



## INSTALLATION MANUAL

# Rotor Spreader

<b>1</b>	<b>29.07.13</b>		<b>EBL</b>	<b>IL</b>
Rev	Date	Issued	Issued by	Approved by

Document no.:	10000559	Project no.:	
---------------	----------	--------------	--



*The information in this document is subject to change without notice and should not be construed as a commitment by AKVA group ASA.*

*AKVA group ASA assumes no responsibility for any errors that may appear in this document.*

*In no event shall AKVA group ASA be liable for incidental or consequential damages arising from use of this document or of the software and hardware described in this document.*

*We reserve all rights in this document and in the information contained therein. Reproduction, use or disclosure to third parties without express authority is strictly forbidden.*

*Additional copies of this document may be obtained from AKVA group ASA at its current charge.*

© 2012 AKVA group ASA (NO)

AKVA group ASA

## Table of contents

<b>1</b>	<b>Assembly .....</b>	<b>4</b>
1.1	Buoy for buoyancy .....	5
1.2	Weight for stability .....	6
1.3	Bearing for even rotation .....	6
1.4	Outlet pipe .....	6
<b>2</b>	<b>Connect rotor spreader to feeding line .....</b>	<b>7</b>
<b>3</b>	<b>Adjust the spreader.....</b>	<b>8</b>
<b>4</b>	<b>Place the rotor spreader in the cage .....</b>	<b>9</b>
	Deviation form .....	10

## 1 Assembly

Check the delivery, and make sure that all mentioned in the packing slip has been delivered.

Read the entire installation manual and be sure that all information is understood before commencing the assembly process.

We recommend assembling the rotor spreader on shore or in the barge/on a boat.

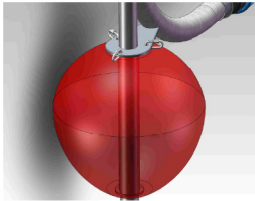
Necessary assembly equipment:

- compressor for inflating the buoy
- a knife for removing any burrs in the buoys center opening
- a tape measure for measuring the buoys centerline circumference
- two M10 spanners/wrenches for fastening the weight bolts
- one Unbraco key for fastening the bearing
- one screwdriver for fastening the outlet pipe hose clamp
- one large forceps to fasten the union house connecting the rotor spreader to the feeding hose

## 1.1 Buoy for buoyancy

Thread the flat buoy onto the weight pole. The air nipple should point upwards.

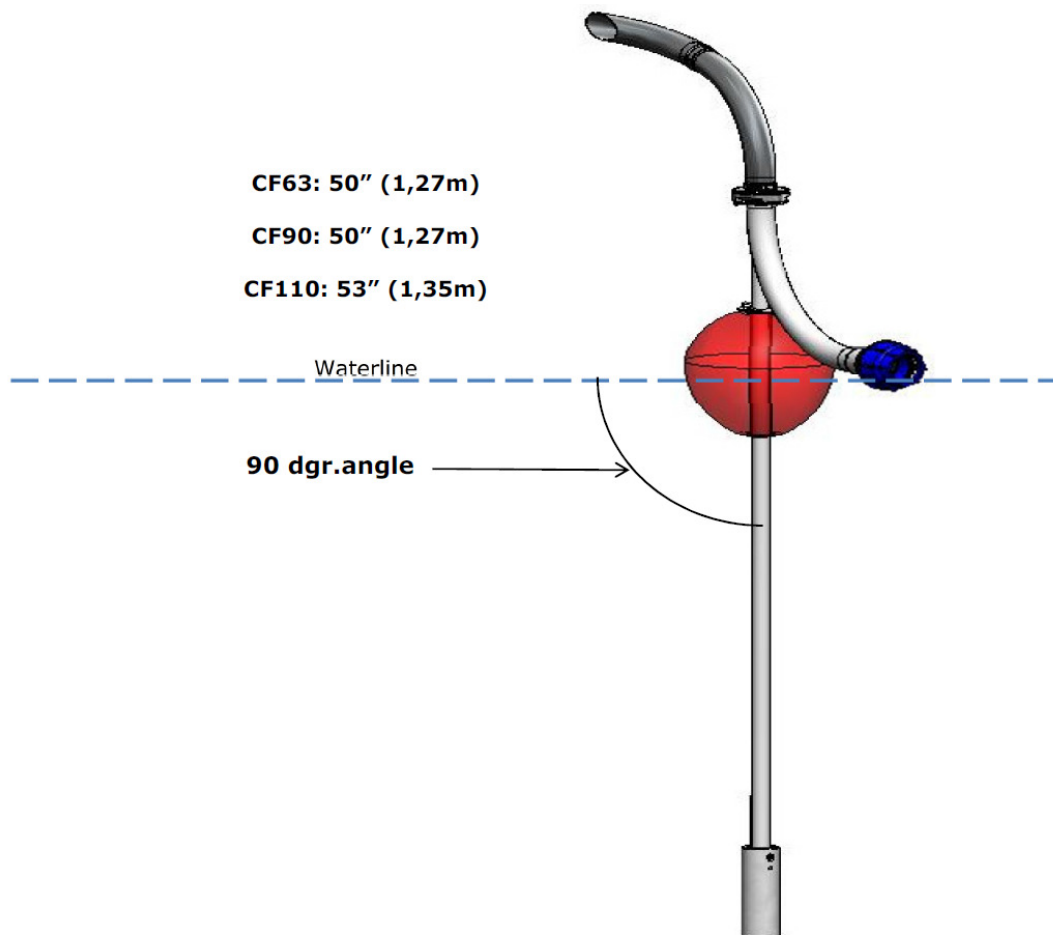
If this is difficult, carefully remove any burrs around the opening of the buoy center hole with a knife.



Inflate the buoy with a compressor. The buoy is properly inflated when the centerline/split-line has a circumference of:

- CF63: 50" (1,27m)
- CF90: 50" (1,27m)
- CF110: 53" (1,35m)
- 

These values make sure that 50% of the buoy is above water and 50% below water, only with these proportions the rotor spreader stands with a 90 degree angle in the water surface. Remember that the buoy is the only buoyancy force of the rotary spreader.



### 1.2 Weight for stability



Align the weight hole with the weight pole hole and insert the M10x80 Allen bolt and lock with the M10 nut.

### 1.3 Bearing for even rotation



Attach all 3 M8 Allen screws before tightening.  
Tighten one by one to maximum 6nm.

*NB! If these are overtightened, the bearing house will bend and the bearing will become useless.*

### 1.4 Outlet pipe



Use the hose clamp to lock the outlet pipe in desired position.

The spread area is adjusted by the outlet pipe:

- pointing it downwards reduces the spread area
- pointing it upwards increases the spread area

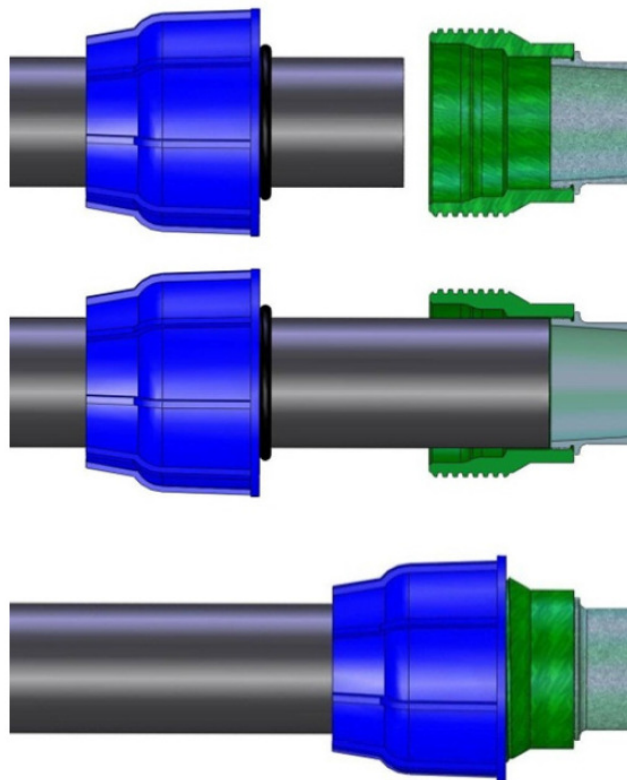
## 2 Connect rotor spreader to feeding line

When the spreader is dropped into the water, it will not align itself in the water, since it is a light weight product. The installer needs to proceed tentatively and adjust little by little to make the spreader angular to the water surface and by this, achieve best possible use for the rotor spreader.

### Connection instructions

*The spreader has to be placed next to the PE feeding hose and hold up in as vertical position as possible before connecting.*

- 1 Smear siliconc grease on the feeding hose end and inside the union house where the O-ring is pressed in.
- 2 Place the feeding hose into the union house.
- 3 Screw the union into the union house using hand force first, then use a forceps for tightening the connection.



### **3 Adjust the spreader**

Drop the rotor spreader assembly into the water, and let it float for a while, until it stabilizes in a given angle.

To adjust the angle, firstly note the approximate angle it needs to be adjusted to stand straight.

Take the rotor spreader out from the water, and either

- unscrew the union and realign the spreader, or
- drag the weight to the far end of the weight pole (the opposite way of misalignment), to force the spreader to align

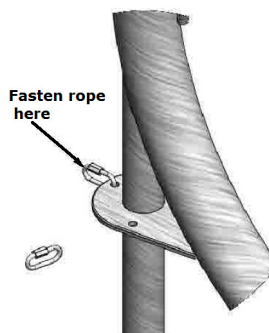
Repeat this process until the rotor spreader stands vertically (90 degrees) on the surface.



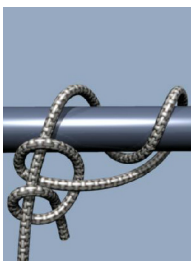
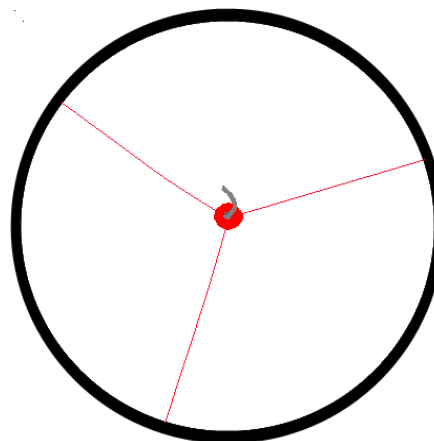
## 4 Place the rotor spreader in the cage

Place the spreader where it was intended in the cage, use the ropes to secure the spreader's position, make sure that the ropes are not too tight.

The spreader is now well balanced and does not need help from the ropes to stay aligned.



- 1 Tie each rope to safety hooks.
- 2 Attach these to the spreader as shown in the figure to the left <-.
- 3 Fasten the ropes to the cage rail as shown in the figure below:



We recommend using a rolling hitch knot when tying the ropes to the cage edge.

## Deviation form

NB! Make copies of this maintenance form before filling anything in.

<b>Deviation control nr.:</b>	
-------------------------------	--

<b>Unit:</b>	<b>Producer:</b>	<b>Prod.no.:</b>	<b>Purchase year:</b>

<b>Deviation description:</b>
-------------------------------

--

<b>Follow up proposition:</b>
-------------------------------

--

<b>Date and signature, declarer:</b>
--------------------------------------

--

<b>Follow up directed:</b>
----------------------------

--

<b>Status:</b>
----------------

--

<b>New action for deviation no.:</b>
--------------------------------------

--

<b>Date and signature, follow up:</b>
---------------------------------------

--



