Output |
|---------------------------------------------------|-----------------|-------------------|--------------------|
| 100 W Power Supply                                | 8 W             | 9 pcs             | 72 W               |
| 100 W Power Supply                                | 12 W            | 6 pcs             | 72 W               |
| 100 W Power Supply                                | 24 W            | 3 pcs             | 72 W               |
| 100 W Power Supply                                | 36 W            | 2 pcs             | 72 W               |

(Disclaimer : Power supply type : power factor, efficiency may affect the result)

## CONTACT US

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