

ROTINOR DIVEJET RD2

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Diver Propulsion Device





High-Performance Diving Scooter

The ROTINOR DIVEJET RD2 is a high-performance diving scooter for professional applications. With its patented E-jet power system, the high-power drive of the RD2 is unrivalled.

Virtually silent and absolutely emission-free the electric Jetstream system works on the principle of water displacement. Water is sucked in by the powerful rotating impeller and forced out in the jet channel under high pressure. The thrust developed by this process propels the RD2 forwards in superior style. The high-performance accumulators form the powerhouse of the RD2. The powerful motor performance of 4.4 HP is controlled by 10 power levels. Hereby the operator can alternate individually between slow or high speed manoeuvres through the water. The RD2 can be steered down to a depth of 60 m, thus making it ideally suitable for all kinds of underwater missions and special operations.

The hydrodynamic design and extremely light weight of the RD2 lends the diving scooter a high degree of agility in the water. All steering and diving manoeuvres are carried out simply by shifting the weight of the body. The specially developed harness system enables the operator to easily control the enormous thrust of over 50 kg.

ROTINOR DIVEJET

High-Performance Technology





Diving depth sensor

Piezo sensors

Switched and operated through the use of modern piezo sensors.

Compass technology

To assist with orientation and navigation for all underwater missions.

Operation display

To provide all important operating information.

Dive weights inserts For additional dive weights attachment.

Attachment mechanism To secure the operator harness system.

Threaded inserts For additional equipment attachment.

Additional attachment mechanism For additional diver towing.

Heavy duty towing system For towing of additional equipment.



Cutting-edge Technology

The RD2 represents advanced, cutting-edge technology through and through. The operator steers his innovative craft using two intelligent Controlgrips featuring piezo technology.

The drive mechanism is activated via the Trigger on the left or right Controlgrip. Applying light pressure to the green sensor accelerates the RD2 in continuous powerful thrusts until the desired speed is achieved. In contrast, the scooter is slowed down through reduced propulsion by pressing the red sensor. Should the situation arise, an emergency stop can be brought about simply by letting go of the Trigger. Two additional piezo buttons make it possible to program a set-up menu to meet individual requirements. This also includes the setting of a maximum diving depth. This important safety function reliably prevents a predetermined depth from being exceeded. The central cockpit is placed perfectly in the operator's field of vision.

The multi-colour illuminated TFT display shows all relevant data relating to the operation such as the current power, accumulator charge state, diving depth and current course. Moreover, the RD2 is equipped with state-of-the art navigation technology. The activated navigation system enables the user to steer the RD2 with ease by means of the digital bearing scale.

E-Jet Engine Extraordinary Efficiency

The Energy System

High-Performance Accumulators

The mechanism used is a high-torque synchronized drive unit featuring a microprocessor-controlled 3-phase sinus power management system. Using cutting-edge technology, this motor develops the ideal amount of torque with extraordinary efficiency.

> The uncompromising use of quality components and special high-grade coatings has made this motor extremely robust and completely maintenance-free. During an endurance test over 1,000 hours of operation at full load, the drive mechanism demonstrated absolutely no breakdowns or reduction in performance.

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The energy for the E-jet power system comes from exceptionally efficient High-Energy Li-lon accumulators. These large and special high-performance accumulators form a high-quality component in the overall propulsion concept of the ROTINOR DIVEJET.



Multifunctional over great Distances

There is no comparison to the innovative drive technology of the RD2. The charging concept and the highly efficient drive make operating times of over 3 hours possible in practical applications, thereby enabling operating distances in excess of 20 km to be achieved.

The RD2 is an absolute powerhouse and the epitome light weight, strength and performance. Professional users are able to overcome great distances with this craft, while conserving their own strength and energy. The increased performance as a result thereof leads to optimal conditions for any special operations mission. Furthermore, the sustained powerful jet engine of the RD2 can transport the diver and equipment over long distances. Its unique propulsion enables effective operation on the water surface too. Additional underwater applications can be mounted on the built-in utility platform.

As an extremely light weight, compact and portable submersible, the RD2 can be transported and deployed into the operational area without any difficulty. It was developed for a multitude of launch scenarios, such as surface, air and submarine. Its cutting-edge technology, its unsurpassed highperformance, the simplicity of the operating concept and its outstanding reliability make the RD2 the internationally unrivalled choice for professional users on special missions.



ROTINOR Para-Drop Deployment

ROTINOR DIVEJET is available with the capability to be launched safely and accurately by parachute drop.

The parachute drop harness has been specifically designed so that the DIVEJET can be deployed from helicopters or fixed wing aircraft. This will enable the DIVEJET to be delivered precisely into the designated mission area, minimizing risk to the aircraft and the receiving unit.

Specification:

Weight of RD2 Harness:
Maximum deployment speed:
Minimum deployment speed:
60 KIAS Minimum deployment speed:
Minimum deployment speed:
Maximum deployment altitude:
Minimum activation altitude:
Operation temperatures:
210 KIAS
60 KIAS
60 KIAS
5.000 ft. AGL
+ 70°C / - 55°C + 70°C / - 55°C



Overland Transport.

Fast. Maneuverable. Functional. The superior quality of the DIVEJET RD2 carries through to its cart. Made to facilitate the safe transport of the DIVEJET RD2 over long and rough land routes.

Even though the RD2 convinces with its low weight and comfortable handling, operations on land should be as effort-saving and speedy as possible. That's why the quickrelease all-terrain wheels with coarse tread are designed for off-road use. The frame is made of powder-coated robust aluminum and, like all other parts, has been designed for use in salt water as well as in extreme conditions. The support surface provides the RD2 with a perfect fit on the cart. To this, the DIVEJET is secured on specially shaped hooks and with durable, practical velcro straps.

This makes transporting the DIVEJET RD2 faster and more comfortable than ever before.

ROTINOR Submarine Deployment

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Deployment from submarine platforms provides the operator with improved operational advantages and increased mission capabilities. Due to the compact dimensions of ROTINOR DIVEJET, they are fully compatible with all NATO submarine torpedo tubes and can therefore be launched accordingly.



Accessories

Operator harness system 1 To minimise fatigue in the arms of the operator during high-speed or long under-water missions. Dive weight (4)



- **T-Bar belt** (2) For towing additional divers.
- **Charger 3** To provide charging to the accumulators. Charging time approximately 2 hours.
 - Provides optimal buoyancy for the RD2 in all diving applications.
 - **Rack** (5) For secure fixation of the RD2.
 - **Cart 6** Effective RD2 transportation, even on rough terrain.
 - **Case 7** For safe transport and protected storage.

Technical Data

Performance Data and Diagrams

Performance up to	3.2 kW (4.4 HP)
Thrust up to	500 N (51 kg)
Speed control	10 power levels
Speed up to	8.0 km/h
Energy - without memory effect	High-Energy Li-Ion accumulators
Operating time - average	2+ hours (see chart below)
Operating distance - average	10 km (see chart below)
Charging time	2 hours (approx.)
Maximum diving depth	60 m (197 ft)
Weight	35 kg
Dimensions in L x W x H	1,150 x 507 x 372 (in mm)



154

150

211

200

250

308

300

400 min

350

Advanced Body Coating Matt Green & Matt Black

To meet with the high demands of the professional user, ROTINOR have developed an advanced body coating which is virtually scratch and dent proof.

www.rotinor.com

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% Operating time in minutes

50

100