

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

Fins retractable when not in use

Less appendage drag

Increased vessel range

Uses proven, reliable range of Rolls-Royce retractable stabilisers (Aquarius & Neptune)

Only one pair of fins required depending on size – lower installation costs

20-30% performance when fins are passive, in quiet mode

Retrofit options available

Low power consumption from quiet electro-hydraulic power unit

Fin Unit

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

Fin

- One piece construction
- Tip fence

Power Unit

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

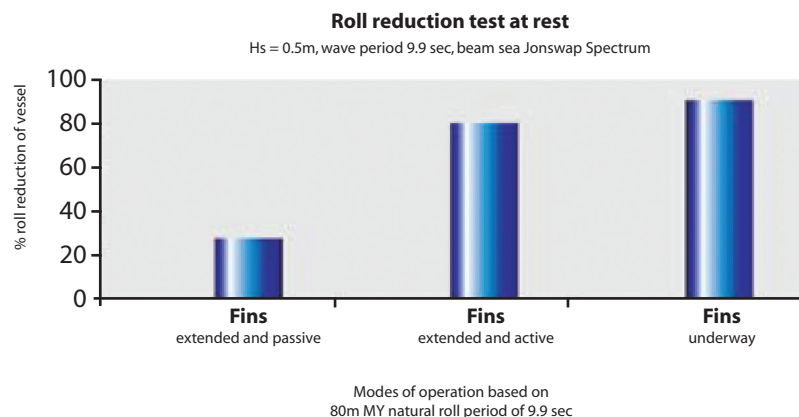


The Rolls-Royce system is specifically designed to minimise the roll of motor yachts. (Image courtesy of Oceanco)

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 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 motions. 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

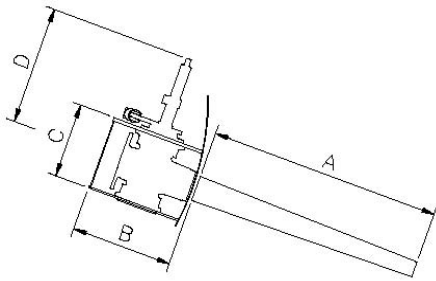


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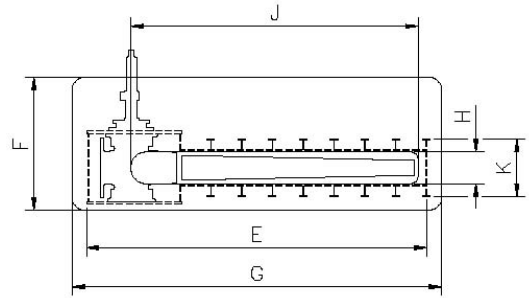
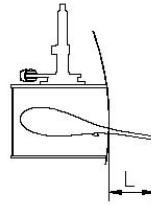
Underway performance based on a separate simulation at higher sea-states and vessel speed

Fact Sheet

Neptune 200 SAR stabiliser



Extended

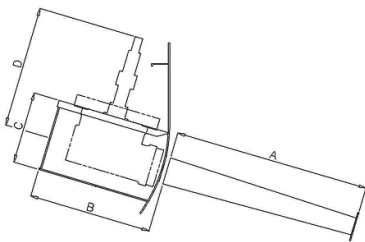


Housed

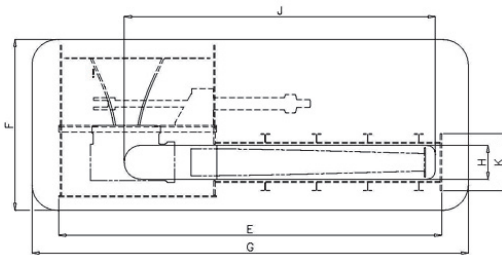
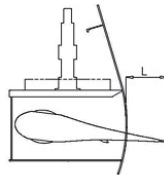
Key specifications:

Model	Fin Area (m ²)	Sizes (metres)											Approx weight/ ship set (tonnes)
		A	B min	C	D	E min	F	G min	H	J	K	L	
25	Up to 4	2.44	1.08	0.64	1.42	3.77	1.85	4.37	0.3	3.14	0.53	0.7	13
50	Up to 6.1	3.19	1.41	0.845	1.69	4.94	2.2	5.54	0.4	4.66	0.68	Up to 0.66	24
100	Up to 9	3.99	1.77	1.2	2.1	6.18	2.7	6.78	0.56	5	0.85	Up to 0.7	42
200	Up to 12	4.54	1.98	1.43	2.28	6.64	2.4	7.2	0.62	5.6	1.03	0.905	50
300	Up to 15	5.14	2.2	1.62	2.575	7.5	2.8	7.8	0.7	6.35	1.18	0.915	75

Aquarius SAR stabiliser



Extended



Housed



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