



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAA00002M9**  
Revision No:  
**2**

## This is to certify:

**That the Electric Actuator**

with type designation(s)  
**Actuator series DV25, DV45, DV75, DV100, DV150, DV300**

Issued to  
**Valpes**  
**Moirans, Isere, France**

is found to comply with  
**DNV GL 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:

<b>Temperature</b>	<b>D</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>B</b>
<b>EMC</b>	<b>A</b>
<b>Enclosure</b>	<b>D</b>

Issued at **Høvik** on **2021-05-19**

for **DNV**

This Certificate is valid until **2025-02-27**.

DNV local station: **France CMC**

Approval Engineer: **Nils Jarem**

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**Marta Alonso Pontes**  
**Head of Section**

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 300,000 USD.





## Product description

Electric Actuators to operate ball valves or butterfly valves.

VR and VS Range:	Ex Version	Operating torque:	Power supply:
DV25 series	DVX25 series	25Nm max	100 to 240V AC 50/60Hz or 100 to 350V DC Or 15 to 30V AC 50/60Hz or 12 to 48V DC
DV45 series	DVX45 series	45Nm max	
DV75 series	DVX75 series	75Nm max	
DV100 series	DVX100 series	100Nm max	
DV150 series	DVX150 series	150Nm max	
DV300 series	DVX300 series	300Nm max	

Other data:	
Travel:	0 to 180°
Enclosure coating:	Epoxy coating 45µm minimum
Degree of protection:	IP68 10m 72h
VR description:	Electric actuator 25 up to 75Nm modified for DV series for DNV approval
VS description:	Electric actuator 100 up to 300Nm modified for DV series for DNV approval

Actuator	Options (electronic boards or components)	
DV25/ DVX25  up to  DV300/ DVX300	P5: Analogic signal 0-10V or 4-20mA (Input/output signal) proportional operation	
	EFC2: 2 additional limit switches	
	ETPC: Analogic transmitter 0-10V or 4-20mA (I Output signal) proportional signal according to actuator position	
	EPRxB: Feedback potentiometer (variable resistance signal according to actuator position. (X= resistor value from 1 to 10 kΩ)	
	GF3: 3 positions option to operate 3 ways ball valves (0°-90°-180°)	
	GS6: Battery backup option, in case of outage of power supply, battery pack takes the relay and drive actuator in position defined by customer (OPEN/CLOSE)	
	GPS: Analogic signal 0-10V or 4-20mA (Input/output signal) + battery backup options combination	
	GFS: 3 position option + battery backup option combination	
	MB: MODBUS RTU	
	167: 2 wires reverse polarity operation	
	182: 4 wires pulse operation	
	187: Varnished electronic boards	
	Options Enclosure coating	
	Marine coating NORSOK 6M 175µm minimum	
	Options electrical connection	
HUM: 6 multipin Hummel connectors IP68		
MULTI: 24 multipin connectors		

## Approval conditions

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 GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Application/Limitation

Ex installations to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Ex-certification is not covered by this certificate and the following paragraph, which is for information only, is based on information received from the manufacturer, but not verified by DNV.

Information on Ex-Certification received from manufacturer – Not verified by DNV		
Equipment	Certified	Certificate No.
VRX*.70*.G*. ** VSX*.90*.G*. **	II 2 G Ex db IIB T6, -10°C ≤ Tamb ≤ +40°C	LCIE 06 ATEX 6006 X

## Type Approval documentation

Doc. No.	Rev.	Description
DSBA3400	2019-01-24	VR-VS Installation and Operation Manual
DSBA3401	2020-08-08	VRX·VSX Installation and Operation Manual
RENV-INN-19-400602-1/A	00/2020-01-20	MECHANICAL TEST REPORT (witnessed)
RENV-INN-19-400602-2/A	00/2020-01-23	CORROSIVE ATMOSPHERE TEST REPORT
RENV-INN-19-400602-3/A	00/2020-01-23	CLIMATIC TEST REPORT (dry heat)
RENV-INN-19-400602-4/A	00/2020-01-27	CLIMATIC TEST REPORT (damp heat)
RENV-INN-20-400146-1/A	00/2020-02-21	CLIMATIC TEST REPORT (insulation/high volt)
155247-720495	01/2018-09-12	TEST REPORT EMC VR and VS series
155247-720498	01/2018-09-12	TEST REPORT EMC VR and VS series
A0638399-1	2019-09-25	Conducted low freq. test. (witnessed)
n/a	2020-01-29	DNV VALPES TEST REPORT (witnessed)
R120-19-102 606-01-1_A	0/2019-11-18	EMC test report VALPES (VR25-VS300)
DM29314/15	2015-04-14	VR IP68 5m 72h Report
155842-722234	2018-08-10	VS IP68_10m_72h
R120-20-101 521-1_A	0/2020-07-20	Rapport Essais CEM VALPES (VR25-VS300)
DNV_VR AND VS SPEC_A	2019-02-25	DESCRIPTION OF VR AND VS RANGES FOR DNV APPROVAL

Type approval initial assessment report, DNV GL Marseille 2020-01-29.

## Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

## 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.

END OF CERTIFICATE