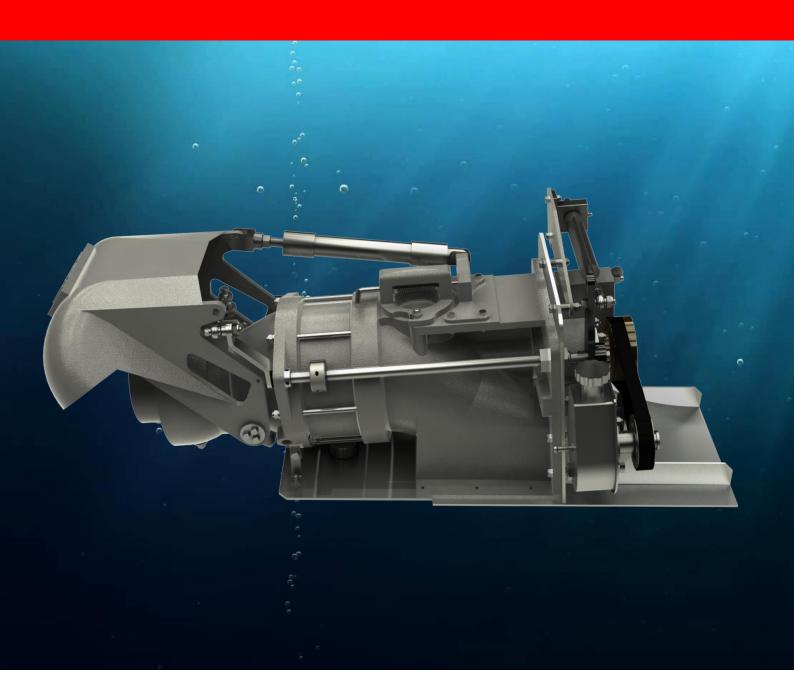


DOEN DJ85



Performance Reliability Simplicity











Performance Reliability Simplicity











DOEN DJ85

The DJ85 is back!

Doen WaterJets is pleased to release an upgraded version of one of its most popular waterjets into the marketplace.

The heritage of DJ80 and DJ85 is embedded in jet sprint racing in Australia from the 1980s. Inheriting the high performance DNA, these waterjets were sold in thousands in both the domestic and international markets, for a variety of applications.







Catering to loyal customers and satisfying the demand in more sophisticated sectors such as fast rescue craft (FRC), Doen WaterJets has completely re-designed the 8.5 inch waterjet, adopting its latest technologies to fill the market gap for a rugged and robust waterjet solution at this scale.

The DJ85 transom mount waterjet meets Doen's key design criteria for high performance, reliability, simplicity of construction, and maintenance. This axial flow waterjet delivers compact and efficient performance at speeds up to 45+ knots.

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.



DOEN DJ85

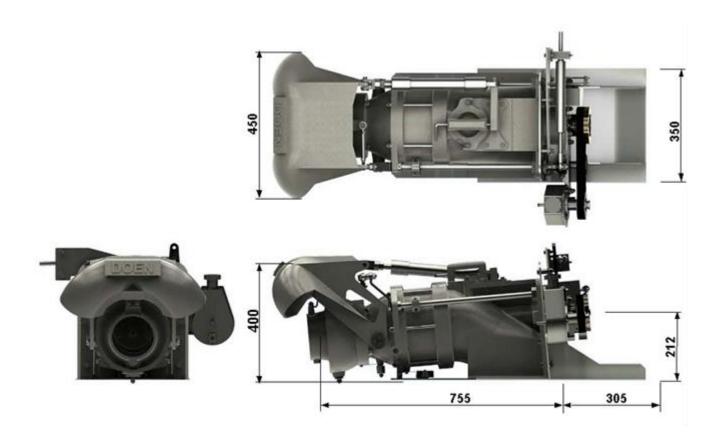
Construction comprises Stainless Steel and heavy-duty powdercoated Aluminium components. The use of modular construction has allowed the DJ85 to be lightweight, compact and simple to maintain and repair while being a robust commercially rated waterjet.

Doen's 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.

The hydraulic steering cylinder is bulkhead mounted to the transom flange with all connections inboard and protected from corrosion - All components are available in left and right configurations to suit mirrored installations.

Doen WaterJets is a market leader in design and manufacturing of axial flow waterjets. Over 45 years experience in 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.

Working closely with our licensees in the USA and China and a global network of sales and service partners, Doen WaterJets ensures customers' waterjet requirements are met anywhere in the world.



^{*} Dimensions are in mm. All data are subject to change without prior notice.



Key Product Features:

HIGH THRUST PUMP

Optimally sized to best suit engine/s power range and target vessel size and weight envelope. The 8.5 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 DJ85 can be configured to be directly coupled to engines with a wide range of output powers and RPMs. Impeller and nozzle combinations are custom matched to each application to ensure optimum performance is achieved.



QUICK RELEASE INSPECTION COVER

The Inspection Cover is outboard mounted and simply retained using a spring loaded slide bolt. This means quick release operation requiring no tools, without the risk of flooding. The cover itself is tethered to the waterjet with stainless wire so that it cannot be lost.



HEAVY-DUTY COMPONENT

The heavy-duty propulsion shaft and bearings, and an upgraded reverse mechanism assist in providing long life and trouble-free operation under harsh and demanding conditions. DJ85 can also be configured to tolerate dry run to comply with SOLAS requirement for rescue boat applications.



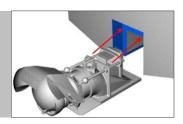
SPLIT DUCT REVERSE BUCKET

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 DJ85.



Performance Reliability Simplicity



UNIT DETAILS

Maximum Rec. Continuous Power: up to 200skW (270shp)

Maximum Rec. Impeller speed: 4200rpm

Dry Weight: 65 kg (complete waterjet including jet mounted hydraulic items)

Corrosion Protection: Cathodic with Anodes

CONSTRUCTION DETAILS

Impeller

Diameter: 8.5 inch (217mm)

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:

Operation:

Balanced nozzle
Inboard tiller actuation

Steering Bowl/Nozzle Material: Cast ASTM A356 Aluminium Alloy

Reverse System

Description: Split Duct Type – "High Thrust"
Operation: 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 (Dry run option)

Main Bearing: Angular contact Thrust Bearing

Lubrication: Grease

Shaft Seal: Face type Mechanical Seal Coupling Flange: Spicer "1410" Series

Shaft Angle: 95° rising fwd.

Intake Body

Material: Cast ASTM A356 Aluminium Alloy

Inspection Opening: Outboard – Quick Release Intake Grate: Removable Aluminium Bars



DOEN WATERJETS

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