

# BOTH WORLDS THE BEST OF



The Kongsberg Maritime system is specifically designed to minimise the roll of motor yachts. (Image courtesy of Oceanco)

## KONGSBERG MARITIME STABILISER

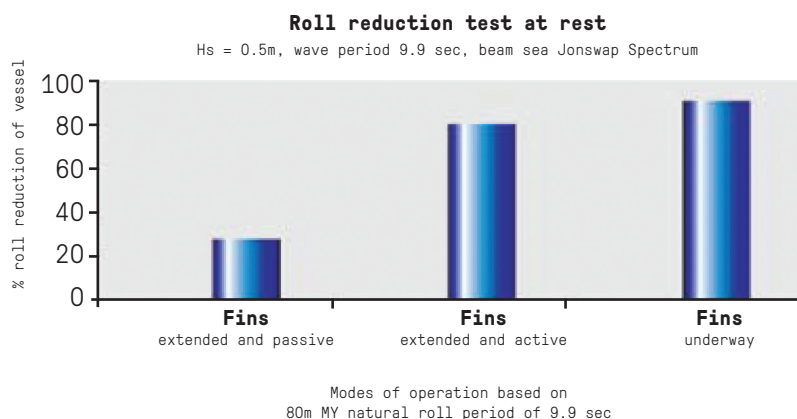
# Stabilisation at rest for motor yachts, using retractable fins - The best of both worlds

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

Kongsberg Maritime 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 Kongsberg Maritime 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-states and vessel speed

- Fins retractable when not in use
- Less appendage drag
- Increased vessel range
- Uses proven, reliable range of Kongsberg Maritime 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

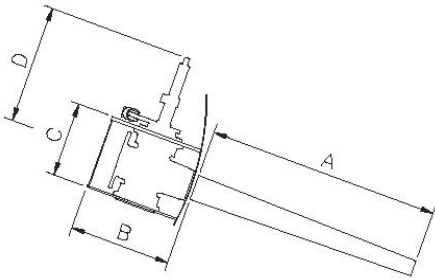
- One piece construction
- Tip fence

#### POWER UNIT

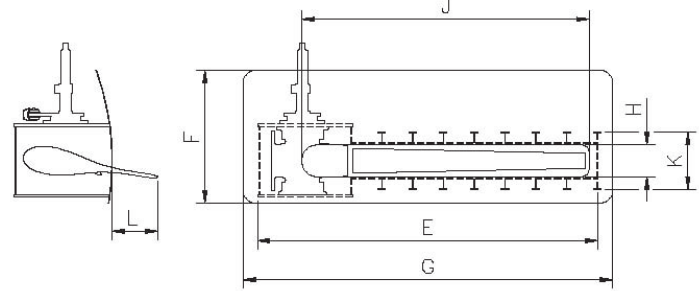
- Package unit including all components for ease of installation
- Low noise and vibration

## Neptune 200 SAR stabiliser

Extended



Housed

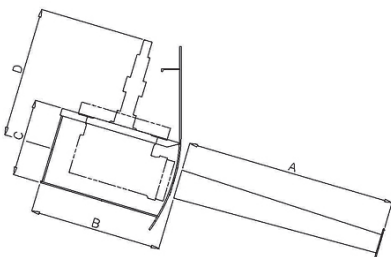


### KEY SPECIFICATIONS

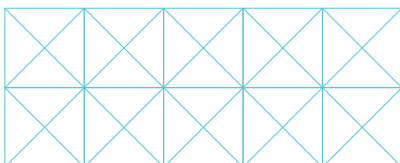
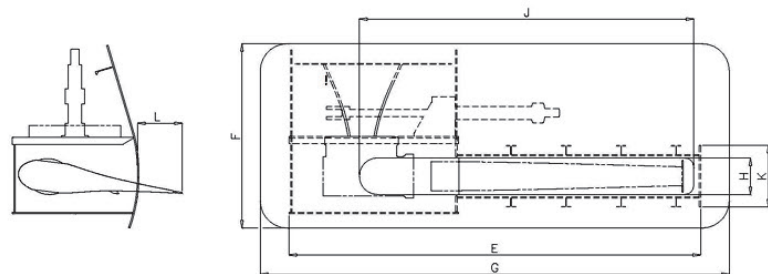
| MODEL | FIN AREA (M <sup>2</sup> ) | SIZES (METRES) |       |       |       |       |      |       |      |      |      |            | APPROX WEIGHT /SHIP SET (TONNES) |
|-------|----------------------------|----------------|-------|-------|-------|-------|------|-------|------|------|------|------------|----------------------------------|
|       |                            | 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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