



Certificate No. 02-002908/024937

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:

STEERING GEAR COMPONENTS

MANUFACTURER:



Rotban d.o.o.
Trenkova 21
21000 Split
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: **2024-03-05**

Place and date: Split, 2020-03-05

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 cylinder	
Type	125 x 1142 / 344 – 75 kN
Dimensions (mm)	125 x 1142/344
Maximum working pressure (bar)	100
Design pressure (bar)	125
Nominal force (kN)	75

Hydraulic power pack	
Type	AGR 2,2-P6,7-8L
Electric motor power (kW)	2,2
Voltage / frequency (V / Hz)	400 / 50
Maximum working pressure (bar)	100
Design pressure (bar)	125
Type of the pump	Gear pump
Oil flow rate (l/min)	6,7
Tank capacity (lit.)	8
Drawing No.	HRB 024937/ 2020/03/02

APPLICATION / LIMITATIONS:

Intended for marine steering gear application.

Test pressure defined as 1,5 x design pressure.

TYPE APPROVAL DOCUMENTATION:

The documentation approved by CRS with No.:

- Hydraulic cylinder: 2587/TSE/IA/024491 dated 2018-11-20
- Hydraulic power pack: 405/TSE/DL/024937 dated 2020-03-02

Report of performed type testing:

- Hydraulic cylinder: dated 2018-11-29
- Hydraulic power pack: dated 2020-03-04

MARKING OF PRODUCT:

- manufacturer's mark
- location and year of final fitting

CONDITIONS FOR CERTIFICATION:

Steering gear components intended for ship under CRS supervision shall be individually tested in the presence of CRS surveyor.
Steering gear components shall be installed onboard according approved ship specific documentation.
Alarms, indications and emergency steering shall be subject to CRS approval in each particular case.