

Aquarius Stabilisation at Rest for motor yachts, using retractable fins - the best of both worlds

Significant roll reduction when the vessel is stationary - continued high performance when underway

Features

- Fins retractable when not in use
- Less appendage drag – increased vessel range
- Uses the reliable Aquarius range
- Only one pair of fins required depending on size – lower installation costs
- 20-30% performance when fins are passive, in quiet mode
- Simple to retrofit to existing Aquarius systems
- Aquarius 25 now available

Fin Unit

- Simplified crux design
- Single top bearing design
- Vertical linkage for fin tilt
- Composite finshaft bearing
- Triple seal arrangement
- Small hull aperture

Fin

- One piece construction using “teardrop” profile
- Tip fence

Power Unit

- Package unit including all components for ease of installation
- Low noise and vibration

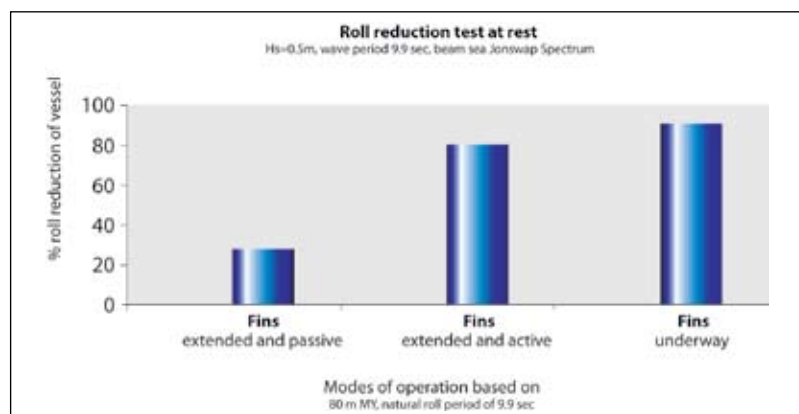


The Rolls-Royce system is specifically designed to minimise the roll of motor yachts. (Image courtesy of oceAnco)

Rolls-Royce has developed a new concept that significantly reduces the roll of a motor yacht when stationary by increasing the effectiveness of the retractable folding fin stabilisers normally used for underway stabilisation. The system uses a new fin profile and an advanced control system that keeps the fins ‘active’ when stationary, maximising their effect in reducing ship motion. Scale model tests carried out at the Maritime Research Institute Netherlands (MARIN) in Wageningen December 2005 on a large motor yacht have proven the effectiveness of the design concept. The conclusion was proven in December 2006, when MY “AMEVI” underwent sea trials with the full scale installation.

The new Rolls-Royce system gives yacht owners the best of both worlds in terms of stabilisation performance with the advantages of a single system installation – providing optimum comfort at rest and at speed. Existing systems can be upgraded to improve performance at rest.

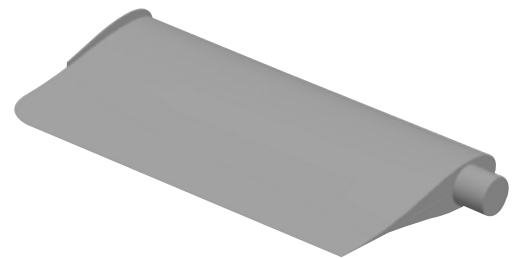
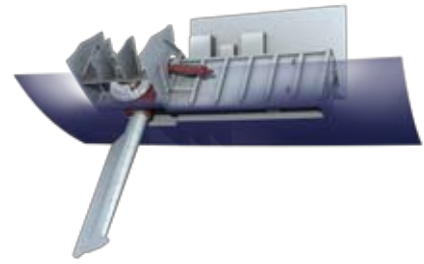
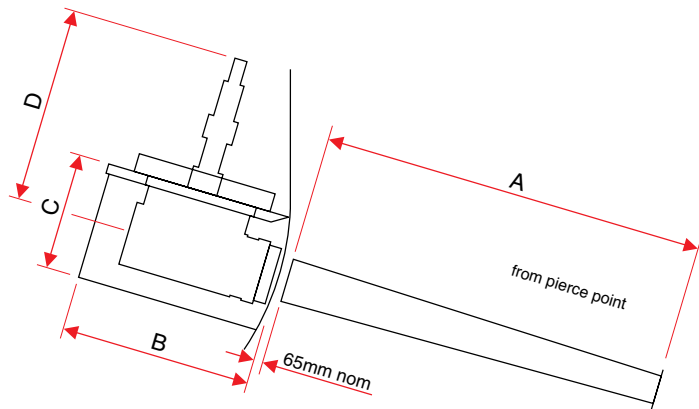
Roll reduction test results



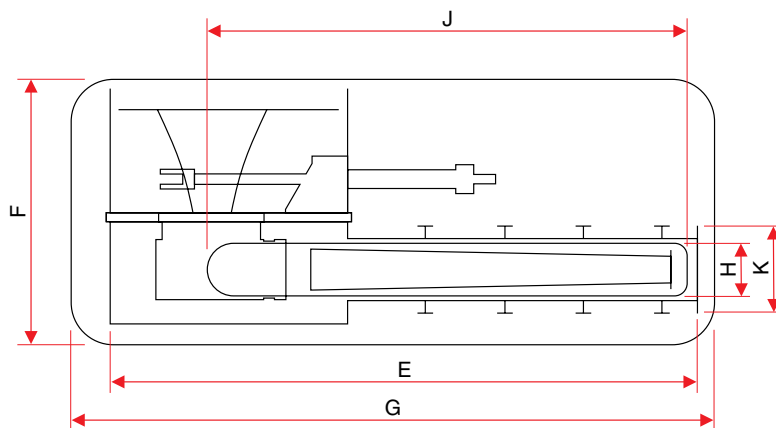
Note: Underway performance based on a separate simulation at higher sea-state and vessel speed

Fact Sheet

Fin extended



Fin housed



Key specifications

Model	Fin Area (M ²)	Sizes (meters)										Approx weight / ship set (tonnes)
		A	B	C	D	E	F	G	H	J	K	
25	Up to 4.0	2.4	1.16	0.64	1.4	3.74	1.85	4.2	0.31	3.14	0.53	12
50	Up to 6.1	3.19	1.41	0.845	1.73	4.94	2.2	5.54	0.4	4.66	0.68	21
100	Up to 9.0	3.99	1.77	1.18	2.18	6.18	2.7	6.55	0.56	5	0.85	41

