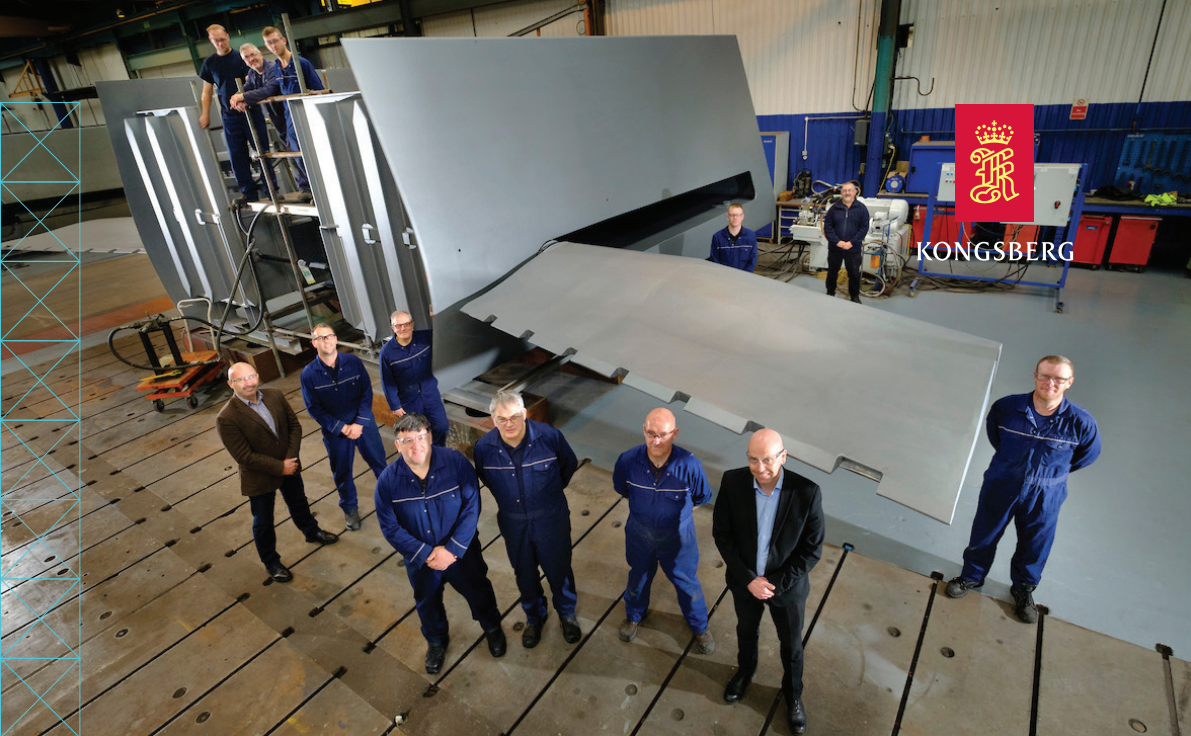


STABILISATION AT REST (SAR)



KONGSBERG STABILISERS

Using retractable fins for Ice Class vessels

FEATURES

- Fully retracts into the fin box when not in use using an innovative five sided swept fin design
- Suitable for Polar Class vessels
- Uses proven Aquarius and Neptune retractable stabilisers, with low through life costs
- Simple no maintenance fin profile, reducing through life cost to owner

FIN UNIT

- Simplified crux design and compact length
- Vertical linkage for fin tilt
- Composite fin shaft bearing
- Quad main seal arrangement
- Small hull opening
- Compatible with EAL oil, and suitable for Vessel General Permit type vessels

FIN

- One piece construction
- Proven anti vortex shedding trailing edge feature
- Shape improves zero speed performance as more chord is behind the centre line of the fin, using less fin area

HYDRAULIC POWER UNIT

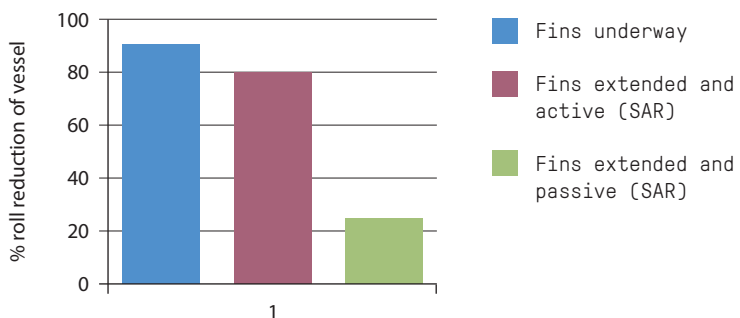
- Complete assembled unit including all components for ease of installation
- Low noise and vibration

This design of stabilisers builds on the success of the Stabilisation At Rest design introduced in 2006 for the Aquarius range and subsequent implementation for the Neptune range. This fin stabiliser allows Ice Class and Polar Class vessels to be fitted with Stabilisation at Rest. This new design, when fully housed into the customised fin box, results in no protrusions from the hull form and gives the operator peace of mind and allows safe navigation through ice waters.

The reduced fin area and optimised lower fin angle, whilst meeting the performance requirements, results in reduced dynamic drag when deployed underway leading to lower fuel costs. The stabiliser fin also incorporates the tested optimised trailing edge designed to eliminate vibration and noise.

With the environment in mind, the stabiliser machinery is fully compatible with an extensive list of Environmentally Acceptance Lubricants (EAL) that are available worldwide and incorporate a quad seal arrangement for additional integrity of sealing.

Roll reduction

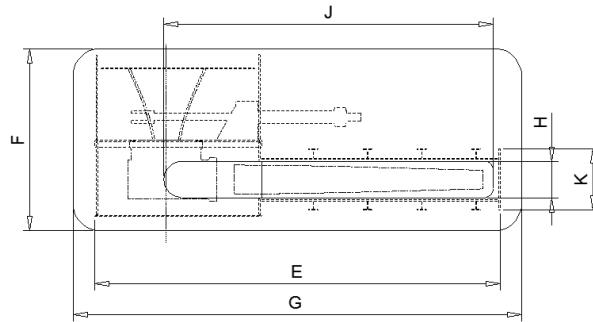
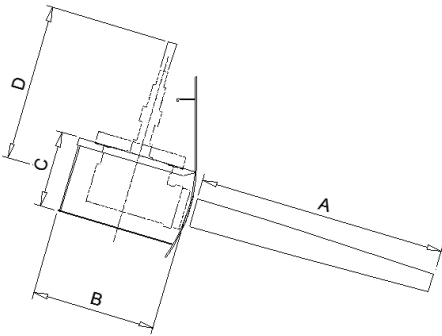


Subject to vessel parameters, and wave height/period

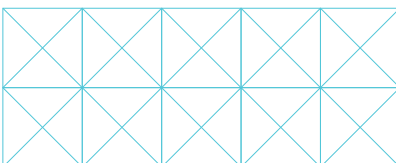
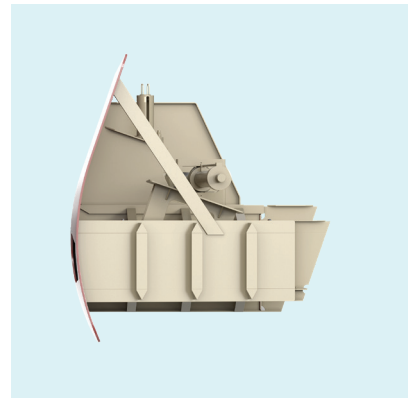
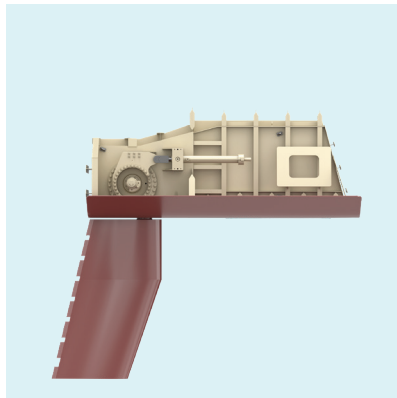
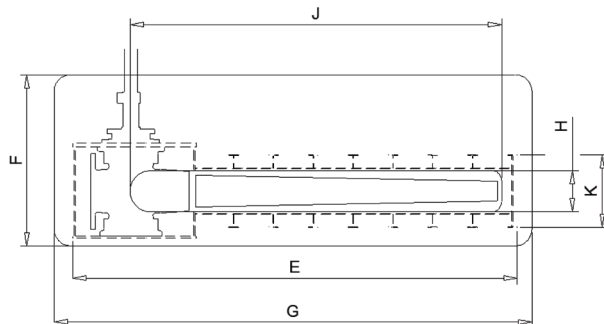
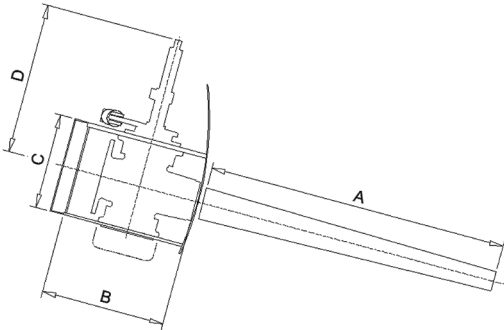
KEY DIMENSIONS

MODEL	FIN AREA (M2)	SIZES (METRES)										APPROX WEIGHT /SHIP SET (TONNES)
		A	B MAX	C	D	E MIN	F	G MIN	H	J	K	
50	5.8	3.34	1.85	0.84	1.69	5.26	2.48	5.86	0.4	4.47	0.68	24
100	8.1	3.99	2.17	1.2	2.1	6.52	2.97	7.72	0.56	5.34	0.85	43
200	10.9	4.8	2.65	1.44	2.28	7.2	2.4	7.80	0.62	6.24	1.03	50
300	13.45	5.14	3.14	1.62	2.58	7.94	2.8	8.54	0.7	6.82	1.18	78

Aquarius stabilisation at rest 50 & 100



Neptune stabilisation at rest 200 & 300



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