

# MOUNTING AND OPERATING INSTRUCTIONS



## EB 5867 EN

Translation of original instructions



Type 3222 N/5857 Electric Control Valve  
Type 3222 N Globe Valve with soldering ends and Type 5857 Actuator

## Electric Control Valves

**Type 3222 N/5857, Type 3222 N/5757-3 and  
Type 3222 N/5757-7**

Edition November 2023



## Note on these mounting and operating instructions

These mounting and operating instructions assist you in mounting and operating the device safely. The instructions are binding for handling SAMSON devices. The images shown in these instructions are for illustration purposes only. The actual product may vary.

- For the safe and proper use of these instructions, read them carefully and keep them for later reference.
- If you have any questions about these instructions, contact SAMSON's After-sales Service ([aftersaleservice@samsongroup.com](mailto:aftersaleservice@samsongroup.com)).



Documents relating to the device, such as the mounting and operating instructions, are available on our website at [www.samsongroup.com](http://www.samsongroup.com) > **Downloads > Documentation.**

## Definition of signal words

### **DANGER**

*Hazardous situations which, if not avoided, will result in death or serious injury*

### **WARNING**

*Hazardous situations which, if not avoided, could result in death or serious injury*

### **NOTICE**

*Property damage message or malfunction*

### **Note**

*Additional information*

### **Tip**

*Recommended action*

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# 1 Safety instructions and measures

## Intended use

The SAMSON Type 3222 N Valve is designed for use in HVAC applications, particularly for local heat supply and large heating networks. The valve is primarily combined with the following SAMSON actuators to form an electric control valve:

- Type 5857 Electric Actuator
- TROVIS 5757-3 Electric Actuator with Process Controller
- TROVIS 5757-7 Electric Actuator with Process Controller

The valve with its actuator is designed to operate under exactly defined conditions (e.g. operating pressure, process medium, temperature). Therefore, operators must ensure that the control valve is only used in operating conditions that meet the specifications used for sizing the valve at the ordering stage. In case operators intend to use the control valve in applications or conditions other than those specified, contact SAMSON.

SAMSON does not assume any liability for damage resulting from the failure to use the device for its intended purpose or for damage caused by external forces or any other external factors.

➔ Refer to the technical data and nameplate for limits and fields of application as well as possible uses.

## Reasonably foreseeable misuse

The control valve is not suitable for the following applications:

- Use outside the limits defined during sizing and by the technical data

Furthermore, the following activities do not comply with the intended use:

- Use of non-original spare parts
- Performing service and repair work not described

## Qualifications of operating personnel

The control valve must be mounted, started up, serviced and repaired by fully trained and qualified personnel only; the accepted industry codes and practices must be observed.

According to these mounting and operating instructions, trained personnel refers to individuals who are able to judge the work they are assigned to and recognize possible hazards due to their specialized training, their knowledge and experience as well as their knowledge of the applicable standards.

Welding operations are to be performed only by personnel who has the necessary qualification to perform the applied welding procedure and handle the materials used.

## **Safety instructions and measures**

### **Personal protective equipment**

We recommend wearing the following protective equipment:

- Protective clothing, safety gloves and eye protection in applications with hot or cold media
- ➔ Check with the plant operator for details on further protective equipment.

### **Revisions and other modifications**

Revisions, conversions or other modifications of the product are not authorized by SAMSON. They are performed at the user's own risk and may lead to safety hazards, for example. Furthermore, the product may no longer meet the requirements for its intended use.

### **Safety features**

The Type 3222 N Valve does not have any special safety equipment.

### **Warning against residual hazards**

To avoid personal injury or property damage, plant operators and operating personnel must prevent hazards that could be caused in the control valve by the process medium, the operating pressure, the signal pressure or by moving parts by taking appropriate precautions. Plant operators and operating personnel must observe all hazard statements, warnings and caution notes in these mounting and operating instructions.

Hazards resulting from the special working conditions at the installation site of the valve must be identified in a risk assessment and prevented through the corresponding safety instructions drawn up by the operator.

### **Responsibilities of the operator**

Operators are responsible for proper use and compliance with the safety regulations. Operators are obliged to provide these mounting and operating instructions as well as the referenced documents to the operating personnel and to instruct them in proper operation. Furthermore, operators must ensure that operating personnel or third parties are not exposed to any danger.

Operators are additionally responsible for ensuring that the limits for the product defined in the technical data are observed. This also applies to the start-up and shutdown procedures. Start-up and shutdown procedures fall within the scope of the operator's duties and, as such, are not part of these mounting and operating instructions. SAMSON is unable to make any statements about these procedures since the operative details (e.g. differential pressures and temperatures) vary in each individual case and are only known to the operator.

### Responsibilities of operating personnel

Operating personnel must read and understand these mounting and operating instructions as well as the referenced documents and observe the specified hazard statements, warnings and caution notes. Furthermore, operating personnel must be familiar with the applicable health, safety and accident prevention regulations and comply with them.

### Referenced standards, directives and regulations

The control valves comply with the requirements of the European Pressure Equipment Directive 2014/68/EU and the Machinery Directive 2006/42/EC. Valves with a CE marking have a declaration of conformity which includes information about the applied conformity assessment procedure. The declaration of conformity is available on request.

The electric actuators are designed for use in low voltage installations. For wiring, maintenance and repair, observe the relevant safety regulations.

### Referenced documentation

The following documents apply in addition to these mounting and operating instructions:

- Mounting and operating instructions for mounted actuator, e.g. SAMSON actuators:
  - ▶ EB 5857 for Type 5857
  - ▶ EB 5757 for TROVIS 5757-3
  - ▶ EB 5757-7 for TROVIS 5757-7

## 1.1 Notes on possible severe personal injury

### DANGER

#### Risk of bursting in pressure equipment.

Valves and pipelines are pressure equipment. Impermissible pressure or improper opening can lead to valve components bursting.

- Observe the maximum permissible pressure for valve and plant.
- Before starting any work on the control valve, depressurize all plant sections affected as well as the valve.
- Drain the process medium from all the plant sections concerned as well as the valve.

### DANGER

#### **Risk of fatal injury due to electric shock.**

- Do not remove any covers to perform adjustment work on live parts.
- Before performing any work on the device and before opening the device, disconnect the supply voltage and protect it against unintentional reconnection.
- Only use power interruption devices that are protected against unintentional reconnection of the power supply.

## 1.2 Notes on possible personal injury

### WARNING

#### **Risk of personal injury due to residual process medium in the valve.**

While working on the valve, residual process medium can escape and, depending on its properties, may lead to personal injury, e.g. burns.

- If possible, drain the process medium from all the plant sections affected and the valve.
- Wear protective clothing, safety gloves and eye protection.

#### **Risk of burn injuries due to hot components and pipelines.**

Depending on the process medium, valve components and pipelines may get very hot and cause burn injuries.

- Allow components and pipelines to cool down.
- Wear protective clothing and safety gloves.

#### **Risk of personal injury due to incorrect operation, use or installation as a result of information on the valve being illegible.**

Over time, markings, labels and nameplates on the valve may become covered with dirt or become illegible in some other way. As a result, hazards may go unnoticed and the necessary instructions not followed. There is a risk of personal injury.

- Keep all relevant markings and inscriptions on the device in a constantly legible state.
- Immediately renew damaged, missing or incorrect nameplates or labels.

## 1.3 Notes on possible property damage

### ! NOTICE

#### **Risk of damage to the electric control valve due to the supply voltage exceeding the permissible tolerances.**

The electric control valves are designed for use according to regulations for low-voltage installations.

- Observe the permissible tolerances of the supply voltage. See associated actuator documentation.

#### **Risk of valve damage due to contamination (e.g. solid particles) in the pipeline.**

The plant operator is responsible for cleaning the pipelines in the plant.

- Flush the pipelines before start-up.

#### **Risk of valve damage due to unsuitable medium properties.**

The valve is designed for a process medium with defined properties.

- Only use the process medium specified for sizing the equipment.

## Markings on the device

## 2 Markings on the device

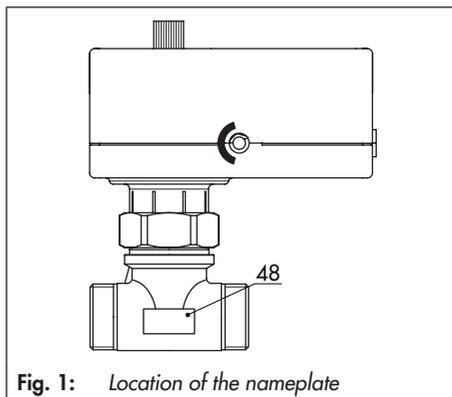
The nameplate shown was up to date at the time of publication of this document. The nameplate on the device may differ from the one shown.

### 2.1 Valve nameplate

<b>SAMSON</b>	1
2	3
4	5
$K_{VS}$ 6	$\Delta p$ 7

- 1 Type designation
- 2 Configuration ID
- 3 Date of manufacture
- 4 Model number
- 5 Max. perm. temperature
- 6  $K_{VS}$  coefficient
- 7 Max. perm. diff. pressure

The nameplate (48) is affixed to the valve body (see Fig. 1).



**Fig. 1:** Location of the nameplate

### 2.2 Actuator nameplate

See associated actuator documentation.

### 3 Design and principle of operation

The medium flows through the single-seated globe valve in the direction indicated by the arrow. The position of the plug determines the flow rate across the area released between plug (3) and seat (2).

The linear actuating force is transmitted directly over the actuator stem (7) to the plug stem (5). When the actuator stem extends, the valve plug (3) is moved in the closing direction. The plug stem follows the actuator stem owing to the force of the valve spring (4) as the actuator stem retracts, causing the valve to open.

The valve and actuator have a force-locking connection.

### 3.1 Versions

#### Intermediate insulating piece

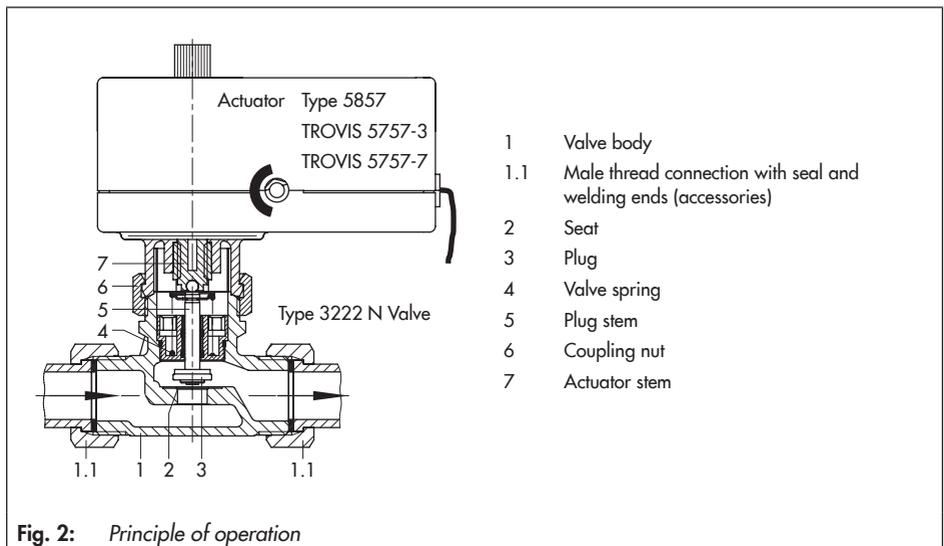
An intermediate insulating piece is available for insulated pipes.

#### Electric actuator

The electric actuator can be controlled either using a three-step signal or, in the version with positioner, with continuous signals adjustable in the range from 0 to 20 mA or from 0 to 10 V.

#### Electric actuators with process controllers

The electric actuator with process controller consists of a linear actuator with an integrated digital controller. TROVIS 5757-3 is suitable for domestic hot water heating, whereas TROVIS 5757-7 is suited for heating and cooling applications.



## Design and principle of operation

**Table 1:** Available versions and possible combinations (valve/actuator)

Type 3222 N Globe Valve/actuator		
Type/TROVIS	Fail-safe action	Valve size
<b>Electric actuator</b>		
5857	Without	DN 15
<b>Electric actuator with process controller for domestic hot water heating</b>		
5757-3	Without	DN 15
<b>Electric actuator with process controller for heating and cooling applications</b>		
5757-7	Without	DN 15

## 3.2 Technical data

The nameplates on the valve and actuator provide information on the control valve version. See section 2.1 and the associated actuator documentation.

**Table 2:** Technical data

Single-seated Type 3222 N Globe Valve		
Valve size	DN 15	
Port	ISO 228/1-G ¾ B	
End connections (optional)	Threaded ends G ½ · Welding ends · Soldering ends	
Pressure rating	PN 16	
K <sub>VS</sub> coefficient	Standard	2.5
	Special version	0.25 · 0.4 · 0.63 · 1 · 1.6
Valve travel	6 mm	
Characteristic	Equal percentage	
Pressure balancing	None	
Max. perm. differential pressure Δp	6 bar	
Type of sealing	K <sub>VS</sub> ≤ 1	Metal seal
	K <sub>VS</sub> = 1.6 and 2.5	Soft seal
Leakage class according to IEC 60534-4	Class I (<0.05 % of K <sub>VS</sub> coefficient)	
Max. permissible temperature	120 °C	
Max. permissible medium temperature	Treated water	120 °C
	Non-flammable gases	80 °C
z value	0.43	

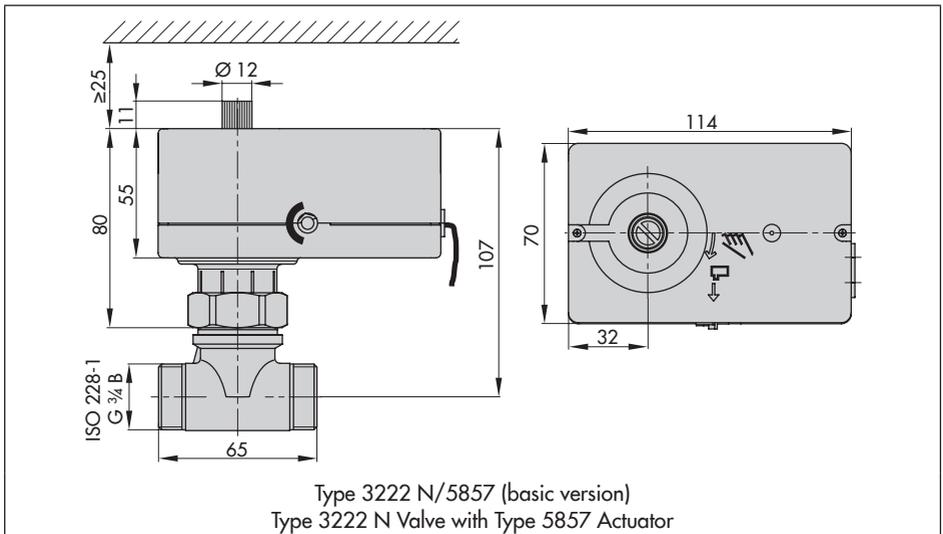
**Table 3: Materials**

Single-seated Type 3222 N Globe Valve		
Valve body		CW602N (brass)
Plug	Up to $K_{VS} = 1$	1.4305
	$K_{VS} = 1.6$ and 2.5	CW617N · 1.4305 with EPDM seal
Plug stem		1.4305
Seat	Up to $K_{VS} = 1$	CW602N (brass)
	$K_{VS} = 1.6$ and 2.5	CW602N (brass)
Valve spring		1.4310
Welding ends		1.0460
Threaded ends		CW617N
Soldering ends		CC491K (red brass, Rg 5)
Intermediate insulating piece (1990-1712)		1.4305, CW617N (brass), PTFE, EPDM, FKM

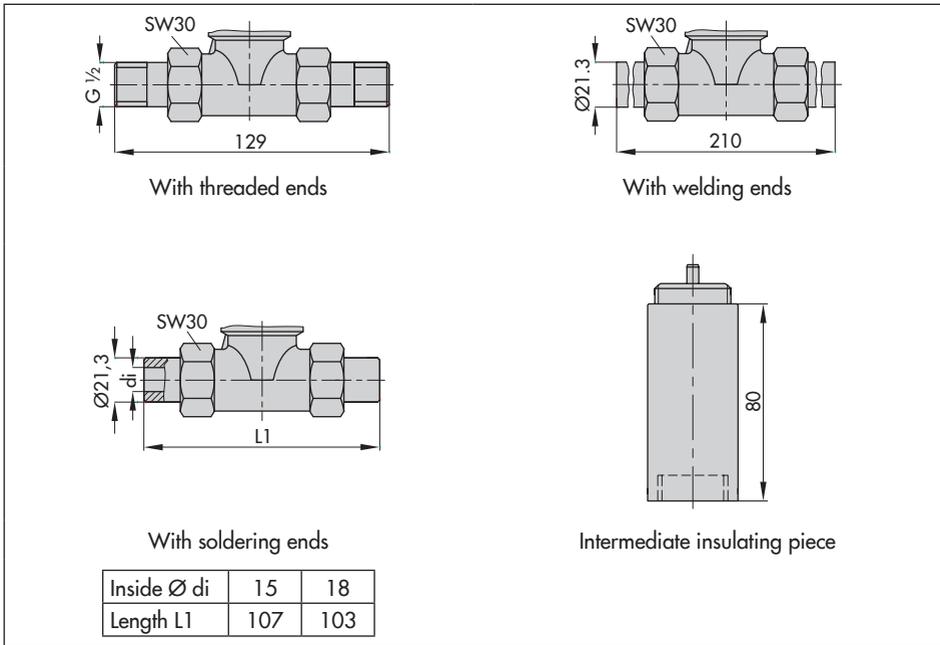
**Noise emissions**

SAMSON is unable to make general statements about noise emissions. The noise emissions depend on the valve version, plant facilities and process medium.

**Dimensions**



## Design and principle of operation



## Weights

- Valve body without actuator: approx. 0.3 kg
- Valve with actuator: approx. 1.0 kg

## 4 Measures for preparation

After receiving the shipment, proceed as follows:

1. Check the scope of delivery. Compare the shipment received with the delivery note.
2. Check the shipment for transportation damage. Report any damage to SAMSON and the forwarding agent (refer to delivery note).

### 4.1 Unpacking

#### Note

*Do not remove the packaging until immediately before installing the valve into the pipeline.*

Proceed as follows to lift and install the valve:

1. Remove the packaging from the valve.
2. Dispose of the packaging in accordance with the valid regulations.

### 4.2 Transporting and lifting

#### Tip

*Our after-sales service can provide more detailed transport and lifting instructions on request.*

### 4.2.1 Transporting

- Protect the control valve against external influences (e.g. impact).
- Protect the control valve against moisture and dirt.
- Observe the permissible ambient temperatures (see section 3.2).

### 4.2.2 Lifting

Due to the low service weight, lifting equipment is not required to lift the valve (e.g. to install it into the pipeline).

### 4.3 Storage

#### NOTICE

**Risk of valve damage due to improper storage.**

- ➔ *Observe the storage instructions.*
- ➔ *Avoid long storage times.*
- ➔ *Contact SAMSON in case of different storage conditions or longer storage times.*

#### Note

*We recommend to regularly check the control valve and the prevailing storage conditions during long storage periods.*

#### Storage instructions

- The control valves can be stored horizontally.

## Measures for preparation

- Protect the control valve against external influences (e.g. impact).
  - Protect the control valve against moisture and dirt. Store it at a relative humidity of less than 75 %. In damp spaces, prevent condensation. If necessary, use a drying agent or heating.
  - Make sure that the ambient air is free of acids or other corrosive media.
  - Observe the permissible ambient temperatures (see section 3.2).
  - Do not place any objects on the control valve.
- Check to make sure that the type designation, valve size, material, pressure rating and temperature range of the valve match the plant conditions (size and pressure rating of the pipeline, medium temperature etc.).
  - Check any mounted pressure gauges to make sure they function.
  - When the valve and actuator are already assembled, check the bolted joints. Components may loosen during transport.



### Tip

*SAMSON's After-sales Service can provide more detailed storage instructions on request.*

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## 4.4 Preparation for installation

Proceed as follows:

- Flush the pipelines.

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### **i** Note

*The plant operator is responsible for cleaning the pipelines in the plant.*

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- Check the valve to make sure that it is clean.
- Check the valve for damage.

## 5 Mounting and start-up

SAMSON valves are delivered ready for use. The valve and actuator are delivered separately and must be assembled on site. Proceed as follows to mount and start up the valve.

We recommend first installing the valve into the pipeline and mounting the actuator afterwards.

### NOTICE

**Risk of valve damage due to excessively high or low tightening torques.**

→ Observe the specified torques when tightening control valve components. Excessive tightening torques lead to parts wearing out more quickly. Parts that are too loose may cause leakage.

## 5.1 Installing the valve into the pipeline

### 5.1.1 Checking the installation conditions

#### Mounting orientation

Generally, we recommend installing the valve with the actuator upright and on top of the valve. The actuator may not be installed in a suspended position (see Fig. 3).

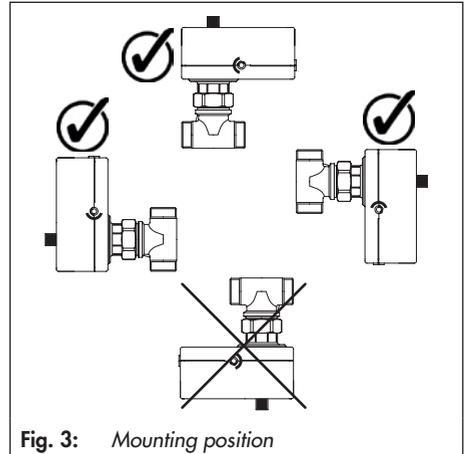


Fig. 3: Mounting position

#### Support and suspension

Depending on the valve version and mounting position, the control valve and pipeline must be supported or suspended. The plant engineering company is responsible in this case.

### NOTICE

**Premature wear and leakage due to insufficient support or suspension.**

→ Control valves, which are not installed in the pipeline in the upright position with the actuator on top, must be supported or suspended.

→ Attach a suitable support or suspension to the valve.

#### Insulation of cold systems

To insulate cold systems, we recommend to proceed as follows:

1. Fill the plant and carefully rinse it.

## Mounting and start-up

2. Shut down the plant and let it heat up until all the condensation water has dried off.
3. Mount and insulate the intermediate insulating piece (1990-1712).

Observe the following on installing the control valve:

- Make sure that the electric actuator remains accessible after installation.
- Make sure that the plug stem can move freely and does not touch the insulation.
- Make sure that the actuator stem does not touch the insulation.

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### **i** Note

*The insulation thickness depends on the medium temperature and the ambient conditions. 50 mm is a typical thickness.*

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## Pipeline routing

To ensure the control valve functions properly, follow the installation instructions given below:

- Do not exceed the maximum permissible flow velocity.

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### **i** Note

*The plant operator is responsible for determining the maximum permissible flow velocity. SAMSON's After-sales Service can support you to determine the flow velocity for your plant.*

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- Install the valve free of stress and with the least amount of vibrations as possible. If necessary, attach supports to the valve.
- Install the valve allowing sufficient space to remove the actuator and valve or to perform service and repair work on them.

## 5.1.2 Additional fittings

### Strainers

We recommend installing a SAMSON Type 2 NI Strainer upstream of the valve. It prevents solid particles in the process medium from damaging the valve.

- Make sure the direction of flow of the strainer and valve are identical.
- Install the strainer with the filter element facing downwards.
- Allow sufficient space to remove the filter.

### Bypass and shut-off valves

We recommend installing a shut-off valve both upstream of the strainer and downstream of the valve and installing a bypass line. The bypass ensures that the plant does not need to be shut down for service and repair work on the valve.

### Intermediate insulating piece

An intermediate insulating piece is available for insulated pipes.

- Do not insulate the actuator and the coupling nut as well.
- Only insulate the intermediate insulating piece up to 25 mm at the maximum.

### 5.1.3 Installing the control valve

#### ! NOTICE

**Risk of valve damage due to work being carried out by personnel not qualified for such tasks.**

The plant operator or specialist company performing the welding is responsible for the selection of the welding procedure and the actual welding operations on the valve. This also applies to any required heat treatment to be performed on the valve.

→ Only allow qualified welding personnel to carry out welding operations.

1. Close the shut-off valve in the pipeline while the valve is being installed.
2. Remove any protective caps from the valve ports before installing the valve.
3. Lift the valve to the site of installation (see section 4.2). Observe the flow direction through the valve. The arrow on the valve indicates the direction of flow.
4. Connect the valve free of stress into the pipeline.
5. Depending on the field of application, allow the valve to cool down or warm up to reach ambient temperature before start up.
6. Slowly open the shut-off valve in the pipeline after the valve has been installed.

#### ! NOTICE

**Risk of valve damage due to a sudden pressure increase and resulting high flow velocities.**

→ Slowly open the shut-off valve in the pipeline during start-up.

7. Check the valve to ensure it functions properly and that there is no leakage.

## 5.2 Mounting the actuator onto the valve

Proceed as described in the actuator documentation if the valve and actuator have not been assembled by SAMSON:

- Type 5857 Electric Actuator ► EB 5857
- TROVIS 5757-3 Electric Actuator with Process Controller ► EB 5757
- TROVIS 5757-7 Electric Actuator with Process Controller ► EB 5757-7

#### i Note

Remove the mounted actuator before mounting the other actuator (see associated actuator documentation).

### 5.2.1 Connecting the actuator

Perform the electrical or pneumatic connection of the actuator as described in the associated actuator documentation.

### 5.2.2 Configuring the actuator

The electric actuator versions with positioner as well as electric actuators with process controller can be adapted to the control task. Configure the actuator as described in the associated actuator documentation.

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**i Note**

*For electric control valves with positioner, an initialization needs to be performed after the initial start-up (see associated documentation).*

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**i Note**

*The plant operator is responsible for performing the pressure test. SAMSON's After-sales Service can support you to plan and perform a pressure test for your plant.*

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### 5.3 Quick check

SAMSON valves are delivered ready for use. To test the valve's ability to function, the following quick checks can be performed:

#### Travel motion

The movement of the actuator stem must be linear and smooth.

- Open and close the valve, observing the movement of the actuator stem.
- Apply the maximum and minimum control signals to check the end positions of the valve.

#### Pressure test

During the pressure test, make sure the following conditions are met:

- Retract the plug stem to open the valve.
- Observe the maximum permissible pressure for both the valve and plant.

## 6 Operation

The valve is ready for use when mounting and start-up (see section 5) have been completed.

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### **WARNING**

***Risk of burn injuries due to hot components and pipeline.***

*Valve components and the pipeline may become very hot. Risk of burn injuries.*

→ *Wear protective clothing and safety gloves.*

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## 7 Servicing

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### **i Note**

The control valve was checked by SAMSON before delivery.

- The product warranty becomes void if service or repair work not described in these instructions is performed without prior agreement by SAMSON's After-sales Service.
  - Only use original spare parts by SAMSON, which comply with the original specifications.
- 

### 7.1 Preparation for return shipment

Defective devices can be returned to SAMSON for repair.

Proceed as follows to return devices:

1. Exceptions apply concerning some special device models ► [www.samsongroup.com](http://www.samsongroup.com) > Service > After-sales Service.
2. Send an e-mail ► [retouren@samsongroup.com](mailto:retouren@samsongroup.com) to register the return shipment including the following information:
  - Type
  - Article number
  - Configuration ID
  - Original order
  - Completed Declaration on Contamination, which can be downloaded from our website at ► [www.samsongroup.com](http://www.samsongroup.com) > Service > After-sales Service.

After checking your registration, we will send you a return merchandise authorization (RMA).

3. Attach the RMA (together with the Declaration on Decontamination) to the outside of your shipment so that the documents are clearly visible.
  4. Send the shipment to the address given on the RMA.
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### **i Note**

Further information on returned devices and how they are handled can be found at ► [www.samsongroup.com](http://www.samsongroup.com) > Service > After-sales Service.

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### 7.2 Ordering spare parts and operating supplies

Contact your nearest SAMSON subsidiary or SAMSON's After-sales Service for information on spare parts, lubricants and tools.

## 8 Malfunctions

Depending on the operating conditions, check the valve at certain intervals to prevent possible failure before it can occur. Plant operators are responsible for drawing up an inspection and test plan.



### Tip

SAMSON's After-sales Service can support you in drawing up an inspection and test plan for your plant.

### 8.1 Troubleshooting

Malfunction	Possible reasons	Recommended action
Actuator or plug stem does not move on demand.	Actuator is blocked.	Check attachment. Remove the blockage.
	No or incorrect supply voltage connected.	Check the supply voltage and connections.
Actuator or plug stem does not move through the full range.	No or incorrect supply voltage connected.	Check the supply voltage and connections.
The valve leaks to the atmosphere (fugitive emissions).	Plug stem seal defective	Contact SAMSON's After-sales Service.
Increased flow through closed valve (seat leakage).	Dirt or other foreign particles deposited between the seat and plug.	Shut off the section of the pipeline and flush the valve.
	Valve trim is worn out.	Contact SAMSON's After-sales Service.

### **i** Note

Contact SAMSON's After-sales Service for malfunctions not listed in the table.

### 8.2 Emergency action

Plant operators are responsible for emergency action to be taken in the plant.

In the event of a valve malfunction:

1. Close the shut-off valves upstream and downstream of the control valve to stop the process medium from flowing through the valve.
2. Check the valve for damage. Contact SAMSON's After-sales Service.

#### **Putting the device back into operation after a malfunction**

- Slowly open the shut-off valves. Allow the process medium to slowly flow into the valve.

## 9 Decommissioning and removal

### **⚠ DANGER**

#### **Risk of bursting due to incorrect opening of pressurized equipment or components.**

Valves and pipelines are pressure equipment that may burst when handled incorrectly. Flying projectile fragments or the release of process medium under pressure can cause serious injury or even death.

Before working on the control valve:

- Depressurize all plant sections affected and the valve (including the actuator). Release any stored energy.
- Drain the process medium from all the plant sections concerned as well as the valve.

### **⚠ DANGER**

#### **Risk of fatal injury due to electric shock.**

- Do not remove any covers to perform adjustment work on live parts.
- Before performing any work on the device and before opening the device, disconnect the supply voltage and protect it against unintentional reconnection.
- Only use power interruption devices that are protected against unintentional reconnection of the power supply.

### **⚠ WARNING**

#### **Risk of personal injury due to residual process medium in the valve.**

While working on the valve, residual process medium can escape and, depending on its properties, may lead to personal injury, e.g. burns.

- Wear protective clothing, safety gloves and eye protection.

### **⚠ WARNING**

#### **Risk of burn injuries due to hot components and pipeline.**

Valve components and the pipeline may become very hot. Risk of burn injuries.

- Allow components and pipelines to cool down.
- Wear protective clothing and safety gloves.

## 9.1 Decommissioning

To decommission the control valve for disassembly, proceed as follows:

1. Close the shut-off valves upstream and downstream of the control valve to stop the process medium from flowing through the valve.
2. Completely drain the pipelines and valve.
3. Disconnect and lock the pneumatic air supply or supply voltage to depressurize or de-energize the actuator.
4. Release any stored energy.

## Decommissioning and removal

5. If necessary, allow the pipeline and valve components to cool down.

### 9.2 Removing the valve from the pipeline

1. Put the control valve out of operation (see section 9.1).
2. **Version with threaded ends or soldering ends:** undo the connection to the pipeline.  
**Version with welding ends:** cut the pipeline in front of the weld seam.
3. Remove the valve from the pipeline (see section 4.2).

### 9.3 Removing the actuator from the valve

See associated actuator documentation.

## 9.4 Disposal



SAMSON is a producer registered at the following European institution  
▶ <https://www.ewrn.org/national-registers/national-registers>.  
WEEE reg. no.: DE 62194439/  
FR 02566

- Observe local, national and international refuse regulations.
- Do not dispose of components, lubricants and hazardous substances together with your household waste.

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#### **i** Note

We can provide you with a recycling passport according to PAS 1049<sup>1)</sup> on request. Simply e-mail us at [aftersaleservice@samsongroup.com](mailto:aftersaleservice@samsongroup.com) giving details of your company address.

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#### Tip

On request, we can appoint a service provider to dismantle and recycle the product as part of a distributor take-back scheme.

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<sup>1)</sup> PAS 1049 is relevant to electrical and electronic equipment (e.g. electric actuators). This PAS specification does not apply to non-electrical equipment.

## 10 Certificates

These declarations are included on the next pages:

- Declaration of conformity in compliance with Machinery Directive 2006/42/EC for Types 3222 N/XXXX-X Control Valves on page 28
- Declaration of incorporation in compliance with Machinery Directive 2006/42/EC for the Type 3222 N Valve with other actuators other than Type 5857, TROVIS 5757-3 or TROVIS 5757-7 Actuators on page 29

The certificates shown were up to date at the time of publishing. The latest certificates can be found on our website:

► [www.samsongroup.com](http://www.samsongroup.com) > *Products* > *Valves* > *3222 N*

Other optional certificates are available on request.

# EU DECLARATION OF CONFORMITY TRANSLATION



## Declaration of Conformity of Final Machinery

in accordance with Annex II, section 1.A. of the Directive 2006/42/EC

For the following product:

**Electric Control Valve Type 3222 N/XXXX-X consisting of Type 3222 N Valve and Actuator Type 5857, TROVIS 5757-3 or TROVIS 5757-7**

We hereby declare that the machinery mentioned above complies with all applicable requirements stipulated in Machinery Directive 2006/42/EC.

For product descriptions refer to:

- Electric Control Valves Type 3222 N/5857, Type 3222 N/5757-3 and Type 3222 N/5757-7: Mounting and Operating Instructions EB 5867

Referenced technical standards and/or specifications:

- VCI, VDMA, VGB: "Leitfaden Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen, Mai 2018" [German only]
- VCI, VDMA, VGB: "Zusatzdokument zum Leitfaden Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen vom Mai 2018" [German only], based on DIN EN ISO 12100:2011-03

Comment:

Information on residual risks of the machinery can be found in the mounting and operating instructions of the valve and actuator as well as in the referenced documents listed in the mounting and operating instructions.

Persons authorized to compile the technical file:

SAMSON AG, Weismüllerstraße 3, 60314 Frankfurt am Main, Germany  
Frankfurt am Main, 22 September 2023

A handwritten signature in blue ink, appearing to read "ppc. N. Tollas".

Norbert Tollas  
Senior Vice President  
Global Operations

A handwritten signature in blue ink, appearing to read "i. v. P. Scheermesser".

Peter Scheermesser  
Director  
Product Maintenance & Engineered Products

Revision no. 00

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# DECLARATION OF INCORPORATION TRANSLATION



## Declaration of Incorporation in Compliance with Machinery Directive 2006/42/EC

For the following product:  
**Type 3222N Valve**

We certify that the Type 3222N Valve is partly completed machinery as defined in the Machinery Directive 2006/42/EC and that the safety requirements stipulated in Annex I, 1.1.2, 1.1.3, 1.1.5, 1.3.2, 1.3.4 and 1.3.7 are observed. The relevant technical documentation described in Annex VII, part B has been compiled.

Products we supply must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive 2006/42/EC.

Operators are obliged to install the products observing the accepted industry codes and practices (good engineering practice) as well as the mounting and operating instructions. Operators must take appropriate precautions to prevent hazards that could be caused by the process medium and operating pressure in the valve as well as by the signal pressure and moving parts.

The permissible limits of application and mounting instructions for the products are specified in the associated mounting and operating instructions; the documents are available in electronic form on the Internet at [www.samsongroup.com](http://www.samsongroup.com).

For product descriptions refer to:

- Type 3222 N/5857, Type 3222 N/5757-3 and Type 3222 N/5757-7 Electric Control Valves:  
Mounting and Operating Instructions EB 5867

Referenced technical standards and/or specifications:

- VCI, VDMA, VGB: "Leitfaden Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen, Mai 2018" [German only]
- VCI, VDMA, VGB: "Zusatzdokument zum Leitfaden Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen vom Mai 2018" [German only], based on DIN EN ISO 12100:2011-03

Comments:

- See mounting and operating instructions for residual hazards.
- Also observe the referenced documents listed in the mounting and operating instructions.

Persons authorized to compile the technical file:

SAMSON AG, Weismüllerstraße 3, 60314 Frankfurt am Main, Germany  
Frankfurt am Main, 01 September 2023

  
\_\_\_\_\_  
Stephan Giesen  
Director  
Product Management

  
\_\_\_\_\_  
Peter Scheermesser  
Director  
Product Maintenance & Engineered Products

Revision no. 00

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# 11 Annex

### After-sales service

Contact SAMSON's After-sales Service for support concerning service or repair work or when malfunctions or defects arise.

### E-mail address

You can reach our after-sales service at [aftersalesservice@samsongroup.com](mailto:aftersalesservice@samsongroup.com).

### Addresses of SAMSON AG and its subsidiaries

The addresses of SAMSON, its subsidiaries, representatives and service facilities worldwide can be found on our website ([www.samsongroup.com](http://www.samsongroup.com)) or in all product catalogs.

### Required specifications

Please submit the following details:

- Order number and position number in the order
- Configuration ID
- Type, model number, valve size, valve version and date of manufacture
- Pressure and temperature of the process medium
- Flow rate in m<sup>3</sup>/h
- Bench range (e.g. 0.2 to 1 bar) or input signal of the actuator (e.g. 0 to 20 mA or 0 to 10 V)
- Is a strainer installed?
- Installation drawing



**EB 5867 EN**



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