

Technical Manual



PlugInPool® socket

Underwater socket

Réf: PF10R24C/CA



No-Niche Underwater Luminaire for Swimming Pool

UL FILE E471596

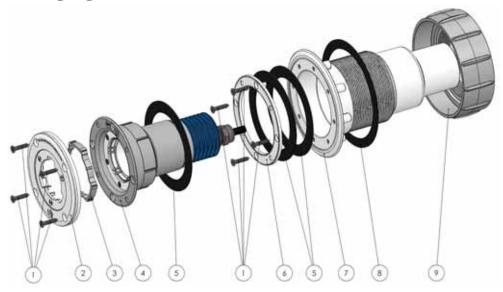
Table of Contents

B. Declaration of conformity	10
A. Technical support	. 10
6. Electrical Connection	9
5.5. Panels + liner pool	8
5.4. Wooden + liner pool	8
5.3. Concrete + liner pool	
5.2. Concrete pool	6
5.1. Shell-shaped polyester pool	5
5. Socket installation	
4.2. Presentation of PlugInPool®	4
4.1. The Principle of Induction	4
4. Description	4
3. Technical characteristics	3
1. Packaging Contents	3
1. Packaging Contents	2



Read these instructions carefully before installing, commissioning and using this product.

1. Packaging Contents



No.	Reference	Name	Qty
1	MPVS0128	Stainless steel screws for thermoplastic 5 x 25, countersunk head	8
2	MPPL0284	PlugInPool® flange cover	1
3	MPPL0285	PlugInPool® latch-spring	1
4	SFxxxxxx	PlugInPool® socket	1
5	MPCS01KA	PlugInPool® liner joint	3
6	MPPL0299	PlugInPool® liner flange	1
7	MPPL0286 &MPBT1807	PlugInPool® rear flange & Coupling sleeve 1,5" / 2"	1
8	MPCS01KG	PlugInPool® wall joint	1
9	MPPL0298	PlugInPool® nut	1



2. Warnings



This product must be installed by an approved or certified electrician or a qualified pool professional in compliance with the National Electrical Code (NEC), NFPA 70 or the Code Canadien de l'électricité (CCE), CSA C22.1. All local installation codes and by-laws must also be respected. Incorrect installation creates electrical hazards which can lead to death or serious injury for users, installers and other persons from electric shocks, it can also lead to damage to the power source. Always disconnect power at the circuit-breaker board before installation. A failure to do this can lead to death or serious injury for people using the swimming pool, installers and other persons from electric shocks.



For countries which comply with the regulations of the International Electrotechnical Commission (IEC): Light fittings must be installed by and approved or certified electrician or a pool maintenance professional, in compliance with the current IEC 364-7-702 standard and all local applicable codes and by-laws. Incorrect installation creates electrical hazards which can lead to death or serious injury for users, installers and other persons from electric shocks, it can also lead to damage to property.

3. Technical characteristics

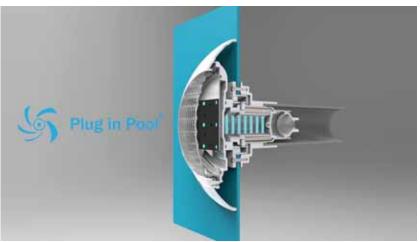
	1	
Power voltage	21~29VDC	
Power consumption	52W maximum	
Efficiency	70% maximum	
Power cable	2 x 16 AWG SJOOW cable	
Degree of protection	IP-68	
Overall dimensions	Diameter: 144mm (5-43/64") - Length: 178mm (7 1/64 in")	
Drill diameter in the wall	434"	
	With 15ft cable: 2,6 kg (5,73 lb) (packaged)	
Weight	With 50ft cable: 3,48 kg (7,68 lb) (packaged)	
	With 100ft cable: 4,7 kg (10,36 lb) (packaged)	



4. Description

4.1. The Principle of Induction

Induction is a physical phenomenon where an electrical current is produced across a conductor exposed to a varying magnetic field. This magnetic field is created by the flow of an alternate current through a coil. This phenomenon is especially used in electric transformers, asynchronous motors and induction plates.



4.2. Presentation of PlugInPool®

The patented Plug-in-Pool process (No. 1260746) is based on the principle of IPT Inductive Power Transfer. The coupling between the wall socket and the plug avoids having to pass the cables through the pool wall. Plug-in-Pool is made up of two distinct parts: the socket and the plug. The water-tight socket is encased in the pool wall and receives to a 24V DC power. The male plug is directly fixed on the device to be supplied with power or is connected via cable. The plug is equipped with a bayonet lock.





The PLUG IN POOL was selected by "the 2014 Observeur du Design" jury and won the 2013 silver pool trophy in the category of Innovation.

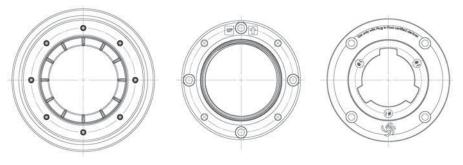
5. Socket installation

The latch-spring must be installed as below:





Pay attention to the angular positioning of the different parts, following the image below:



5.1. Shell-shaped polyester pool

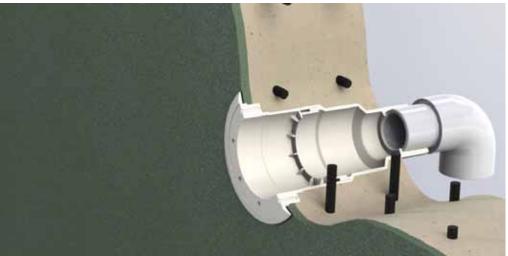
Prior to installing, drill a hole in the pool using a 121-mm (4 $\frac{3}{4}$ -in) diameter cylinder saw. The socket is connected in the rear to a 1,5" or 2" diameter tube.



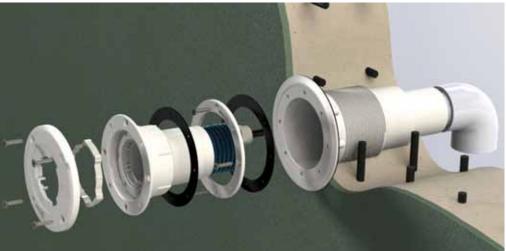


5.2. Concrete pool

Seal the Nr. 7 part;

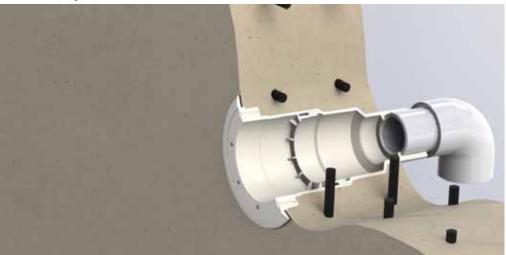


The socket is connected in the rear using a 1,5" or 2" tube.

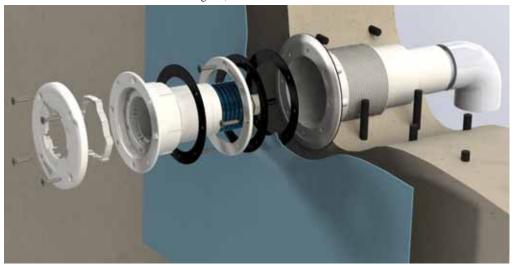


5.3. Concrete + liner pool

Seal the Nr. 7 part;



The socket is connected in the rear using a 1,5" or 2" tube.



5.4. Wooden + liner pool

Prior to installing, drill a hole in the plank using a $4\,$ %-inch diameter cylinder saw. The socket is connected in the rear using a 1,5" or 2" tube.



5.5. Panels + liner pool

Prior to installing, drill a hole in the panel using a 121-mm (4 ¾-in) diameter cylinder saw. The socket is connected in the rear using a 1,5" or 2" tube.



6. Electrical Connection



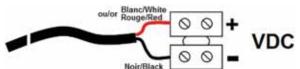
THE PLUG IN POOL SOCKET, LIGHT AND PLASTIC NICHE FORM A COMPLETE NON-METALLIC LOW VOLTAGE LIGHTING SYSTEM. THIS CONFIGURATION DOES NOT REQUIRE BONDING OR GROUNDING WHEN INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC).



THE DEVICE MUST NEVER BE POWERED ON OUTSIDE OF WATER. ALWAYS DISCONNECT THE ELECTRICAL POWER SUPPLY BEFORE WORKING ON THE ELECTRICAL SYSTEM.



The Plug In Pool® socket must be connected to a direct current (DC) power source, delivering between 21 and 29V and delivering 45 W minimal of power (CCEI ref PF10V202/PF10V203). ONLY USE A SAFETY ISOLATION TRANSFORMER COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC). The light fixture and the connection must be installed by a licensed or certified electrician or a qualified pool service person, in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1 and all applicable local codes and ordinances.



The electrical connection must be carried out in the dry, in a watertight connection box whose cable glands must be closed to prevent water infiltration.

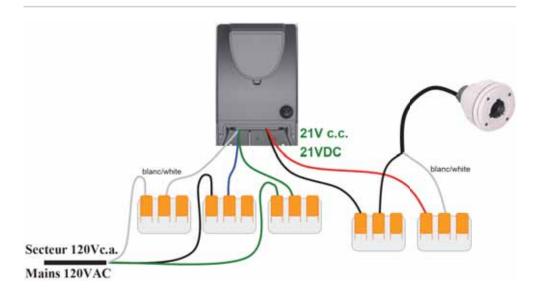
Once startup and the operation tests are complete, it is recommended to drown the connection with a reusable soft hydrophobic insulating gel.







Green wire, on primary, has to be connected on earth conductor.





Connect black wire to Plug In Pool socket's black wire, and red wire to Plug In Pool socket's white wire.

A. Technical support

Website: www.ccei.ca
Phone: +1.514.963.4226

B. Declaration of conformity



CCEI Inc. (Québec 1170122155) declares that product socket Réf: PF10R24C is compliant with the safety and electromagnetic compatibility requirements of European directives 2006/95/CE and 2004/108/CE and is listed UL under the number E471596.





Pierre-Yves Flattot
Montreal, on 13/01/2017

Distributor's stamp

