

VentilBox V2

Operating instructions

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1 General information

1.1 General information

Welcome to TriOS.

We are delighted that you have chosen the VentilBox V2.

The VentilBox V2 is an accessory for the TriBox mini. The TriBox mini supports the operation of an externally controllable valve for the purpose of water or compressed-air cleaning. All settings of the VentilBox V2 can be configured via the TriBox mini menu ("Measurement & Cleaning", sub-item "Cleaning").

In this manual you will find all the information about the VentilBox V2 that you need for commissioning. Technical specifications as well as detection limits and dimensions can be found in chapter 7.

Please note that the user is responsible for complying with regional and national regulations for the installation of electronic devices. Any damage caused by incorrect use or unprofessional installation is not covered by the warranty.

All sensors and accessories supplied by TriOS Mess- und Datentechnik GmbH must be installed and operated in accordance with TriOS Mess- und Datentechnik GmbH specifications. All parts have been designed and tested according to international standards for electronic instruments. The device complies with international standards for electromagnetic compatibility. Please use only original TriOS accessories and cables to ensure smooth and professional use of the devices.

Read this manual carefully before using the device and keep it for future reference. Before using the sensor, make sure that you have read and understood the safety precautions described below. Always ensure that the sensor is operated correctly. The safety precautions described on the following pages are intended to ensure problem-free and correct operation of the device and the associated accessories and to prevent you, other persons or devices from being harmed.

NOTICE

If translations differ from the original German text, the German version is binding.

Copyright notice

All contents of this manual, in particular texts, photographs and graphics, are protected by copyright. Unless expressly indicated otherwise, the copyright lies with TriOS Mess- und Datentechnik GmbH. Persons who violate the copyright are liable to prosecution in accordance with § 106 ff of the Copyright Act and will also be warned and liable to pay compensation.

1.2 Health and safety instructions

This manual contains important information on health and safety regulations. This information is marked in accordance with the international specifications of ANSI Z535.6 ("Product safety information in product manuals, instructions and other collateral materials") and must be followed. The following categories are distinguished:

⚠ DANGER

Danger / Will cause serious injury or death

⚠ WARNING

Warning / May cause serious injury or death

⚠ CAUTION

Caution / May cause moderate injury

NOTICE

May lead to material damage



Tip / Useful information

Electromagnetic waves

Devices that emit strong electromagnetic waves can influence the measurement data or cause the sensor to malfunction. Avoid operating the following devices in the same room as the TriOS sensor: cell phones, cordless phones, transceivers or other electrical devices that generate electromagnetic waves.

1.3 Warning notices

General notices:

- The material resistance should be tested for each application.
- Do not cut, damage or modify the cables. Make sure that there are no heavy objects on the cables and that they are not kinked. Ensure that no cables run near hot surfaces.
- Never attempt to disassemble or modify any part of the device unless expressly described in this manual. Inspections, modifications and repairs may only be carried out by the device dealer or by qualified specialists authorized by TriOS.
- Devices from TriOS Mess- und Datentechnik GmbH comply with the highest safety standards. Repairs to the devices (which include the replacement of the connection cable) must be carried out by TriOS Mess- und Datentechnik GmbH or an authorized TriOS workshop. Incorrect, improper repairs can lead to accidents and injuries.

NOTICE

TriOS does not guarantee the plausibility of the measured values. The user is always responsible for monitoring and interpreting the measured values.

1.4 User and operating requirements

The accessories have been developed for use in industry and science. The target group for the use of the VentilBox V2 is technically experienced specialist personnel in companies, sewage treatment plants, waterworks and institutes.

The application often requires the handling of hazardous substances. We assume that the operating personnel are familiar with the handling of hazardous substances due to their professional training and experience. In particular, the operating personnel must be able to correctly understand and implement the safety markings and safety instructions on the packaging and in the package inserts of the test kits.

1.5 Intended use

The accessories are intended exclusively as a controllable valve for the purpose of water or compressed-air cleaning for the TriBox mini. Please observe the technical data of all components. Any other use is considered improper.

According to current scientific knowledge, the device is safe to use if it is handled in accordance with the instructions in this operating manual.

NOTICE

Damage caused by improper use is excluded from the warranty.

1.6 Disposal instructions

At the end of its service life or useful life, the device and its accessories can be returned to the manufacturer (see address below) for disposal in an environmentally friendly manner. Proof of prior professional decontamination must be provided in the form of a certificate. Please contact us before returning the device for further details.

Address of the manufacturer:

TriOS Mess- und Datentechnik GmbH
Bürgermeister-Brötje-Str. 25
26180 Rastede
Rastede, Germany
Phone: +49 (0) 4402 69670 - 0
Fax: +49 (0) 4402 69670 - 20

1.7 Certificates and approvals

The product meets all requirements of the harmonized European standards. It therefore fulfills the legal requirements of the EU directives. TriOS Mess- und Datentechnik GmbH confirms the successful testing of the product by affixing the CE mark (see appendix).

2 Introduction

2.1 Introduction

The VentilBox V2 is an accessory for the TriBox mini. The TriBox mini supports the operation of an externally controllable valve for the purpose of water or compressed-air cleaning. All settings of the VentilBox V2 can be configured via the TriBox mini menu ("Measurement & Cleaning", sub-item "Cleaning").

The following chapters explain the correct operation of the VentilBox V2 with all its functions and setting options.

2.2 Scope of delivery

The delivery includes the following components:

- Article 03A000003 VentilBox V2
- 1.5 m connection cable with M8 connection



Keep the original packaging of the device for possible return shipment for maintenance or repair purposes.

2.3 Product identification

All TriOS Mess- und Datentechnik GmbH products are provided with a product label that clearly shows the product designation.

There is also a type plate on the device with the following information, which you can use to clearly identify the product:

VentilBox V2

Serial number

Product type

Power supply



The nameplate also contains the product barcode, the TriOS Optical Sensors logo and the CE quality mark.

Please note that the specifications given here are for illustrative purposes only and may vary depending on the product version.

3 Commissioning

This chapter covers the commissioning of the VentilBox V2 up to the first function test. Please pay particular attention to this section and follow the safety instructions to protect the product from damage and yourself from injury.

The VentilBox V2 is easy to install using the mounting holes.

3.1 Power supply

The VentilBox V2 is easy to install. It has four 5.3 mm mounting holes.

⚠ CAUTION

Only version V2 of the VentilBox (03A000003) is suitable for water flushing. Version V1 (03A000000) only supports compressed air flushing and should not come into contact with water.

Connection instructions

The following components are required to connect the VentilBox V2 to the TriBox mini:



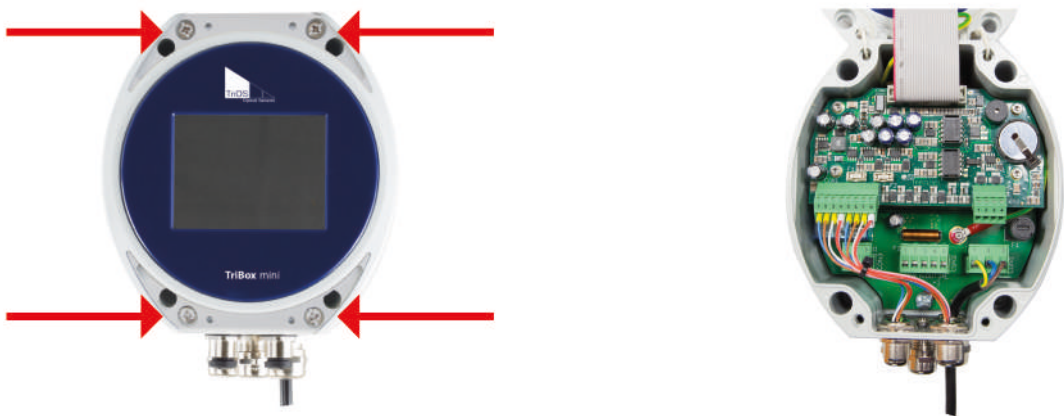
TriOS VentilBox V2



TriBox mini

Connection


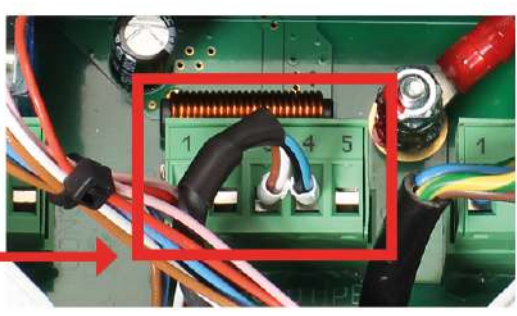
1. Open the cover of the TriBox mini by first removing the gray covers on the top and bottom edges and loosening the screws underneath.



2. Now feed the connecting cable of the VentilBox V2 through the cable gland in the TriBox mini and then secure the cable gland.



3. Connect the brown and white wires of the connection cable to the CON2 connection, pin 3 (labeled VOUT+) and the blue and black wires to the CON2 connection, pin 4 (labeled VOUT-), as described in the table below. The wire pairs are already connected together in a wire end sleeve. Tighten the screws firmly.

VentilBox V2 connection cable	TriBox mini connection
	
Brown and white wires	CON2, pin 3, VOUT+
Blue and black wires	CON2, pin 4, VOUT-

4. Now close the cover of the TriBox mini, tighten the four screws and replace the gray covers on the Tri-Box mini.
5. Carry out a test by running a cleaning cycle in the TriBox mini. The VentilBox V2 must click audibly.

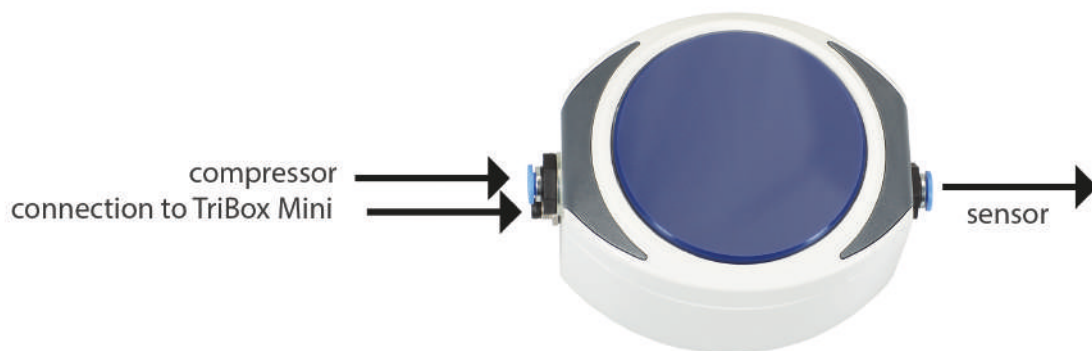
4 Application

4.1 Application of the VentilBox V2

The TriBox mini supports the operation of an externally controllable valve for the purpose of water or compressed-air cleaning. All settings of the VentilBox V2 can be configured via the TriBox mini menu (“Measurement & Cleaning”, sub-item “Cleaning”). See also the TriBox mini operating instructions.

Available configurations:

- Cleaning interval
- Duration of cleaning
- Pause before measurement



⚠ CAUTION

Only version V2 of the VentilBox (03A000003) is suitable for water flushing. Version V1 (03A000000) only supports compressed air flushing and should not come into contact with water.

5 Calibration

Not applicable for this device.

6 Malfunction and maintenance

6.1 Maintenance

Maintenance is not required for this device.

6.2 Return shipment

Please note the procedure for your return.

If you wish to return the sensor or the device, please contact technical support first. To ensure a smooth return process and to avoid incorrect shipments, every return shipment must first be reported to technical support. You will then receive a numbered RMA form, which you must complete in full, check and return to us.

Please stick this form with the number clearly visible on the outside of the return package or write it in large letters on the packaging. This is the only way your return can be correctly assigned and accepted.



Please note! Returns without an RMA number cannot be accepted and processed!

Please note that the sensor or the device must be cleaned and disinfected before shipping.

Use the original packaging to ensure that the goods are sent undamaged. If this is not available, ensure that safe transportation is guaranteed and that the sensors are secured with sufficient packing material.

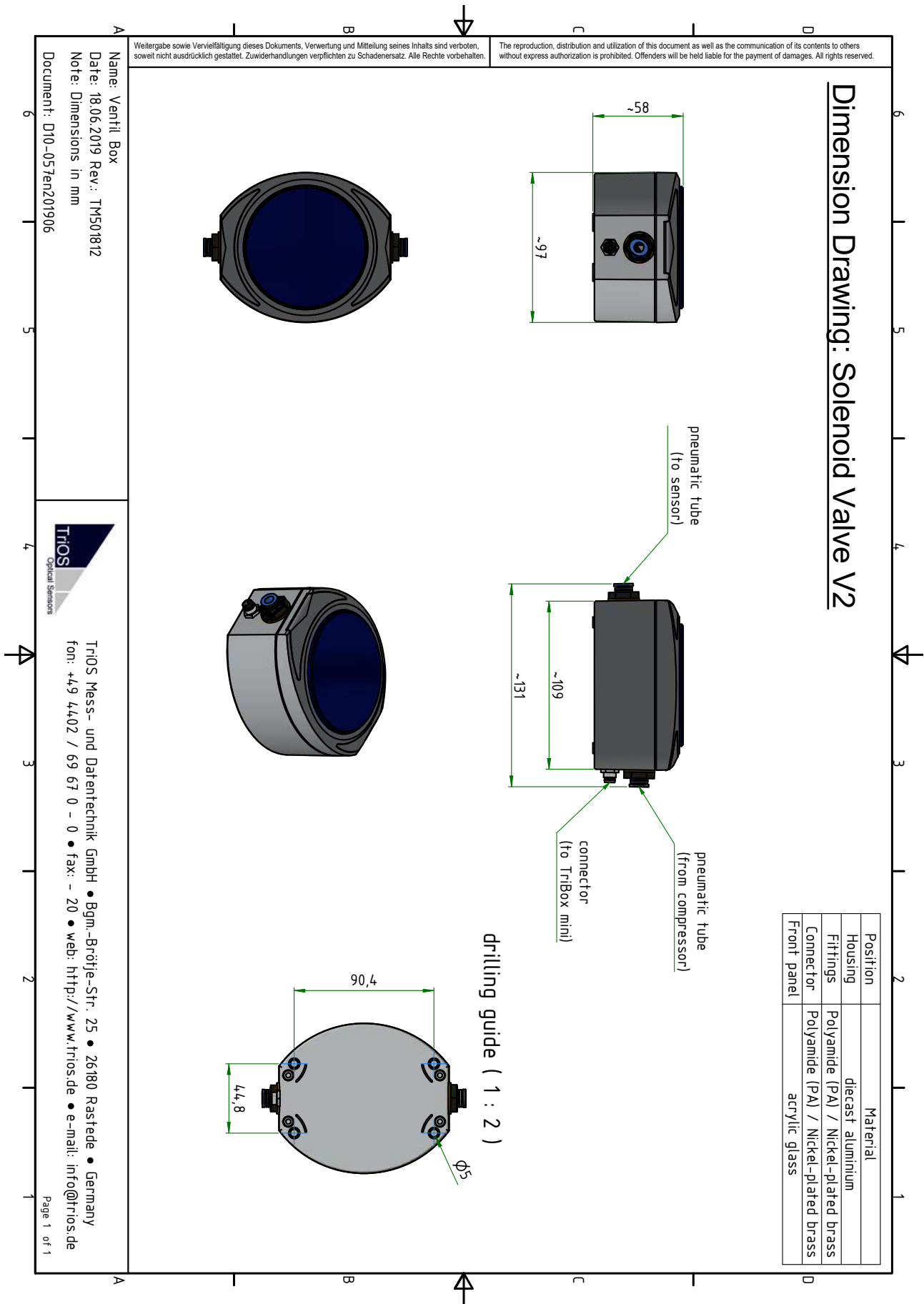
7 Technical data

7.1 Technical specifications

VentilBox V2

Dimensions	110 x 97 x 55 mm	~ 4.3 " x 3.8 " x 2.2 "
Weight	~ 0.6 kg	~ 1.3 lbs
Max. Max. pressure	5 bar	~ 73 psi
Power supply	12 VDC	
Power consumption	3 W	
Connection	for 6 mm hoses (4 mm inner diameter)	
Housing	Die-cast aluminum alloy	
Protection class	IP65	NEMA 4X
Cable	1.5 m connection cable with M8 connection	
Temperature	2...+40 °C	~ +36 ...+104 °F

7.2 Outer dimensions



8 Warranty

The warranty period for our devices within the EU and the USA is 2 years from the date of invoice. Outside the EU it is 1 year. Excluded from the warranty are all normal consumables (depending on the product, e.g. light sources or windows).

The guarantee is subject to the following conditions:

- The appliance and all accessories must be installed as described in the relevant manual and operated in accordance with the specifications.
- Damage caused by contact with aggressive and material-damaging substances, liquids or gases, as well as transport damage, are not covered by the guarantee.
- Damage caused by improper handling and use of the appliance is not covered by the warranty.
- Damage caused by modification or unprofessional attachment of accessories by the customer is not covered by the warranty.

NOTICE

Opening the device will void the warranty!

9 Technical support

If you have a problem with a TriOS sensor / a TriOS device, please contact TriOS technical support.

We recommend sending in sensors every 2 years for maintenance and calibration. To do this, please request an RMA number from technical support.

Contact technical support:

E-mail: support@trios.de

Phone: +49 (0) 4402 69670 - 0

Fax: +49 (0) 4402 69670 - 20

To enable us to help you quickly, please send us the sensor ID number (serial number with 8 digits, consisting of letters and numbers, e.g. 6700003F) by e-mail.

10 Contact us

We are constantly working on improving our devices. Please visit our website for the latest news.

If you have found a fault in one of our devices or programs or would like additional functions, please contact us:

Technical Support:	support@trios.de
General questions/sales:	sales@trios.de
Website:	www.trios.de

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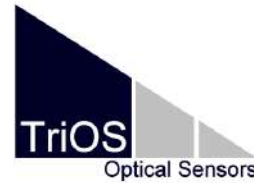
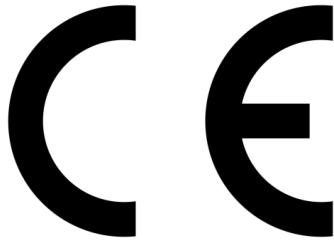
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Hersteller/Manufacturer/Fabricant: TriOS Mess- und Datentechnik GmbH
Bürgermeister-Brötje-Str. 25
D- 26180 Rastede

Konformitätserklärung

Declaration of Conformity

Déclaration de Conformité

Die TriOS GmbH bescheinigt die Konformität für das Produkt
The TriOS GmbH herewith declares conformity of the product
TriOS GmbH déclare la conformité du produit

Bezeichnung Product name Désignation	VentilBox V2
Typ / Type / Type	Art.Nr. 03A000003
Mit den folgenden Bestimmungen With applicable regulations Avec les directives suivantes	2014/30/EU EMV-Richtlinie 2011/65/EU RoHS-Richtlinie + (EU) 2015/863 + (EU) 2017/2102
Angewendete harmonisierte Normen Harmonized standards applied Normes harmonisées utilisées	EN IEC 61326-1:2021 EN 61010-1:2010 +A1:2019 +A1:2019/AC:2019 EN IEC 63000:2018
Datum / Date / Date	Unterschrift / Signature / Signature
23.05.2024	 R. Heuermann

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