Product Information
Diesel Particle Filter DPF-BU Active

Regeneration type: Diesel burner
Regeneration time: 20-25 minutes approx.
Housing: Stainless steel
Control: PIO-CAN-BU
Power supply: 12 V or 24 V DC
Engine Range: > 1 kW - 500 kW

DPF-BU System Applications:

Forklift trucks, telescopic handlers, platform lifts, construction machinery, stationary engines, generators, locomotives, compressors etc.

The active DPF-BU systems supplement the Johnson Matthey modular particle filter systems for non-road applications. BU systems operate at any exhaust temperature and are therefore ideal for use in applications with lower exhaust temperatures.

The filter monitor notifies the operator when filter regeneration is required. Regeneration can begin once the engine has been turned off. This fully automatic process requires no further input from the operator and uses the highly efficient burner module to burn off the soot collected in the filter module at approximately 600°C. The regeneration procedure takes an average of 20 to 25 minutes after which time the engine can be started up again.

The DPF-BU system uses an on-board power supply and requires no external energy; it can therefore be used anywhere.

Summary of Advantages:

- High rate of particle removal: >99% (particle count)
- Rapid filter regeneration
- Works at any exhaust temperature
- Can be used anywhere
- Modular construction
- Easy to install and maintain
- Continuous function monitoring with PIO-CAN filter monitor
- Suitable for almost all diesel engines and diesel fuel S content <1000ppm
Operation

The DPF-BU diesel particle filter with burner function is intended for use on engines operating at low load. The system consists of a filter element with an upstream burner module. The PIO-CAN filter monitor triggers an alarm when an established pressure has been reached; the engine must then be stopped so the regeneration procedure can begin.

The burner heats up to approximately 600°C and burns off the soot collected in the filter. Control and monitoring are carried out by the PIO-CAN filter monitor.

The unit consists of a ceramic filter 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 DFP-BU particle filter system is supplied with stainless-steel filter unit, burner with burner chamber, air supply (compressor) and control system.

<table>
<thead>
<tr>
<th>Filter Type</th>
<th>Operating Range for Maximum TIER II/EU Stage II Engines**</th>
<th>Maximum Recommended Engine Exhaust Volumes in m³/h for EU Stage III A Engines at ±400°C and 70-100 mbar BP**</th>
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</thead>
<tbody>
<tr>
<td>DPF-BU 80SL</td>
<td>up to 60 kW</td>
<td>500</td>
</tr>
<tr>
<td>DPF-BU 100SL</td>
<td>up to 70 kW</td>
<td>800</td>
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</tbody>
</table>
| DPF-BU 120SL | up to 80 kW                                             | 1000                                                               ** These details may vary depending on specific conditions
| DPF-BU 2010SL| up to 100 kW                                            | 1500                                                               ** These details may vary depending on specific conditions
| DPF-BU 2011SL| up to 125 kW                                            | 1700                                                               ** These details may vary depending on specific conditions
| DPF-BU 2012SL| up to 150 kW                                            | 2000                                                               ** These details may vary depending on specific conditions
| DPF-BU 2013SL| up to 200 kW                                            | 2200                                                               ** These details may vary depending on specific conditions

Please contact us for further information.

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