

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Electric Actuator

with type designation(s)
ROM-A, ROM-1, ROM-2 & -3, ROM-4, -5, -6 & -7, ROMPak-A, ROMPak-1, ROMPak-2 & -3, ROMPak-4, -5, -6 & -7

issued to
Rotork Flow Technology (Suzhou) Co., Ltd
Changshu City, Jiangsu Province, China

is found to comply with

DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
ROM-A	D	B	A	B	D
ROM-1	D	B	A	B	D
ROM-2 & -3	D	B	A	B	D
ROM-4, -5, -6 & -7	D	B	A	B	D
ROMPak-A	D	B	A	B	D
ROMPak-1	D	B	A	B	D
ROMPak-2 & -3	D	B	A	B	D
ROMPak-4, -5, -6 & -7	D	B	A	B	D

Issued at **Hamburg** on **2025-09-11**

This Certificate is valid until **2030-09-10**.

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Johannes Kindermann**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

The ROM and ROMpak actuators provide operation for all kinds of small ball valves and butterfly valves.

Input rated:	12/24 VDC 110/220 VAC 1-phase 220/380/440 VAC 3-phases
Frequency:	50/60 Hz
Enclosure type:	IP68
Motor:	S3, Class F

Model		Torque 12/24V	Torque 1-phase	Torque 3-phase
ROM-1	ROMpak-1	35Nm	35	
ROM-A	ROMpak-A	50	50	
ROM-2	ROMpak-2	90	90	90
ROM-3	ROMpak-3	150	150	150
ROM-4	ROMpak-4	400	400	400
ROM-5	ROMpak-5	500	500	500
ROM-6	ROMpak-6	650	650	650
ROM-7	ROMpak-7	800	800	800

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Documents And Drawings :

Specification № PUB008-001-00, dated Sep 2020.

Installation manual № PUB008-005-00, dated Feb 2021.

Test Reports :

Intertek Testing Services Shanghai:

Test report № 150201087SHA-001(Revised), dated 13 Mar 2015.

Test report № 150201087SHA-002, dated 30 Mar 2015.

Shanghai Inspection and Testing Institute of Instruments and Automation Systems CO. Ltd:

Test report № A15-014-WT, dated 14 Apr 2015.

Test report № J24-015-ZC, dated 28 Aug 2024. Test report № J24-021-ZC, dated 21 Oct 2024

Tests carried out

Applicable testing according to class guideline DNV-CG-0339, August 2021. Tested for IP6x, IPx6 and IPx8 (down to 10m for 100h) according to IEC 60529:2013 and IEC 60945:2002.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

Manufactured by:

Rotork Flow Technology (Suzhou) Co. ,
Building A, No 88, Yinhe Road, Southeast Street, Changshu, Jiangsu Province, PRC

END OF CERTIFICATE