

Meet ballast water regulations the easy way

**Alfa Laval PureBallast 3
for smaller vessels**



Let's shrink the hassle of ballast water treatment

There's no need for headaches when it comes to ballast water treatment. However small or large your operations, Alfa Laval PureBallast 3 can provide the optimal fit – for your vessel and where it sails, but also for your time and budget. For nearly 20 years, Alfa Laval has been making it easy.

We can take care of it all

Alfa Laval has almost two decades of experience in ballast water treatment, plus 100 years of marine experience behind it. Having retrofitted PureBallast 3 systems on nearly every type of vessel, we can meet the challenges of yours.

No engineering department or chosen yard? No problem. We can secure the skills you need from our own network. Anxious about timing? We can meet your dry dock schedule and ensure that everything runs smoothly. Engineering review, installation supervision and commissioning are all within our scope, so that you can avoid costly mistakes and potential compliance risk.

Count on Alfa Laval for:

- Expertise in selection, planning and delivery
- Short lead times and global flexibility
- All the skills needed to ensure a successful retrofit

You keep the freedom to sail

When you choose Alfa Laval and PureBallast 3, you get more than our expertise. You get safe and proven UV technology, plus the freedom to follow your business opportunities. You can comply in the widest range of waters and conditions, while saving time for your crew and money on your operating costs.* That's because PureBallast 3 is:

- Non-corrosive
- Chemical-free
- Energy-efficient
- Unaffected by water temperature
- Reliable in all salinities without the need to store salt water
- Able to handle even low-clarity waters at full flow
- Type approved by both IMO and the U.S. Coast Guard

* To see how PureBallast 3 performs in the areas where you sail, try the free Compliance Navigator tool at www.pureballast-compliancenaavigator.com

Always the right size for your needs

PureBallast 3 systems are small and flexible, which means they fit easily into your limited space on board. Skidmounted solutions meet needs from 32 to 300 m³/h, and our space-saving system of plug-and-play components handles flows up to 1000 m³/h. You can learn about these and other options on the following pages.

Whatever you choose, what you see is what you get. There's no "extra" equipment to install, such as tanks, heaters or added ventilation. So retrofitting is straightforward, with no hidden costs.

A world of service capabilities

Best of all, PureBallast 3 has the backing of Alfa Laval's global network. Worldwide and 24/7, our service experts are ready with parts, training and support. That includes remote troubleshooting and other digital services through PureBallast Connect, which can keep onboard service visits to a minimum.

By choosing our PureBallast Compliance Service Package, you can leave everything to us – not only the services and calibration needed to comply with regulations, but also the planning and arrangements.

We provide:

- Service access wherever your vessel sails
- Rapid delivery of spare parts worldwide
- Crew training on board, at Alfa Laval or online
- Digital services through PureBallast Connect
- PureBallast Compliance Service Package



PureBallast 3 is an ideal choice for all types of vessels, including:

- Offshore support vessels
- General cargo vessels
- Coastal bulkers
- Fishing vessels
- Live fish carriers

The right solution for your vessel

With a smart choice of ballast water treatment solution, meeting the regulations can be simple. Alfa Laval PureBallast 3 is chemical-free, easy to use and made with lasting marine-grade materials. Plus, it has the flexibility to meet your specific needs. You'll find the most common system choices here.

PureBallast 3 Compact

For ballast water flows of 32–300 m³/h

PureBallast 3 Compact is a convenient, skid-mounted solution for smaller ballast water flows. Ready-assembled and pre-tested before delivery, the module is easy to install and connect thanks to its small footprint and minimized pipework.

Capacity range (flow in m³/h)

PureBallast 3 Compact	(32)*	85	135	170	250	300
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* PureBallast 3 Compact/85 system at reduced flow rate

Technical data

PureBallast 3 Compact	
Power consumption, 32–170 m ³ /h	Optimal 11 kW (20 kW at full ramp-up*)
Power consumption, 250/300 m ³ /h	Optimal 17 kW (32 kW at full ramp-up*)

* Power consumption can be increased to handle low-clarity water with low UV transmittance.

Power supply: 400–440 VAC, 50/60 Hz
Working pressure: Max 6 bar (up to 10 bar optional)



Component dimensions

PureBallast 3 Compact	Size (mm) (W × D × H)	Net/dry weight (kg)
Skid, 32/85 m ³ /h	1312x680x1745	650/740
Skid, 135/170 m ³ /h	1500x680x1912	785/905
Skid, 250/300 m ³ /h	1500 × 1200 × 2050	1320/1421
Electrical cabinet, 32–300 m ³ /h	954x520x1466	160

Larger flows, Ex or other needs?

The options here are only the most common PureBallast 3 choices. If your vessel has a ballast water flow greater than 1000 m³/h, or if you have explosive environments on board, we can provide PureBallast 3 Std or PureBallast 3 Ex systems. In addition, we have vessel-specific options, such as a bulker-fit configuration or PureBallast 3 Ex deckhouses for tankers. You'll find our full offering at www.alfalaval.com/pureballast

PureBallast 3 Compact Flex

For ballast water flows of 32–1000 m³/h

PureBallast 3 Compact Flex is the ideal choice for most vessels, enabling the smallest possible footprint. Delivered as a system of loose components for plug-and-play installation, it maximizes both space savings and installation flexibility.



Capacity range (flow in m³/h)

PureBallast 3 Compact Flex		85	135	170	250	300	500	600	1000
PureBallast 3 Compact Flex	(32*)								

* PureBallast 3 Compact Flex/85 system at reduced flow rate.

Technical data

PureBallast 3 Compact Flex	
Power consumption, 170 m ³ /h reactor	11 kW (20 kW at full ramp-up*)
Power consumption, 300 m ³ /h reactor	17 kW (32 kW at full ramp-up*)
Power consumption, 600 m ³ /h reactor	33 kW (63 kW at full ramp-up*)
Power consumption, 1000 m ³ /h reactor	52 kW (100 kW at full ramp-up*)

* Power consumption can be increased to handle low-clarity water with low UV transmittance.

Power supply: 400–440 VAC, 50/60 Hz
Working pressure: Max 6 bar (up to 10 bar optional)

Component dimensions

PureBallast 3 Compact Flex			
	Size (mm) (WxDxH)	Net/dry weight (kg)	Volume (L)
Reactor, 170 m ³ /h	663×807×1121	180	45
Reactor, 300 m ³ /h	734×807×1449	250	80
Reactor, 600 m ³ /h	800×801×1492	400	100
Reactor, 1000 m ³ /h	986×931×1568	540	190
Electrical cabinet for 32 – 1000 m ³ /h	900×570×1468	160	
LDC1 for 500/600 m ³ /h	1035×545×928	150	
LDC2 for 750/1000 m ³ /h	1035×545×928	150	
CIP unit	535×443×1186	63	Max 15
Basket filter, 85 m ³ /h	450×460×918	150	15
Basket filter, 135 m ³ /h	510×530×1061	180	25
Basket filter, 170 m ³ /h	510×530×1111	240	33
Basket filter, 250 m ³ /h	585×600×1259	390	61
Basket filter, 300 m ³ /h	600×600×1314	420	82
Basket filter, 500 m ³ /h	755×760×1394	664	146
Basket filter, 750 m ³ /h	855×830×1646	937	241
Basket filter, 1000 m ³ /h	900×950×1824	1141	370



This is Alfa Laval

Alfa Laval is active in the areas of Energy, Marine, and Food & Water, offering its expertise, products, and service to a wide range of industries in some 100 countries. The company is committed to optimizing processes, creating responsible growth, and driving progress – always going the extra mile to support customers in achieving their business goals and sustainability targets.

Alfa Laval's innovative technologies are dedicated to purifying, refining, and reusing materials, promoting more responsible use of natural resources. They contribute to improved energy efficiency and heat recovery, better water treatment, and reduced emissions. Thereby, Alfa Laval is not only accelerating success for its customers, but also for people and the planet. Making the world better, every day. It's all about *Advancing better™*.

How to contact Alfa Laval

Contact details for all countries are continually updated on our web site. Please visit www.alfalaval.com to access the information.

