



**SMART**  
GYRO

**FEEL THE MAGIC**

# THE FUTURE OF MARINE STABILIZATION

Elevating onboard comfort with advanced gyro stabilizers

Smartgyro is a gyro stabilization technology company with a mission to elevate the entire boating experience through its comprehensive range of advanced gyro stabilizers.

Founded in 2014 and based in La Spezia (Italy), Smartgyro is backed by strategic partner YANMAR and its companies, including VETUS, Maxwell and Flexofold.



Enhancing onboard comfort for crew and passengers alike

Smartgyro's advanced line-up of stabilizers is designed to fit a range of boat sizes and specifications. From leisure boats to commercial vessels, Smartgyro can cater to specific requirements.



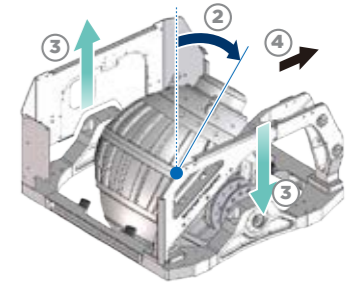
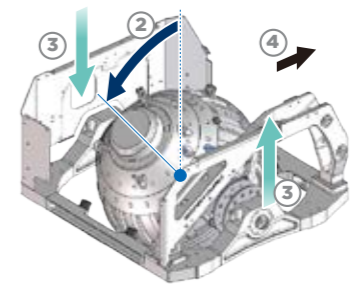
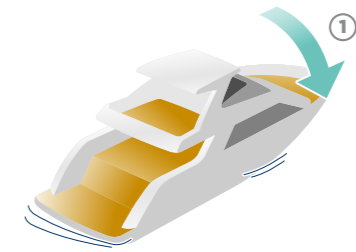


# HOW DOES SMARTGYRO WORK?

## HERE IS THE KEY CONCEPT

When a gyroscope is forced to change its orientation, it generates a force that opposes this change, resulting in a precession motion.

- ① Boat tilt
- ② Precession angle
- ③ Anti-roll torque
- ④ Bow



A motion control system uses sensors and a computing platform to adjust the hydraulic pistons and synchronize the precession motion with the boat's rolling.

The outcome of all these synchronized efforts is a coordinated dance of forces that keeps the boat stable, no matter how rough the sea gets.



# WHAT MAKES SMARTGYRO SPECIAL?

We believe the ultimate luxury is uninterrupted time on the water. That's why Smartgyro is designed to minimise not only unwanted movement, but also downtime during maintenance.

## EXISTING BOATS

The base frame can be broken down into four parts to allow for installation through narrow access hatches, making refitting easier and more cost-efficient.

## NEW BOATS

The unit's compact dimension allows boat builders to easily integrate Smartgyro into vessel design, including taking advantage of empty hull space.



### MODULAR DESIGN

For easy assembly, servicing and maintenance inside the boat, reducing the need for downtime or expensive haul outs



### LIQUID COOLING

Removes heat generated by the motor, bearings, inverter and hydraulic manifold



### VACUUM FLYWHEEL ENCLOSURE

The built-in pump automatically restores the vacuum, ensuring top performance at all times



### GYRO CONTROL MODULE

Monitors and processes boat behaviour data in real time



### DRIVING PERFORMANCE

Stops the gyro's counteracting forces during quick turns for a smoother ride

# CONTROL YOUR SMARTGYRO

Effortlessly navigate Smartgyro's features with intuitive controls

Boaters can easily manage Smartgyro's key functions through an intuitive graphic user interface. Each Smartgyro unit comes equipped with a 5-inch touchscreen display or can seamlessly connect to multifunctional displays (MFDs).



## EXTENDED WARRANTY



From installation to maintenance and beyond, we are committed to keeping our customers on the water. Smartgyro recreational units come with a unique three year/2,000 hours warranty for unrivalled peace of mind.

## GLOBAL NETWORK

Smartgyro has a worldwide distribution network. To find a dealer near you, please go to the website:

[www.smartgyro.com/find-dealer](http://www.smartgyro.com/find-dealer)



## BACKED BY A GLOBAL LEADER

Smartgyro is part of YANMAR.

YANMAR is a privately-held, multinational company with headquarters in Osaka, Japan.



# SPECIFICATIONS



**SG 20**



**SG 40**



**SG 60**



**SG 80**



**SG 120**



**SG 150**

Target boat	45 - 55' or up to 25 tons
Maximum Rated speed	9.500 RPM
Angular momentum at max. rated speed	5.900 Nms
Anti-rolling torque at max. rated speed	15.500 Nm
"Spool-up" time to max. rated speed	55 minutes
"Spool-up" time to stabilization	25 minutes (65% of rated speed)
Input voltage (AC)	115V nominal, 50/60 Hz, single phase 220V nominal, 50/60 Hz, single phase
Input voltage (DC)	12 Vdc
"Spool-up" AC power	2.5 - 3.0 kW
Operating AC power	1.5 - 2.5 kW*
DC power ("spool-up" and operating)	150 W (including display)
Sea water supply	15 (min) - 30 (max) LPM [4 (min) - 8 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	0.76 x 0.77 x 0.65 m [29.9 x 30.3 x 25.6 in]
Weight	495 kg [1091 lbs]
Noise output	70 - 72 dBC @ 1 meter

Target boat	50 - 60' or up to 40 tons
Maximum Rated speed	7.500 RPM
Angular momentum at max. rated speed	9.100 Nms
Anti-rolling torque at max. rated speed	19.000 Nm
"Spool-up" time to max. rated speed	55 minutes
"Spool-up" time to stabilization	25 minutes (65% of rated speed)
Input voltage (AC)	220V nominal, 50/60 Hz, single phase
Input voltage (DC)	24 Vdc
"Spool-up" AC power	4 kW
Operating AC power	1.5 - 2.5 kW*
DC power ("spool-up" and operating)	220 W (including display)
Sea water supply	15 (min) - 30 (max) LPM [4 (min) - 8 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	0.86 x 0.93 x 0.72 m [34.0 x 36.5 x 28.4 in]
Weight	650 kg [1430 lbs]
Noise output	68 - 70 dBC @ 1 meter

Target boat	55 - 65' or up to 50 tons
Maximum Rated speed	5.500 RPM
Angular momentum at max. rated speed	12.500 Nms
Anti-rolling torque at max. rated speed	25.000 Nm
"Spool-up" time to max. rated speed	45 minutes
"Spool-up" time to stabilization	25 minutes (65% of rated speed)
Input voltage (AC)	220V nominal, 50/60 Hz, single phase
Input voltage (DC)	24 Vdc
"Spool-up" AC power	4.5 kW
Operating AC power	2.4 - 4.0 kW*
DC power ("spool-up" and operating)	220 W (including display)
Sea water supply	15 (min) - 30 (max) LPM [4 (min) - 8 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	1.08 x 1.11 x 0.87 m [42.4 x 43.7 x 34.3 in]
Weight	910 kg [2006 lbs]
Noise output	62 - 64 dBC @ 1 meter

Target boat	60 - 70' or up to 60 tons
Maximum Rated speed	5.500 RPM
Angular momentum at max. rated speed	15.400 Nms
Anti-rolling torque at max. rated speed	30.100 Nm
"Spool-up" time to max. rated speed	45 minutes
"Spool-up" time to stabilization	25 minutes (65% of rated speed)
Input voltage (AC)	220V nominal, 50/60 Hz, single phase
Input voltage (DC)	24 Vdc
"Spool-up" AC power	4.9 kW
Operating AC power	2.4 - 4.0 kW*
DC power ("spool-up" and operating)	220 W (including display)
Sea water supply	15 (min) - 30 (max) LPM [4 (min) - 8 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	1.08 x 1.11 x 0.87 m [42.4 x 43.7 x 34.3 in]
Weight	980 kg [2160 lbs]
Noise output	62 - 64 dBC @ 1 meter

Target boat	70 - 85' or up to 75 tons
Maximum Rated speed	5.000 RPM
Angular momentum at max. rated speed	28.000 Nms
Anti-rolling torque at max. rated speed	58.000 Nm
"Spool-up" time to max. rated speed	90 minutes
"Spool-up" time to stabilization	55 minutes (65% of rated speed)
Input voltage (AC)	380V nominal, 50/60 Hz, three phase
Input voltage (DC)	24 Vdc
"Spool-up" AC power	5.5 kW
Operating AC power	2.5 - 4.0 kW*
DC power ("spool-up" and operating)	250 W (including display)
Sea water supply	20 (min) - 30 (max) LPM [5.5 (min) - 8 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	1.36 x 1.41 x 1.02 m [53.5 x 55.5 x 40.1 in]
Weight	1690 kg [3726 lbs]
Noise output	72 - 74 dBC @ 1 meter

Target boat	80 - 95' or up to 100 tons
Maximum Rated speed	5.000 RPM
Angular momentum at max. rated speed	37.000 Nms
Anti-rolling torque at max. rated speed	76.000 Nm
"Spool-up" time to max. rated speed	80 minutes
"Spool-up" time to stabilization	45 minutes (65% of rated speed)
Input voltage (AC)	380V nominal, 50/60 Hz, three phase
Input voltage (DC)	24 Vdc
"Spool-up" AC power	6.5 kW
Operating AC power	3.0 - 5.0 kW*
DC power ("spool-up" and operating)	250 W (including display)
Sea water supply	35 (min) - 55 (max) LPM [9 (min) - 15 (max) GPM]
Operating temperature	0 - 60 °C [32 - 140 °F]
Envelope dimensions	1.36 x 1.41 x 1.02 m [53.5 x 55.5 x 40.1 in]
Weight	1890 kg [4167 lbs]
Noise output	72 - 74 dBC @ 1 meter

Sea state dependent\*

[www.smartgyro.com/products](http://www.smartgyro.com/products)



**VISIT**

[smartgyro.com](https://smartgyro.com)



Smartgyro s.r.l.

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