



Certificate No. 02-003451/025409

## TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

### ANCHOR WINCH HV-ZR10-1ZP

MANUFACTURER:



**Fluidmar d.o.o.**  
Jurja Žakna 2  
52100 Pula  
CROATIA

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

**CRS: Rules for the classification of ships, Part 9. - Machines.**

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2025-12-13**

Place and date: Split, 2021-11-11

Seal

Marinko Popović, dipl.ing.

**NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.**

**DETAILED PRODUCT DESCRIPTION:**

Hydraulic anchor winch:

Type	<b>HV ZR10-1ZP</b>
Execution	<b>Single drum with warping head</b>
Rated pull (kN)	<b>63</b>
Rated rope speed (m/min)	<b>18,7</b>
Rated drum speed (rpm)	<b>25</b>
Steel rope diameter (mm)	<b>18</b>

**APPLICATION / LIMITATIONS:**

Intended for application as marine anchor winch machinery.

Approved for use with a wire rope with a minimum breaking strength of 169 kN.

**TYPE APPROVAL DOCUMENTATION:**

The documentation approved by CRS with No.: 2423/TSE/IA/024232 dated 2017-11-22

**MARKING OF PRODUCT:**

- manufacturer's mark
- year of manufacture
- rated pull
- minimum breaking strength of the mooring rope

**CONDITIONS FOR CERTIFICATION:**

Anchor winch intended for ship under CRS supervision shall be individually tested, in presence of CRS surveyor.