



GENAP INSTALLATION-INSTRUCTIONS

SILOFLOAT® 2009 ANTI ALGAE FLOATING COVER

Genap Silofloat® anti-algae floating cover system for storage silos, diameters varying from 7,04 up to 30,95 meter.



Supplied Materials

Check the package list at delivery, before installation of the floating cover system.

Floating cover

Solarfloat 300 silver/black with tensioning points in cover circumference direction every 50 cm.

Floating ring

- PE pipes, diameter depending on silo diameter, used as fastening-/floating body for the floating cover.
- Connecting pipes, diameter fits in the inner diameter of the PE floating pipes, used as connecting parts between the standard PE pipe lengths. Length of connecting pipes depend on pipe diameter. PE pipes and connecting pipes are build together to a floating ring
 - watertight connection of PE pipes with PVC tape.

Tie rods

Tie rods are used for fastening the floating cover to the PE floating ring.



GENAP INSTALLATION-INSTRUCTIONS

Delivery:

- Delivery of the materials in consultation and accordance to the order.
- Floating cover and supplies are generally packed in a box, on a pallet in shrinkfilm; the pipes are separately bundled and packed to the pallet.

Installation conditions:

Installation of the floating cover system is advised to be executed under the following conditions:

- An empty / almost empty silo (max. 25 cm.) or nearly full silo for silo diameters up to 10 m. (less than 0,3 meter under the top edge of the silo).
- Windforce < 3 Bft., to be judged by the responsible mechanic on site
- A temperature > 5°C.

Installation:

Installation is -as already described above- possible in an empty as well as almost completely filled silo; for both situations the following general guidelines have to be followed:

1. Build the PE floating ring together -as far as possible- **outside** the silo; depending on the diameter and availability of manpower for putting the floating ring into the silo, this can be done in one or more pieces. Take the following steps:
 - Put the separate pipes along the circumference on the outside at the foot of the silo
 - Number of pipe lengths; pipe closing length(s) and number of connecting pipes in relation to the silo diameter are given in the tables 1a-d for the given silo types.
 - Use for connecting the separate pipe lengths the delivered connecting pipe pieces only! in combination with the supplied PVC tape.
 - TAKE NOTICE OF THE FOLLOWING DURING CONNECTING THE PIPES!
 - Pipe ends should be clean; smooth and free from burrs .
 - Push the connecting pipe up to the self tapping screw (= half pipe) into the first PE floating pipe and fix it to the pipe temporarily with PVC tape .
 - Push the second PE floating pipe over the connecting pipe up to the first PE floating pipe. (distance between the coupled floating pipes is 1 cm. max.).
 - Make a tape connection between the floating pipes by wrapping PVC tape around the outside of the connected pipes, the tape is covering at least 20 cm. of both pipes. The total width of PVC tape at each pipe connection is at least 40 cm. Take care that there are no sharp parts of the screwhead penetrating the PVC tape; use therefore sufficient PVC tape.
 - Don't close the PE floating ring completely outside the silo; at least -depending on silo diameter- 1 connection should be kept open and the PE floating ring is put in the silo by one or more pieces.
 - In the silo the floating ring is closed or pieces are connected to one piece.



GENAP INSTALLATION-INSTRUCTIONS

- Put the foam rubbers on the floating ring; for position and numbers see enclosed drawing: 3Q6A0905. The rubbers are taped around the floating pipe with PVC tape. Do not tape the rubbers on the floating pipe; it should be possible to move the rubbers over the floating ring. The foam rubbers are installed in order to prevent damage of the floating ring to the silo liner by bumping and/or rubbing.



- Put the floating cover in the silo and unfold it with **the grey side on top (= viewside)**, inside the circumference of the floating ring; if vertical pipes might be present in the silo (f.i. for overflow or water inlet) local holes have to be cut in the cover (avoid sharp corners/edges!). If a vertical suction pipe is present in the bottom, a T- piece or 90° ellbow pipe has to be installed upon the vertical pipe; this in order to prevent that the floating cover is sucked into the outlet pipe system.



- Fasten the floating cover to the floating ring with the delivered tie rods; fasten all the tensioning points on the outer circumference of the floating cover to the floating ring system; put therefore the tie rod through the eyelet of the tensioning point and put it around the outside of the PE pipe. Take care that the closing part of the tie rod is located on top of the floating cover (and **not** on the outside of the pipe at silo side), it is not necessary to cut of the surplus of the rod; anyway, if this is done, sharp edges have to be avoided.



GENAP INSTALLATION-INSTRUCTIONS

Supplementary information:

- The distance between inside silo wall to outside floating pipe = ± 150 mm; there's no open space between floating cover and floating ring.
- If watersupply (inlet) is over the top edge of the silo; the water has to be supplied to the silo under the floating cover by means of a vertical PVC-U pipe or flexible inlet hose; this in order to avoid that water with dirt is dumped upon the floating cover and contaminates the cover. The flexible inlet hose has to be ordered seperately on base of the pipe diameter; in the cover a hole or opening has to be cut in order to feed the hose through the cover.

After care / maintenance guidelines:

- In order to guarantee that the floating sheet functions properly for many years you must adhere to these fitting instructions and prevent mechanical damage.
- If the silo is outside, it is recommended that the floating cover is inspected regularly after high winds or storm. Check the wall of the silo and the floating cover for any damage during these inspections. If any damage is discovered this should be repaired as soon as possible.
- In case of (excessive) contamination on the floating cover, like: branches; leaves etc.; it is advised to remove this as much as possible.
- Keep always a minimum of 30 - 50 cm. water in the silo; this in order to avoid damages to the floating cover and silo liner.
- It is advised not to withdraw any water from the silo when ice has been formed inside the silo.



GENAP INSTALLATION-INSTRUCTIONS

Buwatec silo									
silo Ø [m.]	pipe Ø [mm.]	Lt pipe [m.]	Number			Closinglength 1 [m.]	Closinglength 2 [m.]	Foam rubbers [pcs.]	Distance* c.t.c. [m.]
			2.3 m. [pcs.]	closing [pcs.]	connections [pcs.]				
7,28	75	21,70	9	1	10	1,00	-	11	2
7,85	75	23,50	9	2	11	1,40	1,40	12	2
8,19	75	24,55	10	1	11	1,55	-	12	2
9,10	75	27,40	11	1	12	2,10	-	14	2
10,01	90	30,20	12	2	14	1,30	1,30	10	3
10,92	90	33,10	13	2	15	1,60	1,60	11	3
11,83	90	35,95	15	1	16	1,45	-	12	3
12,75	90	38,85	16	1	17	2,05	-	13	3
13,66	90	41,70	17	2	19	1,30	1,30	14	3
14,57	90	44,55	18	2	20	1,58	1,58	15	3
15,48	110	47,35	20	1	21	1,35	-	12	4
16,39	110	50,20	21	1	22	1,90	-	13	4
17,30	110	53,05	22	2	24	1,23	1,23	13	4
18,21	110	55,90	23	2	25	1,50	1,50	14	4
19,12	110	58,80	25	1	26	1,30	-	15	4
20,03	110	61,65	26	1	27	1,85	-	15	4
20,94	110	64,50	27	2	29	1,20	1,20	16	4
21,85	110	67,35	28	2	30	1,48	1,48	17	4
22,76	110	70,20	30	1	31	1,20	-	18	4
23,67	110	73,05	31	1	32	1,75	-	18	4
24,57	110	75,90	33	0	33	-	-	19	4
25,49	125	78,75	33	2	35	1,43	1,43	16	5
26,40	125	81,60	35	1	36	1,10	-	16	5
27,30	125	84,45	36	1	37	1,65	-	17	5
28,22	125	87,30	37	1	38	2,20	-	17	5
29,13	125	90,20	38	2	40	1,40	1,40	18	5
30,04	125	93,05	40	1	41	1,05	-	19	5
30,95	125	95,90	41	1	42	1,60	-	19	5

Tabel 1a.- pipediameter; number of pipe lengths[2.3m]/connecting pipes and closing length(s) for a Buwatec silo as function of the silo diameter

* Distance (c.t.c.) = distance between the foam rubbers; measured from centre to centre of the foam rubbers.



GENAP INSTALLATION-INSTRUCTIONS

Govaert silo									
silo Ø [m.]	pipe Ø [mm.]	Lt buis [m.]	Number			Closinglength 1 [m.]	Closinglength 2 [m.]	Foam rubbers [pcs.]	Distance* c.t.c. [m.]
			2.3 m. [pcs.]	closing [pcs.]	connections [pcs.]				
7,04	75	20,95	8	2	10	1,28	1,28	10	2
7,92	75	23,70	9	2	11	1,50	1,50	12	2
8,80	75	26,45	11	1	12	1,15	-	13	2
9,68	75	29,25	12	1	13	1,65	-	15	2
10,56	90	31,95	13	1	14	2,05	-	11	3
11,38	90	34,55	14	2	16	1,18	1,18	12	3
12,32	90	37,50	15	2	17	1,50	1,50	13	3
14,06	90	42,95	18	1	19	1,55	-	14	3
15,82	110	48,40	20	2	22	1,20	1,20	12	4
17,52	110	53,75	22	2	24	1,58	1,58	13	4
20,14	110	62,00	26	1	27	2,20	-	16	4
22,85	110	70,50	30	1	31	1,50	-	18	4
24,52	110	75,75	32	1	33	2,15	-	19	4
25,50	125	78,80	33	2	35	1,45	1,45	16	5
27,25	125	84,25	36	1	37	1,45	-	17	5

Tabel 1b.- pipediameter; number of pipe lengths[2.3m]/connecting pipes and closing length(s) for a Govaert silo as function of the silo diameter

* Distance (c.t.c.) = distance between the foam rubbers; measured from centre to centre of the foam rubbers.



GENAP INSTALLATION-INSTRUCTIONS

Hendic silo									
silo Ø [m.]	buis Ø [mm.]	Lt buis [m.]	Number			Closinglength 1 [m.]	Closinglength 2 [m.]	Foam rubbers [pcs.]	Distance* c.t.c. [m.]
			2.3 m. [pcs.]	closing [pcs.]	connections [pcs.]				
7,37	75	22,00	9	1	10	1,30	-	11	2
8,30	75	24,90	10	1	11	1,90	-	12	2
9,22	75	27,80	11	2	13	1,25	1,25	14	2
10,13	90	30,60	12	2	14	1,50	1,50	10	3
11,06	90	33,50	14	1	15	1,30	-	11	3
12,00	90	36,45	15	1	16	1,95	-	12	3
12,80	90	39,00	16	1	17	2,20	-	13	3
13,83	90	42,20	17	2	19	1,55	1,55	14	3
14,75	90	45,10	19	1	20	1,40	-	15	3
15,67	110	47,95	20	1	21	1,95	-	12	4
16,59	110	50,85	21	2	23	1,28	1,28	13	4
17,50	110	53,70	22	2	24	1,55	1,55	13	4
18,43	110	56,60	24	1	25	1,40	-	14	4
19,36	110	59,55	25	1	26	2,05	-	15	4
20,30	110	62,50	26	2	28	1,35	1,35	16	4
21,20	110	65,30	27	2	29	1,60	1,60	16	4
22,12	110	68,20	29	1	30	1,50	-	17	4
23,04	110	71,10	30	1	31	2,10	-	18	4
23,96	110	74,00	31	2	33	1,35	1,35	19	4
24,90	110	76,95	33	1	34	1,05	-	19	4
27,65	125	85,55	36	2	38	1,38	1,38	17	5

Tabel 1c.- pipediameter; number of pipe lengths[2.3m]/connecting pipes and closing length(s) for a Hendic silo as function of the silo diameter

* Distance (c.t.c.) = distance between the foam rubbers; measured from centre to centre of the foam rubbers.



GENAP INSTALLATION-INSTRUCTIONS

Brinkman silo									
silo Ø [m.]	pipe Ø [mm.]	Lt buis [m.]	Number			Closinglength 1 [m]	Closinglength 2 [m]	Foam rubbers [pcs.]	Distance* c.t.c. [m.]
			2.3 m. [pcs.]	closing [pcs.]	connections [pcs.]				
7,32	75	21,80	9	1	10	1,10	-	11	2
8,24	75	24,70	10	1	11	1,70	-	12	2
9,15	75	27,55	11	1	12	2,25	-	14	2
10,06	90	30,40	12	2	14	1,40	1,40	10	3
10,98	90	33,25	14	1	15	1,05	-	11	3
11,90	90	36,15	15	1	16	1,65	-	12	3
12,81	90	39,00	16	1	17	2,20	-	13	3
13,72	90	41,90	17	2	19	1,40	1,40	14	3
14,64	90	44,75	19	1	20	1,05	-	15	3
15,65	110	47,90	20	1	21	1,90	-	12	4
16,47	110	50,45	21	2	23	2,15	-	13	4
17,39	110	53,35	22	2	24	1,38	1,38	13	4
18,30	110	56,20	24	1	25	1,00	-	14	4
19,22	110	59,10	25	1	26	1,60	-	15	4
20,13	110	61,95	26	1	27	2,15	-	15	4
21,05	110	64,85	27	2	29	1,38	1,38	16	4
21,96	110	67,70	29	1	30	1,00	-	17	4
22,88	110	70,60	30	1	31	1,60	-	18	4
23,79	110	73,45	31	1	32	2,15	-	18	4
24,71	110	76,35	32	2	34	1,38	1,38	19	4
25,62	125	79,15	33	2	35	1,63	1,63	16	5
26,54	125	82,05	35	1	36	1,55	-	16	5
27,45	125	84,90	36	1	37	2,10	-	17	5
28,37	125	87,80	37	2	39	1,35	1,35	18	5
29,28	125	90,65	38	2	40	1,63	1,63	18	5
30,20	125	93,55	40	1	41	1,55	-	19	5

Tabel 1d.- pipediameter; number of pipe lengths[2.3m]/connecting pipes and closing length(s) for a Brinkman silo as function of the silo diameter

* Distance (c.t.c.) = distance between the foam rubbers; measured from centre to centre of the foam rubbers.

