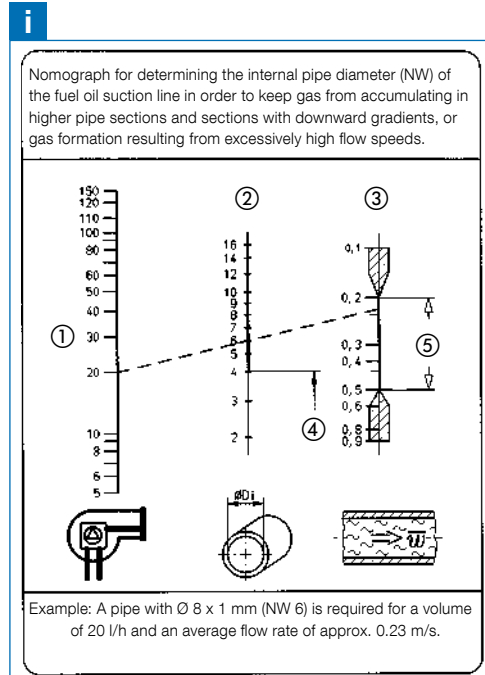


# Automatic fuel oil de-aerator comparison



	Automatic fuel oil de-aerators		Automatic fuel oil de-aerators with filter		
Version	Flow-Control 3/K	Flow-Control 3/K HT	FloCo-Top-1K	FloCo-Top-2 KM Si	FloCo-Top-2 Optimum MC-18
Catalogue page	See page 140.	See page 141.	See page 145.	See page 142.	See page 144.
Application area	Single-line systems with return line				
Media	<ul style="list-style-type: none"> <li>Fuel oil EL</li> <li>Diesel fuel</li> <li>Biofuel or bio-diesel with up to 20 % FAME</li> </ul>	<ul style="list-style-type: none"> <li>Fuel oil EL</li> <li>Diesel fuel</li> <li>Biofuel or bio-diesel with up to 100 % FAME</li> <li>Vegetable oils (colza oil)</li> </ul>	<ul style="list-style-type: none"> <li>Fuel oil EL</li> <li>Diesel fuel</li> <li>Biofuel or bio-diesel with up to 20 % FAME</li> </ul>	<ul style="list-style-type: none"> <li>Fuel oil EL</li> <li>Diesel fuel</li> <li>Biofuel or biodiesel with up to 20 % FAME</li> </ul>	
Function	Continuous de-aeration		Continuous de-aeration and oil filtration	Continuous de-aeration and multiple oil filtration	
Filters	-	-	Sintered plastic filter	Sintered plastic filter	Opticlean ultra-fine filters
Vacuum gauge	-	-	-	-0.7/+0.9 bar	
Approval for construction products	Conformity certificate (ÜHP) as per EN 12514-2				

6



**Our tip**

Only installation by expert companies certified according to the applicable regulations ensures optimum operation of the automatic de-aerators. For optimum combustion, longer nozzle and filter service life and reliable function, the expert determines the following prior to installation and compares the values with the nomograph:

- Oil throughput per hour at burner nozzle
- Inside diameter of the (installed) oil suction line
- Vacuum (overpressure) in the oil carrying pipe upstream of the burner

The oil suction line is often too large. The flow rates of 0.2/0.5 m/s, required according to DIN 4755-2, are often not reached in systems converted from dual-line to single-line mode. The nomograph shows the proper values for sizing the suction line.

- ① Nozzle consumption l/h
- ② Inside diameter of the suction line in mm
- ③ Flow rate of the fuel oil in m/s
- ④ < Ø 4 not advisable
- ⑤ Recommended range as per DIN 4755-T2

# Automatic fuel oil de-aerator

## FloCo-Top-2 TÜV-tested



### Advantages - your benefits

- Multiple filtration for maximum separation of dirt particles
- Reduced height facilitates installation if mounting space is limited
- Vacuum gauge indicates when it is time to replace the filter
- Easy installation with click system and AFRISO universal screw connection or standard screw connection
- PROOFED BARRIER if installed with vent hose
- Suitable for use in flood hazard areas

6

The oil is de-aerated via the vent hose, the system remains odour-tight. Connection via supply air of the room air-independent ventilation or via the return supply of the tank withdrawal system Euroflex.

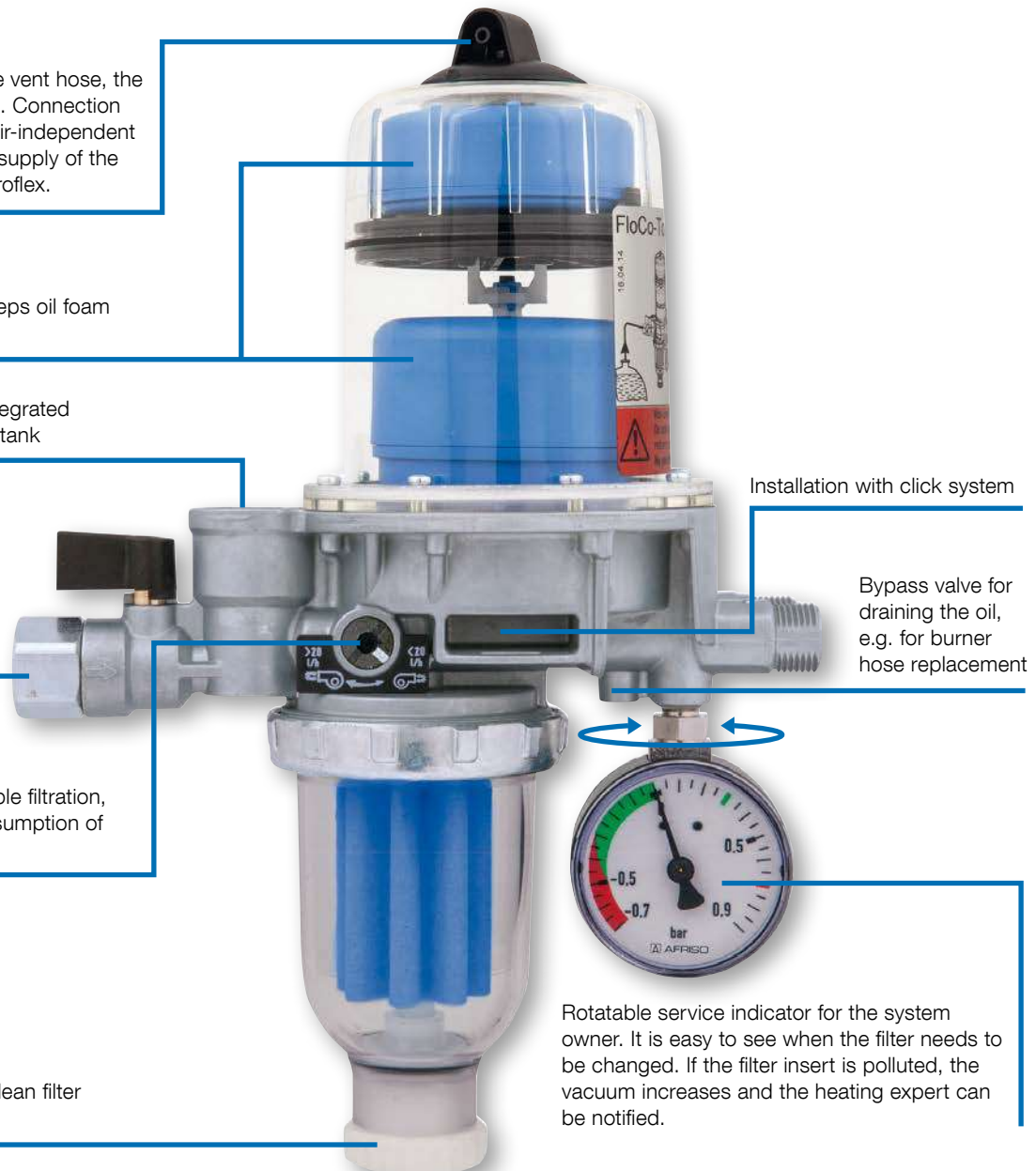
Dual float safety system keeps oil foam from escaping

Backflow preventer with integrated pressure relief towards the tank

Pipe connection via universal screw connection or standard screw connection

Changeover valve for multiple filtration, e.g. for burners with a consumption of < 20 l/h

Drain system for fast and clean filter change



Installation with click system

Bypass valve for draining the oil, e.g. for burner hose replacement

Rotatable service indicator for the system owner. It is easy to see when the filter needs to be changed. If the filter insert is polluted, the vacuum increases and the heating expert can be notified.

Opticlean MC-7



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### Innovative multiple filtration

With an Opticlean filter insert, 50 % of the particles in the circulated oil are removed with a filter rating of 5 µm (99 % separation of particles > 20 µm) per filtration. This means that several filtrati-

on processes result in a genuine 5 µm filtration! The quality of the fuel oil continuously improves.

# Automatic fuel oil de-aerator

## FloCo-Top-2 TÜV-tested



FloCo-Top-2KM SI

- Multiple filtration for maximum separation of dirt particles
- Backflow preventer with integrated pressure relief towards the tank
- Drain system for fast and clean filter change
- Bypass valve for easy and clean burner hose replacement



Page 146



Page 138

**Application** For single-line systems with return line in oil fired systems for continuous de-aeration. Suitable for the following media: fuel oil EL (DIN 51603-1) and diesel fuel (EN 590) as well as biofuel and biodiesel (EN 14214) with max. 20 % FAME. Also for use in flood hazard areas. FloCo-TOP-2 can be installed in any system. Multiple filtration is recommended for burners with an oil consumption of < 20 l/h while larger systems should be operated with single filtration.

**Description** Automatic fuel oil de-aerator, safety version, with integrated filter, shut-off valve and vacuum gauge. Housing with changeover valve for multiple filtration as well as backflow preventer with integrated pressure relief towards the tank. Compact de-aerator hood made of transparent plastic with dual float safety system to keep oil foam from escaping via the de-aerator opening. The vent hose is connected at the side in an unobtrusive way. For venting, the oil is guided via the float chamber and can then be added directly to the flow or it can be filtered again by switching a valve. In the case of multiple filtration, the return oil increases the flow rate so that the filter bowl is permanently filled with de-aerated oil. In service mode, the vacuum gauge indicates the pump vacuum. The shut-off valve can be closed to check the suction capacity of the burner pump. Increased vacuum provides information on the degree of pollution of the filter. The drain unit ensures that replacing the filter is easy and clean: Connect the hose, open the drain valve, loosen the union nut of the filter cup and drain the oil in a controlled way. When the burner hose needs to be replaced, it is sufficient to open a bypass valve so that the oil is drained from the float chamber via the filter cup and the drain unit. Watertight up to 10 m water column.

### Technical specifications

#### Burner connection

G $\frac{3}{8}$  with 60° cone for burner hoses

#### Tank connection

G $\frac{3}{8}$  female

#### Nozzle capacity

Max. 100 l/h

#### Return flow

Max. 120 l/h

#### Separating capacity air/gas

> 4 l/h

#### Mounting position

Float housing vertical to the top

#### Operating temperature range

Medium/ambient: Max. 60 °C

#### Operating overpressure

Max. 0.7 bar (corresponds to static oil column of approx. 8 m)

#### Test pressure

6 bar

#### Vacuum gauge

Range: -0.7/+0.9 bar

#### Dimensions (W x H x D)

Short cup: 183 x 254 x 103 mm

Long cup: 183 x 348 x 103 mm

#### Material

Housing: Zinc die cast

De-aerator hood: Transparent plastic

Filter cup: Transparent plastic

#### Approval

TÜV-tested (S 133 2013 E2)

#### Approval for construction products

Conformity certificate (ÜHP)

as per EN 12514-2

#### Scope of delivery

- Fuel oil de-aerators
- Universal screw connections for pipes Ø 6/8/10 mm
- Bracket with mounting material
- Cover for connection of the vent hose
- Drain hose

# Automatic fuel oil de-aerator

## FloCo-Top-2 TÜV-tested



DG: G, PG: 1		Filters	Filter surface			Part no.	Price €
	<b>FloCo-Top-2KM Si</b>	Sintered plastic sieve short, 50 µm	115 cm <sup>2</sup>	1	-	<b>70110</b>	
	<b>FloCo-Top-2KM MS-5</b>	Opticlean MS-5 short, 20–35 µm	500 cm <sup>2</sup>	1	-	<b>70134</b>	
	<b>FloCo-Top-2KM Optimum Si</b>	Sintered plastic sieve Optimum, 50 µm	200 cm <sup>2</sup>	1	-	70115	
	<b>FloCo-Top-2KM MC-7</b>	Opticlean MC-7 short, 5–20 µm	700 cm <sup>2</sup>	1	-	70112	
	<b>FloCo-Top-2KM Optimum MC-18</b>	Opticlean MC-18 long, 5–20 µm	1,850 cm <sup>2</sup>	1	-	<b>70114</b>	
Spare parts			PG				
	<b>Vacuum gauge</b>	-0.7/+0.9 bar	2	1	10	<b>70030</b>	
	<b>Bracket</b> for FloCo-Top-2 series	-	1	1	-	<b>70127</b>	

6