

RobLight



Aquarius 70

User manual

Product overview/unboxing

Qty	Description	Position number	Item number Wide	Item number Focus
1	Lens housing	7	0313 0761	0313 0766
1	Screw joint	2	4300 2027	4300 2027
1	Fibre mount	4	4300 2028	4300 2028
1	Fibre mount (Max termination for Ø8–10 mm fibre)	4	4300 2034	4300 2034
1	Seal ring	1	4300 2029	4300 2029
1	Nut	3	9100 4214	9100 4214
1	O-ring	6	7100 0069	7100 0069
1	Socket set screw M3	5	9115 0135	9115 0135

Technical data

Fibre dimensions	Ø3-Ø10 mm
Fitting termination	Fitting, compas or max compas termination
Metal housing	EN / Din. W no. 1.4436
Plastic used	PVC and pom
IP class	IP68. 1 Bar / 10 m water pressure
weight	470 g

Installation instructions

Product type	Fiber Ø	In air	In water
Focus	3	9-24°	13-20°
	4.5	12-24°	9-18°
	6	15-23°	11-17°
	8	24-30°	18-23°
	10	25-33°	19-25°
	Wide	3	59°
4.5		59°	38°
6		59°	38°
8		59°	38°
10		59°	38°

Mounting instruction

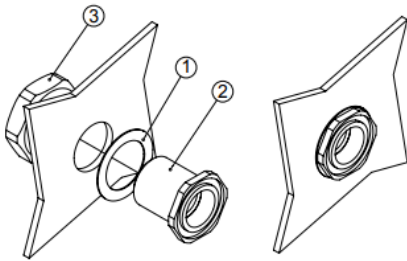
Aquarius Ø70 fitting is suitable for plate mounting or embedment.

Mounting in moulded pools / plate mounting :

1: Placing: Select a level place on the pool wall having a diameter of minimum 70 mm to ensure a level base for the seal ring. Flatness must be within 0.1 mm, corresponding to a radius of 5500 mm. If no such place can be found, seal using silicone or a suitable alternative product.

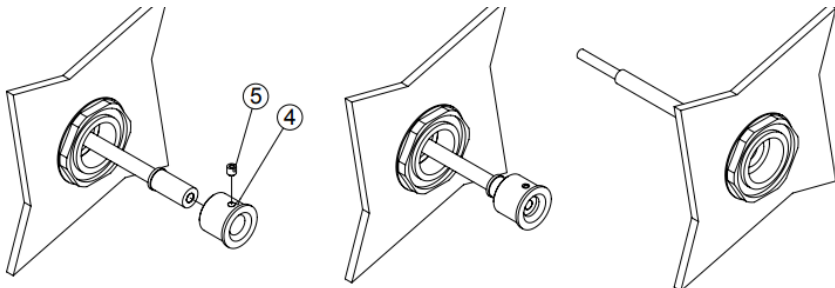
2: Drill a hole in the pool wall, min. Ø42 mm (max. Ø44 mm). Trim the edges, if necessary.

3: Mount the seal ring (pos.1) on the screw joint (pos.2) and place the screw joint in the hole made in the pool. Be careful to clean the hole and the area around it for dust and dirt. Mount the nut (pos.3) from the rear.



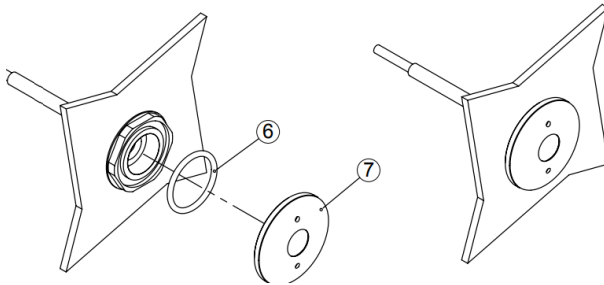
4: Hold the screw joint at the front using tool 0313 0768 (optional) while tightening the nut from the rear. To achieve appropriate compression of the seal ring, the nut should be tightened until any gap is removed and the approximately 30° further. A thread locker should be used, e.g. Loctite 222.

5: Push the fiber through the screw joint and mount the fiber mount (pos.4) on the fiber termination and lock it with the socket screw (pos.5). Push the fiber mount and the fiber back into the screw joint.



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6: Place the O-ring (pos.6) in the groove in the screw joint front. Check that groove and O-ring are clean.



7: crew the lens housing (pos. 7) on the screw joint and tighten it using tool 0313 0758 (optional). Check that the sealing surface of the lens housing is clean. To prevent the unintentional dismantling of the fitting, the lens housing thread should be locked with a thread locker, e.g. Loctite 222.

Embedment

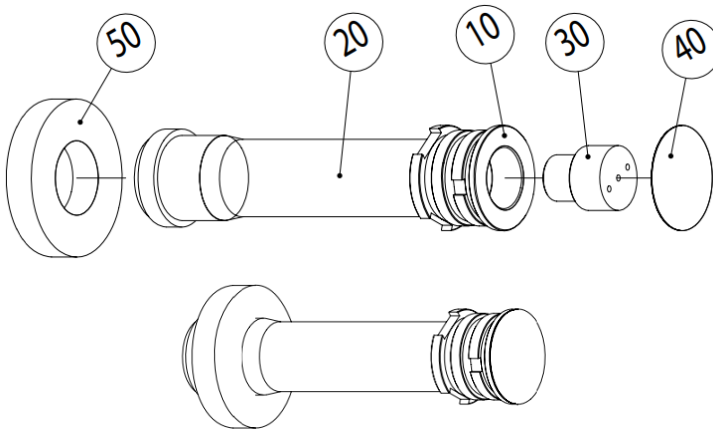
RobLights aquarius fittings can be mounted in concrete pools using various methods. Two methods are described below: direct embedment with or without a liner, and retrofitting.

The methods described presuppose that you have bought RobLights embedment kit

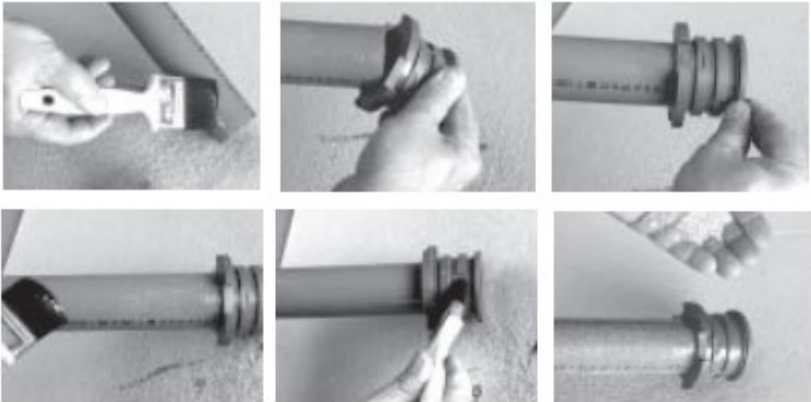
Qty	Description—embedment kit	Position number	0313 0769
1	Embedment unit	10	4300 2031
1	Protective plug	30	4300 2014
1	Tape disc	40	4300 2030
2	Plastic foam disc	50	4300 2032
1	Fibre conduit pipe	20	7200 1250

Direct embedment

1: Connect the embedment unit (pos.10) to the fiber conduit pipe (pos. 20) using epoxy for gluing and sealing. The fiber conduit pipe is a standard $\text{Ø}50 \times 500$ gutter pipe which can be shortened according to requirements. If you wish to guide the fiber further in a smaller conduit, either a plain or flexible one, it is easy to fit a $\text{Ø}50$ end plug mounted with a suitable PG coupling.



To ensure a good adhesion in the embedment process, paste the embedment unit holding the fiber conduit pipe with epoxy and sprinkle it with silica sand.



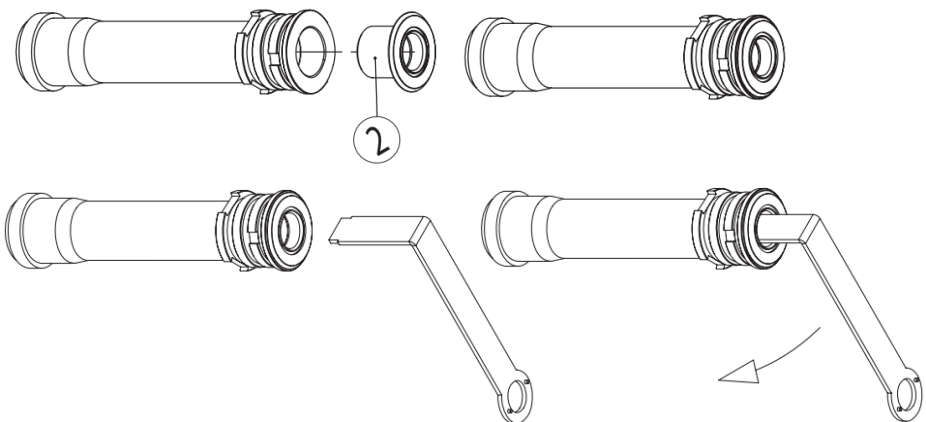
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2: Use the protective plug delivered (pos. 30) to position and fix the embedment unit and the fiber conduit pipe in the concrete formwork. Fasten the plug in the formwork in the following way: bore a $\varnothing 4$ mm hole in the formwork and screw in a $\varnothing 5$ mm wood screw so that it sticks out max. 25 mm on the other side. Screw the plug on the formwork (use the centre hole in the plug and screw holding the plain part). This way it will be easy, for example, to line up a number of fittings.



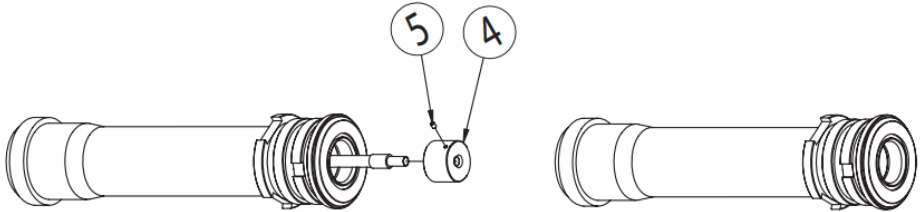
Note that the direction in which the embedment unit is pointing will decide the direction of the light cone. In some cases it will be necessary to mount supports for the fiber conduit pipe. Remove the screw holding the plug before removing the formwork. If the pool wall requires dressing, the plug should not be removed until afterwards. Remove the plug by means of the front holes

3: Mount the screw joint (pos. 2). Pack the thread using for example Loctite 55, and screw the screw joint on the embedment unit using tool 0313 0768 (optional) just until the flange of the screw joint bears against the pool wall. Also be careful not to pack the thread too hard. We recommend the use of a thread locker, e.g. Loctite 222.

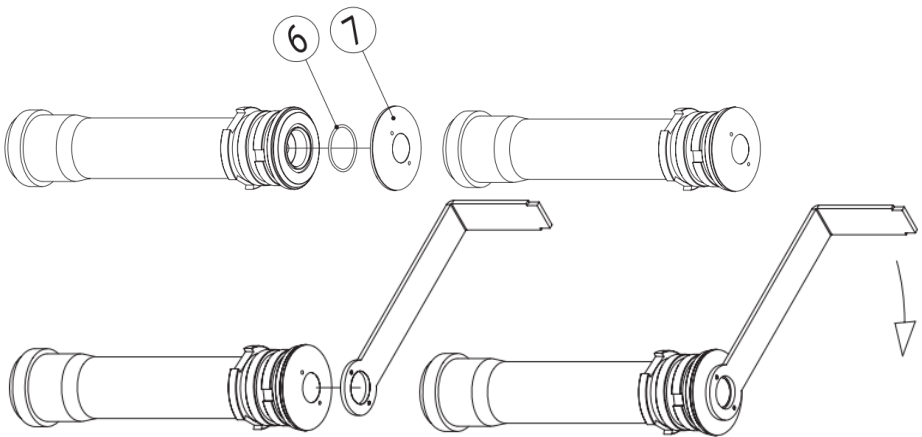


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4: Push the fiber through the screw joint. Mount the fiber mount (pos. 4) on the fiber termination and lock it with the socket set screw (pos. 5). Now push the fiber back into the screw joint.



5: Place the O-ring (pos. 6) in the groove in the screw joint front. Check that groove and O-ring are clean.

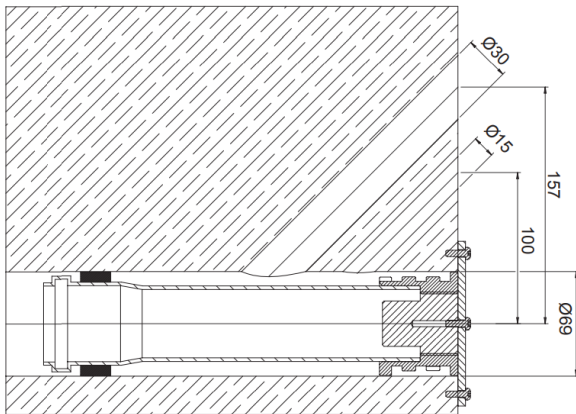


6: Screw the lens housing (pos. 7) on the screw joint and screw it home using tool 0313 0768 (optional). Check that the sealing surface of the lens housing is clean. To prevent unintentional dismantling of the fitting, the lens housing thread should be locked with a thread locker, e.g. Loctite 222.

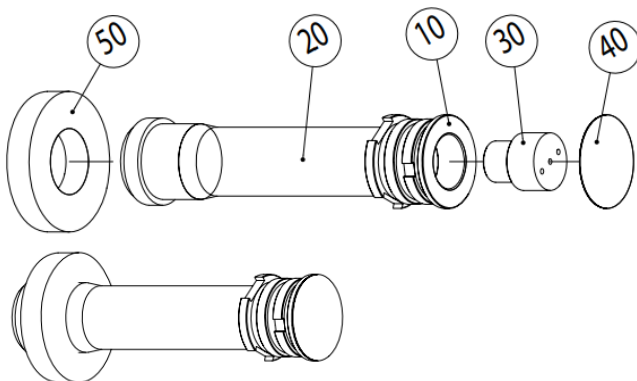
Retrofitting - embedment in bored hole using Epoxy

The moulding material could for example be Sika Floor 156. If necessary, adjust the consistency by adding silica sand (grain size 0.01) and stone dust.

1: Bore a hole for the fitting $\text{Ø}69$ - $\text{Ø}100$ mm. Bore an inlet hole and a vent hole at an angle to the fitting hole

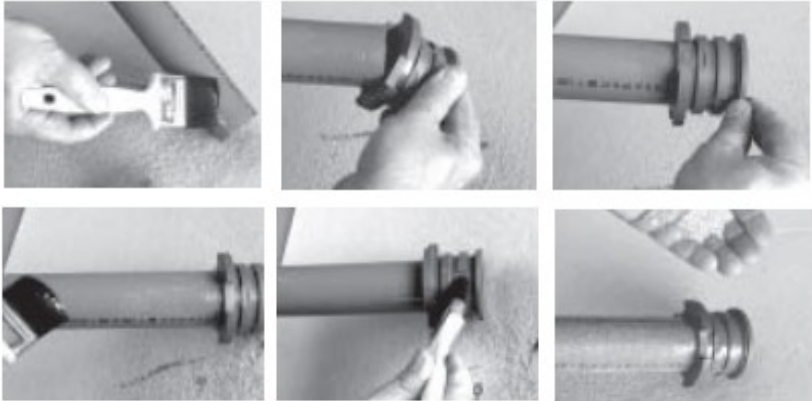


2: Connect the embedment unit (pos. 10) to the fiber conduit pipe (pos. 20) using epoxy for gluing and sealing. The fiber conduit pipe is a standard $\text{Ø}50 \times 500$ gutter pipe which can be shortened according to requirements. If you wish to guide the fiber further in a smaller conduit, either a plain or flexible one, it is easy to fit a $\text{Ø}50$ end plug mounted with a suitable PG coupling.



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To ensure a good adhesion in the embedment process, paste the embedment unit holding the fiber conduit pipe with epoxy and sprinkle it with silica sand.



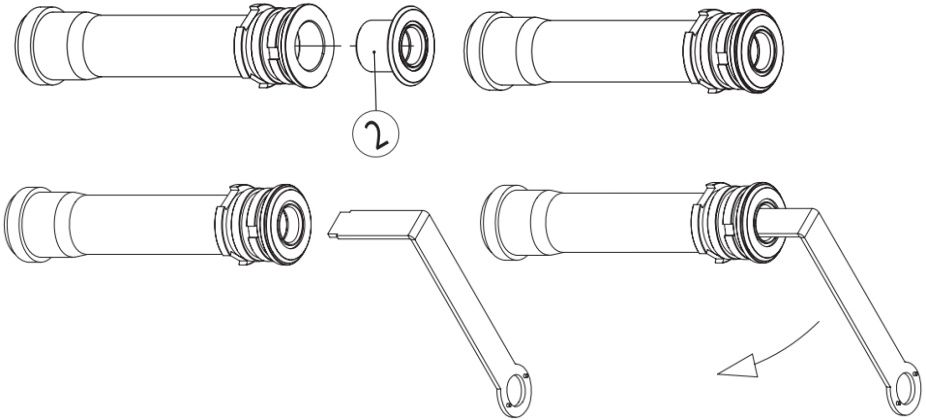
3: Place and fix the embedment unit and the fiber conduit pipe in the hole. Mount the plug (pos. 30) to ensure a clean thread, among other things. The embedment kit includes a plastic foam disc (pos. 50) fitting the fiber conduit pipe and a $\text{\O}100$ mm hole. This will function as the rear sealing and as a guide for the conduit. A plate fastened to the pool wall and the plug in the embedment unit will function as front sealing and at the same time fix the unit firmly.

In a tight fit hole, as shown in the sketch, the foam disc needs to be cut to size to fit in the hole. The extra foam disc which is supplied could, after being cut to size, function as front sealing and guide when placed on the embedment unit, flush with the front wall.

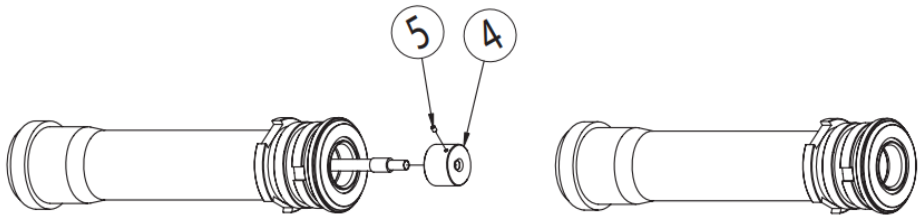
Pour the epoxy through the inlet hole until it shows in the vent hole. Note that the direction in which the embedment unit is pointing will decide the direction of the light cone. Remove the cover plate and dress the front with epoxy, if required. Mount the tape disc (pos. 40) to protect the front and the thread. Remove the tape disc and the plug after hardening.

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4: Mount the screw joint (pos. 2). Pack the thread using for example Loctite 55, and screw the screw joint on the embedment unit using tool 0313 0768 (optional) just until the flange of the screw joint bears against the pool wall. Be careful not to pack the thread too hard. We recommend the use of a thread locker, e.g. Loctite

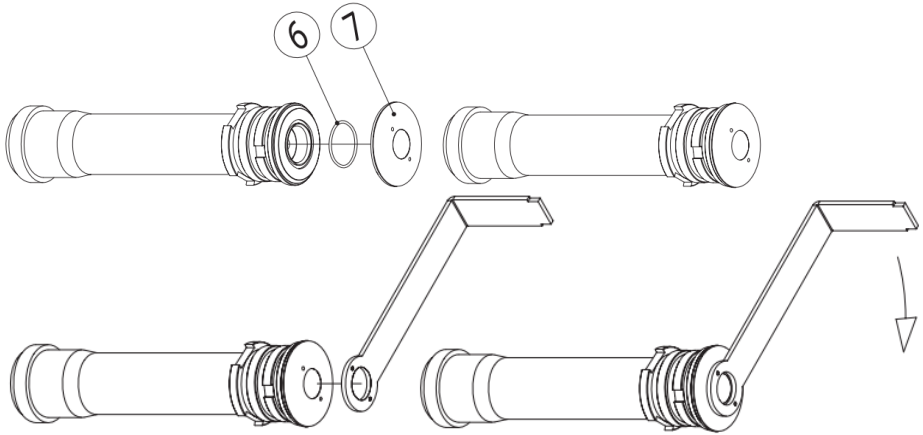


5: Push the fiber through the screw joint. Mount the fiber mount (pos. 4) on the fiber termination and lock it with the socket set screw (pos. 5). Now push the fiber back into the screw joint.



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6: Place the O-ring (pos. 6) in the groove in the screw joint front. Check that groove and O-ring are clean.



7: Screw the lens housing (pos. 7) on the screw joint and screw it home using tool 0313 0768 (optional). Check that the sealing surface of the lens housing is clean. To prevent unintentional dismantling of the fitting, the lens housing thread should be locked with a thread locker, e.g. Loctite 222.

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