## TECHNICAL SPECIFICATION

## F45 HyD90 Electric – Hydraulic Power System DESCRIPTION

The power system supplies the energy required to articulate the stabilizer fins. Quantum power units can be configured with a range of stabilizer hull unit sizes and quantities, allowing flexible arrangements tailored to vessel requirements.

The patented F45, represents a 60%-80% savings in the power required to run a stabilizer system. Even at idle, where hydraulics must remain running at 40% capacity, the F45 operates at 1 kW. The Mass Energy Storage System utilizes flywheel technology to store and recover energy. The F45 features an extended maintenance schedule and operates at noise levels 4X quieter than a traditional hydraulic system.

## **FEATURES:**

SIMPLE INSTALLATION: The F45 is available in multiple sizes and can be supplied with a separate flywheel assembly to accommodate confined spaces. The system operates on a closed-loop hydraulic circuit, eliminating the need for servo valves. This design reduces component count, minimizes potential failure points, and increases overall efficiency compared to traditional open-loop hydraulic systems.

EFFICIENT: The hybrid power system only draws the minimum power as needed. Elimination of the servo valve, greatly enhances the efficiency of the system along with the ability to store and recover energy with the Mass Energy Storage System (M.E.S.S.). This technology preserves the generators and balances the load.

MINIMAL NOISE: Outside party confirmed, the F45 is 4X quieter than a traditional system, 65dB versus 75dB.

APPEARANCE: The durable high gloss paint finish, polished stainless steel tubing and black anodized reflects the attention to detail, resulting in exceptional fit and finish. Available in various colors.

Equipment is covered by Quantum's 1-year comprehensive warranty.

Service and technical support are available worldwide.



	Operating Capacity Continuous*	72kW (97hp)
	Operating Pressure	Up to 3000psi
	Tank Capacity	233L (59Gal)
	Length (overall)**	1321 mm (52")
	Height (overall)**	1206 mm (47.5")
	Depth (overall)**	1118 mm (44")
	Weight Inc. (dry)	1105 kg (2435lbs)

\*Provided for reference only. Consult a Quantum representative for system sizing.

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<sup>\*\*</sup> Length: up to 1478mm (58.2 in) including water valve

<sup>\*\*</sup> Height: up to 1372mm (54 in) including mounting feet

<sup>\*\*</sup> Depth: up to 1372mm (54 in) including mounting feet