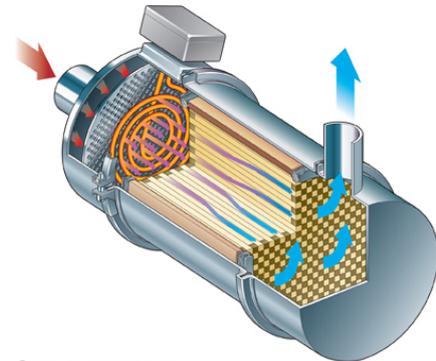


## Product Information

### Diesel Particle Filter - DPFi

Regeneration type:	Electric
Exhaust gas temperature required:	No minimum required
Regeneration time:	60-90 minutes
Max. sulphur content of diesel fuel:	<1000ppm
External structural material:	Stainless steel



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#### Please note when choosing a particle filter system:

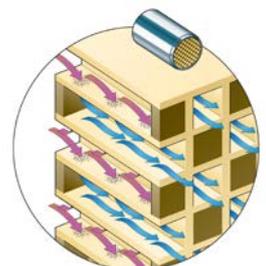
We recommend taking into consideration the maximum allowed back pressure for all engines in the Tier III/EU Stage IIIA emission group.

Filter System*	Weight** (approx., kg)	Electricity Supply	Max. Engine Output* (Tier II only)	Regeneration Time	On-Board Regeneration Control	Off-Board Regeneration Control
DPFi 30SL	9.5	220/400V 4.5 KW	30 kW	60 minutes	PIO-CAN-REG-M-4.5	PIO-CAN-REG-S-4.5
DPFi 80SL	14.5	220/400V 4.5 KW	60 kW	60 minutes	PIO-CAN-REG-M-4.5	PIO-CAN-REG-S-4.5
DPFi 120SL	29	220/400V 4.5 KW	80 kW	60 minutes	PIO-CAN-REG-M-4.5	PIO-CAN-REG-S-4.5
DPFi 130SL	29	220/400V 4.5 KW	95 kW	60 minutes	PIO-CAN-REG-M-4.5	PIO-CAN-REG-S-4.5
DPFi 2010SL	30	220/400V 4.5 KW	100 kW	90 minutes	PIO-CAN-REG-M-6	PIO-CAN-REG-S-6
DPFi 2011SL	35	220/400V 4.5 KW	125 kW	90 minutes	PIO-CAN-REG-M-6	PIO-CAN-REG-S-6
DPFi 2012SL	40	220/400V 6 KW	150 kW	90 minutes	PIO-CAN-REG-M-6	PIO-CAN-REG-S-6
DPFi 202-NT	100	220/400V 6 KW	200 kW	90 minutes	PIO-CAN-REG-M-6	PIO-CAN-REG-S-6

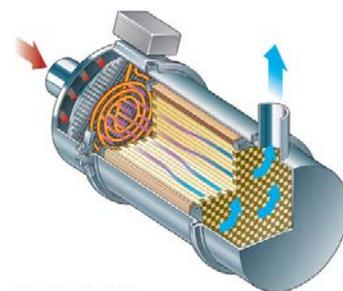
\* Specifications valid for engines without technical defects and in compliance with EU Stage/Tier exhaust gas values.  
 \*\* These details may vary depending on specific conditions.

#### Operation

The ceramic filter is enclosed and protected by a stainless steel housing. The extruded ceramic filter is made up of numerous square cells with alternately sealed parallel channels. The channel walls are porous. The alternating openings in the channels force the diesel exhaust to flow through the filter wall. The particles are trapped by the ceramic surface and pores. The filtered exhaust gas then leaves the filter through the open channel on the exit side.



The filter is regenerated by heating the soot particles collected in the filter to an ignition temperature of approximately 600°C. After reaching this critical temperature, the honeycomb structure of the filter is burned clean by feeding through oxygen from a compressor. The process is monitored by the filter monitoring system, which shows the remaining regeneration time. Depending on the filter system, regeneration takes either 60 or 90 minutes.



The filter is ready for use when the regeneration process is finished.

Filter function parameters are measured by the PIO-CAN-REG filter supplied with the unit. The integrated data logger and a protocol storage memory for service and error messages are provided for service support.

## Design

The DPFi systems are available with two different controls for maximum flexibility. In the on-board control version, all the elements required for regeneration are mounted in the vehicle. This allows for operation wherever an electrical connection is available.

In the off-board control version, the regeneration elements are built into a wall-mounted control cabinet. This system has the advantage of allowing for regeneration of several filter systems, one after another, using just one control cabinet.

Function monitoring is carried out by the PIO-CAN-REG filter monitor supplied with the unit. Both DPFi versions come with the immobilizer option. This prevents accidental movement while the regeneration system is connected to an external socket.

## Advantages of the DPFi System:

- Works at any exhaust temperature.
- Diesel fuel S content <1000ppm.
- Robust, simple construction for a long working life.
- Service-friendly modular design with quick-release system.
- Electronic filter monitor for greater operational safety in non-road settings.
- Flexible mounting options: horizontal or vertical.
- Different product lines are available for use with engine outputs from >1 kW to >250 kW.
- No muffler required as DPFi systems give noise suppression.
- Available with a choice of off-board or on-board control.

## Filter Certification and Testing

Johnson Matthey DPF-(C)CRT<sup>®</sup>, DPFiS and DPFi systems have passed Swiss VERT performance tests with outstanding results and are BAFU certified.

## BAFU Test Number B112, VERT no: B090/04.01-03/12

This certification is recognised by the following: SUVA, TBG, AUVA, UBA, MSHA, DEEP CARB and GLA-London. Outstanding levels of particle removal were achieved at all operating stages. Particle count: 99.8%.

**Please contact us for further information**

**Johnson Matthey GmbH & Co KG**  
**Otto-Volger-Straße 9b**  
**D-65843 Sulzbach /Ts.**

**Tel: + 49 6196 70 38 13**  
**Fax: + 49 6196 72 45 0**

**Email: [oliver.vehmeier@matthey.com](mailto:oliver.vehmeier@matthey.com)**

