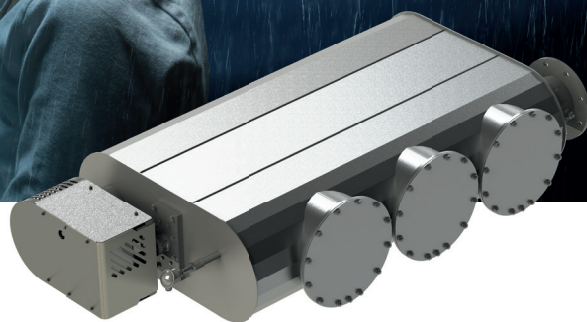


# XEAMOS

## Zero Soot FB

Reducing emissions together



## Zero Soot FB

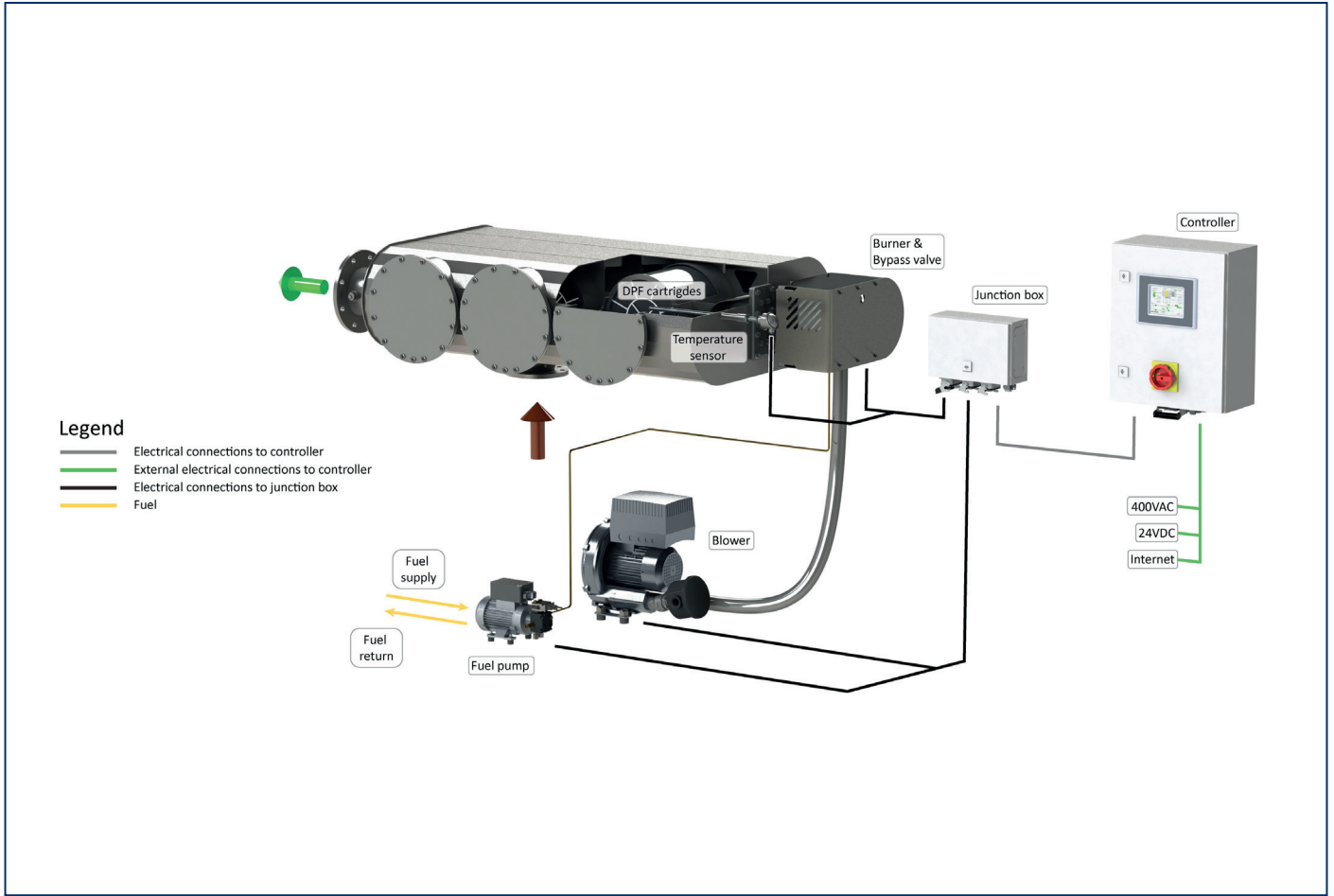
Our Zero Soot FB (Fuel Burner) offers most reliable reduction of harmful emissions of your auxiliary diesel engine under all circumstances. Your generators will be clean, without soot!

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.

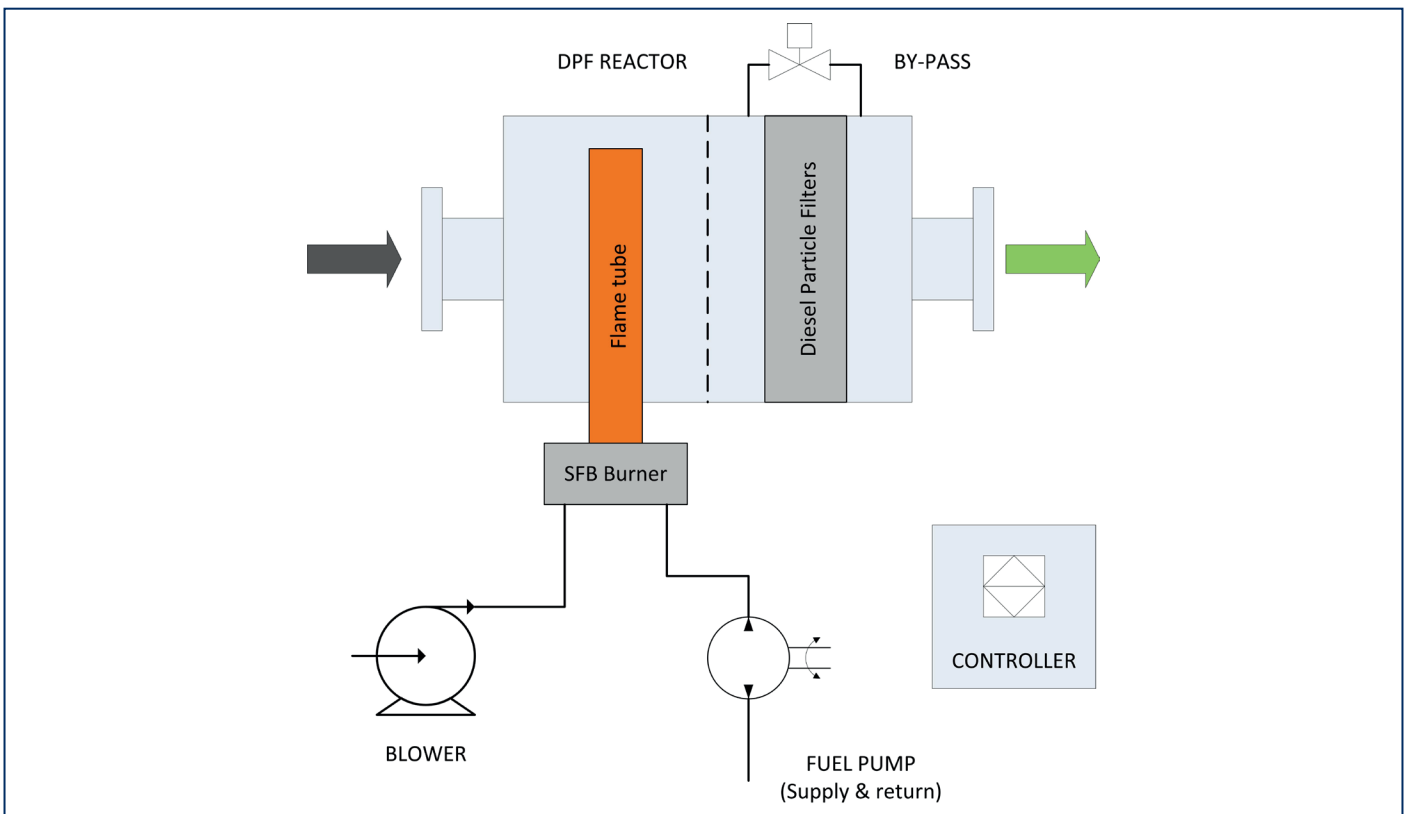
- An automatic safety bypass allows 100% engine availability.
- In practice VIP guests will not experience particulates on deck, common diesel fuel in swimming water and the smell of diesel fuel.
- Compact size. Designed for low installation height.
- Fuel burner regenerated.
- The intelligent PLC controlled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

### Main Features

- Compact design.
- Blower included.
- Active regeneration fuel burner system.
- Lloyd's Register approved.
- By-pass valve for 100% engine availability.
- Integrated sound attenuation function.
- Advanced controller.
- All service on one side possible
- Advanced controller, 1 controller can be used for 3 systems
- Cooling function in blower continues after shutdown of engines



Lay-out of a Zero Soot FB system.



Process schematic of a Zero Soot FB system.

## Operational conditions

Application	Super yachts and inland navigation
Exhaust system	Suitable for dry or wet systems
Environment	Engine room, clean
Ambient Temperature	-20 + 55°C
Degree of Protection	IP55
Relative humidity	5 to 95% Non-condensing
Inspection & service Interval	Approximately 1x per year (normal conditions)
Network	TNC & IT both possible

## Supplies

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

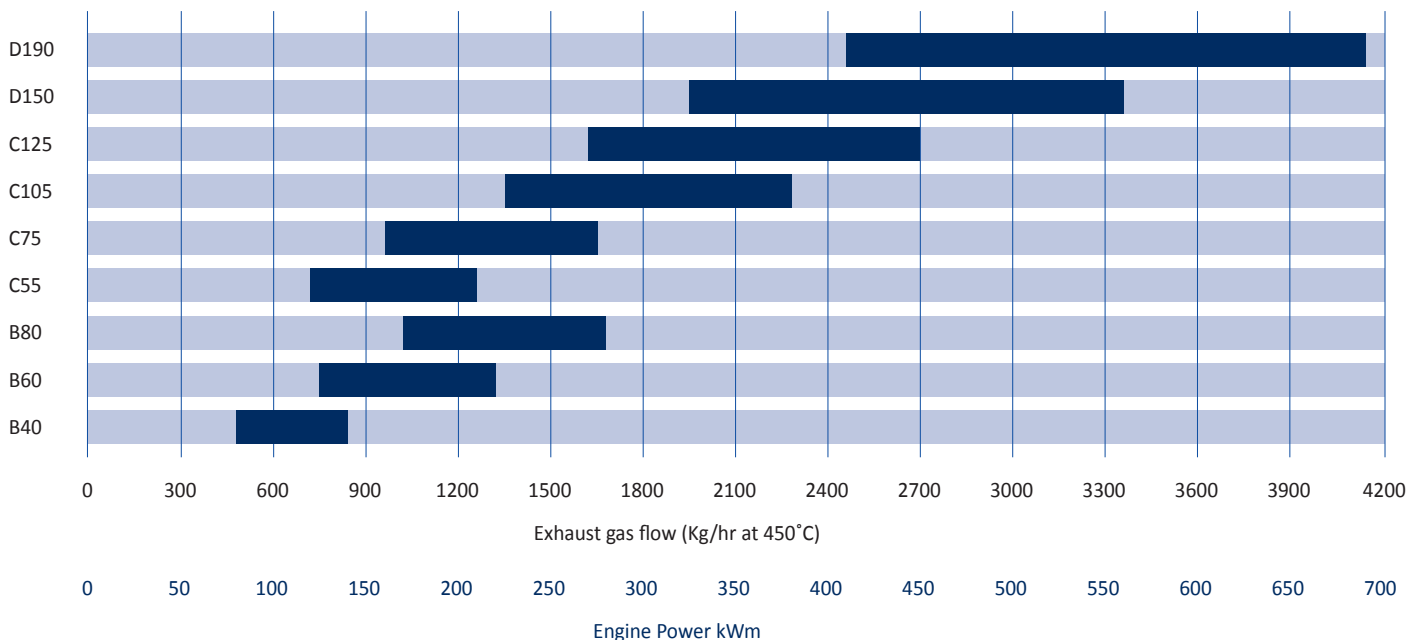
## Design data

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 25-35 mbar, clean without soot and ash
DPF type	SiSiC
Coating	BM, SX, ZX and PX (ULSF only)
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 2014/30/EU Machinery directive 2006/42/EC Low voltage directive 2014/35/EU Thermo processing EN 746-2
Classification	Lloyds Register

## Zero Soot FB



For indication only, please contact us for exact unit selection or custom solutions. Bar in graph corresponds with 20 - 30 mbar pressure drop

## 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
Housing	Containing DPF modules in a flat rectangular shape to reduce overall volume
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)
HC/CO	up to 70%

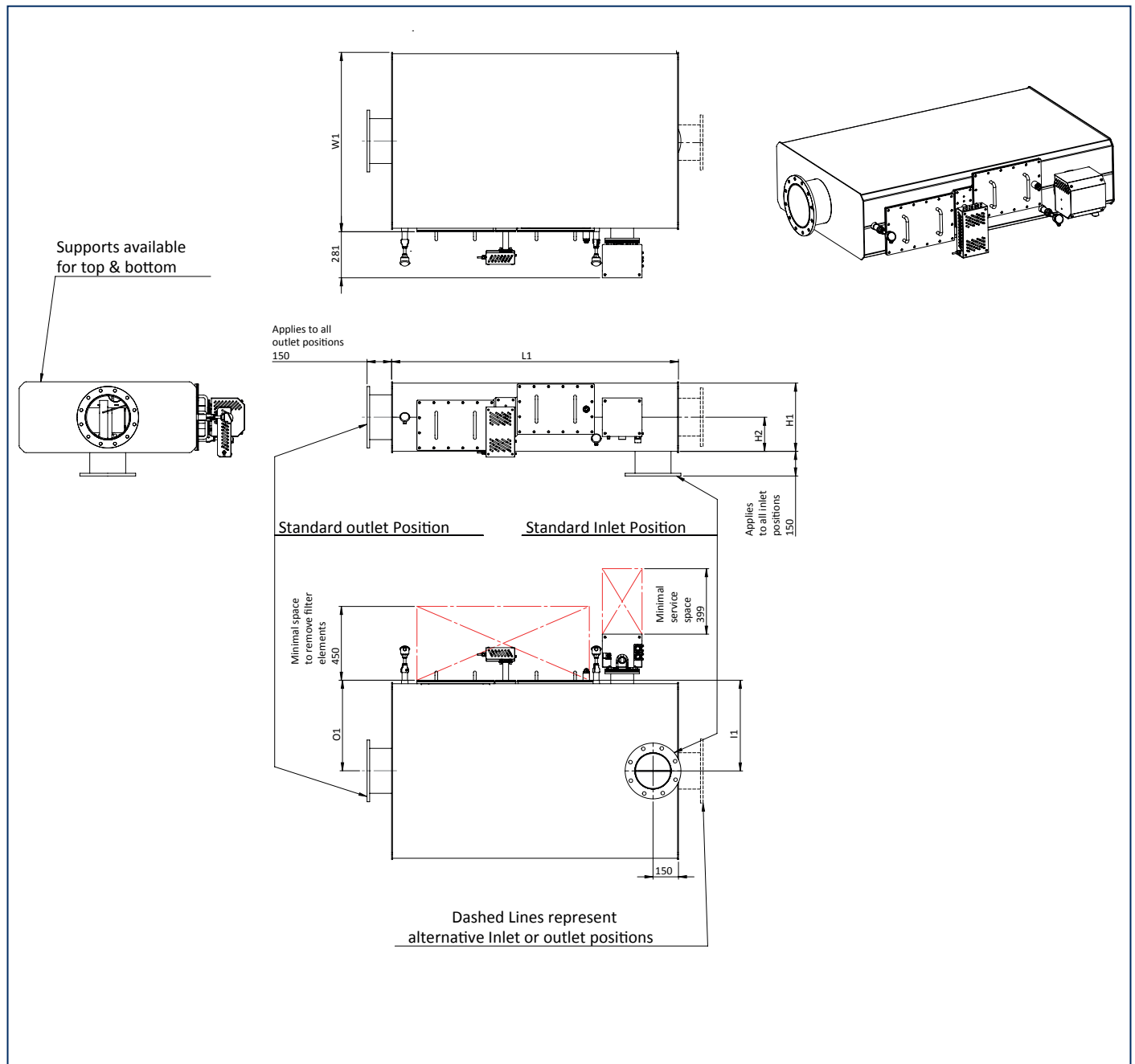
## Optional

- 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
- Mirrored version
- Anti-vibration dampers
- Extended warranty
- Complete exhaust system

## Dimensions & options C/D series left<sup>1</sup>

Type	DPF volume liter	Flanges EN1092 PN10		Hot surface m <sup>2</sup>	L1 mm	W1 mm	H1 mm	H2 mm	I1 mm	I1 mm	O1 mm	Weight kg
		In	Out									
C55	57	DN150	DN150	3,7	1750	509	420	210	270	-	270	370
C75	76	DN150	DN200	4,4	1750	657	420	210	345	-	345	415
C105	104	DN150	DN200	5,4	1750	900	420	210	465	-	465	550
C125	123	DN200	DN250	6,1	1750	1069	420	210	550	-	550	535
D150	152	DN200	DN250	6,2	1750	995	490	245	515	-	515	750
D190	190	DN250	DN300	7,3	1750	1238	490	245	635	-	635	880

<sup>1</sup> 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.

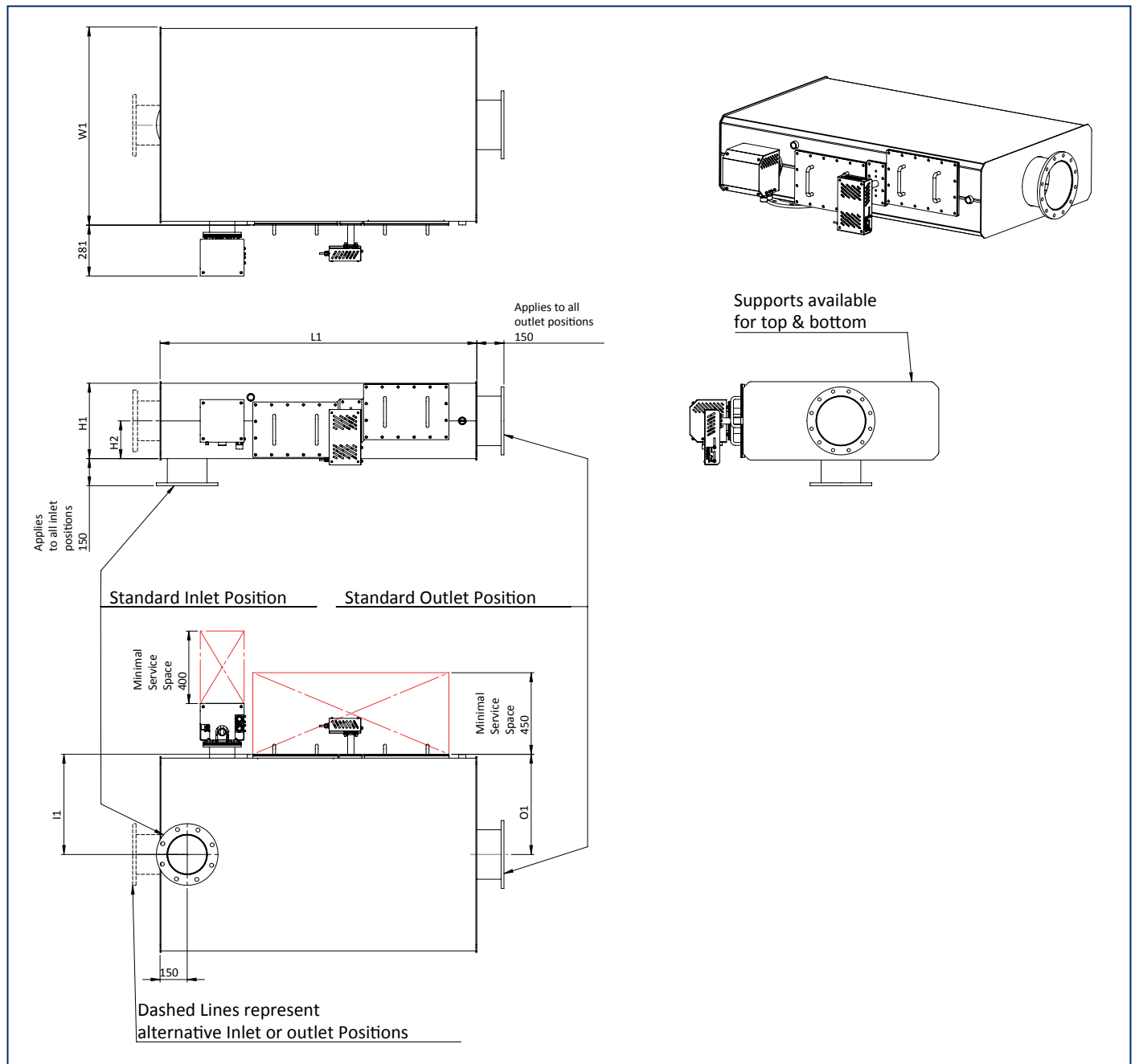


Note: This drawing is preliminary & provided for reference only and is not intended for installation purpose.  
Contact us either your local distributor for detailed information.

## Dimensions & options C/D series right<sup>1</sup>

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