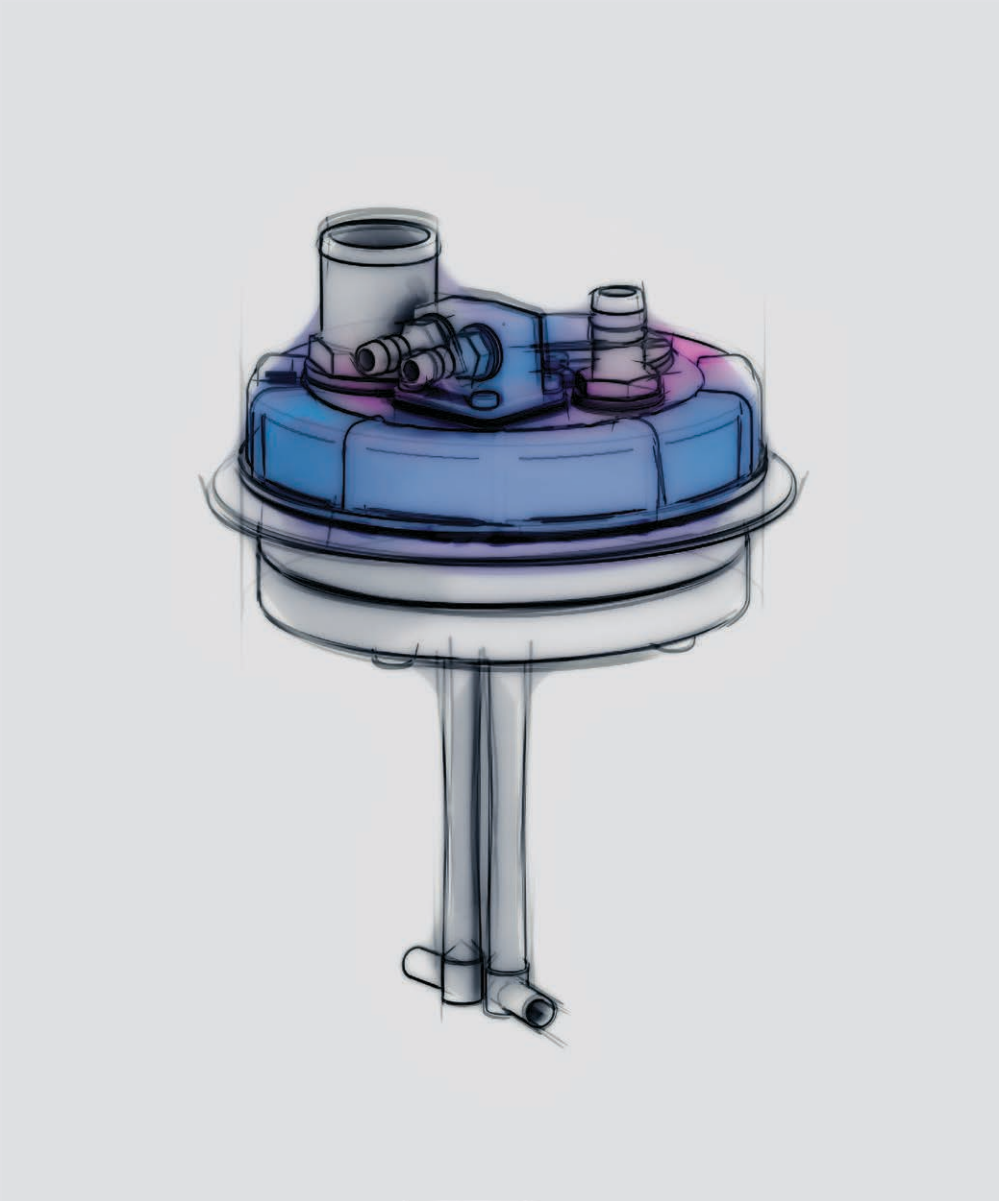
Fuel systems



Overview

Spin-on filters see page 157 - 158

VTEPB

350VTEB

75330VTEB

75350VTEB

Centrifugal filters

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75100VTE

Fuel filter hose connectors

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FFD0890

Petrol/diesel filters

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WS180

Petrol fuel filter

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320VTNEB

Fuel polisher

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NEW!

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FTANK

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FTL

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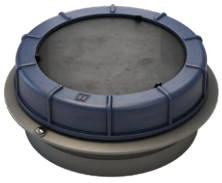


ILT120B
ILT120X

ILTCONF38

No-smell filters see page 169

NSF

NSFCAN NSFCANS

Why VETUS fuel systems?

The fuel system on a boat is a VETUS specialty. You don't have to experience that helpless feeling when an engine unexpectedly stops at a critical moment. VETUS can provide you with the best products, accessories and tips to keep your engine running smoothly, ensuring your safety, comfort and compliance with good practice and environmental regulations.

A good working fuel system

Many people are unaware of the problems that water in fuel can cause. Even a small drop of water can be extremely damaging for the fuel pump, injectors, filters and engine. Water carries dirt, rust and micro-organism through the narrow pipes into the system and when trapped, the water becomes a perfect breeding place, resulting in blockage in the fuel pump and additional wear and tear. Placing a fuel filter / water separator between the tank and the fuel lift pump will prevent damage to the engine and ensures easy starting and smooth running.

VETUS offers the following types of filters

Spin-on filters

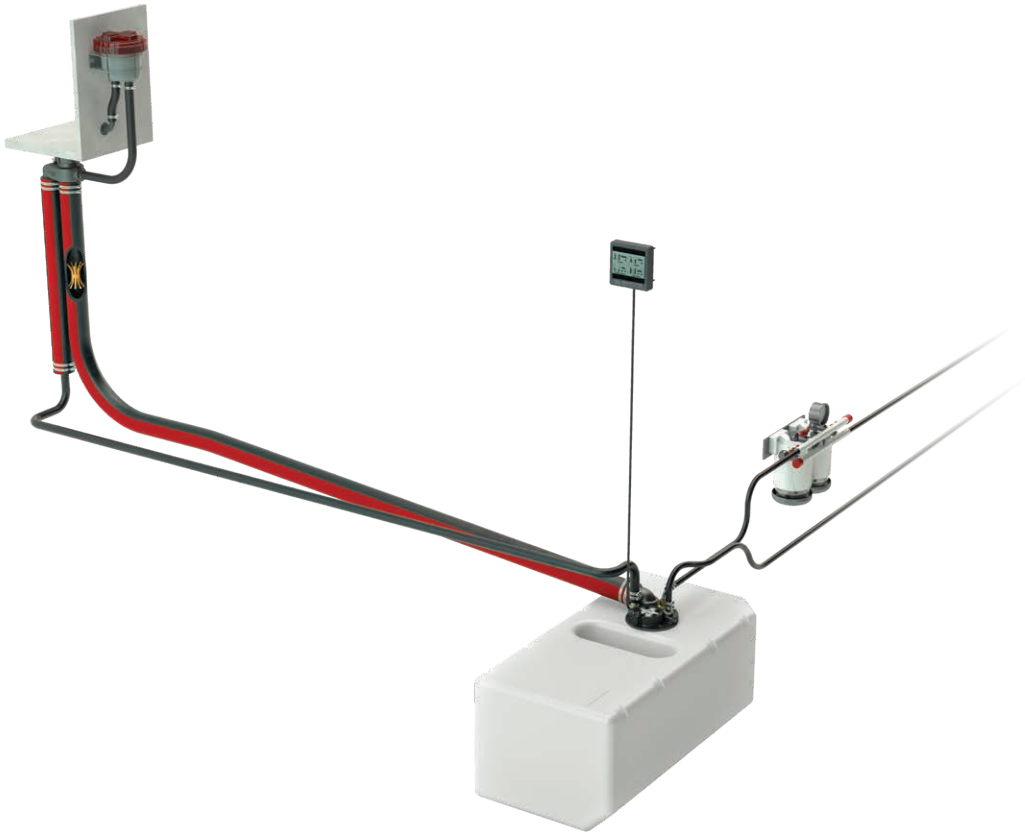
With a maximum capacity from 360 to 800 L/hr., based on a patented fuel flow system in which water is separated from the fuel before the fuel flows back through the filter element.

Centrifugal filters

With a maximum capacity of 720 up to 3600 L/hr. This modular system can be ordered in combinations of two to six filters for engines up to 5000 hp. The fuel inlet and outlet can be configured on the same or the opposite sides.

7 Reasons why you should choose a VETUS fuel system

- Our patented full-flow system gives VETUS fuel filters up to five times larger filtering surface
- Our fuel filters have a CE and ABYC approved clear bowl
- Our fuel filters use O-ring sealing for leak-free element replacement
- Our Splash Stop protects the environment by preventing fuel spillages
- Our fuel tanks are made from synthetic, corrosion free material resulting in less condensation
- Our fuel tanks FTANKA/B are ready for installation, complete with a centre point and five blind bolt holes for a SAE flange gauge sender
- Our Fuel-safe provides complete low cost protection against fuel theft



Spin-on filter

Patented fuel flow system

VETUS Spin-on fuel filters, with maximum capacities ranging from 360 to 800 L per hour, are based on a patented fuel flow system in which water and dirt is separated from the fuel before the fuel flows through the filter element. This way damage can be prevented and an easy starting, smooth running engine is guaranteed.

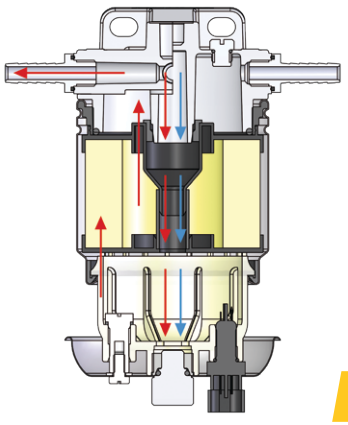
Note: All VETUS Spin-on filters meet the ISO 10088 and ABYC requirements (relating to installation in the engine room) and can withstand a fire test of 2½ minutes.

Type VTEB / VTEPB

Consistent filtering and a longer lifetime

These filters have an increased filtering surface and efficiency up to five times the surface of conventional filters. They are provided with a transparent bowl, which allows easy checking for water contamination. The elements can be easily replaced as a single unit, ruling out leakage or spills. The filters can be replaced without tools and with the engine running.

Characteristics
- Suitable for all diesel engines up to 500 hp
- A connection kit for 10 mm hose incl. three blind plugs is included
- All fittings feature O-ring sealing
- Single Spin-on filters are available with or without a manual pump to facilitate easy bleeding of the fuel system (type VTEPB)



VTEB

VTEPB

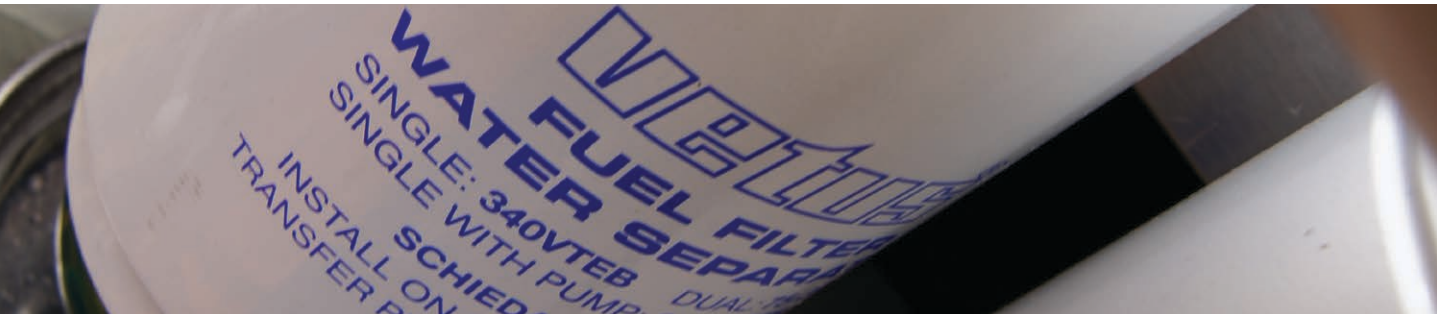
Double Spin-on filters

For boats that sail offshore

For boats that sail offshore, we strongly recommend these dual filter systems. In rougher sea conditions, dirt and water accumulated in the fuel tank becomes agitated and can rapidly clog the filter with little warning. This may result in loss of engine power and all the dangers that may present.

By turning the changeover valve, the system will switch over to a clean spare filter without having to turn off the engine. This dual filter system is supplied with a vacuum gauge which shows when the filter element should be replaced.

75...VTEB



Spin-on filter

Product overview - Spin-on filters for diesel fuel

Single Spin-on filters
with or without bleed pump

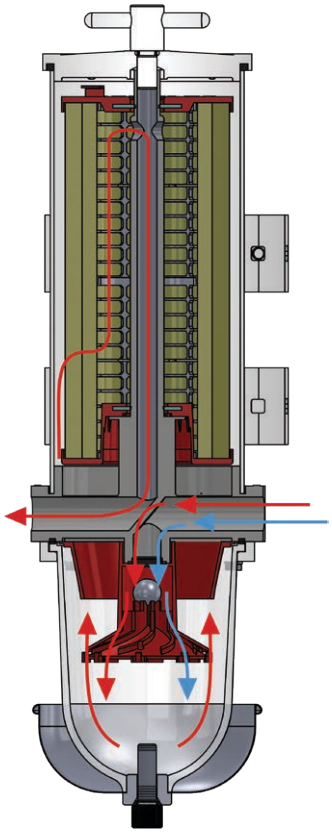
Type		330VTEB	330VTEPB	340VTEB	340VTEPB	350VTEB	350VTEPB
Max. capacity in l/hr		360	270	620	465	800	600
Version		single	with pump	single	with pump	single	with pump
Connections*		M16 x 1.5*		M16 x 1.5*		M16 x 1.5*	
Dimensions (mm)	Height	205		265		325	
	Width	120		120		120	
	Depth	120		120		120	
Weight (kg)		1.3		1.45		1.6	
Replacement filter	10 µm (standard)	VT33EB		VT34EB		VT35EB	
	30 µm (optional)	VT33ER		VT34ER		VT35ER	
Replacement advice		Minimum annually					
Certification		Fire resistant ISO 10088					

*A connection kit for 10mm hose and three blind plugs is standard supply

Double Spin-on filters
Parallel or in line

Type		75330VTEB	75340VTEB	75350VTEB
Max. capacity in l/hr		360	620	800
When both filters are in use		380	760	920
Version		Double	Double	Double
Connections		R ½	R ½	R ½
Dimensions (mm)	Height	305	365	425
	Width	310	310	310
	Depth	167	167	167
Weight (kg)		4,7	5	5,3
Replacement filter	10 µm (standard)	2 x VT33EB	2 x VT34EB	2 x VT35EB
	30 µm (optional)	2 x VT33ER	2 x VT34ER	2 x VT35ER
Replacement advice		When vacuum gauge indicates between -0.2 and -0.38 kg/cm², or annually		
Certification		Fire resistant ISO 10088		

Centrifugal filters



Modular system for effective filtering

VETUS centrifugal filters have maximum capacities ranging from 720 up to 3600 L/hr. This modular system can be ordered in combinations of two to six filters for engines up to 5000 hp. The fuel inlet and outlet can be configured on the same or the opposite sides. When determining the required capacity, it is always assumed that one filter is held in reserve. In case of a six filter configuration, five elements are in use and one is in reserve.

Note: All VETUS centrifugal filters meet the ISO 10088 and ABYC requirements (relating to installation in the engine room) and can withstand a fire test of 2½ minutes.

Specifications
- Suitable for all diesel engines up to 5000 hp
- All fittings feature O-ring sealing
- Centrifugal filters are equipped with a vacuum gauge

Multiple centrifugal filters for diesel fuel

Available in parallel or in line

For the capacities, dimensions and specifications see table below.

..VTE

Type		75100VTE	79100VTE	83100VTE	87100VTE	91100VTE
Max. capacity in l/hr		720*	1440*	2160*	2880*	3600*
Version		2	3	4	5	6
Connections		R ¾	R 1	R 1½	R 1½	R 1½
Dimensions (mm)	Height	540	540	540	540	540
	Width	465	630	788	940	1100
	Depth	335	335	335	335	335
Weight (kg)		12,5	20	27,6	35	41
Replacement filter	30 µm (standard)	2 x 2020VTR	3 x 2020VTR	4x 2020VTR	5 x 2020VTR	6 x 2020VTR
	10 µm (optional)	2 x 2020VTB	3 x 2020VTB	4x 2020VTB	5 x 2020VTB	6 x 2020VTB
Replacement advice		When vacuum gauge indicates between -0.2 and -0.38 kg/cm², or once a year				
Certification		Fire resistant ISO 10088				

* When determining the required capacity it is always assumed that one filter is held in reserve. When all filters are in use, 720 l/hr (160 g/hr) can be added to the capacity!

Replacement elements for spin-on and centrifugal filters

VETUS recommends having a spare fuel filter at all times, on board. This can be done by changing over filters in a multi-filter system or by keeping a spare element on board.

Spare Spin-on filter type VT3

Comes with a 10 micron element as standard. A spare part element with a filtration of 30 micron is also available (a filter of 10 micron will filter out more dirt but will also become clogged sooner). A 30 micron element is recommended when the tank is very large, infrequently filled or the fuel used is of low quality. Filtration of 10 micron has text printed in blue and 30 micron has text printed in red.

VT3..

Replacement elements for spin-on filters

Type	Description	Filter	Spin-on filter
VT33EB	Replacement fuel filter element	10 micron	330VTEB, 330VTEPB, 75330VTEB
VT34EB	Replacement fuel filter element	10 micron	340VTEB, 340VTEPB, 75340VTEB
VT35EB	Replacement fuel filter element	10 micron	350VTEB, 350VTEPB, 75350VTEB
VT33ER	Replacement fuel filter element	30 micron	330VTEB, 330VTEPB, 75330VTEB
VT34ER	Replacement fuel filter element	30 micron	340VTEB, 340VTEPB, 75340VTEB
VT35ER	Replacement fuel filter element	30 micron	350VTEB, 350VTEPB, 75350VTEB

Spare element for centrifugal filter type 2020VT

Comes with a 30 micron element as standard. Also available in 10 micron.

Note: Filtration of 10 micron has an endcap in blue and 30 micron has an endcap in red. Just choose the product code ending with a R (red) or a B (blue) for the right spare part element.

This also holds true for older VETUS filters. These are still available and can be ordered using the code on the existing filter element that is being replaced.

2020VTR

Also available in blue (10 micron)

Replacement elements for centrifugal filters

Type	Description	Filter	Max. l/h
2020VTB	Replacement fuel filter element	10 micron	720
2020VTR	Replacement fuel filter element	30 micron	720

Fuel filter hose connectors

VETUS single 'Spin-on' fuel filters are supplied as standard with Ø 10 mm straight hose connectors. In some situations different connectors may be preferred. Therefore we offer Ø 10 mm connectors with a 90° bend, as well as straight and angled Ø 8 mm connectors.

The double 'Spin-on' filters feature a R1/2 male thread connection. For these filters both straight and angled connections of Ø 8 and 10 mm are available.

Type	Suitable for	Hose Ø (mm)	Model	Thread
FFS0800	Single spin-on filters type 330VTE(P)B, 340VTE(P)B and 350VTE(P)B	8	Straight	M16 x 1.5 male
FFS0890		8	90° Angled	M16 x 1.5 male
FFS1000		10	Straight	M16 x 1.5 male
FFS1090		10	90° Angled	M16 x 1.5 male
FFS1300		13	Straight	M16 x 1.5 male
FFS1390		13	90° Angled	M16 x 1.5 male
FFD0800	Double spin-on filters type 75330VTEB, 75340VTEB and 75350VTEB	8	Straight	G1/2 female
FFD0890		8	90° Angled	G1/2 female
FFD1000		10	Straight	G1/2 female
FFD1090		10	90° Angled	G1/2 female

FFS0890

FFD0800

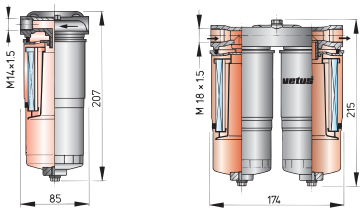
FFD0890

Petrol/diesel filters

Type WS

Filter for both petrol and diesel

Type WS180 and WS720 comply with the fire resistance test according to ISO 10088. These filters must be installed in a vertical position as close to the fuel tank as possible.



WS180

WS720

Type		WS180	WS720
Max. capacity in l/hr		180	720
Recommended capacity in l/hr		110	440
Connections	Thread	M14 x 1.5	M18 x 1.5
	Fittings	8 mm hose barb	15 mm compression fitting
Dimensions (mm)	Height	207	215
	Width	85	174
	Depth	85	85
Weight (kg)		0.7	1.5
Replacement filter	40 µm	WS180FE	2 x WS180FE
Replacement advice		After 200 service hours or annually	
Certification		Fire resistant ISO 10088	

Petrol fuel filter

Designed for use with outboard engines

Type 320VTNEB (Spin-on)

Type 320VTNEB is designed for use with outboard engines, but can also be used as a pre-filter for inboard engines. It fits petrol engines with a maximum of 500 hp.

320VTNEB

Type		320VTNEB
Max. capacity in l/hr		120
Hose connections (mm)		10
Dimensions (mm)	Height	195
	Width	116
	Depth	116
Weight (kg)		1.3
Replacement filter	10 µm	VTN32EB
Replacement advice		After 200 service hours or at least once a year
Certification		Fire resistant ISO 10088

Fuel Polisher

NEW!

Smart Diesel Maintenance - Prevents the build-up of harmful substances

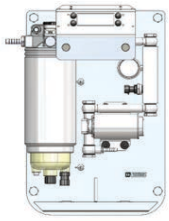
The new VETUS Fuel Polisher system has been engineered to keep your diesel in optimum condition, increasing the reliability of the fuel system and ensuring your engine to run smoothly. Designed to maintain fuel quality, this intelligent system prevents the build-up of harmful substances such as water, bacteria, and moulds. By automatically cycling the fuel at set intervals, the Fuel Polisher actively removes contaminants before they can cause damage - eliminating the need for additives.

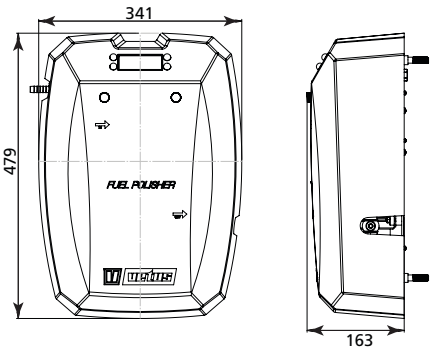
Equipped with sensors and a high-performance, hydrophobic filtration system, it delivers real-time feedback and operates through a programmable control unit. This proactive approach not only extends the lifespan of your fuel system components but also reduces costly maintenance and prevents downtime.

Specifications
- **Advanced Filtration:** Custom-designed filter separates both emulsified and standing water
- **Smart Monitoring:** Built-in sensors provide real-time system insights
- **Programmable Control:** Intelligent unit with customizable fuel cycling schedules
- **Extended Component Life:** Helps preserve filters and reduce wear on system parts
- **Cost-Efficient:** Minimizes the need for professional tank cleaning and reduces maintenance overhead

FPS12

Type	Flow rate	Voltage (DC)
FPS12	3L/min.	12V and 24V





Fuel Splash-Stop

Overflowing fuel or foam collector

The fuel Splash-stop is connected right under the deck filler plate to ensure that overflowing fuel or foam cannot flood onto the deck, soiling your deck and polluting the water.

Type FS

VETUS Splash-Stop model FS is directly connected to a deck entry plate (1), with a diameter of 38 or 51 mm (optional equipment) and has a reservoir with a capacity of approximately 2 L. Excessive fuel will flow back into the main tank through connection (2).
This connection serves as the necessary tank ventilation. The breather line to outside is to be installed as shown at (3). FS is supplied with connections for Ø 38 mm or for Ø 51 mm fuel filling hose (4).

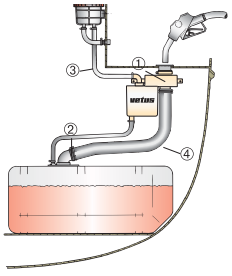
FS

FS3816
- Deck entry Ø 38 mm
- Filler hose connection Ø 38/51 mm
- Breather connection Ø 16 mm

FS5125
- Deck entry Ø 51 mm
- Filler hose connection Ø 51 mm
- Breather connection Ø 25 mm

FS5116
- Deck entry Ø 51 mm
- Filler hose connection Ø 38/51 mm
- Breather connection Ø 16 mm

Note: For use outside the engine room only!



Type	L x W x H (mm)	Hose Ø (mm)	Breather (mm)	Deck entry Ø (mm)
FS3816	250 x 120 x 215	38 / 51	16	38
FS5116	250 x 120 x 215	38 / 51	16	51
FS5125	250 x 120 x 215	51	25	51

Fuel Splash-Stop

Type FSA

The fuel Splash-stop is connected right under the deck filler plate to ensure that overflowing fuel or foam cannot flood onto the deck. The excess diesel* or petrol fuel is collected in a parallel hose which functions as a reservoir, returning the fuel back into the tank.
The capacity of the reservoir is determined by the length and diameter of the hose (see three types below). Always choose the largest reservoir possible, with a maximum of 2,2 L. The housing and hose connection are made of anodized aluminium. The fill and vent lines, hose clamps and a matching stainless steel (AISI 316) deck entry should be ordered separately. The fuel Splash-Stop meets the ISO 10088 and ABYC requirements.

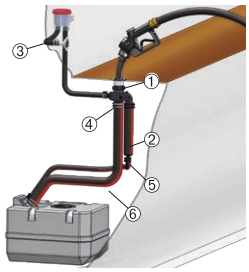
FSA3816
- Suitable for Ø 38 mm hose and 16 mm breather line
- The capacity of Ø 38 mm hose is 1,1 L p/mtr.

FSA5116
- Suitable for Ø 51 mm hose and 16 mm breather line
- The capacity of Ø 51 mm hose is 2 L p/mtr.

FSA5119
- Suitable for Ø 51 mm hose and 19 mm breather line
- The capacity of Ø 51 mm hose is 2 L p/mtr.

FSA

Type	L x W x H (mm)	Hose Ø (mm)	Breather Ø (mm)	Capacity (L p/mtr)
FSA3816	146 x 86 x 121	38	16	1,1
FSA5116	146 x 86 x 121	51	16	2
FSA5119	146 x 86 x 121	51	19	2



1. Deck entry
2. Reservoir / overflow hose and breather line
3. Tank breather line to outside
4. Splash-Stop
5. Hose connection
6. Fuel filling hose

*** Note:** A no-smell filter (for diesel only) can be fitted in the tank breather line to prevent unpleasant smells. If the filter is located well above the deck entry, the breather line may exit lower than the deck level if required.
To prevent expensive fuel theft, we recommend placing a FUELSAFE (see page 170) into the Splash-Stop.

Rigid tanks for diesel fuel

Tank with connectors type FTANKA/B

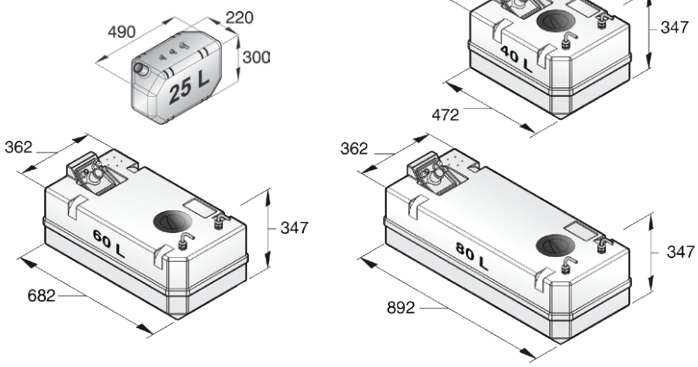
Designed for diesel fuel

This range of rigid VETUS tanks are made of high-grade polyethylene. The centre point for a SAE flange gauge sender is incorporated (except FTANK25) together with five blind bolt holes. The gauge sender should be ordered separately. Tanks are in accordance with the ISO 21487 standard.

FTANK..A **FTANK..B**

Each tank is supplied with the following connections
- Fixed hose connector Ø 38 mm (Ø 51 mm for FTANK25) for filling and 16 mm for breather line
- Rotating hose connector Ø 8 mm (type A + FTANK25) or 10 mm (type B) with pick-up pipe for suction
- Rotating hose connector Ø 8 mm (type A + FTANK25) or 10 mm (type B) for fuel-return

Type	Description	Capacity (L)
FTANK25	Synthetic diesel fuel tank	25
FTANK40A	Synthetic diesel fuel tank	40
FTANK60A	Synthetic diesel fuel tank	60
FTANK80A	Synthetic diesel fuel tank	80
FTANK40B	Synthetic diesel fuel tank	40
FTANK60B	Synthetic diesel fuel tank	60
FTANK80B	Synthetic diesel fuel tank	80



Dimensions: plus or minus 2%. Height dimensions includes connectors

Rigid tanks for diesel fuel

ATANK series

Versatile and durable

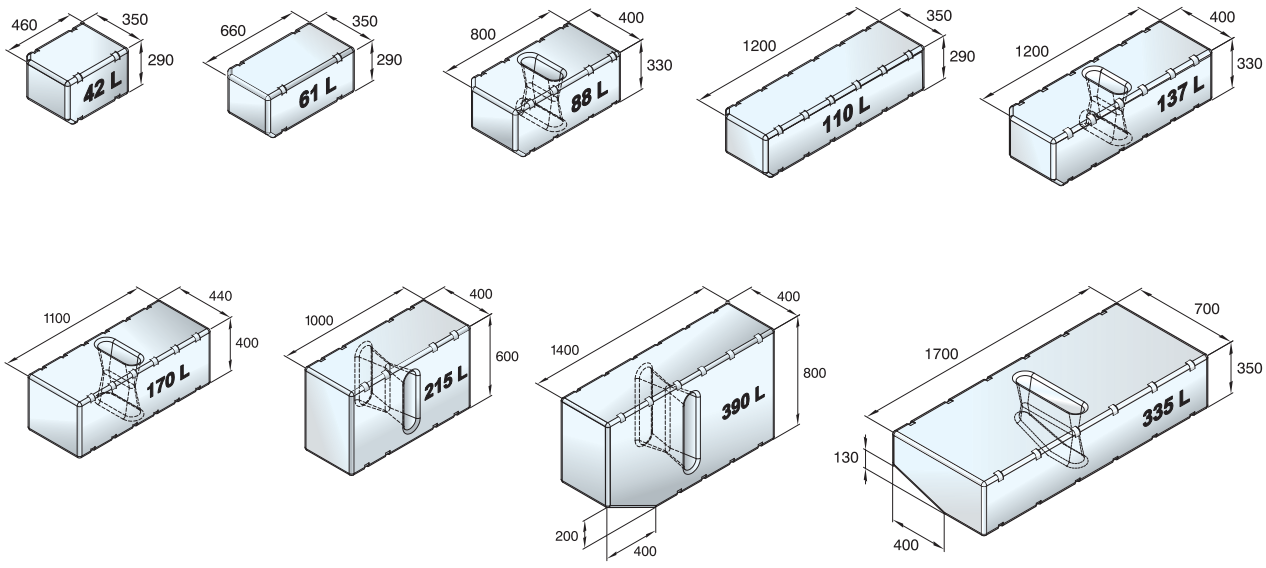
The ATANK is a strong, multi-purpose tank designed to hold diesel fuel, waste water (both black and grey) or fresh water. It is made from thick, odour-proof, high-quality polyethylene, which makes it more resistant to pressure. Unlike metal tanks, it does not corrode and produces less condensation. You can install an inspection lid and fittings wherever needed (sold separately). Labels for different types of fluids, like diesel fuel, are included.

Specifications
- Available in 42, 61, 88, 110, 137, 170, 215, 335 and 390 L
- Light blue translucent polyethylene
- Durable: Thick-walled construction
- Corrosion-resistant: Ideal for long-term use in tough environments
- Multi-purpose: Suitable for diesel fuel, waste water (black water and grey water) and fresh water
- Flexible installation: Fittings can be placed where needed

Some ATANK models include an integrated baffle that reduces liquid movement inside the tank during sailing. This improves stability and reduces noise.

Type	Suitable for	Capacity (L)	Wall thickness (mm)	Baffle integrated	Colour
ATANK042	Diesel (waste water or fresh water)	42	5		Light blue translucent
ATANK061	Diesel (waste water or fresh water)	61	5		Light blue translucent
ATANK088	Diesel (waste water or fresh water)	88	6	✓	Light blue translucent
ATANK110	Diesel (waste water or fresh water)	110	6		Light blue translucent
ATANK137	Diesel (waste water or fresh water)	137	6	✓	Light blue translucent
ATANK170	Diesel (waste water or fresh water)	170	6,5	✓	Light blue translucent
ATANK215	Diesel (waste water or fresh water)	215	6,5	✓	Light blue translucent
ATANK335	Diesel (waste water or fresh water)	335	7	✓	Light blue translucent
ATANK390	Diesel (waste water or fresh water)	390	7	✓	Light blue translucent

Dimensions: plus or minus 2%



Rigid tanks for diesel fuel

Rigid all-purpose tanks for diesel fuel - APT series

Diesel, fresh water or waste water: this tank can handle it

The APT tanks are designed to store diesel fuel, fresh water and waste water. They are made from high-quality polyethylene with an antibacterial additive. All tanks come with a large inspection lid and are prepared for the ILTCONF38 connection kit. A 38 mm hose connection at the bottom can be drilled open for interconnection or drainage.

Specifications

- Available in 50, 75, 100, 150, 200, and 275 L
- Made from high-quality polyethylene with an antibacterial additive
- Suitable for diesel fuel, fresh water or waste water
- Large inspection lid (suitable diameter +/- 130 mm) to meet ISO 21487 (fuel tank standard)
- Ø 38 mm bottom hose connection (can be drilled open if needed) for interconnection purpose or draining
- Ready for ILTCONF38 connection kit
- Easy to clean and inspect thanks to a wide access lid
- Strong and durable for long-term marine use due to design and wall thickness
- Clear identification: Supplied with labels for all contents

Type	Tank capacity (L)	Tank pressure max. (bar)	Wall thickness (mm)	Connection (mm)	Colour
APT050	50	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent
APT075	75	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent
APT100	100	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent
APT150	150	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent
APT200	200	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent
APT275	275	0,3	8	Ø 38 mm bottom outlet*, ILTCONF38-ready	Light blue translucent

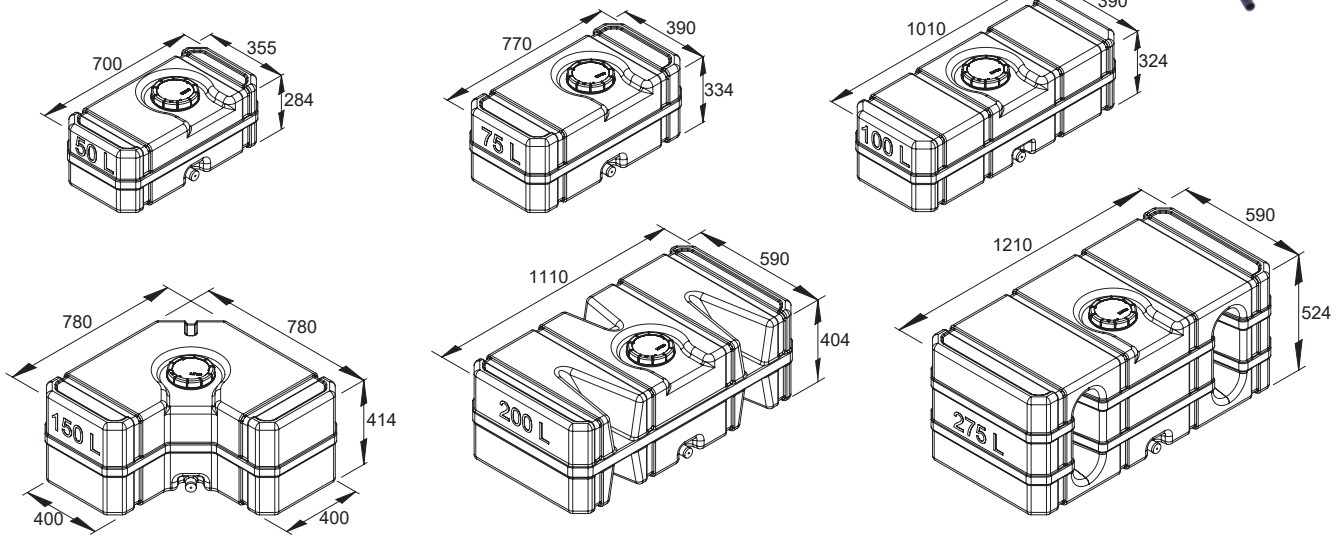
* can be drilled open if needed.

Recommended accessory - VTSTRAP lashing straps & WRILT lid opener

For secure installation of your APT tank, we recommend adding the VTSTRAP lashing strap set. A set includes two straps, each measuring 3 m long and 25 mm wide.

For easy and hassle-free lid handling, we recommend the WRILT opener (see page 168).

ILTCONF38 (Fuel)



Connection kit for rigid tanks

Type FTL....B

Saves considerable installation time

This connection kit has an anodized, salt water resistant aluminium lid with a counter flange and a rubber seal which is tightened very easily with just three bolts compressing the rubber seal to ensure a perfect seal. The set contains all the required connections, only one single hole with a diameter of 114 mm needs to be cut in the top of the fuel tank. This connection kit is suitable for synthetic, metal or GRP, diesel or petrol fuel tanks.

The following connections are supplied
- Hose connection for filling Ø 38 or 51 mm and a 16 mm tank ventilation connection
- Fuel suction pipe according to model selected
  - Ø 8 mm, max. tank depth 440 mm
  - Ø 10 mm, max. tank depth 850 mm
  - Ø 15 mm, max. tank depth 970 mm
- Fuel return for Ø 8, 10 or 15 mm hose
- Mounting flange for tank level sensors (connection is suitable for sensors with a 5-hole SAE flange)
- Terminal tag 6,3 mm for ground wire
- Two lashing straps to secure tank

Type	Filler (mm)	Supply/return Ø (mm)	Vent (mm)
FTL3808B	38	8	16
FTL3810B	38	10	16
FTL3815B	38	15	16

Type	Filler (mm)	Supply/return Ø (mm)	Vent (mm)
FTL5108B	51	8	16
FTL5110B	51	10	16
FTL5115B	51	15	16

VTSTRAP

Lashing straps with VETUS logo.

Type	Description
VTSTRAP	Lashing straps, two pieces, 3 m x 25 mm with VETUS logo

Type FTLDB

For installation of twin tanks

With this interconnection kit, two VETUS fuel tanks can be connected. The lid of this set has two 16 mm connections for tank ventilation. Two brass skin fittings (G3/4) and a coupling are supplied to connect the tanks. Including two lashing straps to secure the tank.

Type	Description
FTLDB	Connection kit for two fuel tanks
VSAW114	Ø 114 hole saw for FTL. For synthetic, G.R.P. or metal tanks

The all-in-one tank solution: the VETUS ILT system!

An inspection opening in all tanks is crucial and is a mandatory requirement for fuel tanks*, so a compliant and versatile system is the ideal solution.
Easy to install and ensuring a perfect seal, the VETUS ILT tank inspection and connection system fulfills all purposes and is suitable for freshwater, waste water and fuel tanks, whether plastic, G.R.P. or metal.

The ILT tank system passes all mandatory regulations worldwide, including the required inspection access opening size, as stated in ABYC H-33.10.3. In addition, our customers appreciate the timesaving, ease of installation and prevention of leaks.

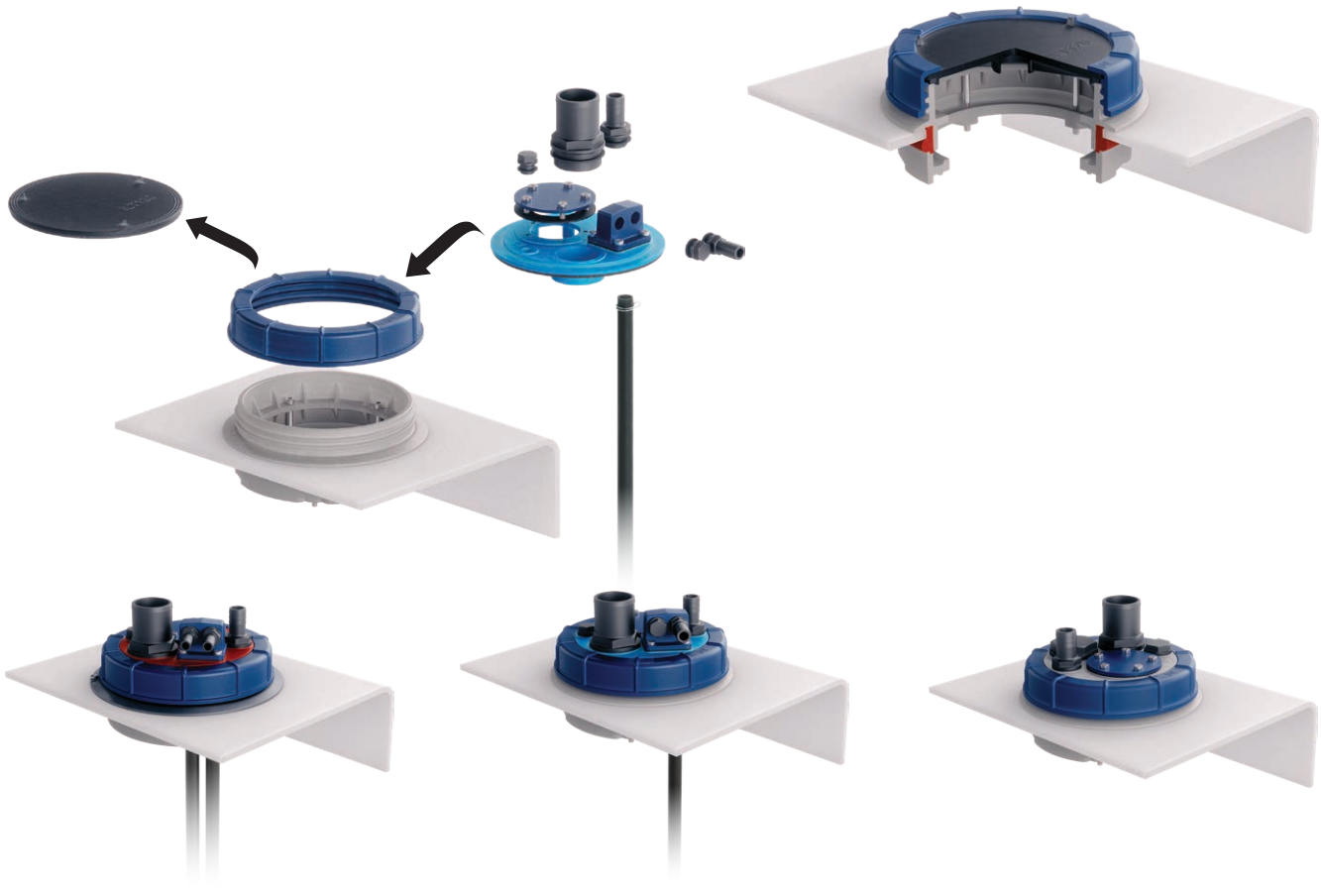
VETUS' advice is to install as many inspection lids as necessary to check, rinse, and clean the tank thoroughly as part of an annual maintenance schedule. As bacteria growth increases exponentially with time, regular preventative servicing is key to ensure these critical systems remain reliable.

The unique clamp design facilitates fast installation, easy opening, simple inspections, and cleaning of the tank. Even after being closed for a long time, the lid will open easily because there is no rotational friction to overcome. Additionally, depending on how the tank is positioned, it's even possible to inspect the inside of the tank without disconnecting the hose connections, resulting in reduced maintenance time and potentially labor cost savings.

The inspection port has a counter flange and a rubber seal which are inserted into a Ø 159 mm hole in the tank. To make the hole, we highly recommend using the VETUS hole saw VSAW159, which is available separately at a very attractive price. The only requirement is to tighten the 4 supplied bolts which compress the rubber seal to ensure perfect sealing. The 'clamp and seal' design simplifies installation, with the drilling of a Ø 159 mm hole the hardest task. Following the clear installation steps will guarantee the connections are strong and leak free. The lids come with pre-installed connections for the most common use situations. Extra connections and plugs are also supplied in the kit.

*ISO 21487 Small craft - Permanently installed fuel systems: This ISO standard requires a 120 mm inspection lid on your fuel tank. This is not only regulated by law, but also a sensible fixture given the problems that possible fuel contamination can cause.

This mandatory standard for fuel tanks includes a stringent fire test, which the ILT120B (for diesel) and ILT120X (for diesel and petrol) passed with ease. This is a unique quality, as VETUS is the only company with a certificate for a standalone ILT120 (B & X) unit.



ILT120B / ILT120X + ILTCONF38

ILT120PH / ILT120PL + ILTCOND

ILT120PH / ILT120PL + ILTCONW

Inspection ports

Universal inspection port for tanks type ILT120B and ILT120X

Innovative inspection port with robust design

The VETUS ILT is an innovative inspection port which facilitates easy opening, inspecting and cleaning the tank, even after being closed for a long time. The ILT120 is available in two ISO approved models: the ILT120B and the ILT120X. By improving the design of the cover and reinforcing the material with fiberglass, they now meet both the ISO 21487 and ISO 10088 standards.

ILT120B

ILT120X

ISO 10088 Small craft - Permanently installed fuel systems
This ISO standard requires a 120 mm inspection port in the fuel tank. This is not only regulated by law but is also a sensible fixture given the problems that possible fuel contamination can cause.

ISO 21487 Small craft - Permanently installed petrol and diesel fuel tanks
This mandatory standard for fuel tanks includes a stringent fire test, which both the ILT120B and ILT120X passed with ease! A unique performance, as we are the only company with a certificate for a standalone inspection port.

Customers who use our certified VETUS tanks together with one of these inspection ports will have an instantly approved system.

Both inspection ports have a counter flange and a rubber seal which are inserted into a Ø 159 mm hole in the tank. All that needs to be done is tighten the four supplied bolts which compresses the rubber seal to ensure perfect sealing. The “clamp and seal” design simplifies installation, making the drilling of a Ø 159 mm hole the hardest part of the installation!
The black blind plate can be replaced by connection kit ILTCONF38.

ILT120B
Suitable for (up to 10% bio)diesel tanks.
- Internal aperture: Ø 120 mm - Cut-out dimensions: Ø 159 mm
- Suitable for G.R.P., stainless steel and synthetic tanks with different wall thicknesses
- A hole saw is available separately. Article code: VSAW159

ILT120X
Suitable for petrol or (>10% bio)diesel fuel tanks.
- Viton gasket set for use with petrol or (>10% bio)diesel fuel
- Internal aperture: Ø 120 mm - Cut-out dimensions: Ø 159 mm
- Suitable for G.R.P., stainless steel and synthetic tanks with different wall thicknesses
- A hole saw is available separately. Article code: VSAW159

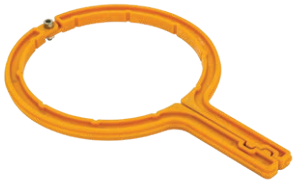
ILTCONF38

Fuel connection kit type ILTCONF38

This fuel connection disc will take care of all fuel related connections
- Ø 38 mm fuel fill connection
- Ø 8 / 10 mm fuel suction connection
- Ø 8 / 10 mm fuel return connection
- Ventilation connection Ø 16 mm
- 5 hole SAE flange tank level sensor connection
- Ø 8 mm suction connection for marine diesel heaters

WRILT - ILT lid opener

To make the opening and closing of ILT lids easy and hassle-free, we have developed the WRILT, a well-designed lid opener to facilitate the motion of stubborn lids.



WRILT

Type	Description	Diameter (mm)	Diameter hole (mm)
ILT120B	Inspection port with counter flange (ISO 10088 and ISO 21487 compliant)	120	159
ILT120X	Inspection port with counter flange and Viton ring, suitable for petrol and 10% >(bio)diesel (ISO 10088 and ISO 21487 compliant)	120	159
VSAW159	Ø 159 mm hole saw for ILT120. For synthetic, G.R.P. or metal tanks		159
ILTCONF38	Fuel connection kit		
ILTCON90	Ø 38 mm 90-degree fill connection elbow for ILTCONF38		
WRILT	Wrench for ILT120		

No-smell filters

No-smell filters for diesel tanks type NSFD/S

Remedy for escaping diesel fuel odours

With these filters, diesel fuel smells can no longer escape through the breather line, which is required for all fuel tanks on boats.
The no-smell filters are easy to install and contain activated carbon material to absorb odours. To avoid diesel fuel and froth entering the filter housing and its element, it is imperative to install in combination with a Splash-Stop (page 163). A VETUS no-smell filter should not be used for petrol tanks.

Specifications
- Model NSFD: l 148 x w 150 x h 162 mm
- Suitable for Ø 16, 19 or 25 mm connectors
- Model NSFDS: l 107 x w 111 x h 111 mm
- Only suitable for Ø 16 mm breather hose

Please note: The filter element is replaceable. Replacement can be done with traditional carbon filters or with the improved solution: the dual function filter canister type NSFCAN. It should be renewed once a year.

NSF..D NSF16DS

Type	Description	L x W x H (mm)	Hose Ø (mm)
NSF16D	Large no-smell filter	148 x 150 x 162	16
NSF19D	Large no-smell filter	148 x 150 x 162	19
NSF25D	Large no-smell filter	148 x 150 x 162	25
NSF16DS	Small no-smell filter	107 x 111 x 111	16
NSF16FES	Spare filter element for small no-smell filters		
NSF16FE	Spare filter element for large no-smell filters		

No-smell filters element type NSFCAN

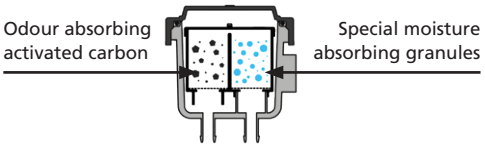
Revolutionary dual function

Type NSFCAN is a pre-filled canister with a measured quantity of activated carbon and special gel granules. The combination of gel granules and carbon provides a perfect dual function. Traditional carbon filters often lose efficiency due to humidity and condensation. The gel granules in this filter absorb the moisture which cause the efficiency loss and also ensure significantly less airborne moisture allowed into the fuel tank.

Specifications
- Suitable for new and existing VETUS no-smell filters type NSFD
- Transparent cover so you can easily see when the special gel is saturated and replacement of the canister is necessary
- The filters reduce the risk of mould and 'diesel bug' in the tank (moisture in diesel fuel can be a perfect breeding ground for mould and bacteria)
- The smaller version type NSFCANS can be used with no-smell filter NSF16DS

NSFCAN NSFCANS

Type	Description
NSFCAN	Dual function no-smell filter canister for type NSF_D filters
NSFCANS	Dual function no-smell filter canister for type NSF_DS filters



Accessories

Hole saw type VSAW

Type	Description
VSAW114	Ø 114 hole saw for FTL. For synthetic, G.R.P. or metal tanks
VSAW159	Ø 159 hole saw for ILT120. For synthetic, G.R.P. or metal tanks

VSAW114

VSAW159

FUELSAFE

No more fuel pumped out of the tank

Type FUELSAFE is made of petrol and diesel resistant synthetic material. No dismantling is required which makes installation of this safety device very simple. The synthetic packaging sleeve can be used to insert the device.

Specifications
- Dimensions Ø 55 x 72 mm
- Suitable for hoses with internal diameters of Ø 38 mm (1½") and 51 mm (2")

Type	Description
FUELSAFE	Fuel theft security device

FUELSAFE

Fuel filling hose type FFHOSE

Extremely flexible!

This type of hose, made of NBR rubber with spiralled steel inlay, is suitable for petrol and diesel fuels. Type FFHOSE meets requirements of SAE J 1527 and the standard ISO 7840 marine fuel A1 and is resistant to temperatures of -30° and up to 100°C.

FFHOSE

Type	Internal (Ø mm)	External (Ø mm)	Weight (kg/m)	Max. pressure (bar)	Bending radius (mm)	Roll length (m)	HCHDS clamp	HCS clamp
FFHOSE38	38	50	1,1	4	76	20	HCHDS047	HCS40
FFHOSE51	51	63	1,5	4	102	20	HCHDS063	HCS60

Type FHA115

Especially suitable for use with petrol because of its low permeability of less than 15 gr/m²/ 24 hour. The lining is translucent nylon for fuel and permeation resistance to 100°C. These fuel hoses have been successfully subjected to a fire test for 2,5 minutes.

Suitable for diesel fuel, bio diesel (up to B100), petrol fuel, oil and ethanol.

FHA115

Meets the highest standards: ISO 7840 marine fuel A1-15 and ISO 10088, ABYC, CARB, EPA, SAE J 1527 A1-15, NMMA Type Accepted (2618936 and 2618937), USCG A1.

Type	Internal Ø (mm)	External Ø (mm)	Weight (kg/m)	Max. pressure (bar)	Bending radius (mm)	Roll length (m)	HCS clamp
FHA11508A	8	16	0,19	7	63,5	76	HCS16
FHA11510A	10	17	0,23	7	63,5	76	HCS16

Accessories

Fuel hose type FUHOSEA

For transportation of petrol and diesel fuels

The inside is made of NBR rubber and the outside is CR rubber. This hose can also be used as a ventilation line. Available as quality type A1, which means that these fuel hoses have been successfully subjected to a fire test for 2,5 minutes and have a maximum permeability of 100 grams/m²/ 24 hour.

Meets the standard: ISO 7840 marine fuel A1.

FUHOSEA

Type	Internal Ø (mm)	External Ø (mm)	Weight (kg/m)	Max. pressure (bar)	Bending radius (mm)	Roll length (m)	HCHDS clamp	HCS clamp
FUHOSE05A	5	11	0,13	10	22	30		HCS08
FUHOSE06A	6	13	0,16	10	25	30		HCS12
FUHOSE08A	8	16	0,24	10	30	30		HCS12
FUHOSE10A	10	18	0,28	10	35	30		HCS16
FUHOSE13A	13	22	0,39	10	50	30		HCS20
FUHOSE16A	16	25	0,45	10	60	30		HCS25
FUHOSE19A	19	28	0,52	10	80	30		HCS25
FUHOSE25A	25	35	0,73	10	110	30	HCHDS034	HCS32

For a complete overview of our range of hoses see page 466. HCHDS (heavy duty) and HCS clamps are made of stainless steel (AISI 316). For a complete overview of our range of hose clamps see page 440.

Ultrasonic level sensors

Accurate, contactless tank monitoring

The VETUS SENSORA and SENSORB are advanced ultrasonic level sensors designed to monitor tank contents without any moving parts or direct contact with the liquid. These sensors can be used in diesel fuel, petrol, fresh water or waste water (black and grey water) tanks of almost any shape and size - up to 120 cm deep. Max. tank capacity 5000 L. Perfect for modern boats and yachts, they offer easy installation and high reliability. Once installed, the sensor can be calibrated on the spot using a built-in LED and wire. No extra tools are needed.

SENSORA **SENSORB**

Specifications

SENSORA - Analogue output sensor

- Contactless ultrasonic measurement for high reliability
- Compatible with all VETUS analogue tank level gauges and WWCP panel
- Easy onboard calibration with LED and a calibration wire
- Ideal for diesel fuel, petrol, fresh water, black/grey water, tanks.
- Not suitable for use with metal tanks

Specifications

SENSORB - CANbus sensor

- Uses RS485 bus interface (CANbus type)
- Designed for integration with digital VETUS display SENSORD
- Contactless, reliable, and easy to calibrate
- Ideal for high-end digital installations
- Not suitable for use with metal tanks

By using an RS485 user interface, data can be transmitted over long distances without signal loss, there is a higher degree of noise immunity, and support for eight sensors connected to one SENSORD panel.

Feature	SENSORA	SENSORB
Output interface	Analogue	RS485 Bus (CANbus)
Voltage	12 / 24 VDC	12 / 24 VDC
Current consumption	35 mA	35 mA
Max. tank depth	120 cm	120 cm
Accuracy	±5%	±5%
Temperature range	-20 °C to +70 °C	-20 °C to +70 °C
Mounting flange	SAE, 5-hole	SAE, 5-hole
Dimensions	Ø 77 mm x 23 mm	Ø 77 mm x 23 mm
Compatibility	Analogue gauges, WWCP panel	SENSORD digital display only
Suitable for	Fuel, water, black/grey water tanks	Fuel, water, black/grey water tanks
Not suitable for	Metal tanks	Metal tanks