

Zero Soot FB

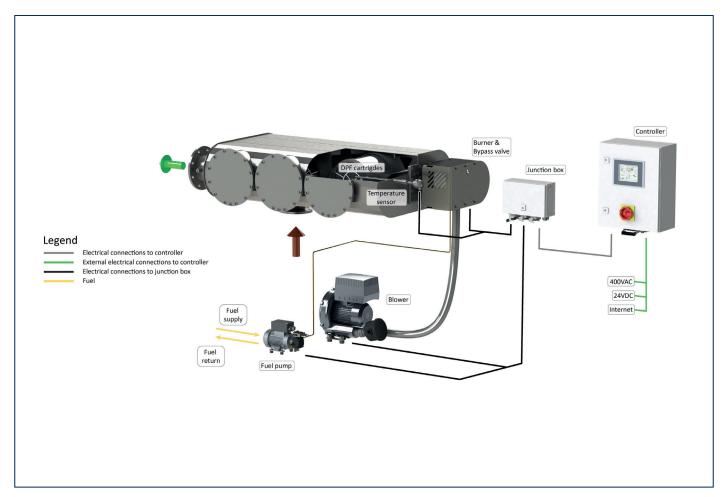
Our Zero Soot FB (Fuel Burner) offers most reliable reduction of harmful emissions of your auxiliary diesel engine under all circumstances. Your generators will be clean, without soot!

The particle filters collect the soot particles from the exhaust stream. A high grade catalytic coating suitable for potentially sulphur containing fuels, minimizes the regeneration temperature and reduces Hydro Carbons and Carbon Monoxide.

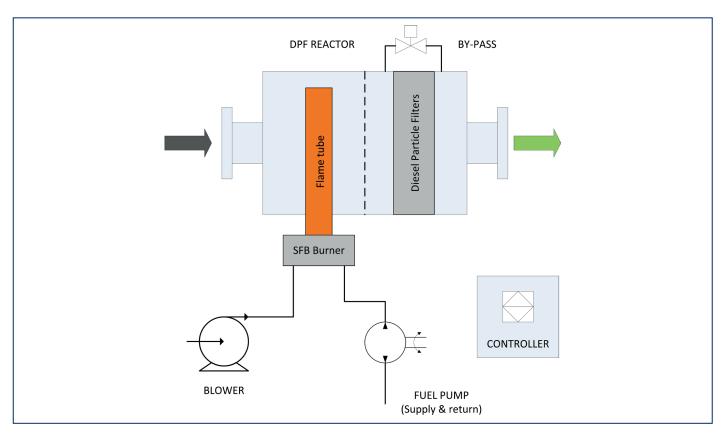
- An automatic safety bypass allows 100% engine availability.
- In practice VIP guests will not experience particulates on deck, common diesel fuel in swimming water and the smell of diesel fuel.
- Compact size. Designed for low installation height.
- Fuel burner regenerated.
- The intelligent PLC controlled regeneration system ensures a trouble-free operation of your filter system.

Main Features

- Compact design.
- Air supply pump included.
- Active regeneration fuel burner system.
- Lloyd's Register approved.
- By-pass valve for 100% engine availability.
- Integrated sound attenuation function.
- Advanced controller.



Lay-out of a Zero Soot FB system.



Process schematic of a Zero Soot FB system.

Operational conditions

Application Exhaust system Environment

Ambient Temperature Degree of Protection Relative humidity Inspection & service interval

Super yachts and inland navigation Suitable for dry or wet systems Engine room, clean

-20 + 55°C IP55

5 to 95% Non-condensing Approximately 1x per year (normal conditions)

Supplies

Fuel EN590 (Diesel), DMA, DMX, max 2000 ppm sulphur 3 x 400 VAC (4 wire) **AC** Power supply 24 VDC - 10A (uninterrupted) DC Power supply

Design data

Materials Reactor housing: Alloy steel

Burner tube and shields: High heat

resistant steel

Temperature Regeneration temperature up to 520°C

Surface treatment Welds brushed

Pressure drop (ΔP) Approximately 20-30 mbar, clean

without soot and ash

DPF type

Coating BM, SX, ZX (ULSF only)

By-pass valve Standard internal, electrically operated

Bottom, standard, optional top Supports Thermal insulation Blankets or cladded insulation

(by customer)

Legal requirements and standards

Standards EMC directive 2014/30/EU

> Machinery directive 2006/42/EC Low voltage directive 2014/35/EU

Thermo processing EN 746-2

Classification Lloyds Register

System parts

Controller PLC with full colour HMI, super yacht

standard (acc. to LR requirements)

- Inputs: engine load, engine on - Outputs: System ON, Alarm, MOD bus

- Datalogging

- Remote access prepared

Blower unit Blower with 3 phase motor with

FC drive, air filter, check valve,

filter service switch

Burner Fuel burner with flame detection

and ignition

Fuel set Fuel pump with shut-off valves

Sensors Temperature & pressure transmitter

Wiring Connectors, wiring by yard

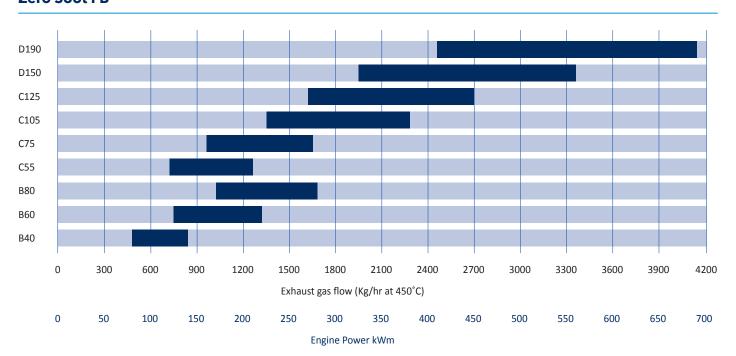
Performance

PM (measured as PM 10) > 97% reduction Sound attenuation ca. 30 dB(A)

Optional

- Harbour mode for optimized reduction of HC (diesel smell and oil deposits)
- Alternative catalytic coating
- NOx sensor for optimized control and actual NOx value
- Remote access via LAN accessible for diagnostics/remote services

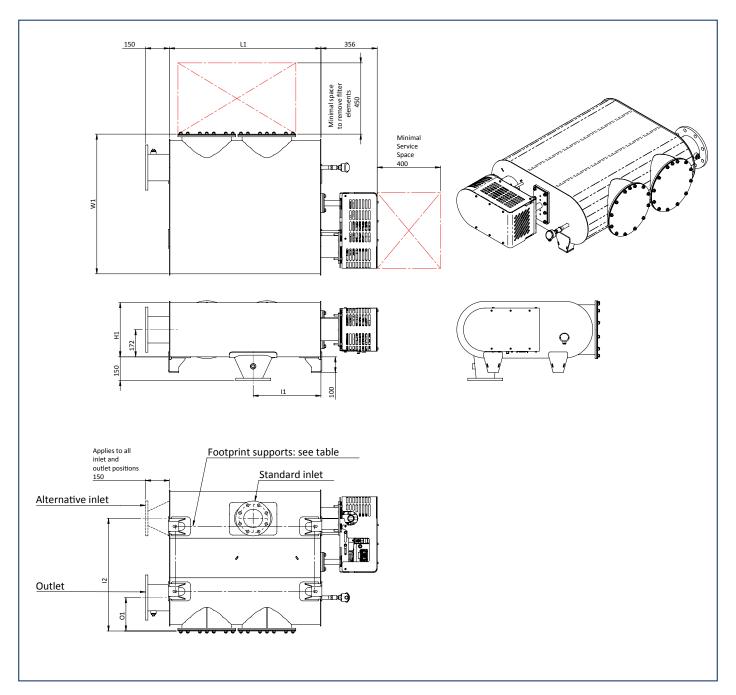
Zero Soot FB



Dimensions & options B series left

Туре	DPF volume	Flanges EN1092 PN10		Hot surface	L1	W1	H1	H2	11	11	01	Weight
	liter	ln	Out	m2	mm	mm	mm	mm	mm	mm	mm	kg
B40	39	DN100	DN150	2,5	960	885	343	-	530	710	210	245
B60	59	DN100	DN150	3,3	1340	885	343	-	720	710	210	320
B80	78	DN150	DN200	4,1	1750	885	343	-	910	710	210	405

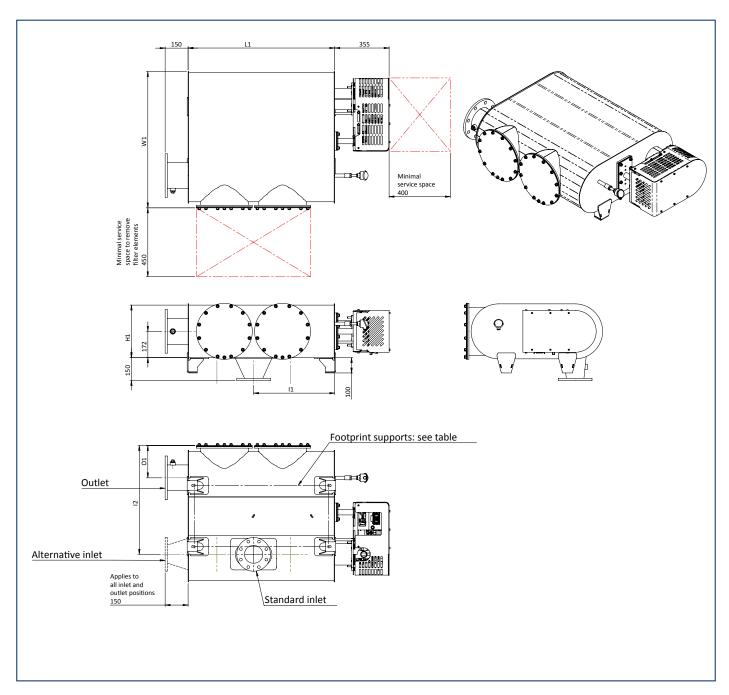
Service space for burner is 400 mm. Service space to remove soot filter elements is 450 mm.



Dimensions & options B series right

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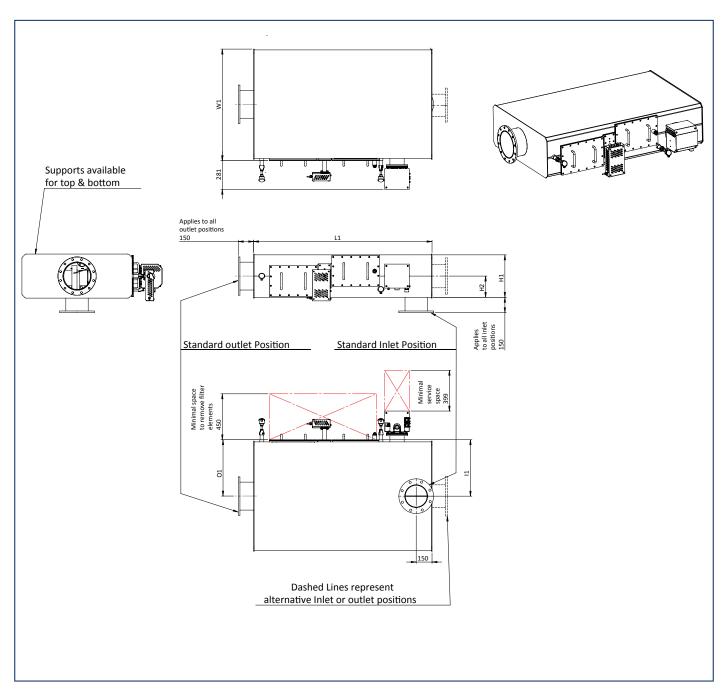
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Dimensions & options C/D series left¹

Туре	DPF volume	Flanges EN1092 PN10		Hot surface	L1	W1	H1	H2	11	I 1	01	Weight
	liter	ln	Out	m²	mm	mm	mm	mm	mm	mm	mm	kg
C55	57	DN150	DN150	3,7	1750	525	420	210	270	-	270	320
C75	76	DN150	DN200	4,4	1750	670	420	210	345	-	345	390
C105	104	DN150	DN200	5,4	1750	915	420	210	465	-	465	500
C125	123	DN200	DN250	6,1	1750	1085	420	210	550	-	550	560
D150	152	DN200	DN250	6,2	1750	1010	490	245	515	-	515	600
D190	190	DN250	DN300	7,3	1750	1255	490	245	635	-	635	720

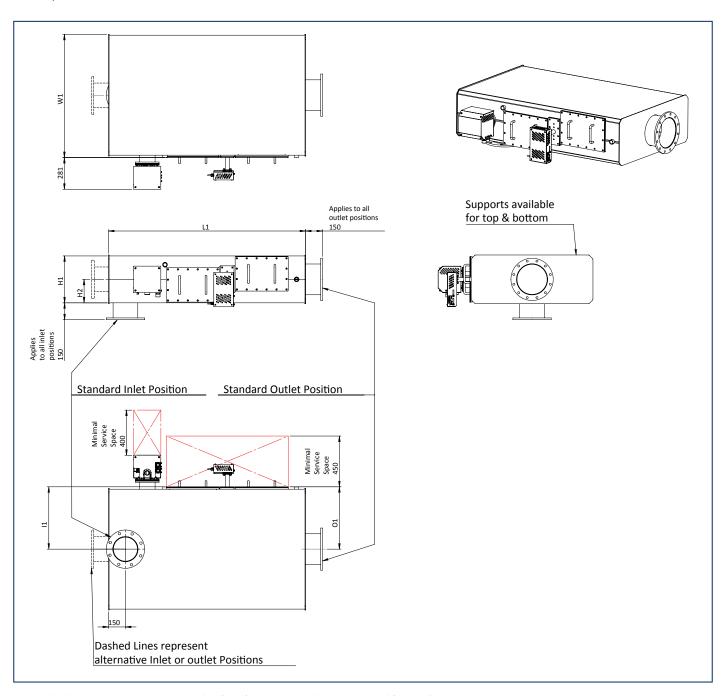
 $^{^{1}}$ option outlet on top, bottom and side: length = L2 +80 mm. Service space for burner is 400 mm. Service space to remove soot filter elements is 450 mm.



Dimensions & options C/D series right¹

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