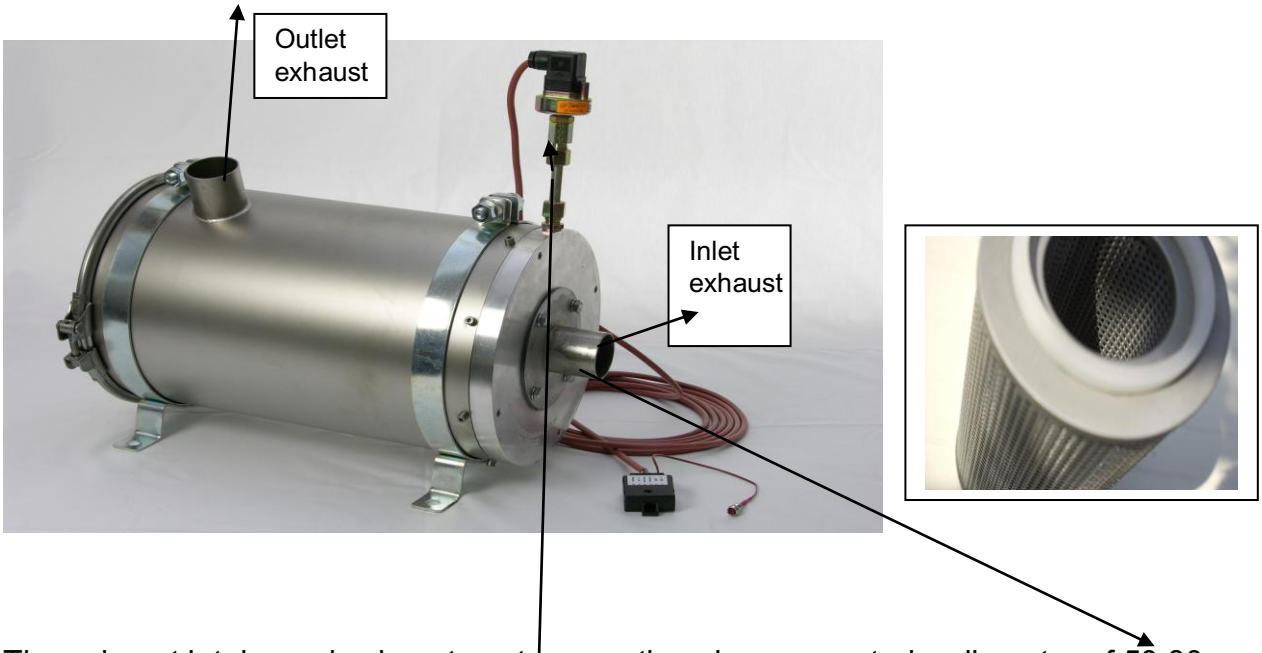
AGRIEMACH LTD

Assembly and Operating Instructions

Agriemach Cartridge Diesel Particulate Filter

The filter casing is fabricated of Werkst. No. 1.4301 stainless steel and tool-grade AlMgSi1 aluminum. The non-flammable filter cartridge contains a multilayer filter which ensures a long life cycle.
The Agriemach particulate filter can be mounted vertically, horizontally, or obliquely.

Model 300-3 particulate filters are not substitutes for mufflers.



The exhaust intake and exhaust vent connections have an exterior diameter of 50,80 or 135 mm. The axial boring on the aluminum flange is the exhaust intake. The flange, used to fasten a flexible tube or exhaust tubing, is included in delivery. When fitting the particulate filter care should be taken to ensure that the tubing leading to the filter does not become constricted.

The aluminum flange has a ¼“ thread which accepts an Ermeto pipe which is then fastened to the pressure switch.
The particulate filter should be assembled with the Ermeto tube pointing upwards (condensation, which is mixed with soot, prevents proper dynamic pressure monitoring).
The retaining ring on the casing cover is intended for condensation draining. It is stopped with a screw. To prevent condensation from accumulating in the filter the silicon tube should be screwed into the ¼“ thread. Condensation arises from frequent short-time operation.

The pressure adjuster is set to 145mbar. It comes with a printed circuit board in a black enclosure and a 5m silicon cable. It is desirable that the printed circuit board be mounted out of harm’s way. A buzzer is also located in the black enclosure of the printed circuit board. The voltage required by the printed circuit board, 12V or 24V, is indicated on the enclosure. A time-delay relay, set to 30 sec., is mounted on the

board. Its purpose is to interrupt dynamic pressure (motor pulsation) for 30 sec. before activating the lamp and buzzer.

Replacing filter cartridges
When replacing filter cartridges care should be taken to ensure that the filter-cartridge gasket is properly inserted in the boring of the aluminum flange.

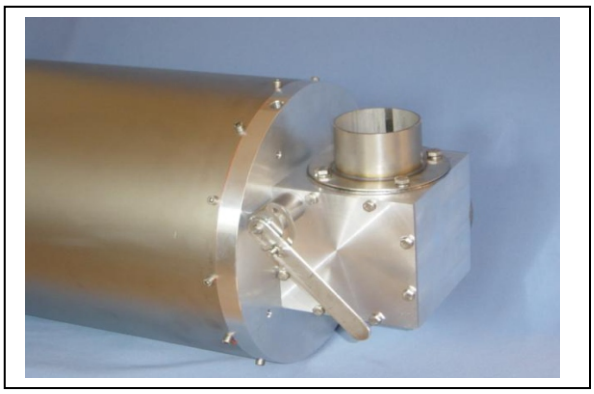
Exhaust temperature	Max. 350°C in continuous operation, 400°C for short-term operation up to 30 min.
Efficiency	>97% reduction of particulate matter emissions
Scope of delivery	Particulate filter including filter cartridge, pressure adjuster with cable, printed circuit board, LED and Ermeto tube, 2 retaining clips connecting flange with gasket and screws
Accessories available upon request	Electric valve Manual valve Flexible tube with glass fiber gasket Exhaust vent-tube Safety shield
Notice;	the delivery does not content inlet or outlet connectionpipes to exhaustsystem or endpipe.
	Conforms to TRGS guidelines.

Disposal of used filter cartridges: at Class II landfill above-ground disposal sites
- in a tied plastic bag -

Certification is available.

OPTION
Manual-Controlled Valve
for Agriemach Particulate Filter

The manually-controlled valve, Product No. BP100080, can be ordered as an accessory to the BP particulate filter. The valve is retrofittable.



Mounted manually-controlled valve

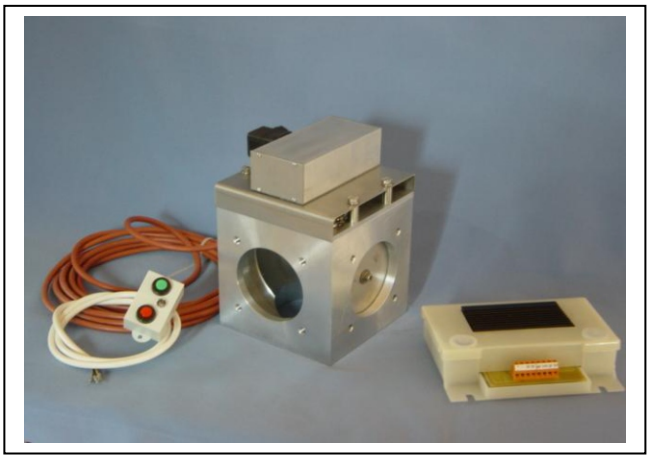
Mounting the valve

Loosen the cover of the particulate filter and remove the filter cartridge.
The valve is attached by pressing it onto the aluminum plate of the filter and inserting and tightening the four screws from the inside. Care should be taken to ensure that surfaces of contact are clean.

Option
Electrically Controlled Valve

The electrically controlled valve,Product No. BP100080, can be ordered as an accessory to the BP particulate filter. Included in deliver are:
1 drive with 5 m cable to be attached to the valve
1 printed circuit board, unmounted
1 pushbutton control unit with cable, unmounted

The valve is retrofittable.



Mounting the valve

Loosen the cover of the particulate filter and remove the filter cartridge.
The valve is attached by pressing it onto the aluminum plate of the filter and inserting and tightening the four screws from the inside. Care should be take to ensure that surfaces of contact are clean.

The valve was designed to operate on 12 or 24 Volts.The printed circuit board should be mounted out of harm's way. The pushbutton control unit should be installed in a position where it can be easily seen and operated.

Schematic diagram and mode of operation

The cable leading to the pushbutton control unit has four differentcolored wires. These wires should be left connected as they are. Changing connection will result in damage to the printed circuit board.
The pushbutton control unit has green and red pushbuttons equipped with indicator LEDs. The LEDs light during operation of the valve motor.

Pressing the green button directs the exhaust to the particulate filter; pressing the red button causes the exhaust to exit in the normal way, that is without filtration. If pressing the buttons does not produce the proper results the two wires designated MM should be interchanged.