

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Direct Acting Control Valve**

with type designation(s)

**Series 52,  
 Series 72**

Issued to

**GSR Ventiltechnik GmbH & Co. KG  
 Vlotho-Exter, Germany**

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.**

Type	Temperature	Humidity	Vibration	EMC	Enclosure
Series 52	B	B	B	N/A	B
Series 72	B	B	B	N/A	B

Issued at **Høvik** on **2017-12-01**

for **DNV GL**

This Certificate is valid until **2022-11-16**.

DNV GL local station: **Essen**

Approval Engineer: **Marco Rinkel**

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**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.



Job Id: **262.1-026004-1**  
Certificate No: **TAA00001FT**  
Revision No: **1**

## Product description

**Series 52:** **2/2 Way**  
**Series 72:** **3/2 Way**

Type of contact: direct acting  
Construction: piston design

Connection: G 1/8" (A523...)  
G 1/4" (A524...)  
G 3/8" (A525...)  
G 1/2" (A536...)  
G 1/8" (A723...)  
G 1/4" (A724...)

Pressure range: Series 72: 0 - max. 20 bar  
Series 52: 0 - max. 100 bar

Medium: neutral, gaseous and liquid medium  
Electrical connection: plug/socket according to DIN 43650  
Supply voltage: 24, 42, 110, 230 V AC 50 Hz; 24, 110, 205 V DC  
Protection class: IP65 acc. to DIN EN 60529  
Duty factor: 100% ED-VDE 0580  
Power-consumption: 1182 = 6.8 Watt, 0182 = 14.5/10.5 VA  
1032 = 11 Watt, 0032 = 24/15 VA  
1012 = 18.5 Watt, 0012 = 35/24 VA  
1148 = 10 Watt, 0148 = 9 VA  
1178 = 5.2 Watt, 0178 = 5.3 VA

Information only:  
Explosion proof acc. to Certificate: PTB 03 ATEX 2172 X (.148)  
PTB 03 ATEX 2018 X (.178)

## 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

## Type Approval documentation

(hidden)

Test Report of GSR, dated 09.07.1986;  
Data sheet "Type 52" GSR-MK-JK-DB-52 (05/2011)  
Data sheet "Type 72" GSR-MK-JM-DB-72 (05/2011)

## 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  
- power supply ratings

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### **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 proved 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
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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