

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Valve Accessories**

with type designation(s)

Positioner TROVIS 3730-3, Limit Switch 4747

Issued to

**SAMSON AG Mess- und Regeltechnik
Frankfurt am Main, 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.****Location classes:**

Type	Temperature	Humidity	Vibration	EMC	Enclosure
Positioner TROVIS 3730-3	D	B	B	B	C
Limit Switch 4747	D	B	B	N/A	C

Issued at **Hamburg** on **2020-06-30**This Certificate is valid until **2025-06-29**.for **DNV GL**DNV GL local station: **Essen**Approval Engineer: **Holger Jansen**

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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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

Positioner TROVIS 3730-3

Electric pneumatic positioner for pneumatic controlled valves to assign the valve position to the control signal.

Additional options:

- Forced venting
- Position transmitter
- Binary input
- Binary output (only in combination with limit contacts)
- Software limit contacts (PLC or NAMUR)
- Inductive limit contacts (NAMUR)

Technical data:

Valve travel: 3.6 to 300mm
Opening angle: 24 to 100°
Signal range: 4-20 mA
Supply air: 1.4 to 7 bar
Electrical connection: M20x1.5

Limit Switch 4747

Limit switch with a maximum of two inductive proximity switches or two electric micro switches.

Technical data:

	Inductive Limit Switch	Electric Limit Switch
Switching element	NAMUR NC	Changeover
Contacts	1 or 2	2
Electrical connection	M20x1.5 or 1/2 NPT	

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.

Ex-certification is not covered by this certificate. Application in hazardous area 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.

Type Approval documentation

Tests carried out

Applicable tests according to DNVGL-CG-0339, December 2019

Marking of product

The products to be marked with:

- SAMSON AG
- Model name
- Serial number

Periodical assessment

Job Id: **262.1-032933-1**
Certificate No: **TAA00002SC**

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