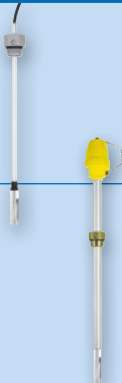

































Making Tanks Safe –

efficient heating, safe living, environmental protection!











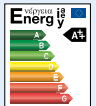







The complete range of products for profes-

	Product	Media	Application
OVERFILL ALARM SYSTEMS as per EN 13616			
	Level sensor GWG 12 K/1 With yellow or grey fitting or without fitting. GWG 12 K/1 yellow also with mechanical level indicator or withdrawal system.	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel 	   For indoor battery tanks: tanks made of sheet steel, rectangular tanks welded on site and plastic tanks. Approval for construction products: CE marking as per EC Construction Products Regulation 305/2011, EC 574/2014, EN 13616:2004
	Level sensor GWG 23 With yellow or grey fitting and fitting for wall mounting. Also with telescopic tube for height adjustment.	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel Petrol* 	   For aboveground and underground outdoor tanks as per 12285-1, 12285-2, DIN 6608, 6618, 6619, 6623, 6624, 4119 Approval for construction products: CE marking as per EC Construction Products Regulation 305/2011, EC 574/2014, EN 13616:2004 Approval yellow fitting: Ex II 1 G Ex ia IIB T3
OVERFILL PREVENTION SYSTEMS according to German AwSV			
	Overfill prevention system UFS 01 With visual/audible alarms, Test and Acknowledge buttons and 2 relay outputs.	<ul style="list-style-type: none"> Flammable and non-flammable liquids (flash point ≥ 55 °C) 	Triggers visual/audible alarms when the maximum level in stationary tanks is reached. For level probes series 76. Approval for construction products: DIBt: Z-65.11-193
TANK WITHDRAWAL SYSTEMS / SAFETY FITTINGS			
	Combination fittings Euroflex 3 / Miniflex 3 With quick-action shut-off valve, suction line, measuring line and check valve.	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel 	   Withdrawal fitting for single tanks. Approval for construction products: ÜHP
	Universal withdrawing system with level sensor chain	<ul style="list-style-type: none"> Fuel oil/diesel fuel Biofuel/biodiesel 	 Complete withdrawal system with level sensor chain for battery tank facilities. Reliable protection against overflowing by means of monitoring of all tanks. Approval for construction products: DIBt: Z-65.17-182, CE marking as per EC Construction Products Regulation EN 13616:2004
	Anti-siphon valves KAV / MAV	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel 	   For oil carrying suction pipes. Keeps fuel oil from being siphoned out of the tank in the case of leaks in the suction line. Approval for construction products: DIBt: Z-65.50-415
	Automatic fuel oil de-aerators FloCo-TOP-2 series With integrated filter, shut-off valve, pressure gauge, backflow preventer, bypass valve and drain system.	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel 	   For use in single-line systems with return line. The safety float chamber keeps oil from escaping. Multiple filtration for maximum separation of dirt particles. Approval for construction products: ÜHP, TÜV-tested: S 133 2013 E2
LEVEL INDICATORS			
	MT-Profil R Indication in cm of level	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel Biofuel/biodiesel Water 	   Mechanical level indicator for mounting on the tank. Universal application. Measuring range: 0/150 cm to 0/250 cm (reversible scale)
	Unitop Indication in % volume	<ul style="list-style-type: none"> Fuel oil EL Diesel fuel AdBlue® 	 Pneumatic level indicator. Remote indication up to 50 m. For tank heights of 0/900 to 0/3,000 mm (diesel/fuel oil) and 0/700 to 0/2,300 mm (AdBlue®).
	DTA 10 / 20 E Indication in l, % or cm liquid level 	<ul style="list-style-type: none"> Fuel oil EL, L Diesel fuel Biodiesel Water 	 Electro-pneumatic pneumatic tank contents indicator. For tank heights of 0/400 cm (fuel oil) and 0/350 cm (water). Measuring line 20 m. Universal application with liquids with a density of 0.5 to 1.5 g/cm ³ . Battery-operated. DTA 20 E including EnOcean®-inside for integration into AFRISO Smart Home.

*Special conditions apply for use in the corresponding medium.

sional tank protection and safe fuel oil storage.

	Product	Media	Application
	TankControl 10 Graphical indication of level, consumption and remaining range in l, m ³ , % or mm liquid level. Single-channel/dual-channel	<ul style="list-style-type: none"> ■ Fuel oil EL, L ■ Diesel fuel ■ Biodiesel ■ Water 	 Hydrostatic level indicator For continuous level measurement and alarms in the event of minimum or maximum levels, level differences, back-water as well as level control. For tank heights from 1,000 to 4,000 mm.
	Level switches Minimelder/Maximelder With magnetic float switch. 1 channel 	<ul style="list-style-type: none"> ■ Water ■ Fuel oil EL, L, M ■ Oil/water mixtures ■ Neutral liquids 	For alarms in the event of minimum or maximum levels. EnOcean®-ready
WATCHDOG ALARM UNITS			
	Oil alarm unit OM 5 With visual/audible alarms, Test/Acknowledge buttons and relay output. 5 channel	<ul style="list-style-type: none"> ■ Fuel oil EL, L, M ■ Diesel fuel ■ Lubricating oils ■ Gearbox oils/motor oils ■ Hydraulic oils, vegetable oils and transformer oils 	For collection facilities below oil consuming equipment, pipe and cable ducts, pumps and control stations and tanks. Approval for construction products: DIBt: Z-65.40-214, ÜHP, CE marking as per EC Construction Products Regulation pending
	Oil/water alarm unit ÖWWG 3 With visual/audible alarms, Test/Acknowledge buttons and relay output. 1 channel 	<ul style="list-style-type: none"> ■ Electrically conductive and non-conductive liquids 	Generates alarms in the event of accumulations of liquids caused by leaks, backflow, flooding, etc. Approval for construction products: DIBt: Z-65.40-339, ÜHP, CE marking as per EC Construction Products Regulation pending EnOcean®-ready
LEAK DETECTORS			
	Leak detector LAS Usable contents without additional containers from 0.7 l to 6.6 l. Also with wire mesh cylinder (E) for EX applications.	<ul style="list-style-type: none"> ■ Flammable and non-flammable water-polluting liquids 	For monitoring aboveground, double-walled containers containing leak detection fluid in the interstitial space. Approval for construction products: DIBt: Z-65.24-381
	Leak detector LAG As per German WHG and BetrSichV. For EX applications as intrinsically safe version. 1 channel	<ul style="list-style-type: none"> ■ Flammable and non-flammable water-polluting liquids (flash point ≥ 55 °C) 	For monitoring double-walled containers containing leak detection fluid in the interstitial space. Approval for construction products: CE marking as per EC Construction Products Regulation 305/2011, EC 574/2014, EN 13160-1 and ÜHP
	Eurovac leak detector Low or high vacuum type  	<ul style="list-style-type: none"> ■ Flammable and non-flammable water-polluting liquids (flash point ≥ 55 °C) ■ AdBlue® 	For monitoring aboveground or underground double-walled tanks or single-walled tanks with inner lining. Approval for construction products: CE marking as per EC Construction Products Regulation 305/2011, EC 574/2014, EN 13160-1 and ÜHP
	Leak detector Europress Pressure type  	<ul style="list-style-type: none"> ■ Flammable and non-flammable water-polluting liquids ■ AdBlue® 	For monitoring aboveground or underground double-walled tanks. Approval for construction products: CE marking as per EC Construction Products Regulation 305/2011, EC 574/2014, EN 13160-1 and ÜHP
PORTABLE MEASURING INSTRUMENTS, ANALYSERS AND TESTERS			
	Level sensor tester GPG 01 With colour display and "step by step" instructions	<ul style="list-style-type: none"> ■ Fuel oil EL, L, M ■ Diesel fuel ■ Liquid fuels or oils (flash point ≥ 55 °C) 	For full testing of level sensors which are not used in hazardous areas. For all level sensors as per EN 13616 design B1 (formerly TRbF 511)

TANK PROTECTION

Professional equipment and convincing solutions for tank protection and rainwater harvesting.

Our product portfolio for the safe operation of heating systems and fuel oil tanks reduces operating costs, helps make optimum use of fuels, provides timely warnings if hazardous situations arise and contributes to the protection of the environment. Irrespective of installation site, tank size or the fuel to be stored.



The EnOcean® wireless technology allows you to easily integrate alarm units and sensors into building automation systems and operate them conveniently via smartphones or tablets.

If used in conjunction with the event reporting system EMS, the alarm units immediately transmit a text message to signal events such as reserve level or error messages, tank contents data, fault conditions or accidents. With the AFRISO Net web service, it is also possible to visualise, log and manage data.



Advantages – your benefits

- + Complete range of products for professional tank protection from a single supplier
- + Maximum protection against fuel oil accidents with brand products with approval for construction products
- + Chemical resistance even if used with biodiesel, biofuel or admixtures
- + Absolutely odour-tight – PROOFED BARRIER® for safety fittings and tank withdrawal systems
- + Inner linings and tank room linings, exactly made to size and ready for easy installation
- + 10 years warranty on material and workmanship for plastic inner linings
- + Fittings and devices ready to be installed, with all required mounting accessories



In flood hazard areas, oil must be kept from escaping from oil tank systems as a result of buoyancy, flooding or damage due to floating refuse. All AFRISO products with the label "flood water proof" meet this requirement.

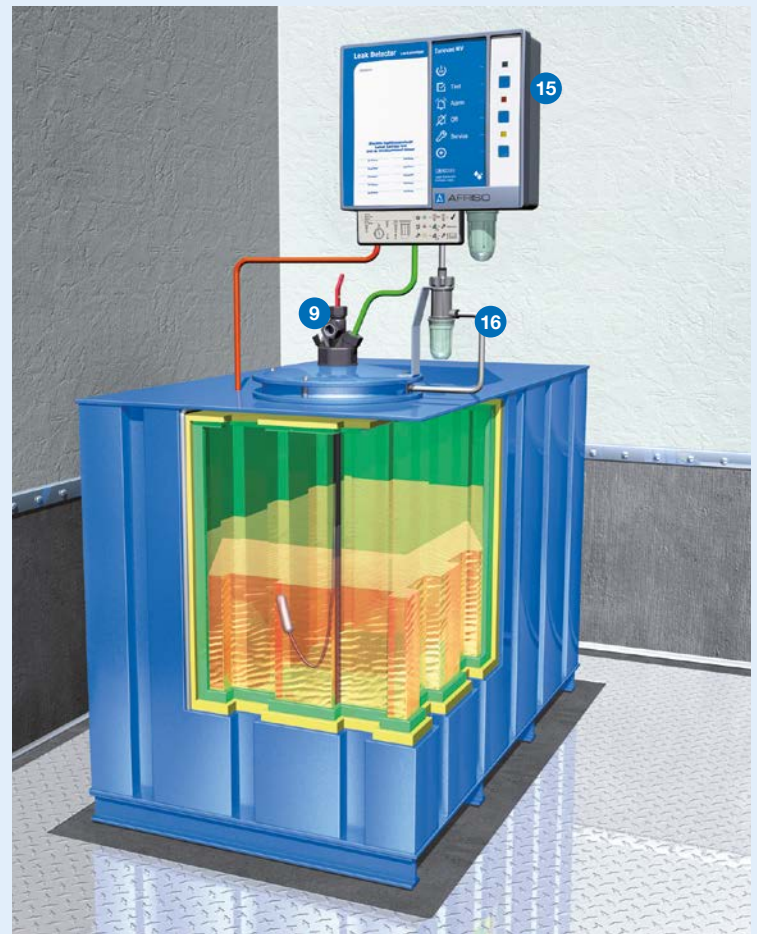
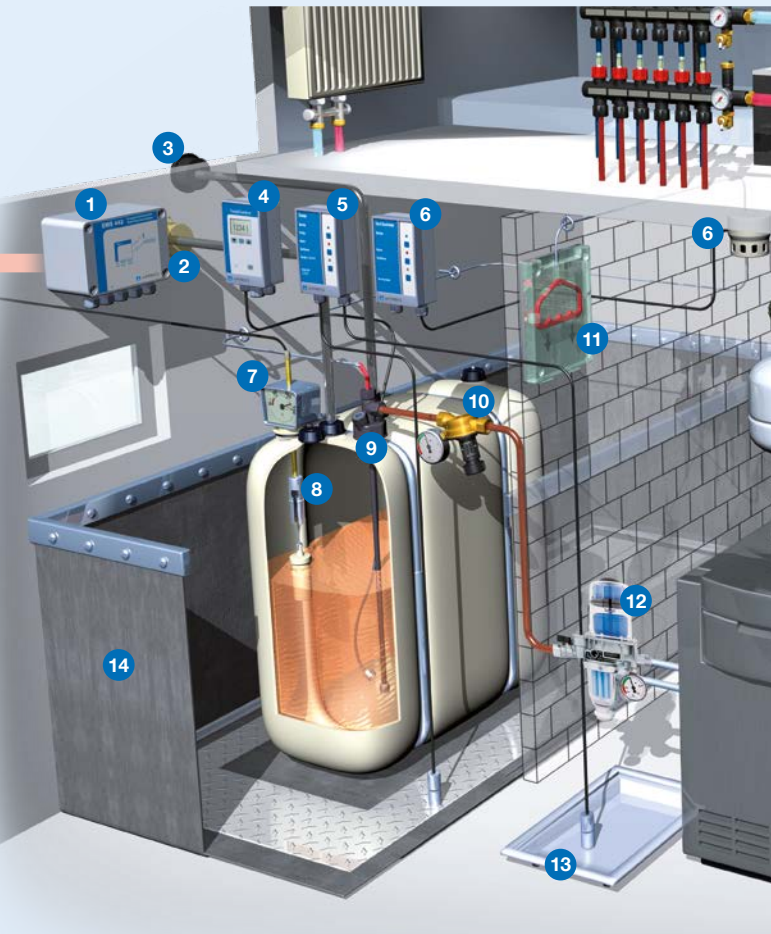


The Bio-Oil label certifies chemical resistance as well as full performance and functionality of the products even if biodiesel, biofuel or additives are used. The percentage shown corresponds to the maximum permissible admixture.



The PROOFED BARRIER® quality label is for products that are odour-tight. It is awarded by the Fraunhofer-Institut (IVV) in Freising, Germany, exclusively for components that have passed stringent initial and repeat tests.

- 1 Event reporting system EMS
- 2 Filler cap with integrated level sensor connector
- 3 Vent cap
- 4 Level indicator TankControl
- 5 Oil alarm unit OM 5
- 6 Gas detector GM 2.1
- 7 Tank contents gauge MT-Profil
- 8 Level sensor GWG
- 9 Tank withdrawal system Euroflex
- 10 Piston type anti-siphon valve KAV
- 11 Pull cord
- 12 Automatic fuel oil de-aerator FloCo-Top-2
- 13 Drip pan
- 14 Tank room lining
- 15 Leak detector Eurovac
- 16 Liquid barrier/condensate bar made of impact-resistant, weather-resistant plastic



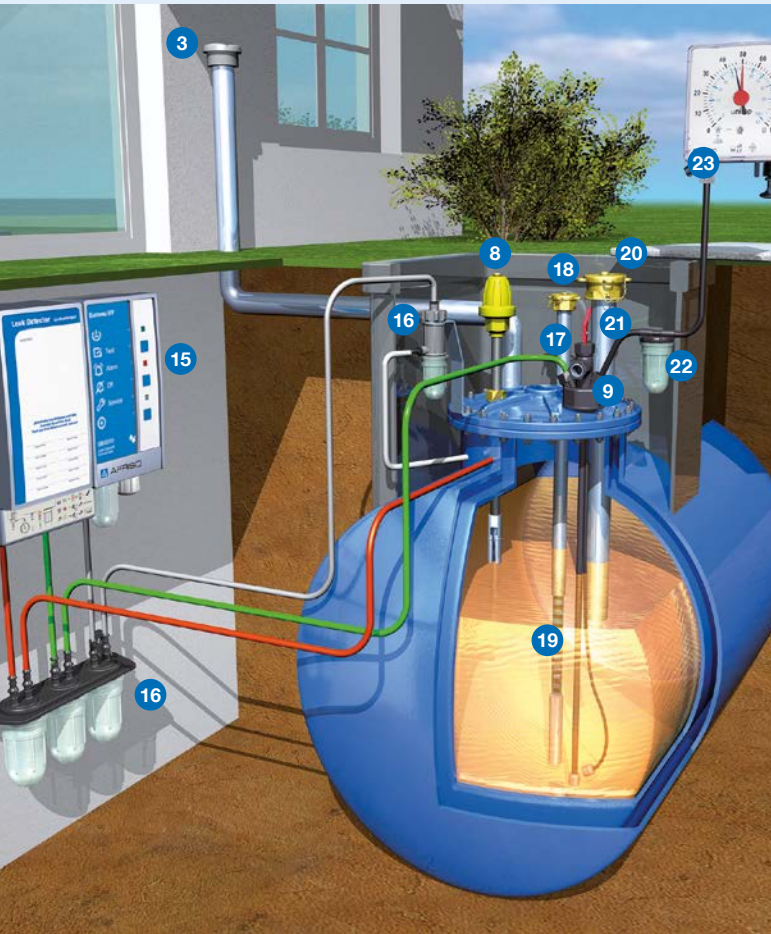
Safe operation of fuel oil systems

With a comprehensive range of building technology products, AFRISO prides itself in "Making Tanks Safe". In addition to this extensive range, a large selection of alarm instruments for the fast detection of level, liquid spillage, leakage, gas or smoke is available.

Leak protection lining

The installation of customised AFRISO leak protection linings turns single-walled steel tanks into double-walled tanks. Complex drip pans or collection facilities are no longer required. Oil cannot escape even if there is a leak in the outer tank wall. The Eurovac leak detector uses a vacuum in the interstitial space between the inner lining and the tank wall to monitor both walls for leaks. Malfunctions and leaks are immediately signalled.

- 17 Pipe for dipstick
- 18 Cap for dipstick pipe
- 19 Dipstick
- 20 Filler cap
- 21 Filling pipe with immersion pipe
- 22 Condensate trap
- 23 Level indicator Unitop
- 24 Rainwater filter
- 25 Plastic manhole cover
- 26 Level probe
- 27 Calmed inlet



Leak monitoring

Application areas

- Cylindrical steel or plastic (glass-fibre reinforced plastic) double-walled tanks
- Double-walled steel tanks
- Spherical tanks
- Tanks with inner lining
- Inspection ducts
- Oil storage rooms/collection facilities
- Containers, cisterns, cesspits

Media

- Fuel oil EL
- Diesel fuel
- Biofuel
- Biodiesel
- AHL
- AdBlue®
- Rainwater
- Other liquids

Oil tank conversion kits

If oil tanks can no longer be used or if the heating system is converted to other types of energy or if old unused cesspits and cisterns are available, the containers can be equipped with a plastic inner lining for rainwater harvesting and integrated into a rainwater harvesting system.

Various conversion kits, inner linings and a complete range of accessories are available.

AFRISO quality products

At AFRISO, quality is systematically planned and, at every stage of product development and production, managed and monitored. This is attested to by national and international approvals and certificates. Each new development is meticulously engineered, developed, documented and tested. Our wealth of experience

resulting from numerous applications, the latest production technologies and an unusually high degree of vertical manufacturing integration stand for the very highest product quality and make us a reliable partner.

4 Level indicator TankControl

For level measurement and signalling of minimum levels or level differences in tanks.

- Optimum use of fuels
- With visual/audible alarms, Acknowledge button and 2 relays
- Graphical indication of consumption and remaining range
- Remote measurements up to 15 m
- For fuel oil EL, L, diesel fuel and biofuel/biodiesel, water



10 Piston type anti-siphon valve KAV

For oil carrying suction lines. Keeps fuel oil from being siphoned out of the tank in the case of leaks.

- Piston instead of diaphragm – no pollution, icing or system overpressure
- Also for outdoor use (manhole) to -25 °C
- Height difference continuously adjustable up to max. 4 m
- Adjusted value corresponds to actual safe height



Universal withdrawing system with level sensor chain

For universal retrofitting and fitting of battery tank facilities of practically all renowned manufacturers. Depending on the version, suitable for communicating and non-communicating systems.

- Complete withdrawal system with level sensor chain
- Reliable protection against overfilling by means of monitoring of all tanks with additional float switch
- Level sensor with metallised sleeve for permanent operation even with biofuel/biodiesel

9 Tank withdrawal system Euroflex

Combination fitting ready to be installed as a tank withdrawal system for fuel oil.

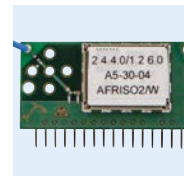
- Throughput up to 150 l/h
- Integrated measuring line connection for pneumatic level measurement (type 3)
- Quick-action shut-off valve with lever for remote closing, e.g. via pull cord
- Fast mounting with universal compression fitting
- Also acts as an isolating unit
- Options include floating withdrawal system and tank heating



15 Leak detector Eurovac

For the safe monitoring of double-walled tanks or single-walled tanks with inner lining.

- Control panel with visual/audible alarms and Acknowledge button
- High energy efficiency: economical, powerful DC motor with high starting torque
- Service indicator for annual maintenance
- Indication of pump operating time
- Switching output for additional equipment or integration into building control systems
- With power failure alarm
- EnOcean-ready



Pluggable EnOcean® wireless module TCM 320 for WATCHDOG-LINE devices. Can be ordered separately for EnOcean-ready products.

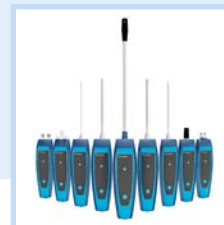


Application example: Universal withdrawing system for three battery tanks with level sensor, float switches and floating withdrawal.

The complete range:

Measuring, control and monitoring technology for domestic, industrial and environmental applications.

- Level indicators and level controllers
- Overfill prevention systems/overflow alarm systems
- Leak detectors/leak monitoring systems
- Inner tank linings
- Gas alarm units
- Equipment for fuel oil storage tanks, oil carrying pipes, boiler rooms, boilers and heating systems
- Smart Home systems
- Heating controllers
- Valves and control technology for hydraulic balancing
- Equipment for drinking water supply
- Pressure gauges and pressure controllers
- Temperature measuring instruments and temperature controllers
- Portable measuring instruments, analysers and testers
- Portable and stationary gas analysers
- Signalling devices/display units
- Event reporting and communication systems



For detailed information on our product range, please have a look at our catalogues at www.afriso.com/online-catalogue

