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	▪ Fuel oil EL ▪ Diesel fuel ▪ Biofuel or bio-diesel with up to 20 % FAME	▪ Fuel oil EL ▪ Diesel fuel ▪ Biofuel or bio-diesel with up to 100 % FAME ▪ Vegetable oils (colza oil)	▪ Fuel oil EL ▪ Diesel fuel ▪ Biofuel or bio-diesel with up to 20 % FAME	▪ Fuel oil EL ▪ Diesel fuel ▪ Biofuel or biodiesel with up to 20 % FAME	
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				

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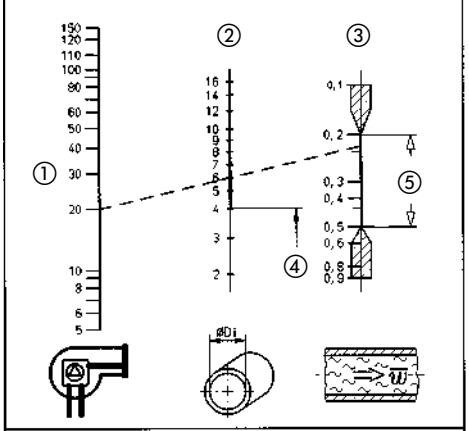
Nomograph for determining the internal pipe diameter (NW) of the fuel oil suction line in order to keep gas from accumulating in higher pipe sections and sections with downward gradients, or gas formation resulting from excessively high flow speeds.



Example: A pipe with Ø 8 x 1 mm (NW 6) is required for a volume of 20 l/h and an average flow rate of approx. 0.23 m/s.

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 Flow-Control 3/K TÜV-tested

- **Trouble-free operation due to automatic de-aeration**
- **Dual float safety system keeps oil foam from escaping**
- **Considerably increased fuel oil filter service life – the amount of oil drawn from the tank corresponds exactly to the oil actually burnt**
- **The suction line can usually have a smaller cross section**

"PROOFED BARRIER" if installed with vent hose

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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 with max. 20 % FAME. Also for use in flood hazard areas. The risk of a leak in the return line going unnoticed is removed with Flow-Control. It is no longer necessary to regularly check the return line for leaks.

Description

Automatic fuel oil de-aerator consisting of a diecast zinc housing with female G¼ connection thread at the tank end and male G⅜ connection threads with 60° cone at the burner end for connection of the burner hoses. De-aerator hood made of transparent plastic. Flow-Control 3/K features two separate float chambers. The lower float chamber contains the operating float; the upper float chamber contains the safety float. The upper float chamber keeps oil foam from escaping via the vent opening (e.g. during commissioning/filter exchange) and indicates malfunctions of the vent valve. An oil hose with ball-shaped sealing for 60° cone and a G⅜ union nut is supplied for connection to the fuel oil filter. Watertight up to 10 m water column. All Flow-Control versions are TÜV-tested.

Flow-Control 3/K (G¼) with G¼ female thread instead of G⅜ male thread.

Technical specifications

Burner connection
G⅜ male with 60° cone for burner hose or G¼ female (part no. 69978)

Tank connection
G¼ female or oil hose G¼male x G⅜ union nut for connection to filter

Nozzle capacity
Max. 100 l/h

Return flow
Max. 120 l/h

Separating capacity air/gas
Approx. 4 l/h

Mounting position
Float housing vertical to the top

Operating temperature range
Medium: Max. 60 °C
Ambient: Max. 60 °C

Operating overpressure
Max. 0.7 bar
corresponds to static oil column of approx. 8 m

Test pressure
6 bar

Dimensions
W x H x D: 95 x 147 x 95 mm

Approval
TÜV-tested (S 133 2013 E2)

Approval for construction products
Conformity certificate (ÜHP)
as per EN 12514-2

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The devices must not be subjected to undiluted additives, alcohol and acids.

DG: G, PG: 1			Part no.	**Price €**
Flow-Control 3/K	1	-	**69930**	
Flow-Control 3/K (G¼)	1	-	69978	