

Instruction and operation manual

Measuring chamber A554 2301



Dear Customer,

Thank you for choosing our product.

The operating instructions must be read in full and carefully observed before starting up the device. The manufacturer cannot be held liable for any damage which occurs as a result of non-observance or non-compliance with this manual.

Should the device be tampered with in any manner other than a procedure which is described and specified in the manual, the warranty is cancelled and the manufacturer is exempt from liability.

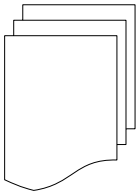
The device is destined exclusively for the described application.

SUTO offers no guarantee for the suitability for any other purpose. SUTO is also not liable for consequential damage resulting from the delivery, capability or use of this device.

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1. Safety instructions



Please check if this instruction manual accords to the product type.

Please observe all notes and instructions indicated in this manual. It contains essential information which have to be observed before and during installation, operation and maintenance. Therefore this instruction manual has to be read carefully by the technician as well as by the responsible user / qualified personnel.

This instruction manual has to be available at the operation site of the device at any time. In case of any obscurities or questions, regarding this manual or the product, please contact the manufacturer.



WARNING!

Compressed air!

Any contact with quickly escaping air or bursting parts of the compressed air system can lead to serious injuries or even death!

- Do not exceed the maximum permitted pressure range (see chamber label).
- Only use pressure tight installation material.
- Avoid that persons get hit escaping air or bursting parts of the instrument.
- The system must be pressureless during maintenance work.



WARNING!

Permitted operating parameters!

Observe the permitted operating parameters, any operation exceeding this parameters can lead to malfunctions and may lead to damage on the instrument or the system.

- Do not exceed the permitted operating parameters.
- Make sure the product is operated in its permitted limitations.
- Do not exceed or undercut the permitted storage and operation temperature and pressure.
- The product should be maintained frequently, at least annually.

General safety instructions

- It is not allowed to use the product in explosive areas.
- Please observe the national regulations before/during installation and operation.

Remarks

- It is not allowed to disassemble the product.
- Always use spanner to mount the product properly.



ATTENTION!

Measurement values can be affected by malfunction!

The product must be installed properly and frequently maintained, otherwise it may lead to wrong measurement values, which can lead to wrong results.

Storage and transportation

- Make sure that the transportation temperature of the device is between -30°C ... 70°C .
- For transportation it is recommended to use the packaging which comes with the device.
- Please make sure that the storage temperature of the device is between -10°C ... 50°C .
- Avoid direct UV and solar radiation during storage.
- For the storage the humidity has to be $<90\%$, no condensation.

2. Application

The measuring chamber is used in applications with pressurized air in combination with a SUTO dew point sensor. It ensures that the sampling air flows around the sensor element thus providing a fast response time to dew point changes. It must be used within the permissible operating parameters. These parameters can be found in the technical data section.

The measuring chamber is not developed to be used in explosive areas. For the use in explosive areas please contact the manufacturer.

The measuring chamber is mainly used in compressed air systems in industrial environment.

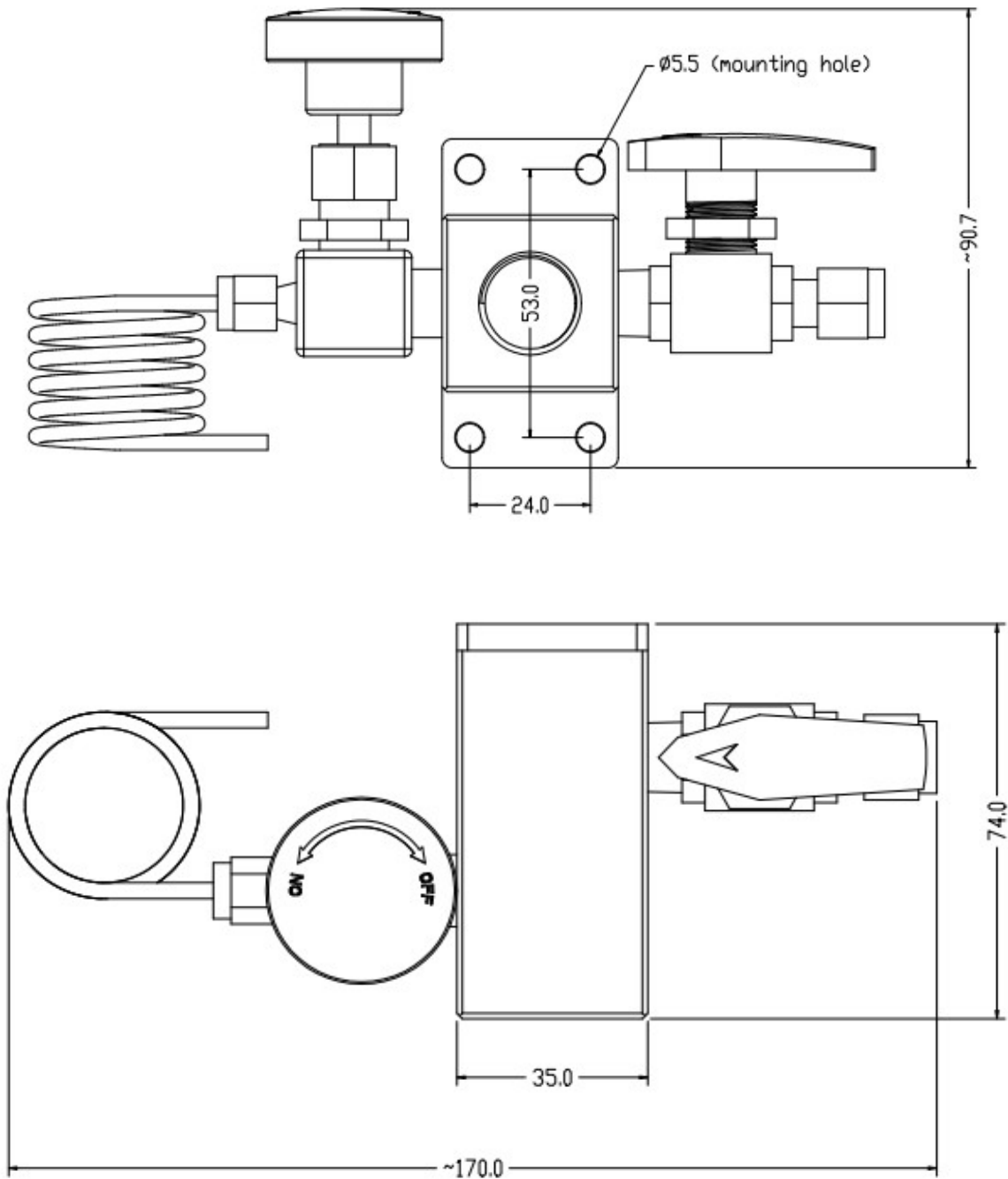
3. Features

- Easy mountable at a surface through 4 mounting holes
- sample air connection through 1/4" compression fitting
- Inlet valve to isolate the chamber from compressed air supply
- Needle valve to adjust the purge flow
- Outlet pigtail tube to avoid back diffusion
- Convenient to all the dew point sensors of the manufacturer.
- Sensor is mounted to the 1/2" G-type thread connection.

4. Technical Data

CE	
Measuring medium	Air, gas (non corrosive gas, non explosive)
Operating temperature	-20°C ... 50°C
Humidity of the meas. medium	< 90%, no condensation
Operating pressure	up to 1.5 MPa
Housing material	Stainless steel
Inlet connection	1/4" compression fitting
Dimensions	See dimensional drawing on the next page
Weight	850g

5. Dimensional drawing



6. Installation

Please make sure that all components listed below are included in your package.

Qty	Description	Item No.
1	Measuring chamber	A554 2301
1	Instruction manual	No P/N

6.1 Installation Requirements

The dew point sensor is mounted to the chamber through the 1/2" G-type thread connection. The compressed air/gas is supplied through a OD 1/4" tube to the inlet fitting.

6.2 Installation Procedure

The following steps explain the procedure of an appropriate installation.

Installation of measuring chamber

1. Mount the chamber on a surface through the 4 mounting holes.
2. Screw the dew point sensor onto the 1/2" G-type thread connection. Make sure that the sealing-ring is fitted on the sensor!
3. Connect the compressed air/gas supply through a OD 1/4" tube to the inlet fitting
4. Mount the outlet pictail tube to the outlet fitting
5. Close the outlet needle valve and then open the inlet valve
6. Open up the outlet needle valve so that a flow can be felt at the end of the outlet pigtail tube. The higher the flow the faster the response time, but the more air/gas is lost.

7. Maintenance

To clean the measuring chamber it is recommended to use distilled water or isopropyl alcohol only.

8. Disposal or waste

The device, the accessories and its packings must be disposed according to your local statutory requirements. The dispose can also be

carried by the manufacturer of the product, for this please contact the manufacturer.

9. Warranty

SUTO provides a warranty for this product of 24 months covering the material and workmanship under the stated operating conditions from the date of delivery. Please report any findings immediately and within the warranty time. If faults occurring during the warranty time SUTO will repair or replace the defective unit, without charge for labour and material costs but there is a charge for other service such as transport and packing costs.

Excluded from this warranty is:

- Damage caused by:
 - Improper use and non-adherence to the instruction manual.
 - Use of unsuitable accessories.
 - External influences (e.g. damage caused by vibration, damage during transportation, excess heat or moisture).

The warranty is cancelled:

- If the user opens the measurement instrument without a direct request written in this instruction manual.
- If repairs or modifications are undertaken by third parties or unauthorised persons.
- If the serial number has been changed, damaged or removed.

Other claims, especially those for damage occurring outside the instrument are not included unless responsibility is legally binding.

Warranty repairs do not extend the period of warranty.

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