DNV·GL

Certificate No:
TAA00001A4

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Actuators and valves, miscellaneous

with type designation(s)
DVC6200

Issued to
Fisher Controls International LLC
Marshalltown, IA, USA

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 GL.

Temperature	**D**
Humidity	**B**
Vibration	**A**
EMC	**A**
Enclosure	**B (IP66)**

Issued at **Hamburg** on **2020-05-12**

This Certificate is valid until **2025-05-11**.

for **DNV GL**

DNV GL local station: **Certification & Inspection Services**

Approval Engineer: **Jens Dietrich**

Joannis Papanuskas
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.

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Product description

DVC6200 digital valve controller is a HART communicating instrument that converts a two-wire 4-20 mA control signal into a pneumatic output to an actuator.

Communication Protocol: HART 5 or HART 7

Input Signal
Point-to-Point
Analog Input Signal: 4-20 mA DC, nominal; split ranging available
Minimum Voltage Available at Instrument Terminals must be 9.5 VDC for analog control, 10 VDC for HART
Communication:
Minimum Control Current: 4.0 mA
Minimum Current w/o Microprocessor Restart: 3.5 mA
Maximum Voltage: 30 VDC
Overcurrent protected
Reverse Polarity protected
Multi-drop
Instrument Power: 11 to 30 VDC at 10 mA
Reverse Polarity protected.

Input Impedance
An equivalent impedance of 550 ohms may be used.
This value corresponds to 11V@20 mA.

Output Signal
Pneumatic signal, up to full supply pressure
Minimum Span: 0.4 bar (6 psig)
Maximum Span: 9.5 bar (140 psig)
Action: Double, Single Direct or Reverse.

Remote mount variant (DVC6205/ DVC6215)
The DVC6200 remote mount (DVC6205/ DVC6215) option enables the linkage-less, non-contact feedback travel sensor (DVC6215) available to be mounted on the valve while the base unit (DVC6205), with all other components like the I/P converter, pneumatic relay and Printed wiring Board, is mounted away (up to 30m) from the valve. Connection by flexible metal conduit.

DVC6200p digital valve controller is a Profibus communicating instrument that converts a two-wire communication signal into a pneumatic output to an actuator.

Electrical Input
Voltage Level: 9 to 32 volts
Maximum Current: 19 mA
Reverse Polarity Protection: Unit is not polarity sensitive
Termination: Bus must be properly terminated per ISA SP50 guidelines

Output Signal
Pneumatic signal, up to full supply pressure
Minimum Span: 0.4 bar (6 psig)
Maximum Span: 9.5 bar (140 psig)

DVC6200f digital valve controller is a Foundation Fieldbus communicating instrument that converts a two-wire communication signal into a pneumatic output to an actuator.

Electrical Input
Voltage Level: 9 to 32 volts

Maximum Current: 19 mA
Reverse Polarity Protection: Unit is not polarity sensitive
Termination: Bus must be properly terminated per ISA SP50 guidelines

Output Signal
Pneumatic signal, up to full supply pressure
Minimum Span: 0.4 bar (6 psig)
Maximum Span: 9.5 bar (140 psig)

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, 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.
The suitability for use in the respective valve application system has to be evaluated based on the requirements for Piping Systems DNV GL Pt.4, Ch.6.
The sufficiency of Ex-protection is to be evaluated for the respective application and is not covered by this type approval.

EMC in the range 2 GHz to 6 GHz according to DNVGL-CG-0339, December 2019 has not been documented. EMC up to 6 GHz must additionally be documented for installation on ships contracted for construction on or after 2022-01-01.

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number

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