

Verhaar Omega V-POD® series

The Verhaar Omega V-POD is a podded electric propulsion & manoeuvring system that replaces conventional shaft lines, stern tubes and rudders.

The V-POD is suitable for diesel-electric as well as LNG-electric generators and combines a high propulsion efficiency with an attractive price level.

While the first POD drives were introduced in the 1990s, their number has remained limited for various reasons:

- Most manufacturers were using either an oversized electric motor, directly driving the propeller shaft, or relatively expensive permanent magnets
- Despite the fact that these large electric motors drove the propeller shaft directly without friction losses, the peripheral velocity of the propeller was relatively high, resulting in a lower efficiency
- Both the absence of stringent maritime regulations and the lack of the required diesel-electric technology hindered a wider application of POD drives

Meanwhile, the increasing demand for green technologies has forced the maritime industry to search for sustainable alternatives. Current diesel-electric technology has much improved as a result, and the price of

diesel-electric generators has dropped. This is now the right moment to reconsider designs for the POD drive. The V-POD counters both the high prices and the low efficiency levels of existing POD drives, which use larger oversized electric motors or relatively expensive permanent magnets.

The V-POD's unique and compact design provides optimum flexibility for ship designers and builders. It is easy to install, takes up a minimum of space and offers an excellent solution for podded propulsion.

Depending on the owner's requirements, the V-Pod can be delivered either as a pull or push propulsion unit and supplied with or without nozzle. When supplied as a 'pull' propulsion unit, an extra fin will be mounted onto the underside of the pod in order to improve manoeuvring.

The V-POD is rotated by means of a slewing bearing, driven by two independent electric servo motors both equipped with a planetary gear reduction and an electro-magnetic brake.

The cables of the integrated electric motor are guided to a cable reel system which is mounted onto the top flange of the V-POD. This cable reel enables the V-POD to rotate 270° clockwise and counter-clockwise.

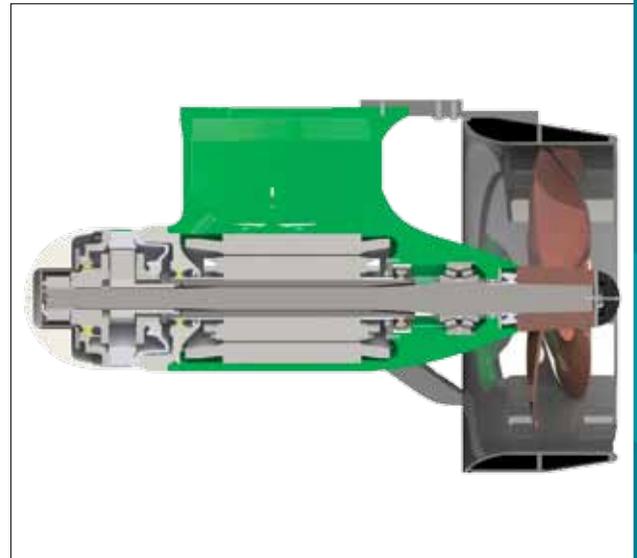
Upon request the V-POD can also be supplied as a full 360° azimuthing drive by applying a slip ring unit

Features

- Unique and innovative design
- Compact and easy to install
- High propulsion efficiency and performance
- Rigid and solid construction
- Attractive price level

Available Models

V-POD MODEL	Maximum power [kW]
V-POD 600	520
V-POD 660	900
V-POD 760	1350



Verhaar Omega Thrusters

With well over four decades of experience in the field of bowthrusters, stern thrusters and drives, Verhaar Omega has earned its reputation for outstanding quality, performance and reliability. Today over 4000 thruster units have been installed on inland and seagoing vessels around the world.

After sales

Verhaar Omega thrusters require little maintenance other than changing oil at regular intervals. In the unlikely event of a breakdown you can always count on our 24/7 call out service and extensive stock of spares.

Rules and regulations

Verhaar Omega thrusters are built fully in accordance with the rules and regulations set by the major classification societies such as LRS, GL, BV, DNV, ABS, RINA and RMRS.