Alfa Laval PureBallast 3 Compact is a third-generation PureBallast system designed for simple, plug-and-play installation. Like other PureBallast 3 systems, it is fully automated and uses an enhanced form of UV treatment for the biological disinfection of ballast water. (See the PureBallast 3 Compact Flex or PureBallast 3 Std leaflets for details.)

The system is delivered as a compact module, which comes ready-assembled and mounted on a skid with all necessary equipment and prefabricated pipework. The module is easy to connect and is pre-tested before delivery.

Application
Type approved by IMO and the U.S. Coast Guard (USCG), PureBallast 3 Compact is certified for ballast water treatment in all types of water: fresh, brackish and marine. Even in low-clarity water, it provides unmatched biological disinfection performance. When operating in IMO-regulated waters, full-flow treatment is possible where the UV transmittance is as low as 42%.

PureBallast 3 Compact is specifically designed for compact installation and can be configured for flows of 32–300 m³/h.

Type approvals
- IMO (USCG upgradeable)
  PureBallast 3 Compact systems have IMO type approval. Note that when comparing IMO type approval certificates for different ballast water treatment systems, certificates issued before 2014 do not state the system limitations. If needed, IMO-certified PureBallast 3 Compact systems can be upgraded with USCG type approval at a later date.
- USCG
  For vessels that need to discharge ballast in United States waters, PureBallast 3 Compact systems with USCG type approval are available. Standard USCG-certified systems have the same capacities as IMO-certified systems, but they may operate at reduced flow in United States waters with very low UV transmittance values. For vessels requiring full flow at all times, high-power USCG-certified (USCG HP) systems are available.

Benefits*
- Minimal system footprint
- Simple installation as a plug-and-play skid
- Certified performance in any type of water: fresh, brackish, marine
- Excellent performance in low-clarity waters
- Effective power management

* Additional benefits and details can be found in the PureBallast 3 Compact Flex or PureBallast 3 product leaflets

Skid components
The following components are incorporated into the PureBallast 3 Compact skid:
- **Filter**
  The filter is used during ballasting operations to block the intake of larger organisms and reduce sediment in the ballast water tanks.
- **Reactor**
  Built with long-lasting super-austenitic stainless steel, the reactor comprises the enhanced UV treatment stage responsible for biological disinfection.
- **Compact Cleaning-In-Place (CIP) unit**
  UV lamp performance is safeguarded by an automatic CIP cycle that removes UV-impairing fouling and scaling.
**Technical data**

<table>
<thead>
<tr>
<th>PureBallast 3 Compact IMO &amp; USCG</th>
<th>Power consumption, 32–170 m³/h</th>
<th>Optimal 11 kW (20 kW at full ramp-up*)</th>
<th>PureBallast 3 Compact USCG HP</th>
<th>Power consumption, 85 m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power consumption, 250/300 m³/h</td>
<td>Optimal 17 kW (32 kW at full ramp-up*)</td>
<td>* PureBallast 3 Compact/85 system at reduced flow rate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Component dimensions**

<table>
<thead>
<tr>
<th>PureBallast 3 Compact IMO &amp; USCG</th>
<th>PureBallast 3 Compact USCG HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (mm) (W x D x H)</td>
<td>Net/dry weight (kg)</td>
</tr>
<tr>
<td>Skid, 32/85 m³/h</td>
<td>1312x680x1745</td>
</tr>
<tr>
<td>Skid, 135/170 m³/h</td>
<td>1500x680x1468</td>
</tr>
<tr>
<td>Skid, 250/300 m³/h</td>
<td>1500 x 1200 x 2050</td>
</tr>
<tr>
<td>Electrical cabinet, 32–300 m³/h</td>
<td>954x520x1466</td>
</tr>
</tbody>
</table>

Alfa Laval reserves the right to change specifications without prior notification.

**How to contact Alfa Laval**

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com