

# **TECHNOLOGY**



### Flow Sense

A built-in protector against power-related issues, ensuring lasting performance and safety.



### Split & Seal

Uses protective polymers to shield Filix products from water and moisture, boosting durability and resilience.



### Heat Sense

Automatically reduces LED power at high temperatures, ensuring longevity and safety in Filix products.













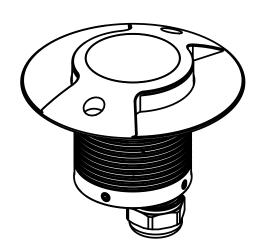


Specification Sheet





UL STD 676 swimming pool rated CSA C22.2#89 swimming pool rated IP68



Ø100mm X H90mm

#### **LUMINAIRE FEATURES**

#### Design and Application

- Small and medium pools
- · Fontaines and water feature

#### Mechanical details

- IK10 crystal-clear tempered glass, 10mm (0.39") thick
- IP68, rated for permanent submersion
- Maximum installation depth up to 5m (16')
- AISI316L stainless steel body
- Suitable for chlorine and marine environments
- Supplied with 3m(10') oil and water resistant feed cable as standard
- Recessed installation secured with A4 grade srews
- Galvanic protection

#### Electrical details

- LED Lifetime TM-21 @ 105°C
   L80(10K) = 60,500 hours
- Operating temperature: -20°C (-28°F) to +50°C (122°F)
- LED CRI: >85
- 3 step MacAdam
- Remote power supply
- · Low voltage operation

#### Sustainabilty

· Recyclable materials

#### Controls

- DMX, with compatible LED power supply
- DALI, with compatible LED power supply
- 0-10V, with compatible LED power supply
- Mains, with compatible LED power supply

#### Integrated systems

- · Split & Seal
- Flow Sense
- Heat Sense

#### Links & Downloads

- · List of available drivers
- Voltage drop calculator
- Fixture installation manual
- Housing installation manual
- CAD file
- <u>IES-LTD data</u>

#### Note

Underwater luminaire – must be constantly submersed.





## ORDERING INFORMATION

N/		Б		
M	U	IJ	Е	L

AC

**APPLICATION** 

TM

• TM - Ø100mm x 90mm (Ø3,9" x 3,5")

**POWER** 

L

• L - 9W, 2700/3000/4000K, 90 lm

• L - 9W, RGBW (W 4000K)

COLOR TEMP.

27

• 27 - 2700K

30

• 30 - 3000K

40

• 40 - 4000K

**RGBW** 

• RGBW (W 4000K)

TW

• TW - Tunable White 2200K-4000K

**OPTICS** 

S30

- S30 - Single side 30°  $\,$ 

S60

• S60 - Single side 60°

S120 D30 • S120 - Single side 120°

D60

• D30 - Double side 30°

D120

D60 - Double side 60°D120 - Double side 120°

VOLTAGE

12

• 12 - 12VDC fixture voltage

24

• 24 - 24VDC fixture voltage

**OPTIONS** 

3

• 3\* - standard feed cable 3m (10')

0

• 6 - luminaire supplied with 6m (20') feed cable

9

• 9 - luminaire supplied with 9m (30') feed cable

20

• 20 - luminaire supplied with 20m (65') feed cable





## MANDATORY ACCESSORIES

#### Housings

## HOUSING

AM382

AM382S

AM382SP

AM382LN

AC60C

- AL382 Concrete pool installation housing beck feed
- AL370SP Concrete pool intallation housing side feed
- AL370SP Stainless pool installation housing
- AM382LN Liner pool installation housing
- AC60C Concrete exterior installation housing

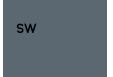
### Power supplies



.INK

• List of available drivers

## **OPTIONAL ACCESSORIES**



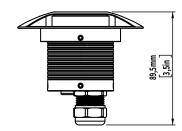
• SW - Socket wrench for cable gland

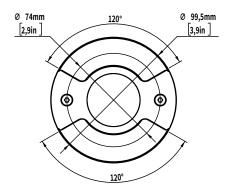




## **INSTALLATION DETAILS**

### **Fixture**





Made out of AISI3161 stainless steel with additional passive coating, this luminaire is suitable for use in marine and chlorine environments. The standard luminaires are equipped with water and oil-resistant cables in various standard lengths. With integrated systems such as Flow Sense, Heat Sense, and Split & Seal, the luminaire has all the needed protective barriers.

Note:

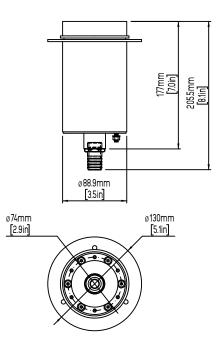
For details on specific depths, tiling thickness and other please refer to both Installation instructions for fixture and housing.



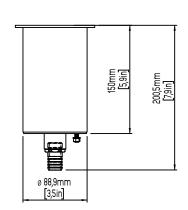


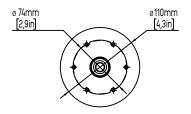
## **HOUSING**

AM382 - Concrete Pool Installation back feed

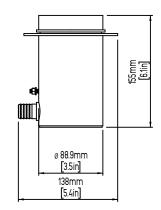


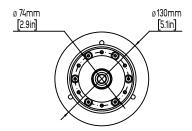
AM382SP - Stainless Steel Pool Installation



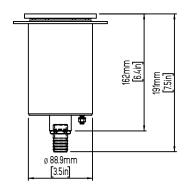


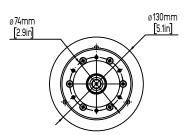
AM382S - Concrete Pool Installation side feed





AM382LN - Liner Pool Installation





Note:

For details on specific depths, tiling thickness and other please refer to both Installation instructions for fixture and housing.





## MANDATORY ACCESSORIES

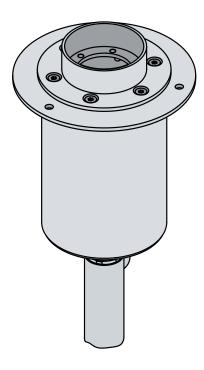
#### Stainless steel installation housing

Used to niche used to seamlessly integrate luminaire utilizing precision press fit with no exposed hardware.

Made out of stainless steel with single cable entry and suitable for marine and pool environments. Standard features include a 1.5m oil and water-resistant cable conduit, streamlining the installation process. Due to its size, the housing's back end intentionally lacks a sealed cable gland. Contractors are advised to review installation instructions for proper guidance.

#### Power supply

A LED power supply, is an electrical device designed to control the power supplied to an LED or an array of LEDs. It plays a critical role in LED lighting systems as LEDs demand a specific type and level of electrical current or voltage for optimal operation. It's important to note whether a constant current or constant voltage LED power supply is required. The power supply should be installed in a dry and easily accessible area.









# **ON/OFF SYSTEM TOPOLOGY**

#### Integrated systems:

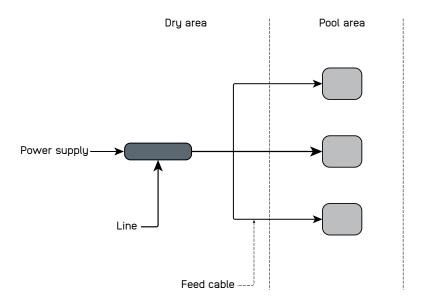
- · Heat Sense
- Flow Sense
- · Split & Seal

#### System components

- · Wiring and additional accessories leading up to the product feed cable are the responsibility of others.
- · Housing and neccessarry accessories that are marked as mandatory must to be ordered separately

#### System topology

· In the system design, any of the following system topologies can be utilized: line wiring, star wiring, or tree wiring.



#### Addressing & dimming notes

- ON/OFF system does not allow device addressing
- Dimming of the product not avaliable in this system

#### Segment length and limitations

- In a serial connection of multiple fittings, the maximum length of a cable loop is 50 meters, and the electrical circuit size is limited by power supply ratings, such as output voltage range.
- · All wire splicing should be performed in a dry area to ensure a proper connection.
- Used in single colour applications

### Fault tolerance

• In a serial connection, if one product fails, the rest of the system stops working.





## 0-10V SYSTEM TOPOLOGY

#### Integrated systems:

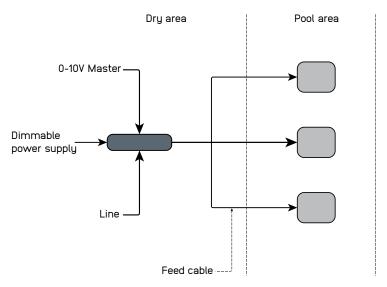
- · Heat Sense
- · Flow Sense
- · Split & Seal

#### System components

- The 0-10V system, wiring and additional accessories leading up to the product feed cable are the responsibility of others.
- · Housing and neccessarry accessories that are marked as mandatory must to be ordered separately

#### System topology

• In the system design, any of the following system topologies can be utilized: line wiring, star wiring, or tree wiring.



#### Addressing & dimming notes

- Without 0-10V dimmable power supply product can not be controled
- Individual device addressing can be achieved by connecting each product to a separate output channel of the 0-10V dimmable power supply.
- Logaritmic and linear dimming options depend on the 0-10V dimmable LED power supply
- The dimming range is determined by the 0-10V dimmable LED power supply

#### Segment length and limitations

- The minimum controllable segment is one product.
- In a serial connection of multiple fittings, the maximum length of a cable loop is 50 meters, and the electrical circuit size is limited by power supply ratings, such as output voltage range.
- All wire splicing should be performed in a dry area to ensure a proper connection.
- Used in single colour applications

#### Fault tolerance

- If the LED driver is source type and in the case the control line doesn't have power the light fitting will turn at 100%. in the opposite case where the LED power supply is sink type, light will not work
- In a serial connection, if one product fails, the rest of the system stops working.





## DALI SYSTEM TOPOLOGY

#### Integrated systems:

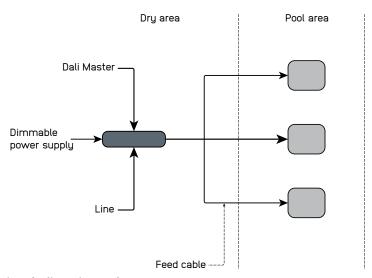
- Heat Sense
- Flow Sense
- Split & Seal

#### System components

- · The DALI system, wiring and additional accessories leading up to the product feed cable are the responsibility of others.
- · Housing and neccessarry accessories that are marked as mandatory must to be ordered separately

#### System topology

· In the system design, any of the following system topologies can be utilized: line wiring, star wiring, or tree wiring.



### Addressing & dimming notes

- · Without a DALI dimmable power supply, the product cannot be controlled.
- Individual device addressing (short address) and group addresses for up to 16 groups can be achieved by connecting each group of products
  to a separate output channel of the DALI dimmable power supply. A broadcast address targets everything on the line of the DALI dimmable
  LED driver.
- Logarithmic and linear dimming options depend on the DALI dimmable LED power supply.
- The dimming range is determined by the DALI dimmable LED power supply.

### Segment length and limitations

- The minimum controllable segment is one product.
- · A DALI dimmable power supply cannot control fittings individually unless they are connected to separate channels of a DALI dimmable power supply.
- In a serial connection of multiple fittings, the maximum length of a cable loop is 50 meters, and the electrical circuit size is limited by power supply ratings, such as output voltage range.
- All wire splicing should be performed in a dry area to ensure a proper connection.
- · Suitable for both single-color and multi-color applications.

#### Fault tolerance

• In a serial connection, if one product fails, the rest of the system stops working.





### DMX SYSTEM TOPOLOGY

#### Integrated systems:

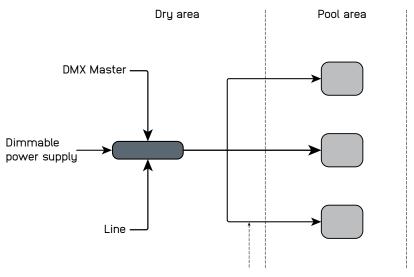
- · Heat Sense
- Flow Sense
- · Split & Seal

#### System components

- · The DMX system, wiring and additional accessories leading up to the product feed cable are the responsibility of others.
- · Housing and neccessarry accessories that are marked as mandatory must to be ordered separately

#### System topology

· In the system design, any of the following system topologies can be utilized: line wiring, star wiring, or tree wiring.



#### Addressing & dimming notes

- The minimum controllable segment is one product.
- A DMX dimmable power supply cannot control fittings individually unless they are connected to separate channels of a DMX dimmable power supply.
- In a parallel connection of multiple fittings, the maximum distance between the LED power supply and the last fitting in line is limited to the maximum allowed voltage drop.
- In a serial connection of multiple fittings, the maximum length of a cable loop is 50 meters, and the electrical circuit size is limited by power supply ratings, such as output voltage range.
- All wire splicing should be performed in a dry area to ensure a proper connection.

#### Segment length and limitations

- Without a DMX dimmable power supply, the product cannot be controlled.
- Individual device addressing (short address) and group addresses can be achieved by connecting each product or a group to a separate out put channel of the DMX dimmable power supply.
- Logarithmic and linear dimming options depend on the DMX dimmable LED power supply.
- The dimming range is determined by the DMX dimmable LED power supply.
- Suitable for both single-color and multi-color applications.

#### Fault tolerance

- In a parallel connection, if one product fails, the rest of the system continues to operate.
- In a serial connection, if one product fails, the rest of the system stops working.

www.filixlighting.com