

## Instruction and operation manual

# High pressure installation device

For S410 and S430



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.

Revision: 2025-1

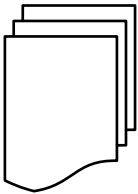


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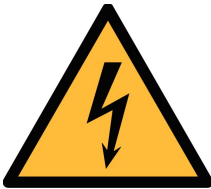
## 1 Safety Instructions



### **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 must be observed before and during installation, operation and maintenance. Therefore this instruction manual must be read carefully by the technician as well as by the responsible user / qualified personnel.

This instruction manual must be available at the operation site of the high pressure installation 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
- 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!**

#### **Voltage used for supply!**

**Any contact with energized parts of the product, may lead to a electrical shock which can lead to serious injuries or even death!**

- Consider all regulations for electrical installations.
- The system must be disconnected from any power supply during maintenance work.
- Any electrical work on the system is only allowed by authorized qualified personal.

**ATTENTION!****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 and calibrated 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**

- Always use spanner to mount the product properly.

**Storage and transportation**

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

## 2 Application

The high pressure installation device is designed for safety reasons. In applications where the pressure exceeds 1.6 MPa(g) the installation of a sensor must be done in combination with the high pressure installation device. This installation device is suitable for pressures up to 5 MPa(g). There are different types of installation devices depending on the sensor:

- High pressure device for S401 with a 220 mm shaft
- High pressure device for S450 with a 220 mm shaft
- High pressure device for S401 with a 400 mm shaft
- High pressure device for S450 with a 400 mm shaft

The high pressure installation device is mainly used in compressed air systems in industrial environments.

The high pressure installation device is not developed to be used in explosive areas. For the use in explosive areas please contact the manufacturer.

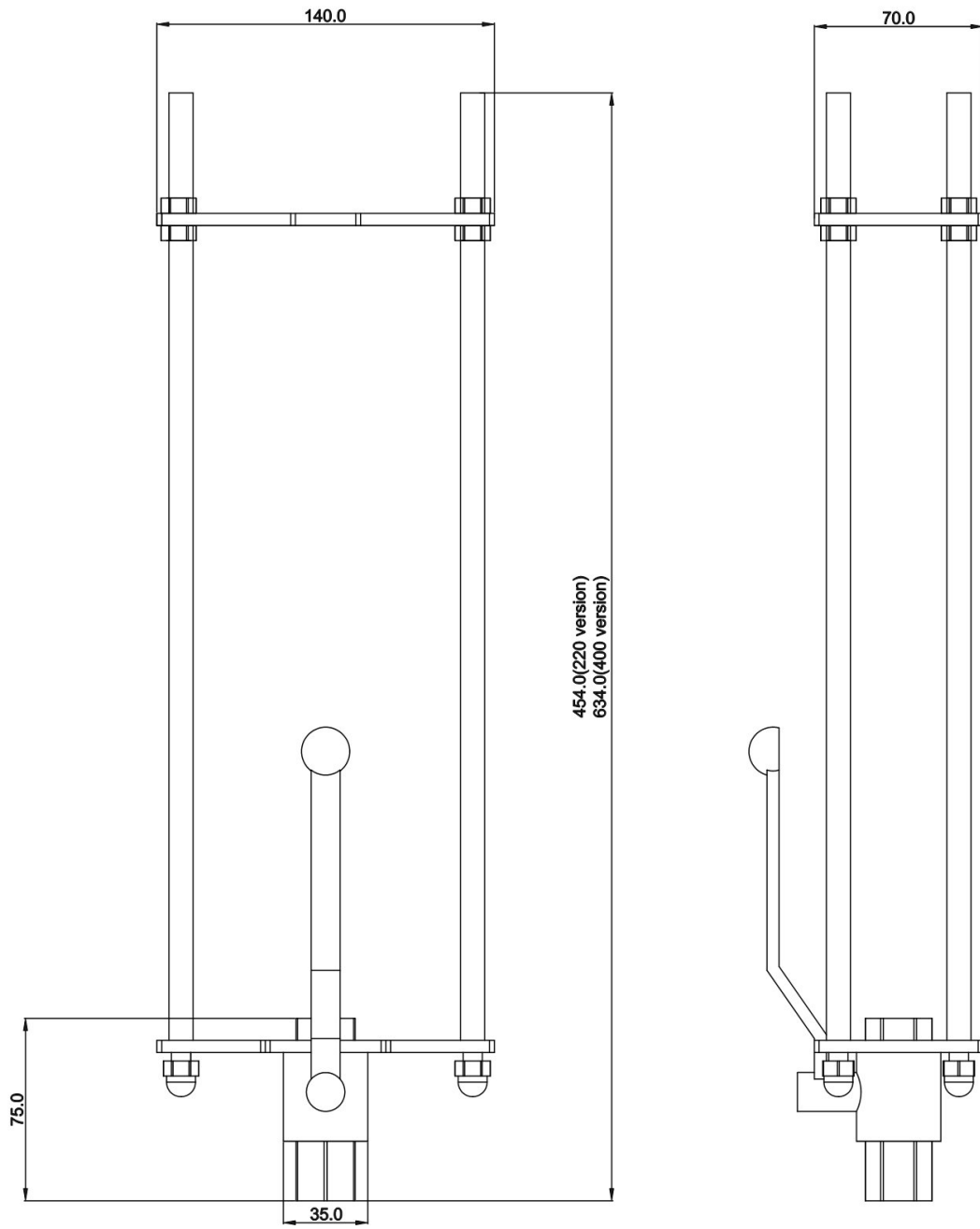
## 3 Features

- Easy installation over a ball valve, no production stop
- Security for applications where the pressure exceeds 1.6 MPa(g)

## 4 Technical Data

CE	
Operating temperature	-30 ... +70°C
Operating pressure	1.6 ... 5 MPa(g)
Material of the device	Stainless steel
Dimensions	See below the picture
Screwing thread	G 1/2"
Weight	<ul style="list-style-type: none"> <li>• 1.7 kg for the flow meter with the 220 mm shaft</li> <li>• 1.85 kg for the flow meter with the 400 mm shaft</li> </ul>

# 5 Dimensional Drawing



## 6 Installation

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

Qty	Description	Item No.
1	High pressure installation device	A530 1105/A530 1106 A530 1111/A530 1113
1	Instruction manual	No P/N

- The high pressure installation device is for indoor use only! At an outdoor installation, the device must be protected from solar radiation and rain.
- It is strongly recommend not to install the device permanently in wet environment which exists usually right after a compressor outlet.

### 6.1 Installation Requirements

Please make sure that a nibble with a 1/2" BSP thread is placed at the point of measurement.

### 6.2 Installation

#### Install the high pressure installation device

Please observe the following steps for an appropriate installation:



1. The device must be installed on a de-pressurized pipe and without any leakage.
2. Tight it up fully (use the teflon tape for sealing).





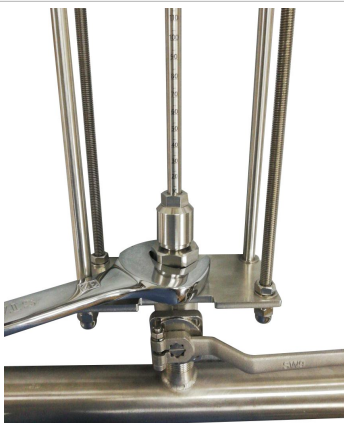
3. Turn the wing nuts to the top position.



4. Place the S401 / S450 in the holding plate as indicated.



5. Mount the connection head onto the ball valve and tighten it up with a wrench. Ensure that the O-ring is proper fitted on the ball valve.



6. Before opening the ball valve, first screw down the wing nuts so that the holding plate is secured. This prevents the sensor from shooting out when the ball valve is open.

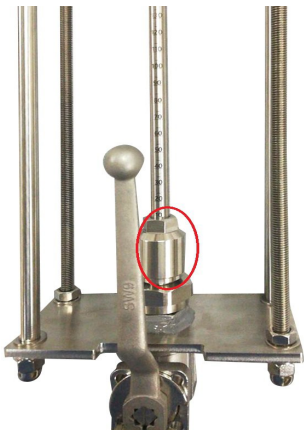
7. Turn on the ball valve slowly and check for any possible leakage.



8. Now turn the wing nuts until the sensor shaft is inserted to the correct depth. For more information, please refer to the instruction manual of the sensor.



9. Turn the counter nuts until the holdings plate is secured in the position.



10. Tighten up the clamp sleeve to fix the installation.

### Remove the high pressure installation device

After installing the sensor successfully, you can easily remove and re-install the sensor even under pressure.

1. For the de-installation, open the counter nut at the sensor head.
2. Then turn the wing nuts to the upper position so that the sensor shaft is fully removed.
3. Finally close the ball valve.

## 7 Disposal of Waste



Electronic devices are recyclable material and do not belong in the household waste. The sensor, the accessories and its packings must be disposed according to your local statutory requirements. The disposal can also be carried by the manufacturer of the product, for this please contact the manufacturer.

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