Advanced Marine Innovation Technology Subsea Ltd

ZJS-100 ROV Dredge Pump

The ZJS-100 is the 4" suction 6" discharge version of the ZJS family of eductor type suction dredge pumps designed primarily for use on modern high powered Work class ROVS.

The pump is fitted with a new generation of impeller to maximise performance. The power water intake is fitted with an integral pre-swirl strainer primarily to improve efficiency with the advantage of removing the need for an inlet hose and strainer. A heavy duty suction reversal valve permits a blocked suction nozzle to be backflushed and rapidly cleared of debris. The construction makes maximum use of modern engineering plastics to minimise both the "in air" and "in water" weights.



The eductor throat is designed to pass large dimension solids.

The pump can be provided with the option of a selectable simultaneous jetting capability to disrupt the ground to enhance the dredging production.

Materials of construction are stainless steels and modern engineering plastics.

Modified versions are available for special bespoke applications.



Working Hoses

Nominal sizes	
Suction	4″ (100mm)
Discharge	6″ (150mm)
Jet Nozzle	10mm to 20mm
Jet Hose	1″ (25mm)

90 to 145 l/min

175 to 275 bar

Performance

Dependent upon total power supplied.Water Suctionup toSolids Removalup toOptional Jetting flowup toOptional Jet Pressureup to

up to 250 m³ /hr up to 30 tonnes/hr up to 90 m³/hr up to 14 bar

Hydraulic Input

Physical Properties

Dimensions In air weight In water weight 635mm x 515mm x 305mm 47 kg 19 kg

Optmisation

Flow

Pressure

There are a range of impellers and eductor nozzles available to permit the pump to be configured for optimum performance on any given ROV. The configuration should be confirmed at time of order. The performance depends upon the hydraulic flow and pressure available from the ROV and the pump impeller/eductor configuration.

Options

The unit can also be supplied powered by an electric motor. The options include high voltage motors or standard workshop / site voltages of 415v 50Hz or 440v 60Hz. Motor types can be either oil or water filled.

The unit can be supplied minus the jet facility for applications where preserving water clarity is important.

The stainless steel hydraulic actuators can be configured to operate on clean water systems.

There is a high pressure water turbine option under development that can be used where electric or hydraulic motors are not practicable.

Specifications are subject to change due to a policy of continuous improvement. Please confirm current build standard at time of order. ©2004 Advanced Marine Innovation Technology Subsea Ltd.