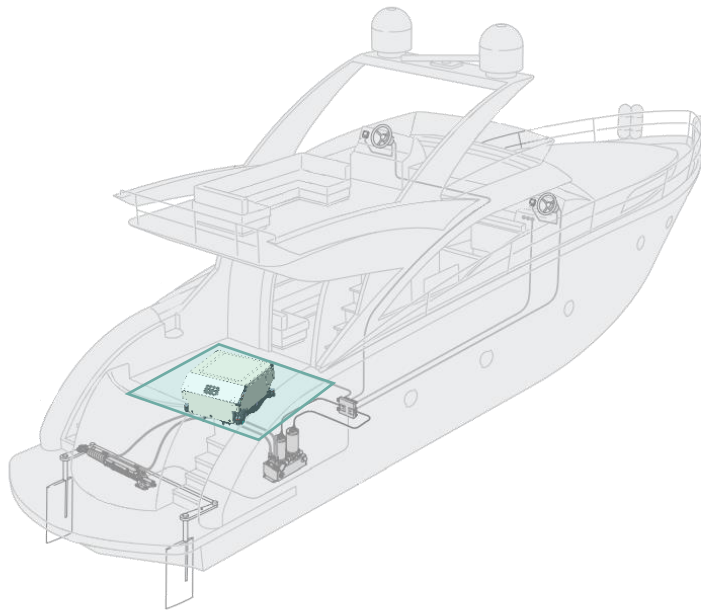


# TECHNOLOGY BEHIND THE INNOVATION



## Summary

The result of years of engineering, testing and refinement, Dometic's new DG3 delivers industry-leading roll control, increased durability and an impressive 40% reduction in overall power consumption compared to current offerings for boats in the 35- to 41-foot category.

The DG3 utilizes Dometic's innovative technologies and state-of-the-art manufacturing capabilities to provide boaters a whole new level of vessel ride and roll control.

In developing the DG3, engineers in the company's Vancouver, British Columbia facility set out to overcome common boat builder and consumer "pain points" associated with existing stabilization products. The result is a breakthrough new system that delivers significant improvements in performance, durability, reliability, and long-term cost of ownership.



## BREAKTHROUGHS

### Less Waiting

Key among these breakthroughs is DG3's ability to spin up in 16 minutes, versus the typical 50 minutes for current systems on the market. This accounts about 66% less than competitions. What this means is that boaters can begin having fun on the water three times faster while enjoying smooth sailing in all types of conditions.

The Dometic DG3 is even more impressive at the end of a trip, capable of fully spinning down in less than 20 minutes — 15 times faster compared to up to eight or more hours for current systems. With a new DG3 installed onboard, boaters can enjoy a more comfortable ride over a wide range of conditions without having to alter their boating or fishing plans to accommodate their vessel's stabilization technology.

## How we significantly reduce waiting times

Dometic achieves these industry leading spin up/spin down times by using a dedicated 48V Lithium battery for spin up and a larger flywheel that creates the required angular momentum spinning at a much slower 4,700 RPM.

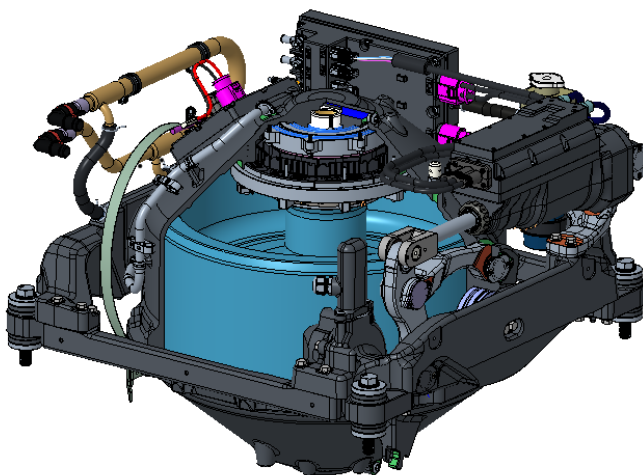
## Innovation in reducing energy consumption

Another revolution is how we reduce the energy consumption. The energy stored in the spinning flywheel is recaptured during spin down via a custom-engineered motor controller to recharge the system's dedicated battery.

Where other systems use hydraulic technology to dampen (rather than drive) the hemisphere, DG3's Roller Screw technology allows Dometic to actively control flywheel procession. This proprietary design also allows the push-pull forces on the ram to recapture energy and generate electrical current — helping reduce the system's overall power consumption by an impressive 40% compared to competitor's solutions.

## What about the performance?

The DG3 utilizes Dometic's proprietary, industry-proven Inverted Roller Screw technology for true dynamic control and greatly enhanced roll reduction performance. The precision of this technology is particularly noticeable in DG3's ability to smooth the ride in small to moderate sea states, where other stabilization technologies are not as effective.



Dometic product engineers also set out to enhance long-term durability, minimize required service and reduce the total cost of ownership. A common complaint among gyrostabilizer owners and the boating industry is the frequency of required service and the replacement of expensive bearings, bushings, and other components. With its slower-spinning flywheel, larger and more robust bearings, patent-pending cooling of the stationary bearing inner race, parallel path cooling, and titanium heat exchanger, DG3 is designed to stay cool and operate reliably in the most challenging boating conditions. Furthermore, Dometic's proprietary all-electric procession actuator eliminates hydraulic actuators that require fluid and are prone to troublesome leaks.

### **Service-free**

Dometic's DG3 is designed to be service-free. Regular maintenance is limited to visual inspection, cleaning the sea strainer, and descaling or winterizing the heat exchanger/raw water system in certain climates. The system's cover can be removed easily without tools, and key components are designed for easy access within the tight confines of a boat's hull.