



Fuel burner Zero Soot System

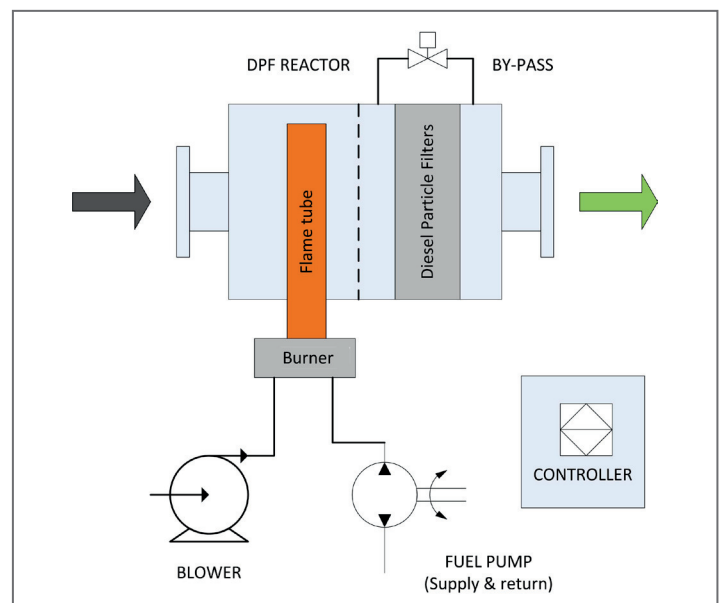
Our Fuel burner Zero Soot System offers most reliable reduction of harmful emissions of your auxiliary diesel engine under all circumstances.

Your generators will be clean, without soot!

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

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



OPERATIONAL CONDITIONS

Application	Super yachts, other high end applications
Exhaust system	Suitable for dry or wet systems
Environment	Engine room, clean
Ambient Temperature	-20 + 60°C
Degree of Protection	IP55
Chemical Resistance	Diesel fuels and general lubricants, mild detergents, salt
Relative humidity	5 to 95% Non-condensing
Inspection & service interval	1x per year up to 2000 operating hours

SUPPLIES

Fuel	EN590 (Diesel), DMA, DMX, max 2000 ppm sulphur
Power supply	230VDC / 3 x 400 VDC

DESIGN DATA

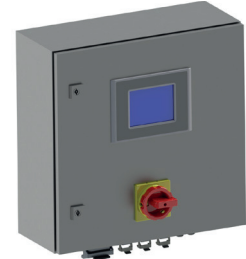
Materials	Aisi 316Ti/321 parts in contact with exhaust gas but not with flame Aisi 310(s) - parts in direct contact with burner flue gas
Surface treatment	Welds brushed
Max. system back pressure & temperature	100 mbar and 600 °C
DPF type	SiSiC
Coating	Base metal
By-pass valve	Standard internal, electrically operated
Supports	Bottom, standard, optional top
Thermal insulation	Blankets or cladded insulation (by customer)

LEGAL REQUIREMENTS AND STANDARDS

Standards	EMC directive - 2004/108/EC Thermo processing standard EN 746-2 Machinery directive 2006/42/EC Safety of machines-electrical equipment of machines NEN-EN-IEC 60204-1 Classification LR
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SYSTEM PARTS

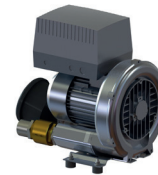
Controller	"PLC control terminal (with full color 5,7" HMI and touch screen)"
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Logging	Yes Communication with engine J1939
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External I/O	Inputs: engine load signal, engine on Outputs: System ON, Alarm
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Blower unit	3x 400 VDC motor, side channel blower, air filter, check valve, filter service switch, vibration dampers and connector
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Burner	Nozzle, ignition electrodes, ignition tranformer, flame sensor, sight glass, pressure sensors, connector
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Fuel set	Fuel pump, motor, fuel valves, pressure switch, vibration dampers and connector
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Sensors	Temperature & pressure transmitter
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Wiring	Connectors, wiring by yard
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PERFORMANCE

PM (measured as PM 10)	> 97% reduction
HC/CO	up to 80% reduction*
Sound attenuation	ca. 30 dB(A)
*with optional zone coating & depending on exhaust temperatures	

OPTIONAL

- Harbour mode, burner continuous on during low load conditions to control exhaust temperature, HC > 4 ppm
- Zone coating of precious metal
- Remote Access

Wet exhaust

Pressure drop (20-28 mbar new & regenerated)

ENGINE MODEL	JOHN DEERE								SCANIA										MAN		
	4045 AFM	6,8 AFM	6,8 SFM	9,0 AFM	9,0 SFM	13,5 AFM	13,5 SFM	DI 09 074M	DI 09 074M	DI 09 074M	DI13 074M	DI13 074M	DI13 074M	DI16 074M	DI16 074M	DI16 074M	DI16 074M	DI16 090M	D2862 LE322	D2862 LE322	D2862 LE322
Frequency in Hz	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	60
Engine Power kWm	89	139	168	195	222	278	334	199	217	269	323	376	426	430	450	480	511	535	600	700	800
B-2	x	x																			
B-3			x	x	x			x	x	x											
B-4						x(1)	x(1)				x										
C-2				x	x			x	x	x											
C-3											x										
C-4						x	x					x	x	x	x	x					
C-5																	x	x			
D-3																			x	x	
D-4																					x

(1) Limited service interval.
 Applicable 60 Hz models on request.

Dry exhaust

Pressure drop (30-40 mbar - new & regenerated)

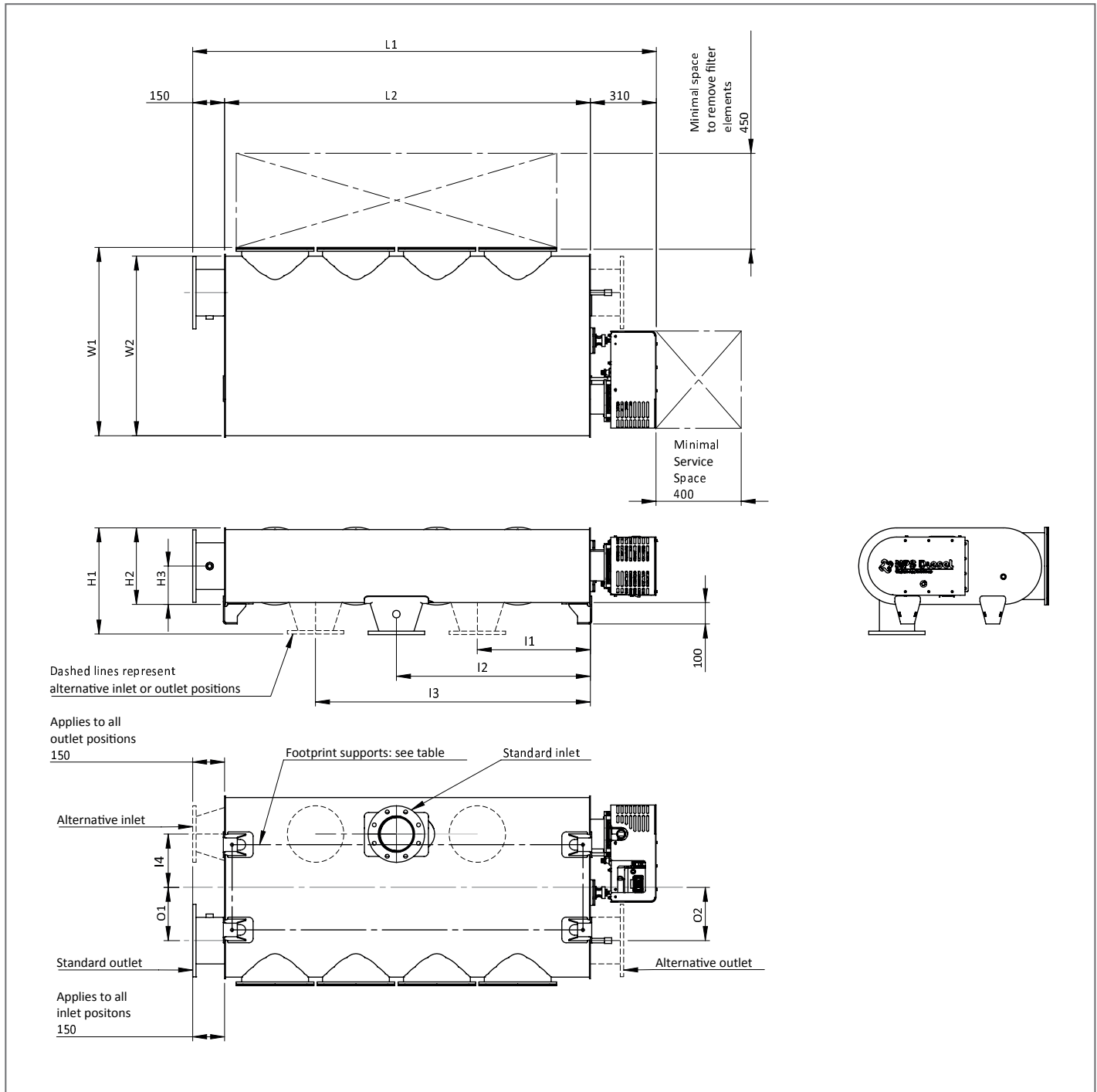
ENGINE MODEL	JOHN DEERE								SCANIA										MAN		
	4045 AFM	6,8 AFM85	6,8 SFM85	9,0 AFM85	9,0 SFM85	13,5 AFM85	13,5 SFM85	DI 09 074M	DI 09 074M	DI 09 074M	DI13 074M	DI13 074M	DI13 074M	DI16 074M	DI16 074M	DI16 074M	DI16 074M	DI16 090M	D2862 LE322	D2862 LE322	D2862 LE322
Frequency in Hz	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	60
Engine Power kWm		139	168	195	222	278	334	199	217	269	323	376	426	430	450	480	511	535	600	700	800
B-2	x	x	x					x	x												
B-3				x	x					x	x										
B-4						x	x					x	x	x	x	x					
C-2				x	x					x	x										
C-3						x	x					x	x	x	x	x					
C-4																	x	x			
C-5																			x	x	
D-3																					x
D-4																					

60 Hz models on request.

Dimensions & options B series left

Type	DPF Volume	Dimensions in mm							Inlet				Outlet		Foot print supports	Flanges EN1092-1 PN10		Weight excluding DPF	Weight	
		ZS	Liter	L1	L2	W1	W2	H1	H2	H3	I1 (option)	I2 (std.)	I3 (option)	I4 (option)		O1 (std.)	O2 (option)			m ²
B-2	39	1420	960	890	850	500	350	175	340	530	720	250	250	250	2,5	400 x 890	DN100	DN150	195	245
B-3	59	1800	1340	890	850	500	350	175	530	720	910	250	250	250	3,3	400 x 1270	DN100	DN150	240	315
B-4	78	2210	1750	890	850	500	350	175	530	910	1290	250	170	250	4,1	400 x 1680	DN150	DN200	300	400

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

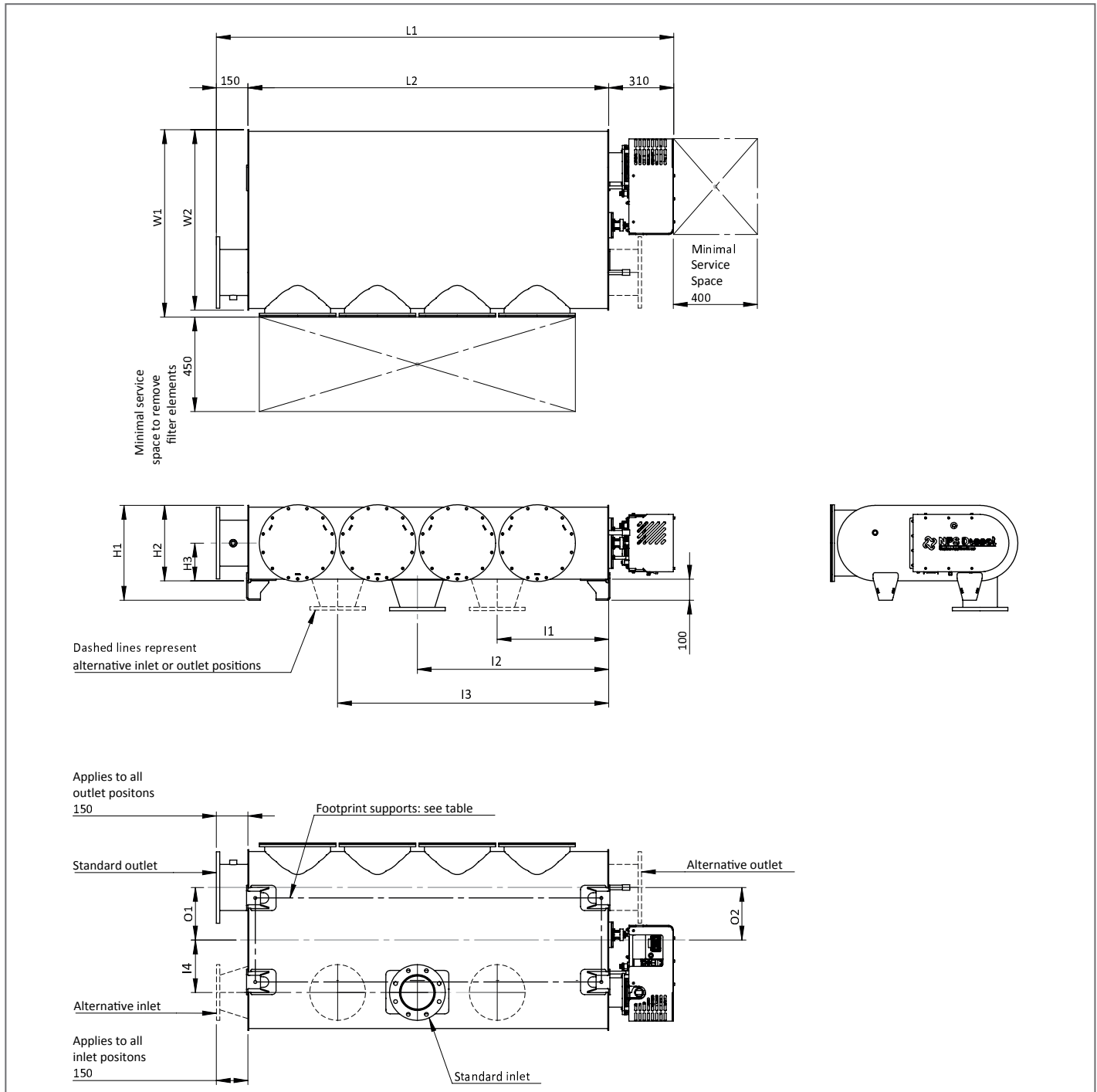


Note: This drawing is preliminary & provided for reference only and is not intended for installation purpose. Contact us either your local distributor for detailed information.

Dimensions & options B series right

Type	DPF Volume	Dimensions in mm							Inlet				Outlet		Foot print supports	Flanges EN1092-1 PN10		Weight excluding DPF	Weight	
		ZS	Liter	L1	L2	W1	W2	H1	H2	H3	I1 (option)	I2 (std.)	I3 (option)	I4 (option)		O1 (std.)	O2 (option)			m ²
B-2	39	1420	960	890	850	500	350	175	340	530	720	250	250	250	2,5	400 x 890	DN100	DN150	195	245
B-3	59	1800	1340	890	850	500	350	175	530	720	910	250	250	250	3,3	400 x 1270	DN100	DN150	240	315
B-4	78	2210	1750	890	850	500	350	175	530	910	1290	250	170	250	4,1	400 x 1680	DN150	DN200	300	400

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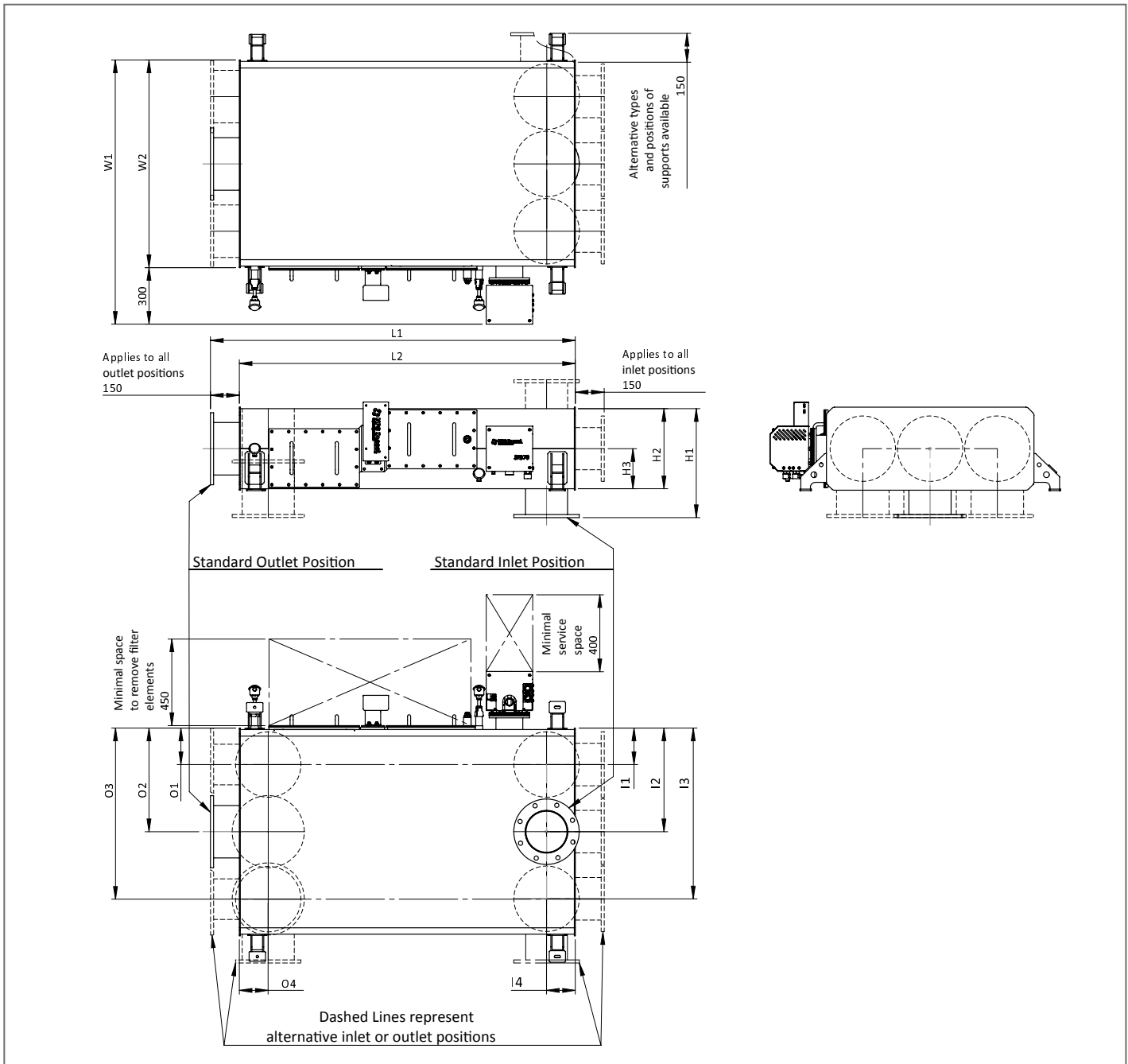


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Dimensions & options C/D series left¹

Type	DPF Volume	Dimensions in mm								Inlet				Outlet				Outside Surface	Flanges EN1092-1 PN10		Weight excluding DPF	Weight
		ZS	Liter	L1	L2	H1	H2	H3	W1	W2	I1 (option)	I2 (std.)	I3 (option)	I4 (option)	O1 (option)	O2 (std.)	O3 (option)		O4 (option)	m ²		
C-2	57	1900	1750	570	420	210	810	510	190	250	320	150	190	250	320	150	3,3	DN150	DN200	250	310	
C-3	76	1900	1750	570	420	210	960	660	190	330	470	150	190	330	470	150	3,8	DN150	DN200	290	390	
C-4	104	1900	1750	570	420	210	1200	900	190	450	710	150	190	450	710	150	4,6	DN200	DN250	360	500	
C-5	123	1900	1750	570	420	210	1370	1070	190	530	880	150	190	530	880	150	5,2	DN200	DN250	400	560	
D-3	152	1900	1750	640	490	250	1290	990	190	500	800	150	190	500	800	150	5,2	DN200	DN250	410	600	
D-4	190	1900	1750	640	490	250	1530	1230	190	620	1040	150	190	620	1040	150	6,0	DN200	DN300	480	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.

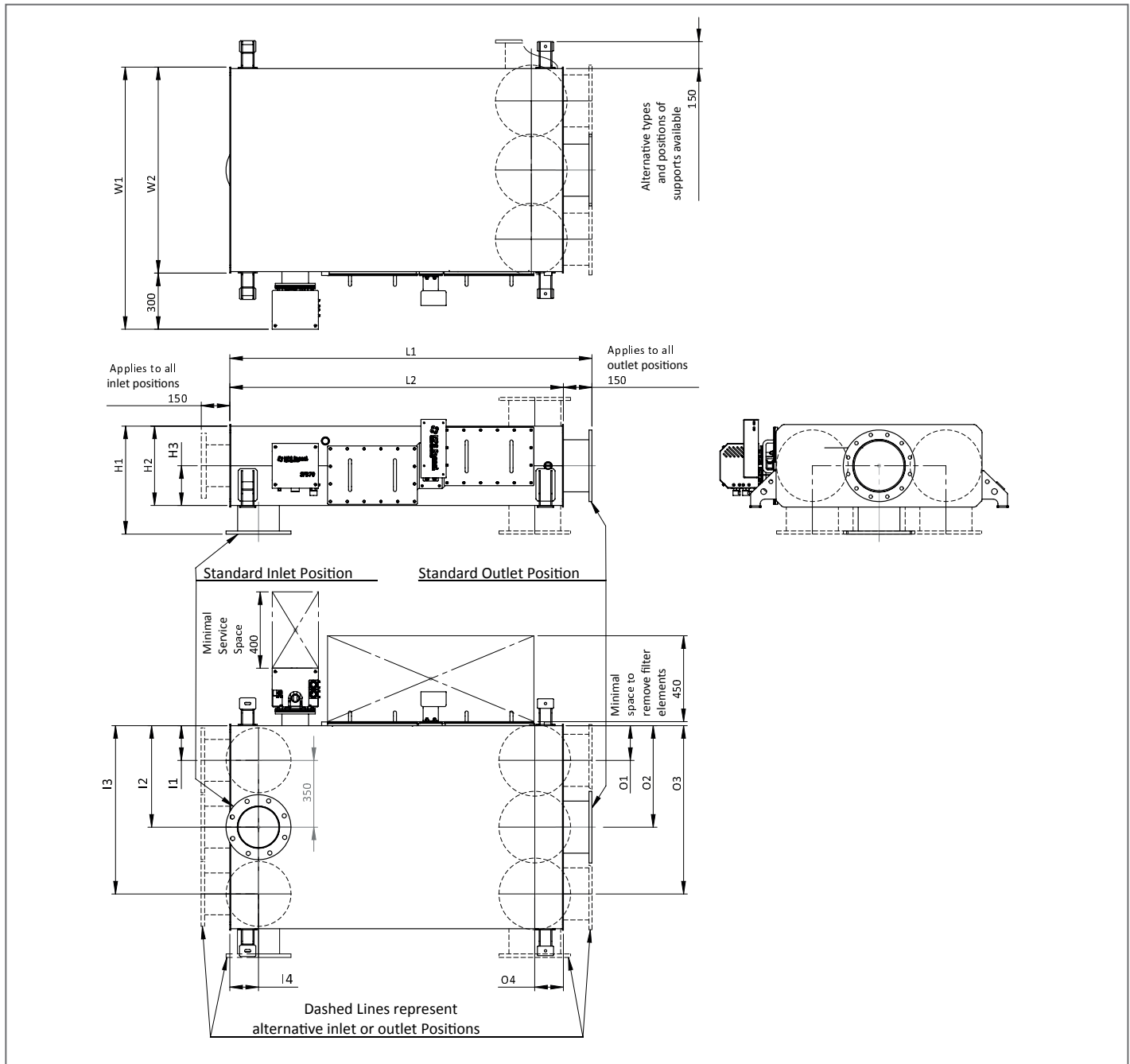


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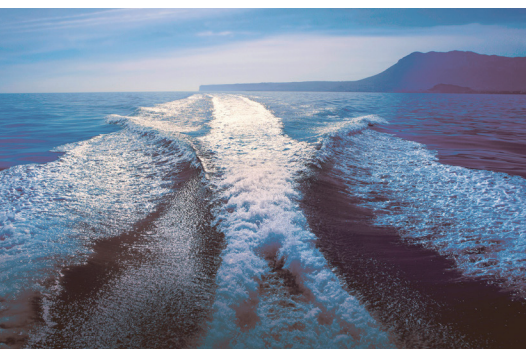
Dimensions & options C/D series right¹

Type	DPF Volume	Dimensions in mm							Inlet				Outlet				Outside Surface	Flanges EN1092-1 PN10		Weight excluding DPF	Weight
ZS	Liter	L1	L2	H1	H2	H3	W1	W2	I1 (option)	I2 (std.)	I3 (option)	I4 (option)	O1 (option)	O2 (std.)	O3 (option)	O4 (option)	m ²	Flange in	Flange out	kg	kg
C-2	57	1900	1750	570	420	210	810	510	190	250	320	150	190	250	320	150	3,3	DN150	DN200	250	310
C-3	76	1900	1750	570	420	210	960	660	190	330	470	150	190	330	470	150	3,8	DN150	DN200	290	390
C-4	104	1900	1750	570	420	210	1200	900	190	450	710	150	190	450	710	150	4,6	DN200	DN250	360	500
C-5	123	1900	1750	570	420	210	1370	1070	190	530	880	150	190	530	880	150	5,2	DN200	DN250	400	560
D-3	152	1900	1750	640	490	250	1290	990	190	500	800	150	190	500	800	150	5,2	DN200	DN250	410	600
D-4	190	1900	1750	640	490	250	1530	1230	190	620	1040	150	190	620	1040	150	6,0	DN200	DN300	480	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.



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Premium Generators
for Superyachts