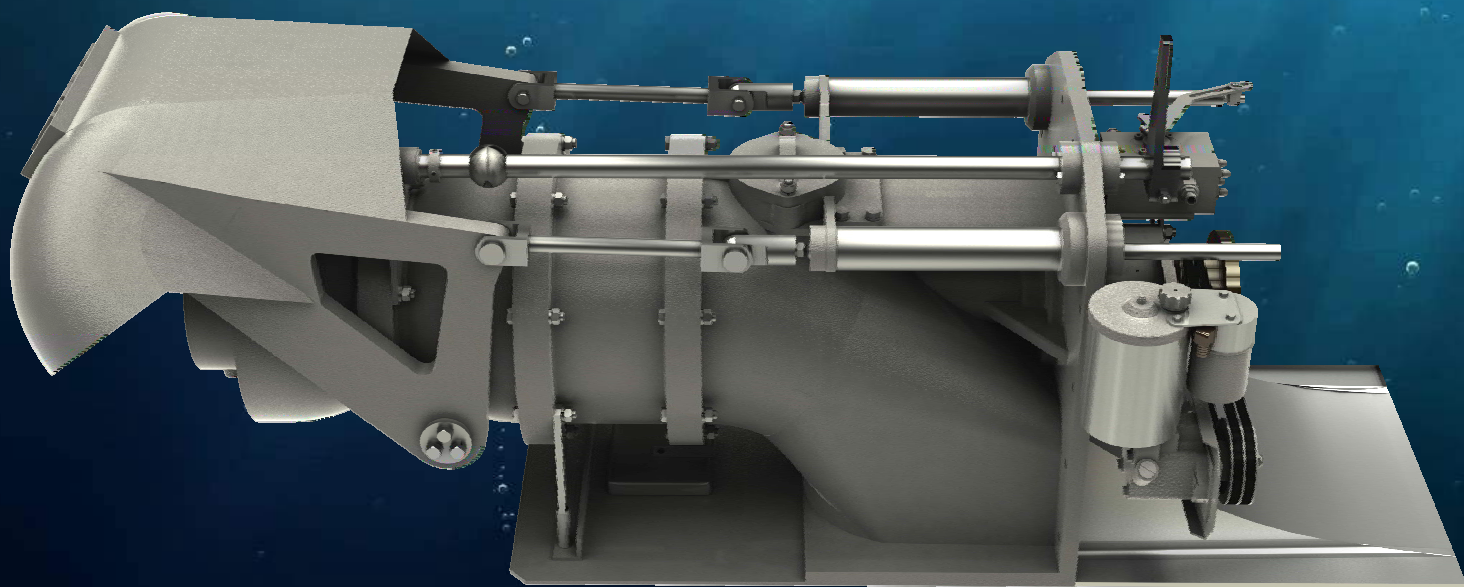




DOEN DJ142



Performance Reliability Simplicity



Performance Reliability Simplicity

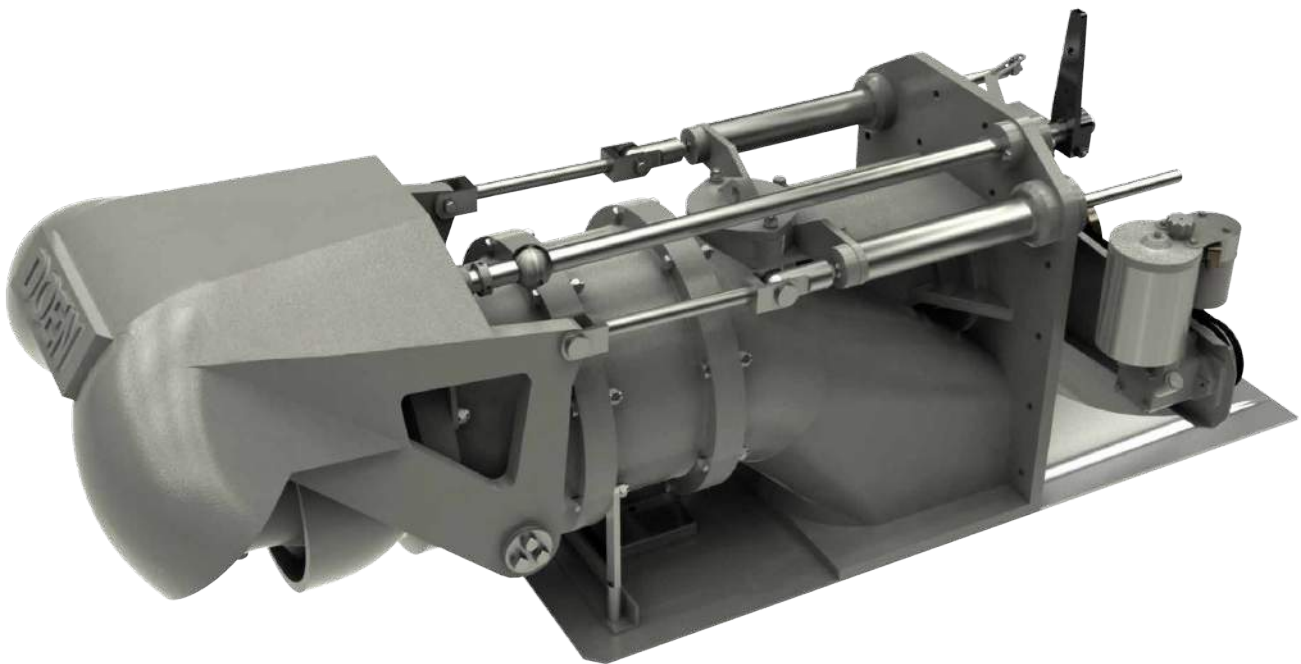


DOEN DJ142

Introducing the all new DJ142

Doen WaterJets is pleased to add the DJ142 to its current range of waterjet models – Following the successful launch of the DJ140HP using the most recent intake and impeller designs, it was timely to introduce this latest 14-inch waterjet model into the market.

DJ142 transom mount 14-inch (356mm) waterjet perfectly meets DOEN's key design criteria of high performance, reliability and simplicity of construction and maintenance. This axial flow waterjet delivers compact and efficient performance at speeds up to 45+ knots. Construction comprises Stainless Steel and heavy-duty powdercoated Aluminium components protected with an anode anti-corrosion system.



The transom mounting and very low profile of the waterjet ensure minimal intrusion into valuable onboard space. This allows for very low profile swim platforms or additional deck area; and the low propulsion shaft height allows flatter trim for the boat. Furthermore, DOEN can supply mould inserts for GRP boats and weld-in Aluminium inserts for Aluminium boats to ensure installation is as simple as possible.

The use of modular construction has allowed the DJ142 to be lightweight, compact and simple to maintain and repair while being a robust commercially rated waterjet. The heavy-duty propulsion shaft and bearings, and an upgraded reverse mechanism with two cylinders assist in providing long life and trouble-free operation. The design and construction allow the DJ142 to be easily configured to meet BV, DNV, Lloyds, Rina or other marine standards on customer specification.

Doen's standard hydraulic rotary servo control (RSC) provides proportional, position sensing, and control of the reversing bucket by way of a 3" (75mm) stroke Morse 33C cable. The balanced nozzle steering design minimises required input force and provides precise control.

DOEN DJ142

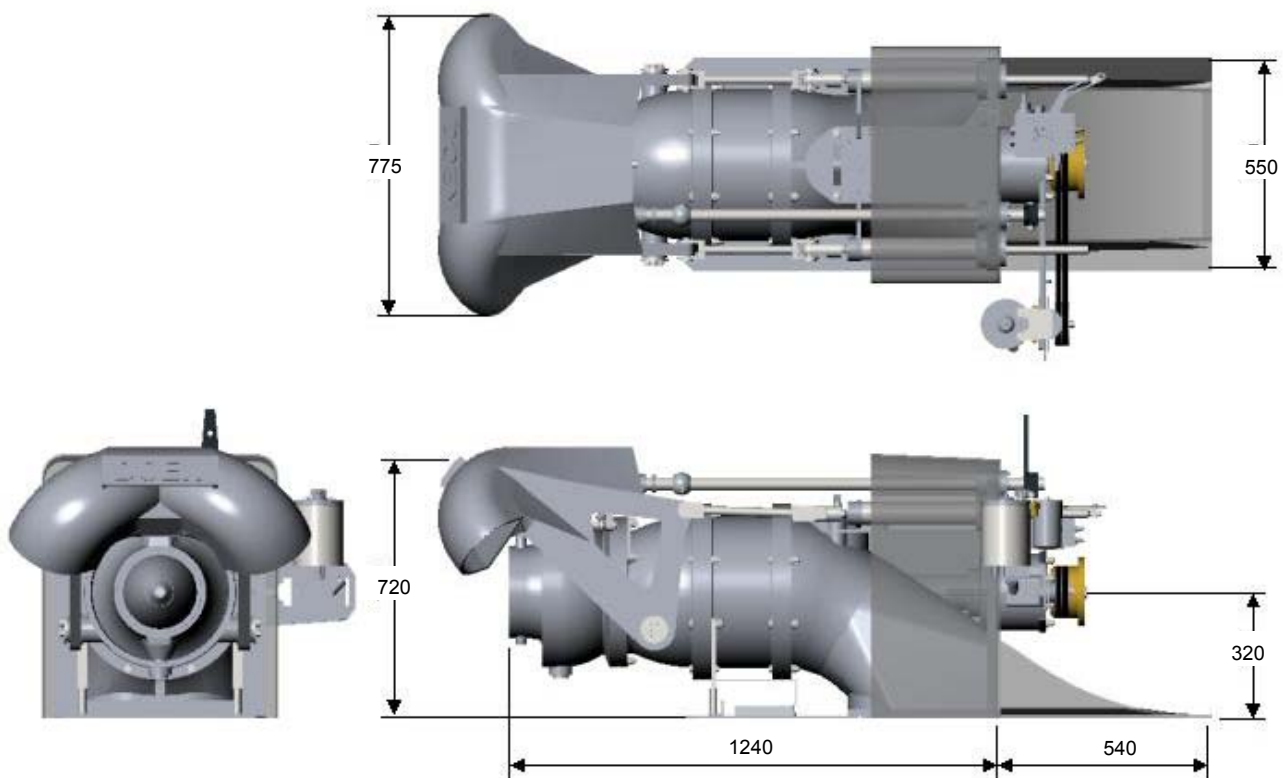
The hydraulic steering and reverse cylinders are bulkhead mounted to the transom flange with all connections inboard and protected from corrosion. The hydraulic pump has an angle adjustment of 25° to allow for deadrise mounting in twin installations - All components are available in left and right configurations to suit twin installations.

For twin installations, DJ142 can also be configured with Doen's fully integrated electronic control system, ECS200 that is certifiable to class. eDOCK single joystick docking control panel is an option for customers that opt for ECS200; this device is intended for close docking manoeuvres only and is managed by the system as a standalone control station. The joystick lever is used to co-ordinate the combined control of all waterjets speed setting, steering and reversing so as to provide the user with a simple vectored control.

DJ142 is expected to be in strong demand within the more sophisticated commercial and military markets, typically twin installations in small workboats and patrol vessels up to 15 meter length, powered by inboard diesel engines up to 700hp.

Doen WaterJets is a market leader in design and manufacturing of axial flow waterjets with over 45 years experience in design and application engineering, together with significant investment in R&D and a policy of continuous product improvement placing Doen waterjets at the forefront of the industry.

DJ142 provides yet another testimonial to Doen WaterJets unrivalled capability in offering extremely high-performance waterjets to the marketplace with very competitive pricing.



Key Product Features:

HIGH THRUST FOURTEEN INCH PUMP

Optimally sized to best suit engine/s power range and target vessel size and weight envelope. The 14-inch axial flow pump efficiently converts horsepower into a high volume jet flow delivering high thrust, more range and more payloads with reduced fuel consumption.



IMPELLER TECHNOLOGY

The DJ142 can be configured for high bollard pull (maximum low speed thrust) or variable speed and load operation. Impeller and nozzle combinations are custom matched to each application to ensure optimum performance is achieved.



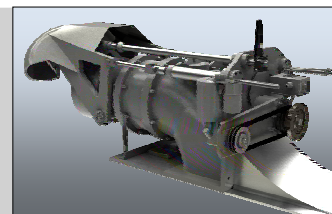
VERIETY OF CONTROL SYSTEMS

Customers have a range of controls to choose from for DJ142; from simple hydro-mechanical follow-up RSC to fully integrate electronic control system, ECS200 which satisfies the standards of all international classification societies.



HEAVY-DUTY COMPONENT

The heavy-duty propulsion shaft and bearings, and an upgraded reverse mechanism with two cylinders assist in providing long life and trouble-free operation under harsh and demanding conditions, such as frequent crash stop maneuver at full speed at full throttle.



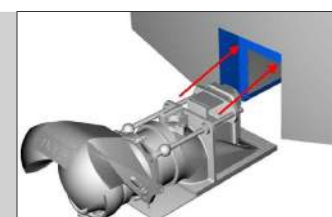
SPLIT DUCT REVERSE BUCKET

The split duct-reversing bucket provides excellent high thrust reverse maneuverability. By default this is power operated by DOEN's RSC, which gives proportional, position sensing, and control of the reversing bucket by way of a 3" (75mm) stroke Morse 33C cable.



TRANSOM MOUNTING

The unit is installed using Doen's proven quick and simple transom mounting method. This results in less intrusion into valuable inboard space, allowing more compact machinery arrangements further aft in the boat. Doen can also offer compact coupling systems with the DJ142.



Performance Reliability Simplicity

UNIT DETAILS

Maximum Rec. Continuous Power:	up to 520skW (700shp)
Maximum Rec. Impeller speed:	2400rpm
Dry Weight:	315 kg (complete waterjet including jet mounted hydraulic items)
Entrained Water:	70 kg
Loss of buoyancy:	0.05m ³ (duct volume within hull bound)
Corrosion Protection:	Cathodic with Anodes
Design Standard:	To international authority standards

CONSTRUCTION DETAILS

Impeller

Diameter:	14 inch (356mm)
No of Stages/Configuration:	Single Stage – Axial flow pump
Standard Rotation:	Anti-clockwise (Looking forward from stern)
Impeller Material:	Cast CF8M Stainless Steel

Pump Assembly

Impeller Casing Material:	Cast ASTM A356 Alum. Alloy with stainless steel liner
Discharge Nozzle Material:	Cast ASTM A356 Alum. Alloy

Steering System

Description:	Balanced nozzle
Operation:	Inboard tiller actuation
Steering Bowl/Nozzle Material:	Cast ASTM A356 Aluminium Alloy

Reverse System

Description:	Split Duct Type – “High Thrust”
Operation:	Twin Hydraulic cylinder actuation
Reverse duct material:	Cast ASTM A356 Aluminium Alloy

Shaft Assembly

Main Shaft Material:	Stainless Steel Grade SAF 2205
Rear Bearing:	Water Lubricated Cutlass Bearing
Main Bearing:	Angular contact Thrust Bearing
Lubrication:	Grease
Shaft Seal:	Face type Mechanical Seal
Coupling Flange:	Spicer “1600” Series
Shaft Angle:	0 degrees standard

Intake Body

Material:	Cast ASTM A356 Aluminium Alloy
Inspection Opening:	Outboard
Intake Gate:	Removable Aluminium Bars

Performance Reliability Simplicity



© Doen Pacific Pty Ltd. 2015

The information in this document is the property of Doen Pacific Pty Ltd.

While this information is given in good faith, based upon the latest information available to Doen WaterJets, no warranty or representation is given concerning such information, which must not be taken as establishing any contractual or other commitment binding upon Doen Waterjets or any of its subsidiaries or associated companies.

Deon WaterJets policy is one of R&D and continual product improvement, therefore information and specifications can change without notice. For the latest information please go to our website, www.doen.com

DOEN WATERJETS

33 VENTURE WAY
BRAESIDE, 3195
VICTORIA, AUSTRALIA

TEL: + 613 9587 3944

FAX: + 613 9587 3179

Email: inquiries@doen.com

Web: www.doen.com

DISTRIBUTOR