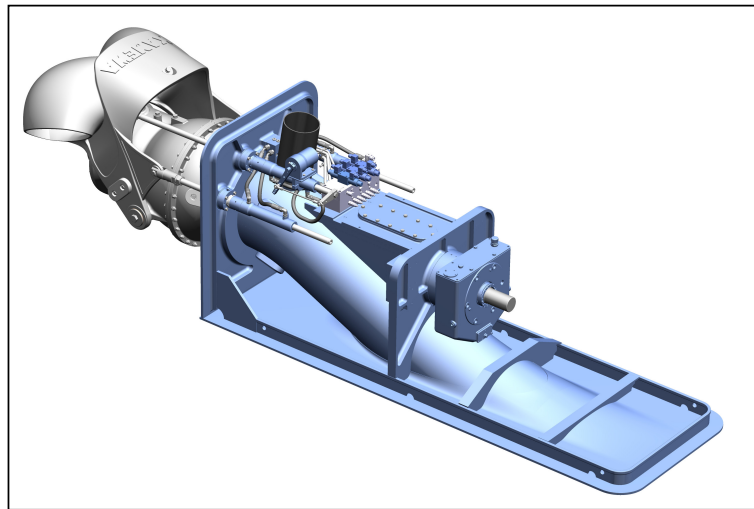


Kamewa

A3-series waterjets

The new superior A3-series with Stainless Steel pump unit sets new standards for quality and performance



Maximum performance at minimum weight

Improved from the best

The new Kamewa A3 series draws on experience from the popular A-series but incorporates numerous improvements made possible by advanced design calculation methods and testing and production techniques.

More thrust

Kamewa A3 waterjets offer a 2-3% increase in efficiency, which translates into reduced fuel consumption for a given workload and consequently reduced CO2 emissions. At the same time there is a reduction in size, weight and life-cycle costs.

Heavy duty Stainless Steel pump unit

The new Kamewa A3 series is equipped with a fully Stainless Steel pump unit providing the best possible durability at any circumstances.

One size smaller waterjet can be used – significant weight saving possible

For most applications an A3 unit one size smaller than its predecessor can be fitted resulting in identical performance with a weight reduction exceeding 35%. The savings in weight has been achieved even with hydraulics being integrated onto waterjet. Kamewa A3 offers the highest efficiency on the market; alternatively either higher speed, larger payload or less installed power and reduced fuel consumption for a given size.

Improved low and high speed performance in the same package

These advantages for the customer have been achieved through a variety of developments. At the heart of the waterjet is the mixed flow pump which has been significantly improved, in particular its cavitation margin, by using the latest CFD techniques combined with extensive testing in the cavitation tunnels at the Rolls-Royce Hydrodynamics Research Centre.

Increased reversing thrust

A new compact and highly efficient reversing bucket provides the highest reverse thrust levels on the market being 16% higher than its predecessor and at the same time almost 20% narrower. In addition to savings in weight this means also superior position keeping and maneuverability at zero speed.

Higher speed in curves

Totally new steering nozzle in stainless steel provides 2 – 3 knots higher speed in tight turns. In addition, full scale tests confirm the new nozzle to be significantly quieter compared to the earlier design.

Modular interceptor trim

All Kamewa A3 waterjets can be delivered with new modular interceptor trim tabs bolted directly onto the waterjet, including hydraulics and control panels for electronics. Modular bolt installation enables easy retrofitting. The interceptor trim system improves acceleration and low speed characteristics, in addition to trim angle adjustment.

Booster units also available

Kamewa A3 waterjets can be supplied as a steering and reversing unit, or as boosters providing forward thrust only, enabling the ideal system to be configured for multi-jet installations.

Ultralight inlet duct without hydrodynamic compromises

As on all A-series, the inlet duct is fabricated by Rolls-Royce as an integral part of waterjet unit. This means quick and cost efficient installation at the shipyard.

Fact sheet

Rolls-Royce raises the standard for medium-size waterjets

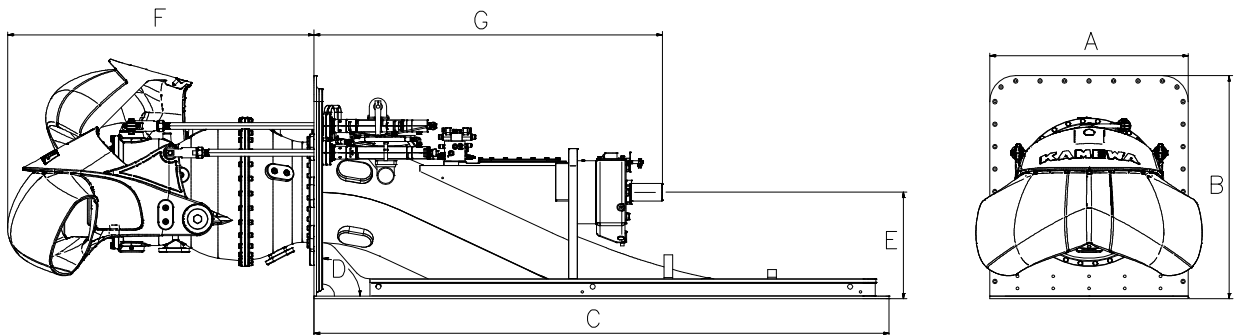
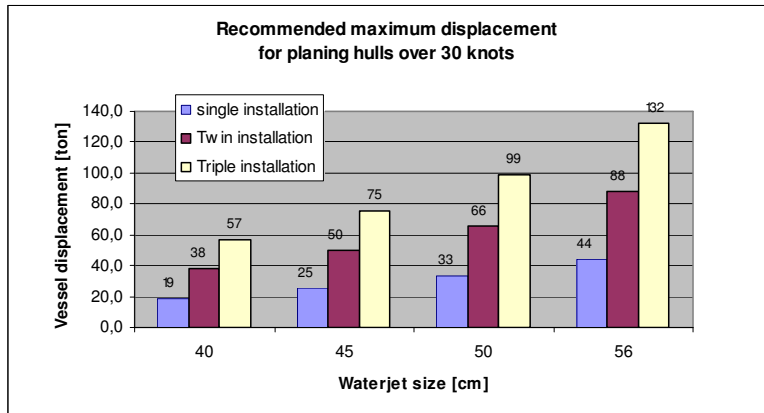
Displacement table

The table to the right shows maximum displacements for each A3-series waterjet. The waterjet unit can be installed on both displacement and planing crafts as single, twin, triple or quadruple systems.

For displacement hull applications it is recommended to select a larger jet diameter than required by a faster planing hull at same power.

The diagram is for preliminary waterjet selection only. Consult Rolls-Royce in all cases for a size selection.

The A3-series offers seven different water outlet nozzle diameters to provide a balance to the waterjet speed, and five different impeller blade pitch angles for fine adjustment of the rpm. The final combination of the outlet diameter and the blade pitch angle will be selected by Rolls-Royce to ensure the optimum performance and the lowest possible fuel consumption for the vessel in question.



Waterjet size	Max power [kW]	Dimensions [mm]							Weight dry unit [kg]	Entrained water inside transom [liters]
		A	B	C	D	E	F	G		
40A3	1320	850	951	2370	90°	440	1275	1472	850	186
45A3	1670	940	1050	2703	90°	495	1433	1637	1130	258
50A3	2060	1050	1170	2980	90°	550	1591	1809	1500	348
56A3	2580	1150	1290	3330	90°	616	1773	2017	1920	493

The data is subject to change by the manufacturer without prior notice



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