

FILTERS

specifically designed for
Ballast Water
Treatment



MossHydro

TECHNICAL SPECIFICATIONS

Vol. 2



DIMENSIONAL DATA

MossHydro Ballast Water Single Screen Filters

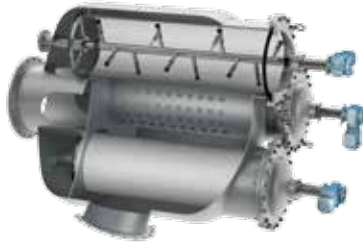


MossHydro

For flowrates up to 1350 m³/h (6000 gpm), Moss Hydro offers 8 single screen filter sizes:

		MH 1.0	MH 1.4	MH 1.7	MH 2.0	MH 3.0	MH 3.5	MH 4.0	MH 5.4
Flowrate ¹	m ³ /hr (gpm)	250 (1100)	350 (1540)	425 (1900)	500 (2200)	700 (3100)	880 (3900)	1000 (4400)	1350 (6000)
Inlet/Outlet flange connections	mm (inch)	200 (8)	200 (8)	250 (10)	250 (10)	300 (12)	350 (14)	350 (14)	400 (16)
Backwash flange connection ²	mm (inch)	80 (3)						100 (4)	125 (5)
Operational weight ³	kg (lbs)	485 (1070)	550 (1210)	660 (1450)	720 (1590)	1430 (3150)	1710 (3770)	2030 (4480)	2670 (5880)
Housing configuration		Vertical or horizontal							
Instantaneous backwash flowrate during selfcleaning ⁶	m ³ /hr (gpm)	30 (132)	40 (176)	50 (220)	60 (264)	40 (176)	50 (220)	60 (264)	80 (352)
Self-cleaning time ⁷	second	60							
Backwash volume per cleaning cycle ⁶	ltr (gal)	500 (132)	667 (176)	833 (220)	1000 (264)	667 (176)	833 (220)	1000 (364)	1333 (352)
Self-cleaning activation criteria		0.5 bar (7 psi) differential pressure, time based interval, manual activation, external activation							
Power consumption	kW	0,5							
Current consumption	Ampere	1,5							
Rated operating voltage	V	440V / 60 Hz							
Control Voltage criteria ⁵	V	24V DC							
Min. working pressure ⁴	bar / (psi)	2.5 / (36) (Required only during the self-cleaning cycle)							
Max. working pressure	bar / (psi)	6.0 / (90)							
Materials of construction		Choice of options available: Filter housing and internals in Duplex. Filter screen in SS316L or 904L.							

- 1 Recommended flowrate based on 40 micron filtration degree and 50 mg/ltr TSS and according IMO G8 guidelines. Please consult MossHydro when water quality and filtration degree will change.
- 2 Flange connections can be tailored to customer preferences. DIN PN6 is standard. External forces are not allowed.
- 3 Approx. operational weight includes filter completely filled with seawater and is subject to selected housing configuration.
- 4 During a self-cleaning cycle, the minimum recommended inlet pressure must be 2.5 bar higher than the hydrostatic pressure present directly downstream of the backwash valve. Backwash piping should be designed as to allow unrestricted flow. Lower pressures during self-cleaning will require the installation of a backwash pump/or provisions have to be taken to raise the pressure inside the filter by using a booster pump and filter isolating valves. Please consult MossHydro for further information for each particular project that will have low operating pressures.
- 5 Explosion proof electrics are available as an option.
- 6 Backwash flowrate and volume at approx. 2.5 bar operating pressure.
- 7 During the self-cleaning cycle, the filter continues to deliver filtered water.



DIMENSIONAL DATA

MossHydro Ballast Water Multiple Screen Filters



MossHydro

For flowrates up to 3500 m³/h (15400 gpm), Moss Hydro offers 7 multiple screen filter sizes:

		MH 5.0	MH 6.0	MH 7.5	MH 9.0	MH 10.0	MH 12.0	MH 14.0
Flowrate ¹	m ³ /hr (gpm)	1250 (5500)	1500 (6600)	1850 (8150)	2250 (9900)	2500 (11000)	3000 (13200)	3500 (15400)
Inlet/Outlet flange connections	mm (inch)	400 (16)	400 (16)	500 (20)	500 (20)	600 (24)	600 (24)	700 (28)
Backwash flange connection ²	mm (inch)	100 (x2) [4 (x2)]	100 (x2) [4 (x2)]	100 (x3) [4 (x3)]	100 (x3) [4 (x3)]	100 (x4) [4 (x4)]	100 (x4) [4 (x4)]	100 (x4) [4 (x4)]
Operational weight ³	kg (lbs)	3690 (8135)	4340 (9570)	4500 (9920)	5200 (11460)	6250 (13780)	7230 (15940)	8250 (18190)
Housing configuration		Vertical or horizontal						
Instantaneous backwash flowrate during selfcleaning ⁶	m ³ /hr (gpm)	100 (440)	120 (530)	150 (660)	180 (790)	200 (880)	240 (1060)	280 (1230)
Self-cleaning time ⁷	second	60						
Backwash volume per cleaning cycle ⁶	m ³ (gal)	1.7 (440)	2.0 (530)	2.5 (660)	3.0 (790)	3.3 (880)	4.0 (1360)	4.7 (1230)
Self-cleaning activation criteria		0.5 bar (7 psi) differential pressure, time based interval, manual activation, external activation						
Power consumption	kW	1.0	1.0	1.5	1.5	2.0	2.0	2.0
Current consumption	Ampere	3.0	3.0	4.5	4.5	6.0	6.0	6.0
Rated operating voltage	V	440V / 60 Hz						
Control Voltage criteria ⁵	V	24V DC						
Min. working pressure ⁴	bar / (psi)	2.5 / (36) (Required only during the self-cleaning cycle)						
Max. working pressure	bar / (psi)	6.0 / (90)						
Materials of construction		Choice of options available: Filter housing and internals in Duplex. Filter screen in SS316L or 904L.						

- 1 Recommended flowrate based on 40 micron filtration degree and 50 mg/ltr TSS and according IMO G8 guidelines. Please consult MossHydro when water quality and filtration degree will change.
- 2 Flange connections can be tailored to customer preferences. DIN PN6 is standard. External forces are not allowed.
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- 4 During a self-cleaning cycle, the minimum recommended inlet pressure must be 2.5 bar higher than the hydrostatic pressure present directly downstream of the backwash valve. Backwash piping should be designed as to allow unrestricted flow. Lower pressures during self-cleaning will require the installation of a backwash pump/or provisions have to be taken to raise the pressure inside the filter by using a booster pump and filter isolating valves. Please consult MossHydro for further information for each particular project that will have low operating pressures.
- 5 Explosion proof electrics are available as an option.
- 6 Backwash flowrate and volume at approx. 2.5 bar operating pressure.
- 7 During the self-cleaning cycle, the filter continues to deliver filtered water.



DIMENSIONAL DATA

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Ballast Water

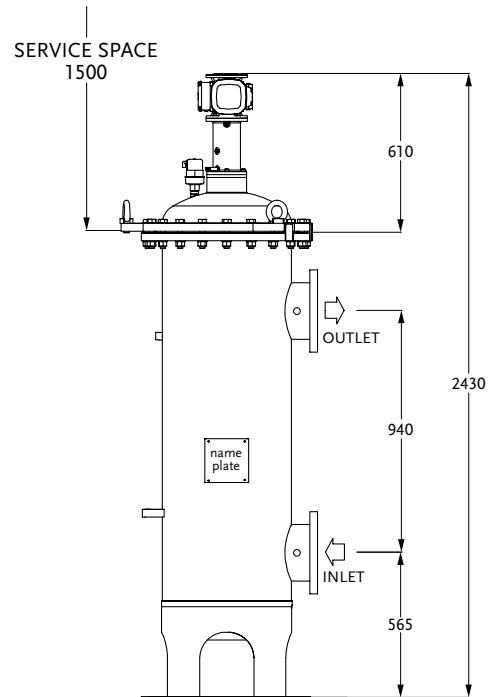
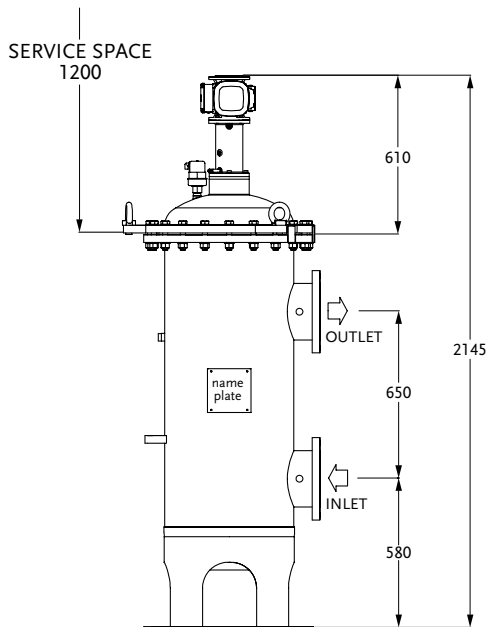
Single Screen Filters



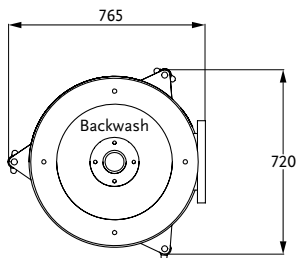
MossHydro

MH 1.0

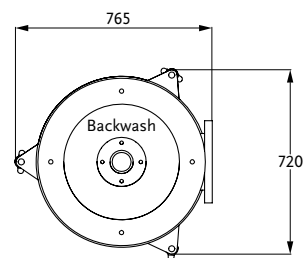
MH 1.4



BOTTOM VIEW



BOTTOM VIEW



All dimensions in mm



DIMENSIONAL DATA

MossHydro

Ballast Water

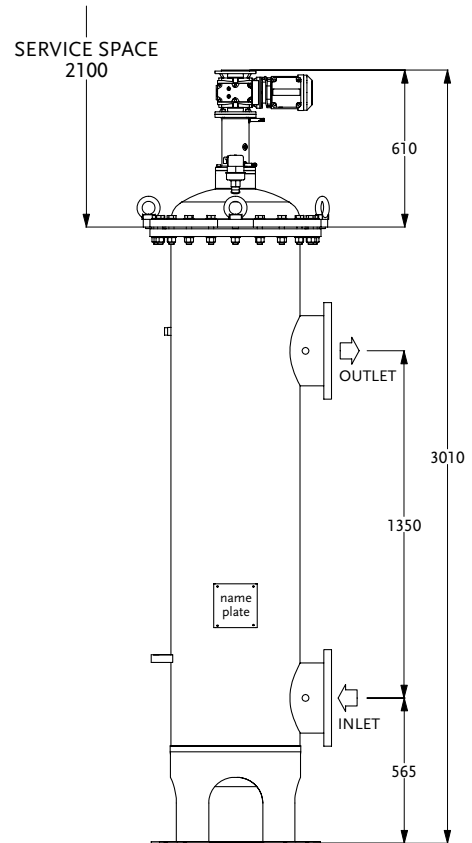
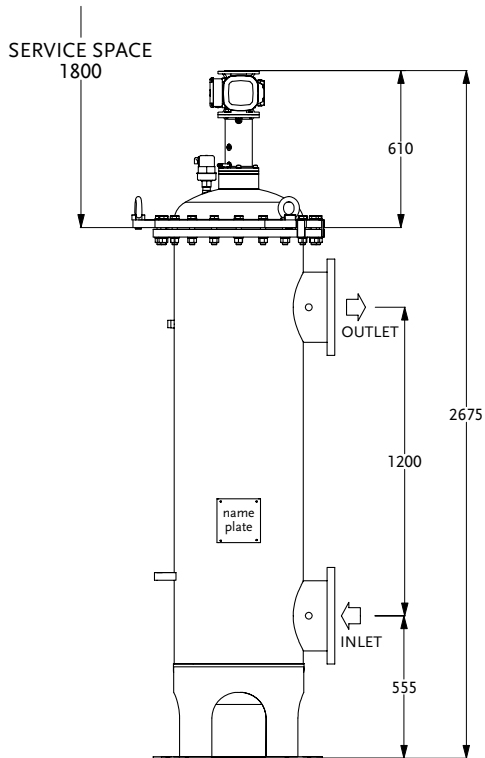
Single Screen Filters



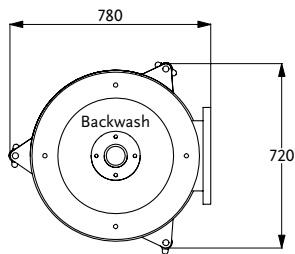
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MH 1.7

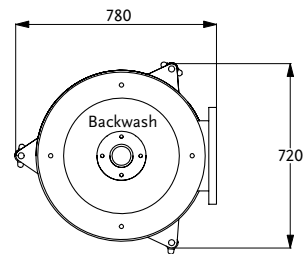
MH 2.0



BOTTOM VIEW



BOTTOM VIEW



All dimensions in mm



DIMENSIONAL DATA

MossHydro

Ballast Water

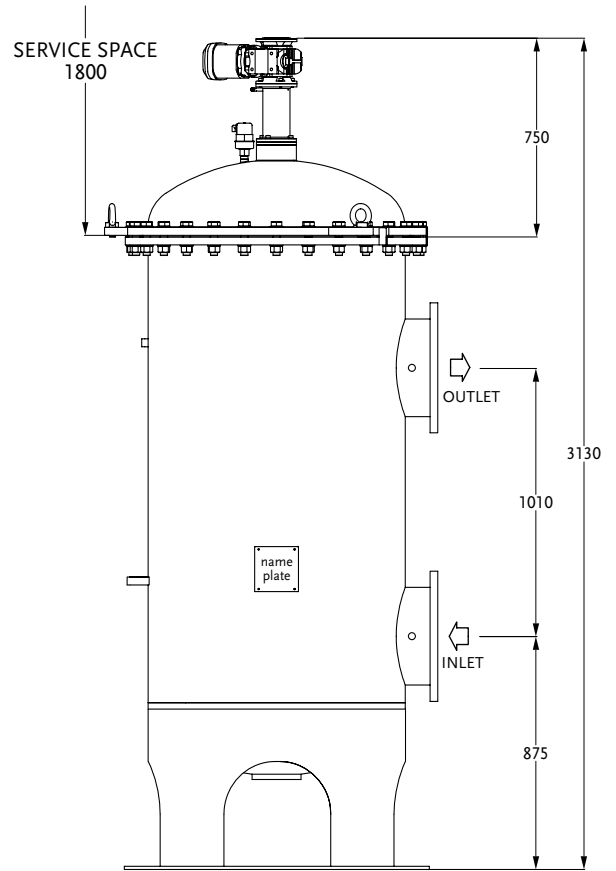
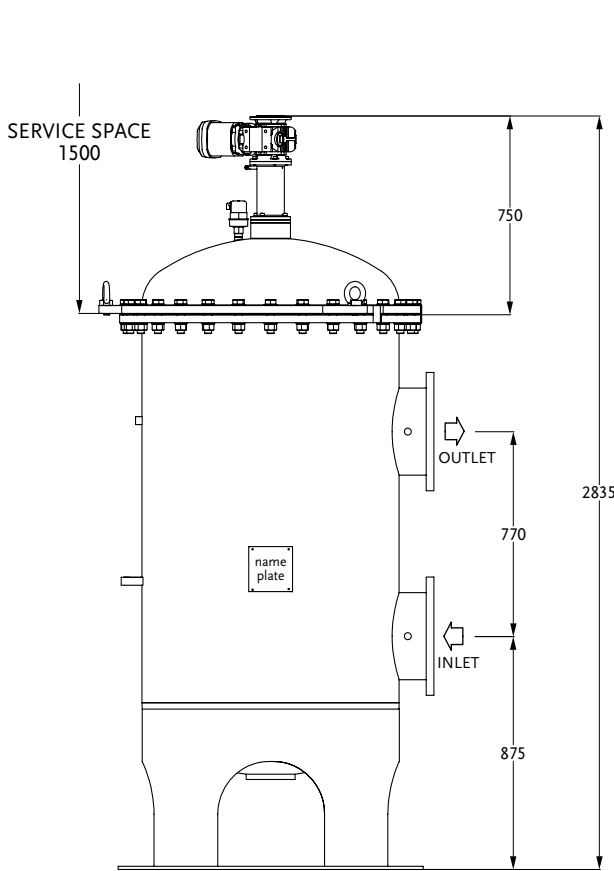
Single Screen Filters



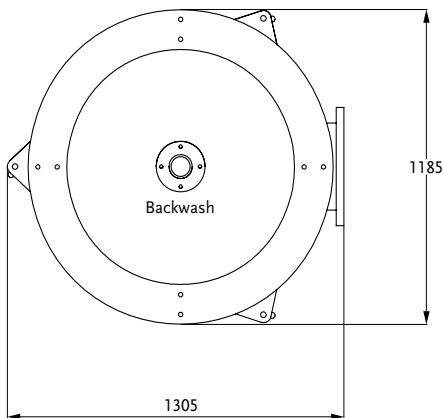
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MH 3.0

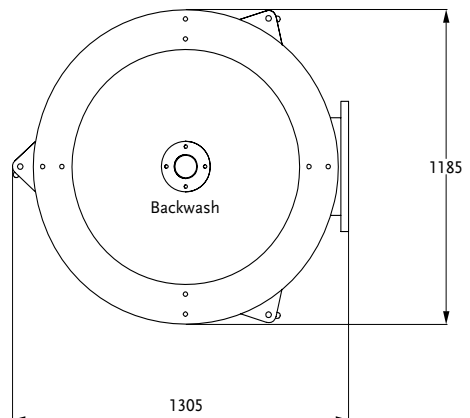
MH 3.5



BOTTOM VIEW



BOTTOM VIEW



All dimensions in mm



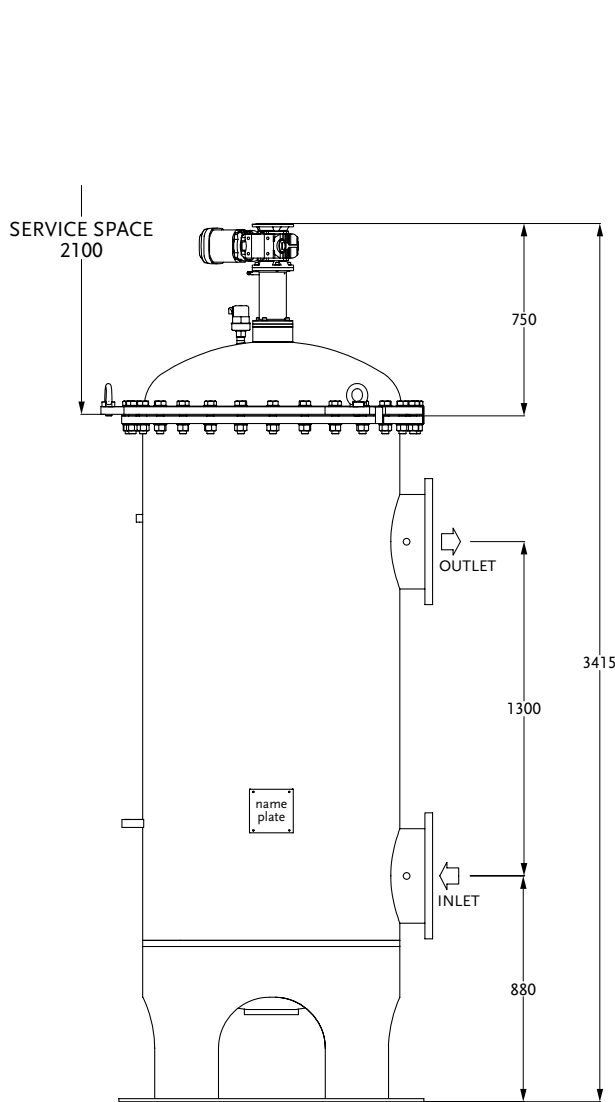
DIMENSIONAL DATA

MossHydro Ballast Water Single Screen Filters

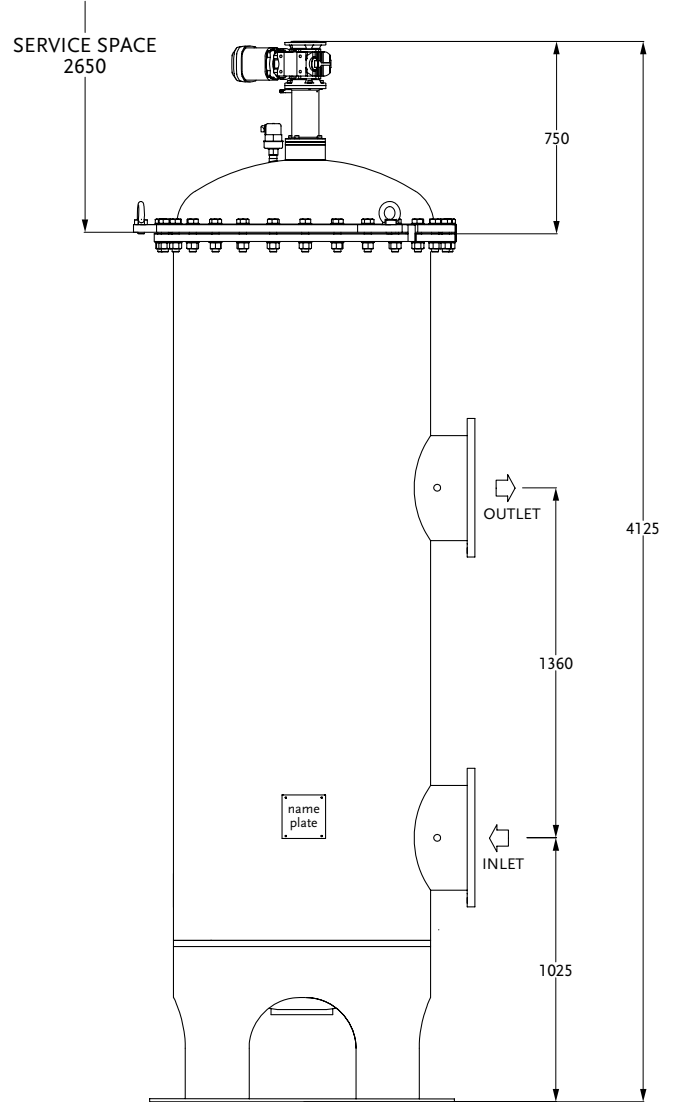


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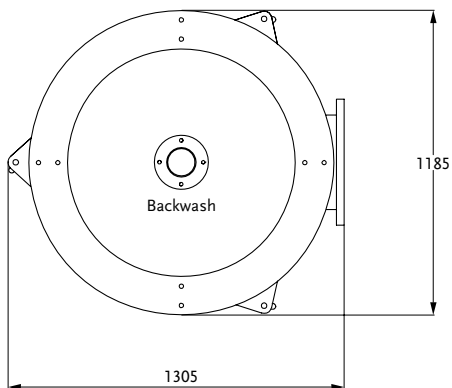
MH 4.0



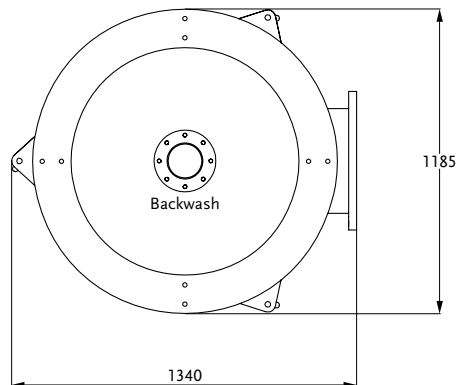
MH 5.4



BOTTOM VIEW



BOTTOM VIEW



All dimensions in mm



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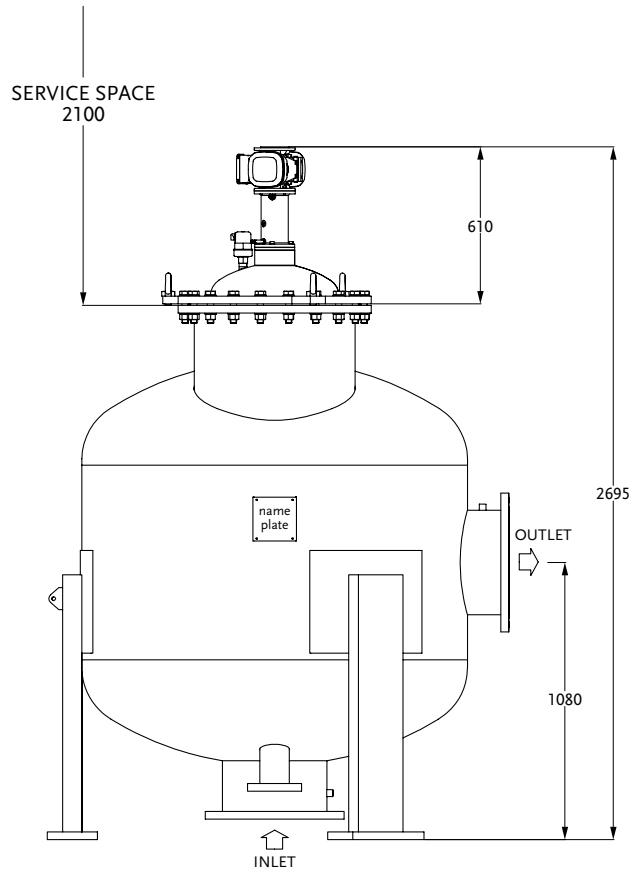
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Ballast Water

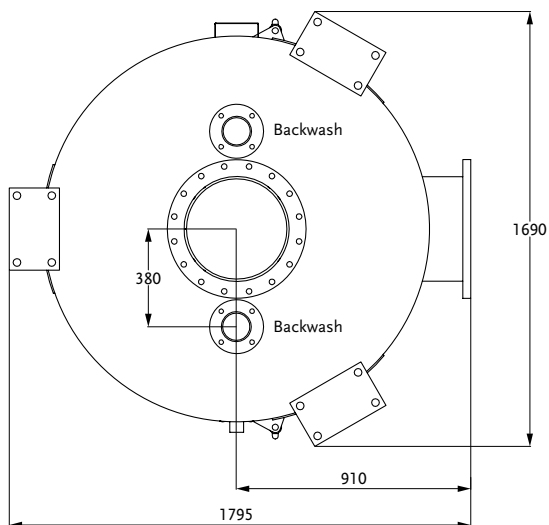
Multiple Screen Filters



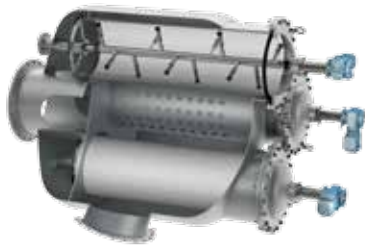
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BOTTOM VIEW



All dimensions in mm



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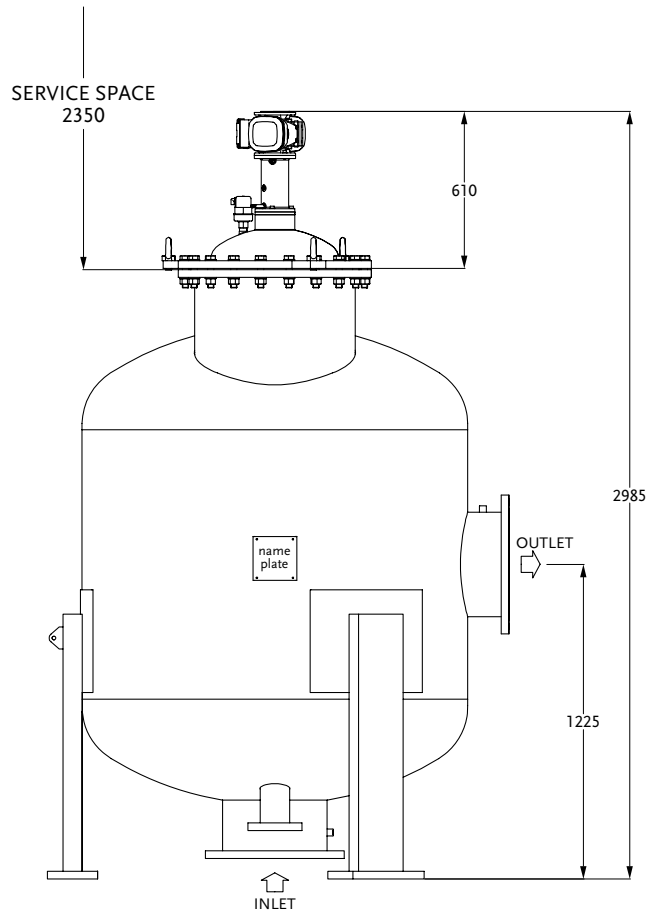
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Ballast Water

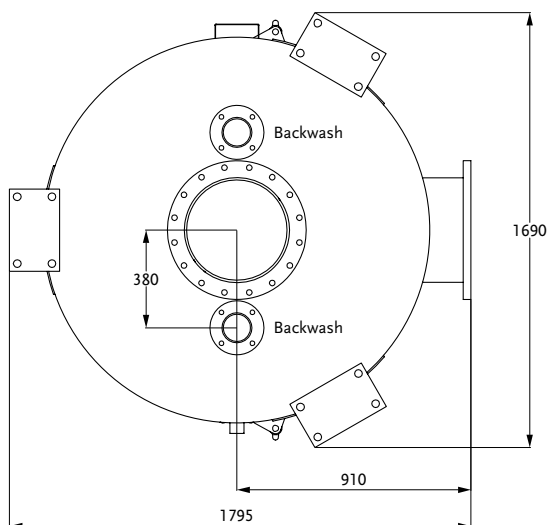
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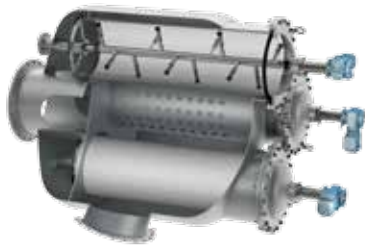
MH 6.0



BOTTOM VIEW



All dimensions in mm



DIMENSIONAL DATA

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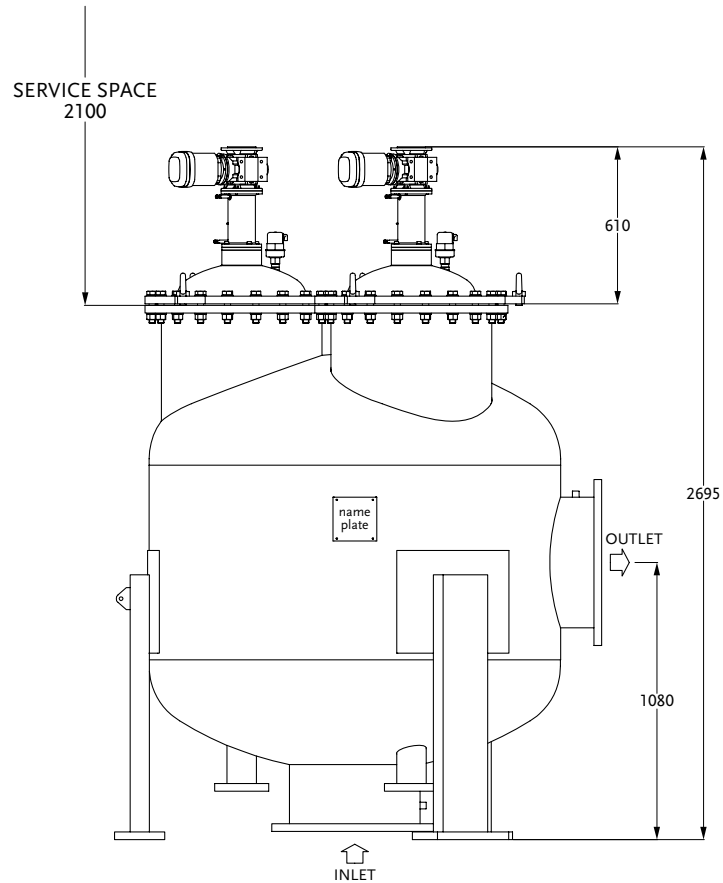
Ballast Water

Multiple Screen Filters

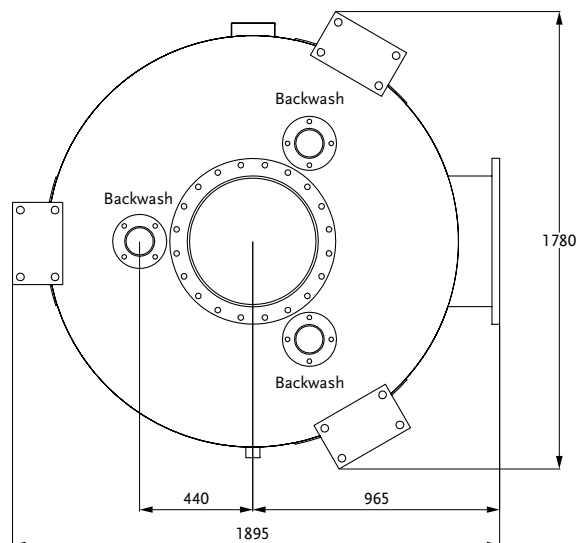


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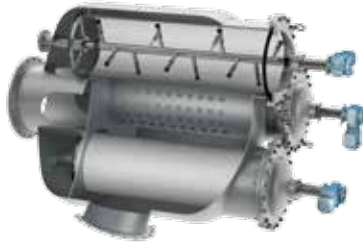
MH 7.5



BOTTOM VIEW



All dimensions in mm



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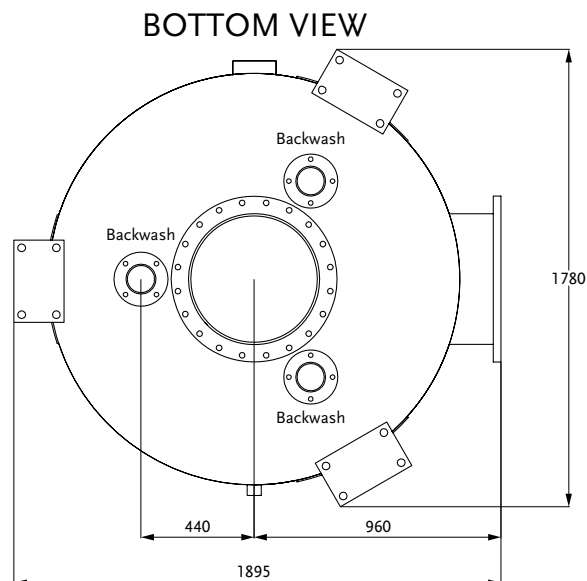
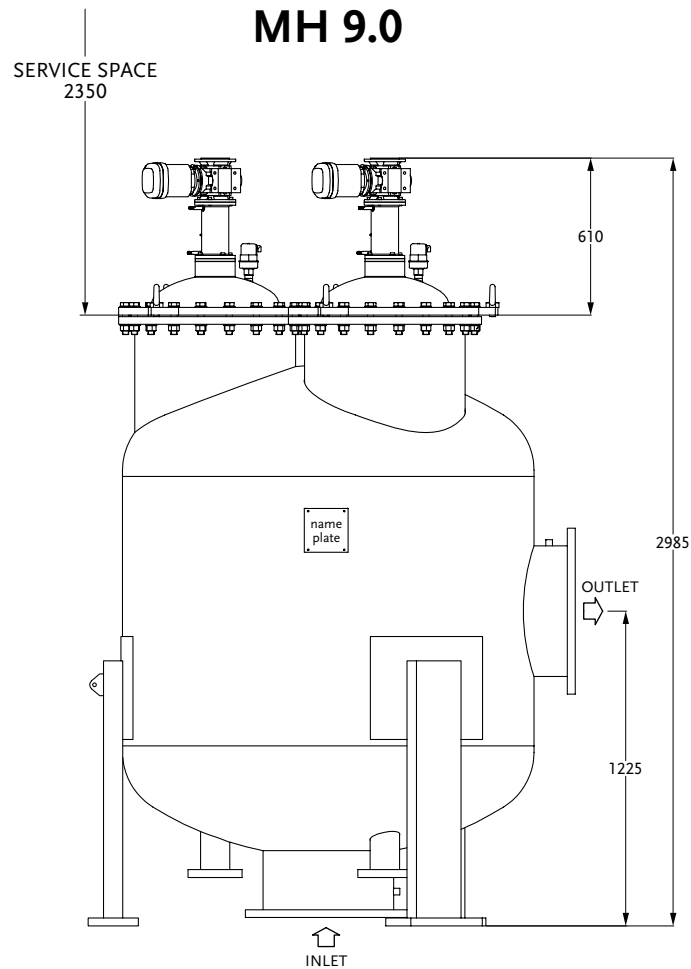
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Ballast Water

Multiple Screen Filters



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All dimensions in mm



DIMENSIONAL DATA

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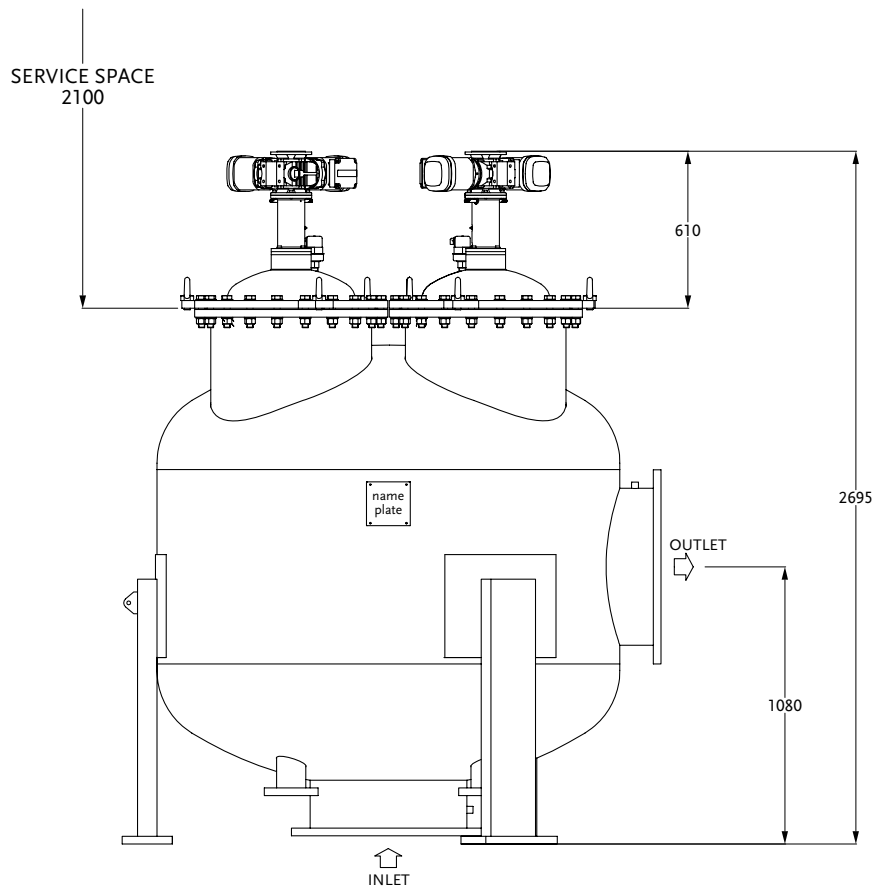
Ballast Water

Multiple Screen Filters

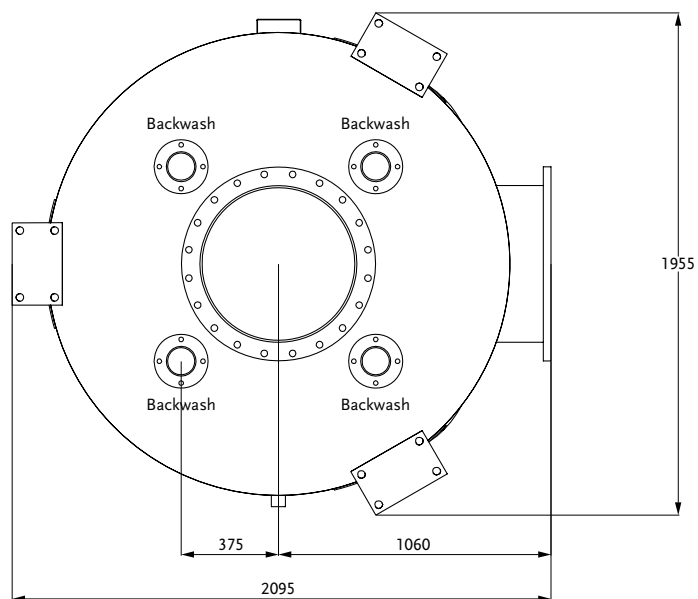


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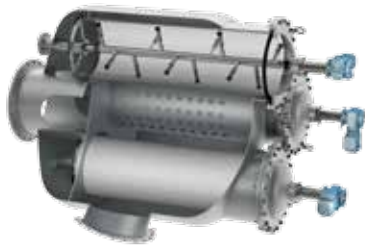
MH 10.0



BOTTOM VIEW



All dimensions in mm



DIMENSIONAL DATA

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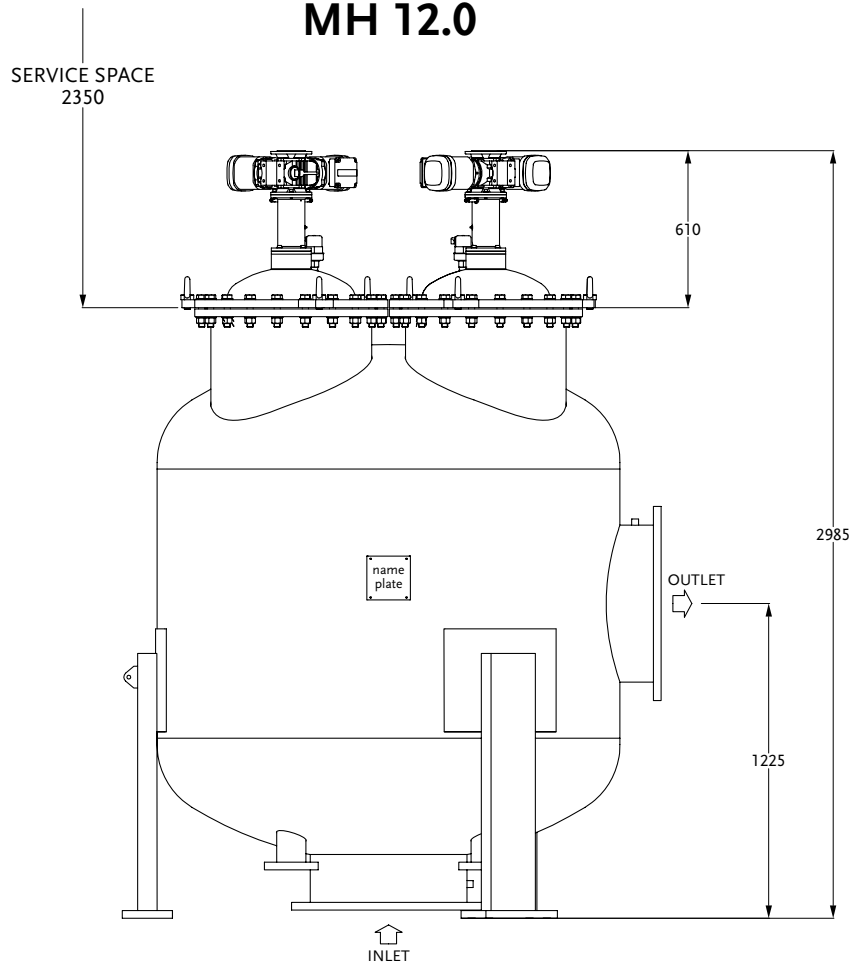
Ballast Water

Multiple Screen Filters

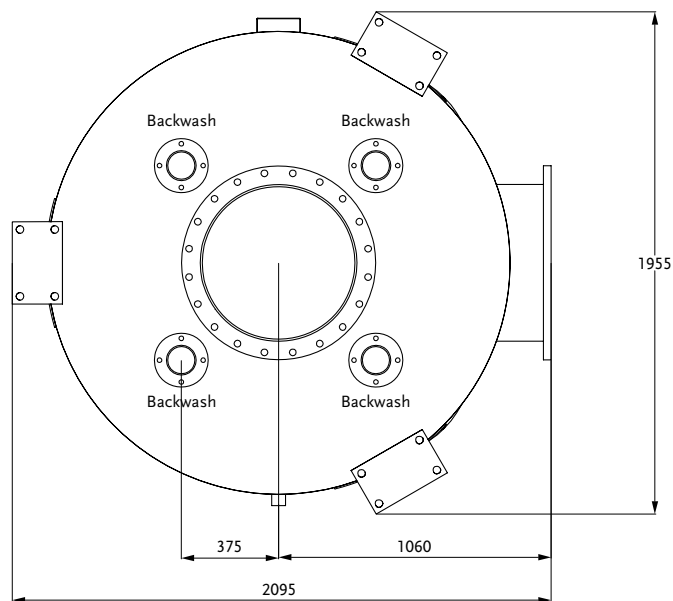


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MH 12.0



BOTTOM VIEW



All dimensions in mm



DIMENSIONAL DATA

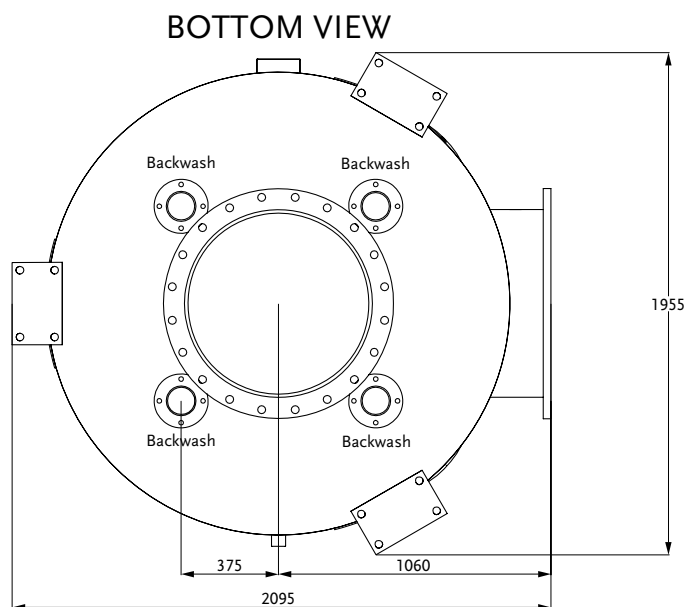
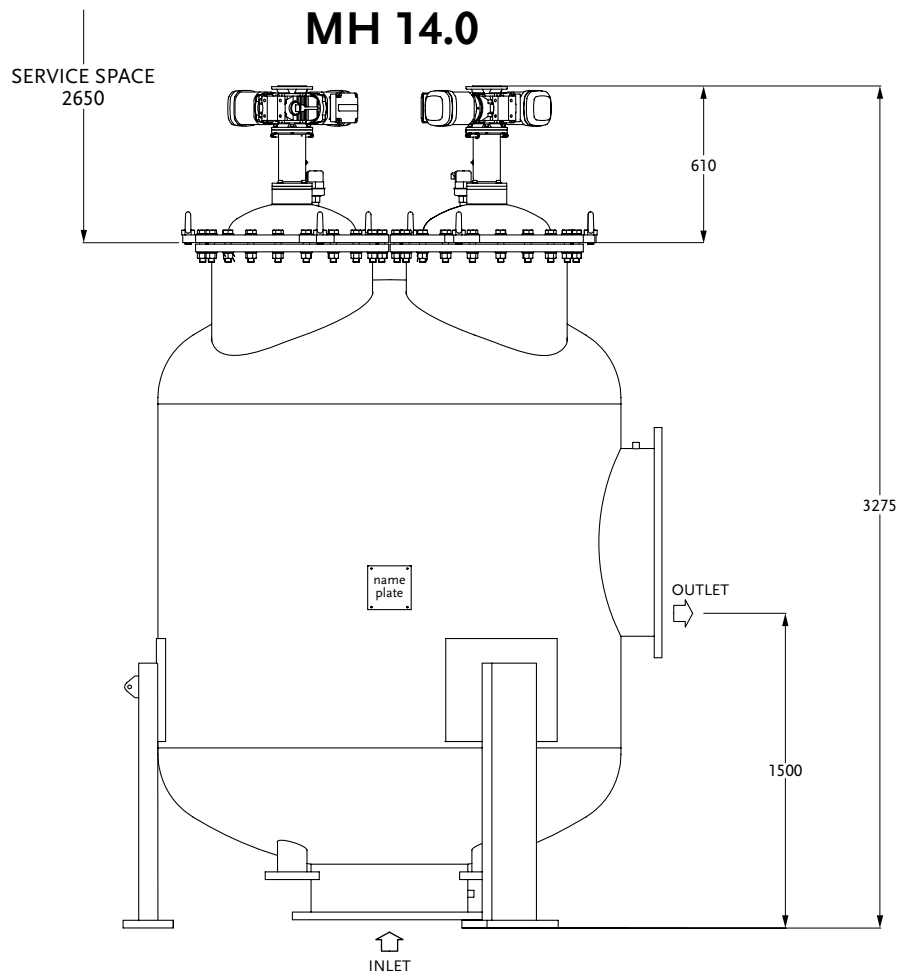
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Ballast Water

Multiple Screen Filters



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All dimensions in mm



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