

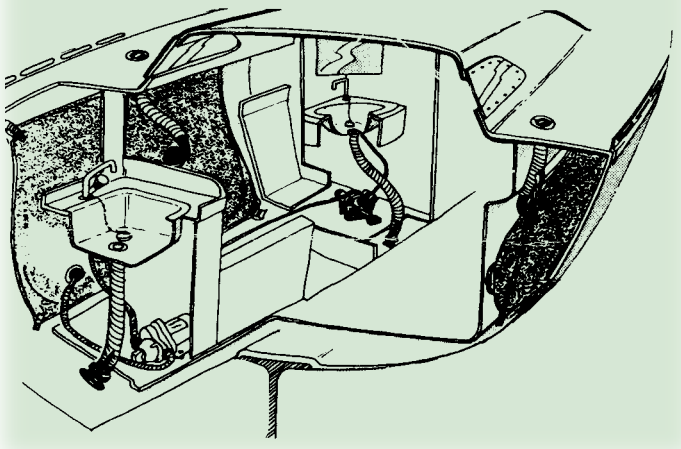


Pennel & Flipo

FOR WATER

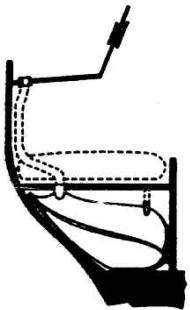
Our most popular application is also the easiest way to increase or replace water capacity on boats whose tank is inadequate or deteriorated. NAUTA® flexible water tanks use an exclusive Tedlar® inside lining to maintain a taste-free system most PVC, fiberglass, other plastics and metal contribute a distinct, unpleasant flavour to fresh water, Tedlar® does not. No venting is required for water tanks; only a fill pipe and a simple draw line to head and / or gallery pumps.

5 years warranty coverage.



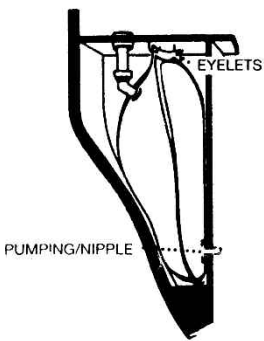
Filling from the highest point

Allows any air to escape that might have entered during the filling. Pumping should be done just above the lowest point, which is the highest water level.



For a vertical positionned tank

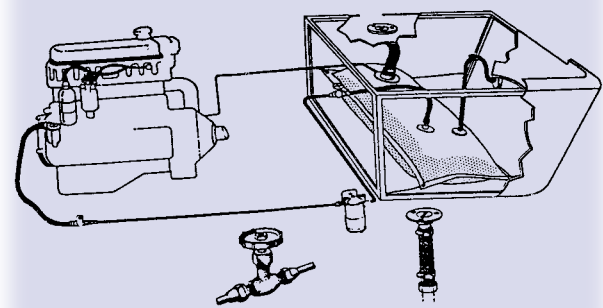
The tank must be maintained empty by its eyelets. Once filled, the tank is held in place by the walls surrounding it, and thus is no longer free. Installation of nipples is done in the same manner as for rigid tanks.



FOR DIESEL

BIG CAPACITY GAS TANK

NAUTA® flexible gas tanks can dramatically extend the range of powered sail and motor boats. They can be deck or cockpit mount to



gravity feed (or be hand-pumped) to tankage below decks. And, when empty, these tanks can be rolled up and stowed. Sport and commercial fishermen heading into offshore waters and cruisers visiting remote ports (where refuelling may be unavailable or of suspect quality) will find these NAUTA® tanks an ideal, low cost solution. NAUTA® gas tanks of 200 litres capacity and larger are supplied with adjustable hold-down straps with D-rings. Two N.P.T brass fittings allow this system allow this system to connect with conventional fuel line.

1 year warranty coverage

PORTABLE GAS TANK

NAUTA® flexible portable tanks are a remarkable improvement over the traditional painted metal tanks. Perhaps the most noticeable change : they do not live rust rings on the floorboards or cockpit sole.



These roll-up when empty tanks offer convenience in use and in stowage. They are also more comfortable to carry than most rigid tanks. They do not rust, will not scrape your paint, are easier to tie down and do not rattle when you are underway.

1 year warranty coverage

Filling and pumping from above the tank

When the tank is free and flat, pumping is done by suction. There is no air in the flexible tank. Straight nipples are used for flexible pipes arriving vertically.



Filling and pumping with a bent nipples (45°)

For firxible pipes arriving horizontally.

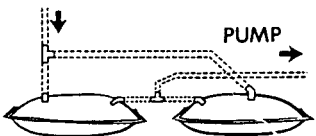


Installation of two or more tanks at the same level

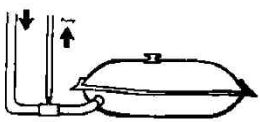
Each tank is connected directly to the pump and the drain with the aid of tees (parallel installation).

Pumping through the filling circuit

Connect the tee piece (35 mm x 15 mm x 35 mm) to the Ø 35 mm flexible pipe at the base of the tank. Join the Ø 15 mm pump pipe to the corresponding section of the tee.



Starboard and port tanks



In order to prevent the tanks from emptying into one another, a needle valve is place at the center point of the pipe connecting the tanks.

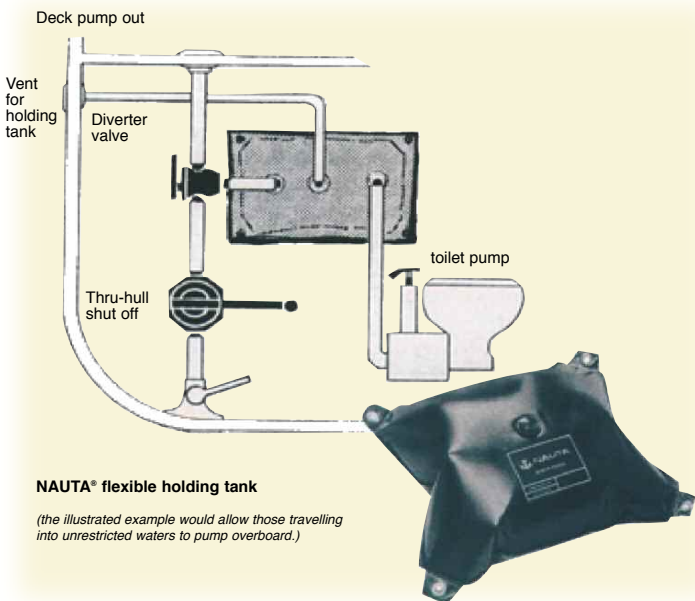
ADDITIONAL FITTINGS

We have designed a comprehensive range of nylon fittings to be used only on NAUTA® tanks. Each type of fittings is composed of 3 parts which ensure together with the rubber seal and the rubber coated fabric a complete tightness. The necessary fitting for self-installation at the most suitable location on the tank wall. Generally, vent fittings are required on holding or gas tanks (not required on water), should be positioned at the higher end of the tank, while draw fittings are best located at the lower end. Under no condition should fittings be installed on the bottom side of the tank. All fittings should be installed on the top half of the tank and not closer than 4" to the edge and not through a seam doubler.

FOR HOLDING : A SOLUTION FOR POLLUTION

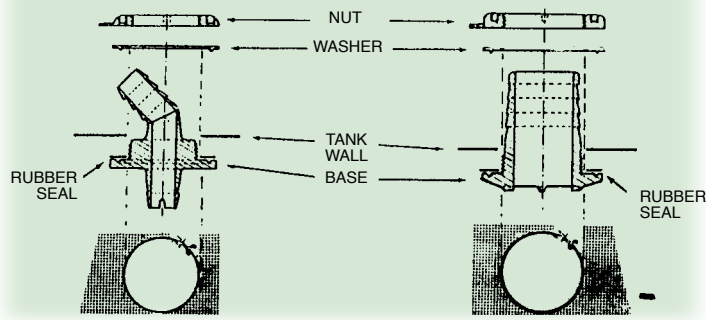
The more rigorously enforced laws against over-board discharge now make non-compliance extremely costly. A NAUTA® flexible holding tank, on the other hand, provides a relatively inexpensive Type III solution. In addition, the Teldarl® lining of these NAUTA® tanks prevents gas permeation, thus stopping a major odour problem with many other holding tanks. Combined with a few other components, this solution is both legal and far less costly than replumbing a vessel or installing a more complex and expensive Type I or Type II system : it occupies less space and requires no electrical power.

1 year warranty coverage



FITTING THE CONNECTIONS

- Fitting of the connection is generally made on the same side of the tank.
- The position of the nipple will be so that there will be a minimum margin of 100 mm between the connection and the edges of the tank.
- Use the washer (see drawing) to mark out the circumference of the hole to be made in the support. Its dimension must be the one of the washer inside.
- Then cut with scissors the marked out hole and take care to separate the two walls of the tank in order to avoid to damage the opposite wall when cutting. it is also necessary to take care not to make a hole of a bigger diameter then the one made in ref. 2.
- Bring the edges of the hole nearer by pinching the fabric and introduce the base of the nipple as a button in a button-hole.
- Place the washer with the edge on fabric side (in order to ensure the imperviousness) and then the screw ring.
- Tighten the ring with the wrench.
- Check the tightening periodically and in particular some days after the fitting installation.



MAINTENANCE

NAUTA® flexible tanks used for drinking water will operate more satisfactory if the following procedures are observed. Before putting in use for the first time, partly fill the tank with warm water (50°c) and a 1% solution of mild detergent. After a few minutes, rinse with clear water and fill it again with water treated with chlorine tablets (follow package instructions for a 5% concentration). Empty after 2 hours and carefully and thoroughly rinse with clear water. These cleaning operations should be performed with the system fully installed so that all the piping undergoes the same treatment.

When the tank will not be used for a long period (winter layup...), keep it partly filled with water and 10% of chlorine solution. Because it is not possible to completely evacuate the tank, this procedure best prevents the development of micro-organisms which could coat the inside and contribute to a bad taste in water. Before returning the tank to service, follow the same procedure as used with a new tank. Even if using your tank constantly, this cleaning operation is recommended at 6 months interval. Do not forget that the pipes also contribute to the water's taste and should be involved in the regular cleaning process.

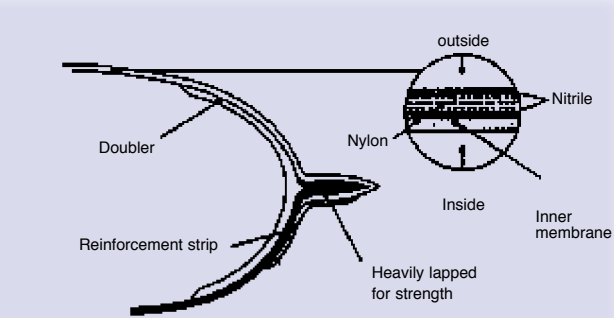
THE FLEXIBLE TANK

The technique of storing and transporting liquids through the use of flexible tanks has many advantages :

- lightness
- handiness
- adaptability
- fiability

NAUTA® FLEXIBLE TANKS provide many advantages over rigid tanks and have therefore, become very popular with both yacht-builders and boat owners.

Each of these tanks uses an extremely rugged 935-dtex nylon fabric, coated on both sides with a neoprene / nitrile compound.



Heavily lapped seams are inside-reinforced with a "doubler" to provide extra strength. All NAUTA® tanks are vulcanised to assure leakproof panels and seams for years of trouble-free service.

All are covered by a warranty

Because of their flexibility and the NAUTA® range of sizes, these tanks can fit into almost any space, especially those odd-shaped places that would otherwise be wasted.

NAUTA® tanks are very easy to work with. Several for water and holding are available with fittings already installed. But NAUTA®'s construction allows custom placement of fittings to suit your particular requirements and makes it simple to install them (see fittings).

NAUTA® - Tanks for fresh water and drinking water			
Reference	Capacity (L / Gal.)	Dimension cm	Dimension Inches
NAUTA® 911 120	55 / 14 1/2	67 * 62	26 1/2 x 24 1/2
NAUTA® 911 150	90 / 23 1/2	67 * 85	26 1/2 x 33 1/2
NAUTA® 911 160	135 / 35 1/2	67 * 115	26 1/2 x 45 1/2
NAUTA® 911 170	260 / 68 1/2	83 * 139	32 1/2 x 54 1/2
NAUTA® 911 180	200 / 52 1/2	67 * 158	26 1/2 x 62 1/4
NAUTA® 521 210	150 / 39 1/2	110 * 152 * 152	43 x 60 x 60

NAUTA® - Gas Tanks & used water holding tanks			
Reference	Capacity (L / Gal.)	Dimension cm	Dimension Inches
NAUTA® 915 120	55 / 14 1/2	69 * 64	27 X 25
NAUTA® 915 150	95 / 25	69 * 87	27 X 34
NAUTA® 915 160	140 / 37	69 * 117	27 X 46
NAUTA® 915 180	200 / 52 1/2	69 * 160	27 X 63

NAUTA® - Gas Tanks & used water holding tanks (Large Capacity)			
Reference	Capacity (L / Gal.)	Dimension cm	Dimension Inches
NAUTA® 945 621	300 / 80	139 * 127	54 1/2 x 50
NAUTA® 945 622	470 / 125	139 * 151	54 1/2 x 59 1/2
NAUTA® 945 623	600 / 160	139 * 173	54 1/2 x 62
NAUTA® 945 624	750 / 200	139 * 204	54 1/2 x 80
NAUTA® 945 625	1000 / 265	139 * 256	54 1/2 x 100 1/2
NAUTA® 945 626	1150 / 300	139 * 278	54 1/2 x 110 1/2
NAUTA® 945 627	1325 / 350	139 * 320	54 1/2 x 126
NAUTA® 945 628	1500 / 400	139 * 362	54 1/2 x 142 1/2
NAUTA® 945 630	1600 / 422	139 * 382	54 1/2 x 150 1/2
NAUTA® 945 629	2000 / 530	139 * 466	54 1/2 x 183 1/2

NAUTA® - Portable Gas Tanks for Outboard Motors			
Reference	Capacity (L / Gal.)	Dimension cm	Dimension Inches
NAUTA® 521 100	25 / 6	42 * 23 * 25	9 x 16 1/2 x 10
NAUTA® 521 101	35 / 9	42 * 32 * 25	13 x 16 1/2 x 10
NAUTA® 521 102	50 / 13	42 * 45 * 25	18 x 16 1/2 x 10
NAUTA® 521 103	70 / 18	42 * 61 * 25	24 x 16 1/2 x 10
NAUTA® 521 151 IT	35 / 9	73 * 45 * 35 * 17	29 x 18 x 14 x 7
NAUTA® 521 153 IT	70 / 18	73 * 45 * 35 * 30	29 x 18 x 14 x 12

Réf.	Description	Accessories diameter	
		mm	inch
10	Wrench to tight accessories		
501	Vent with cap	35	1 3/8
120	Complete cap	50	2
30	Complete cap	100	4
215	Screwed Nipple (US std)+cap	25	1
400	Drawing nipple	6	1/4
1300	Drawing nipple	12,7	1/2
300	Drawing nipple	15	5/8
E300	Vent (fuel)	15	5/8
1000	Vent	20	3/4
210	Drawing nipple	35	1 3/8
1210	Drawing nipple	38	1 1/2
910	Drawing nipple	42	1 5/8
110	Drawing nipple	50	2
600	Bent drawing nipple 45°	8	5/16
310	Bent drawing nipple 45°	15	5/8
220	Bent filling nipple 45°	35	1 3/8
1220	Bent filling nipple 45°	38	1 1/2
311	Bent drawing nipple 90°	15	5/8
221	Bent filling nipple 90°	35	1 3/8
2221	Bent filling nipple 90°	38	1 1/2
111	Bent filling nipple 90°	50	2
605	Tee piece	8x8x8	5/16x5/16x5/16
1320	Tee piece	12,7x12,7x12,7	1/2x1/2x1/2
320	Tee piece	15x15x15	5/8x5/8x5/8
230	Tee piece	35x35x35	13/8x13/8x13/8
1230	Tee piece	38x38x38	1 1/2x1 1/2x1 1/2
130	Tee piece	50x50x50	2x2x2
240	Tee piece	35x15x35	13/8x5/8x13/8
1240	Tee piece	38x12,7x38	1 1/2x1/2x1 1/2
200	Deck plug	38	1 3/8
900	Deck plug	42	1 5/8
100	Deck plug	50	2
101	Bent deck plug 90°	50	2
330	Water shut off valve	15	5/8
720	Strait 90 filling unit with cap	35	1 3/8
700	Strait 90 filling unit with cap	35	1 3/8
610	Robinet filtre + tube plongeur	8	1/3
630	Fuel shut off valve	12,7	1/2
2254	Brass fitting with cap	20	3/4
3254	Brass fitting with cap	38	1 1/2

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