



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	SAMSON AKTIENGESELLSCHAFT
Address	Weismüllerstraße 3, Frankfurt am Main, 60314, Germany
Place of Production	SAMSON AKTIENGESELLSCHAFT Weismüllerstraße 3, Frankfurt am Main, 60314, Germany
Type	VALVE ACCESSORIES
Description	Electric and pneumatic valve attachments Positioner TROVIS 3730-3 Limit Switch 4747 For detailed description, pls. refer to appendix.
Trade Name	TROVIS 3730-3, 4747
Application	Marine applications for use in environmental categories ENV1, ENV2, ENV3, ENV4 and ENV5 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 – 2024
Specified Standard	Manufacturer's specification
Ratings	Supply pressure: Up to 10 bar Ambient temperature: -25 °C to +80 °C Enclosure protection: IP66

Units 1702-1704, 17th Floor (Level-13), Building Q2, Aurum Q Parc; Gen 4/1 TTC, Thane-Belapur Road, Ghansoli, Navi Mumbai, 400710, India

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For detailed ratings, pls. refer to appendix.

Other Conditions

Specific Conditions of Use as stated in applicable Ex-certificates and the conditions of the LR Ship Rules & Regulations of Classification of Ships Part 6, Chapter 2 shall be observed when installed in hazardous areas. The Ex-certification does not form part of this certificate.

Where valves are required to be capable of being closed remotely in the event of fire, actuators with stainless steel housing are to be used. The valve itself is excluded from this type approval.

Type Approval does not eliminate the need (as required by LR Rules) the requirements for further review or for the product to be further inspected and/or surveyed to be installed in ships classed or intended to be classed with LR

If the specified standards are amended during the validity of this certificate, the product is to be reapproved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Marine and Offshore India LLP of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2004388TA

The Design Appraisal Document TSO/25-040409-E-01 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

DESCRIPTION	Electric and pneumatic valve attachments
	Positioner TROVIS 3730-3: The electropneumatic positioner is mounted on pneumatic control valves and is used to assign the valve position (controlled variable x) to the control signal (set point w).
	Limit Switch 4747: The limit switch is intended for the attachment to linear or rotary valves. It is equipped either with a maximum of two inductive proximity switches or two electric micro switches and gives a limit signal when a set limit value is exceeded or reached.
RATINGS	Positioner TROVIS 3730-3: <ul style="list-style-type: none">- Firmware version: 2.00.xx- Voltage Current Input: 4 to 20 mA DC- Supply air: 1.4 to 7 bar- Temperature rating: -25 °C to +80 °C (all versions)- Degree of protection: IP 66- Certified Safe EquipmentTROVIS 3730-3-110... :<ul style="list-style-type: none">II 2G Ex ia IIC T4/T6 Gb andII 2D Ex ia IIIC T85 °C DbTROVIS 3730-3-510... :<ul style="list-style-type: none">II 2D Ex tb IIIC T85 °C DbTROVIS 3730-3-810... :<ul style="list-style-type: none">II 3G Ex ec IIC T4/T6 Gc andII 2D Ex tb IIIC T85 °C DbTROVIS 3730-3-850... :<ul style="list-style-type: none">II 3G Ex ec IIC T4/T6 Gc
	Limit Switch 4747: <ul style="list-style-type: none">- Standard temperature: -25 °C to +80 °C- Degree of protection provided by enclosure: IP 66- Certified Safe Equipment:<ul style="list-style-type: none">4747-110... :<ul style="list-style-type: none">II 2 G Ex ia IIC T6 Gb andII 2 D Ex ia IIIC T85 °C Db IP66 andII 2 D Ex tb IIIC T85 °C Db IP664747-210... :<ul style="list-style-type: none">II 2G Ex db IIC T6...T4 GbII 2D Ex tb IIIC T80 °C Db4747-810... :<ul style="list-style-type: none">II 3 G Ex ic IIC T6 Gc andII 3 G Ex nAc II T6 Gc andII 3 D Ex tc IIIC T85 °C Dc IP66