

# MOUNTING AND OPERATING INSTRUCTIONS



## EB 5824-1 EN

Translation of original instructions



**Electric Actuators**

**Type 5824 without fail-safe action  
Type 5825 with fail-safe action**

Three-step version

Edition January 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).



The mounting and operating instructions for the devices are included in the scope of delivery. The latest documentation is available on our website at [www.samsongroup.com](http://www.samsongroup.com) > **Service & Support** > **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 Type 5824 and Type 5825 Electric Actuators are designed to operate a mounted globe valve used in heating, ventilation and air-conditioning systems as well as in process engineering and industrial energy transfer systems. The actuators are designed to operate under exactly defined conditions (e.g. thrust, travel). Therefore, operators must ensure that an actuator is only used in operating conditions that meet the specifications used for sizing the actuator at the ordering stage. In case operators intend to use an actuator 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 for limits and fields of application as well as possible uses. See the 'Design and principle of operation' section.

## Reasonably foreseeable misuse

The actuators are not suitable for the following applications:

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

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 actuators must be mounted, started up, serviced and repaired by fully trained and qualified personnel only; the accepted industry codes and practices are to 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.

## Safety instructions and measures

### Personal protective equipment

No personal protective equipment is required for the direct handling of electric actuators. Work on the control valve may be necessary when mounting or removing the device.

- Observe the requirements for personal protective equipment specified in the valve documentation.
- 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

Upon supply voltage failure, the **Type 5825** Electric Actuator causes the valve to move to a certain fail-safe position. The direction of the fail-safe action is specified on the nameplate of SAMSON actuators.

### 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, especially for installation, start-up and service work.

### 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 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.

### Responsibilities of operating personnel

Operating personnel must read and understand these mounting and operating instructions as well as 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

Devices with a CE marking fulfill the requirements of the following Directives:

- 2014/30/EU
- 2014/35/EU
- 2011/65/EU

Devices with a UKCA marking fulfill the requirements of the following Regulations:

- SI 2016 No. 1091 (The Electromagnetic Compatibility Regulations 2016)
- SI 2016 No. 1101 (The Electrical Equipment (Safety) Regulations 2016)
- SI 2012 No. 3032 (The Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment Regulations 2012)

Devices with an EAC marking fulfill the requirements of the following Regulations:

- TR CU 004/2011
- TR CU 020/2011

The 'Certificates' section contains these declarations of conformity and TR CU certificate.

The Type 5824 and Type 5825 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 of the valve on which the electric actuator is mounted, e.g. for SAMSON valves:
  - ▶ EB 5861 for Type 3260 Three-way Valve
  - ▶ EB 5863 for Type 3226 Three-way Valve
  - ▶ EB 5866 for Type 3222 Globe Valve
  - ▶ EB 5868 for Type 3213 and Type 3214 Globe Valves
  - ▶ EB 8111 for Type 3321 Globe Valve
  - ▶ EB 8113 for Type 3323 Three-way Valve
  - ▶ EB 8131 for Type 3531 Globe Valve for Heat Transfer Oil
  - ▶ EB 8135 for Type 3535 Three-way Valve for Heat Transfer Oil

## 1.1 Notes on possible severe personal injury

### DANGER

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

- Before connecting wiring, performing any work on the device or opening the device, disconnect the supply voltage and protect it against unintentional reconnection.
- Only use power interruption devices that can be protected against unintentional reconnection of the power supply.
- Do not remove any covers to perform adjustment work on live parts.
- Do not open the back housing cover.

The electric actuator is protected against spray water (IP 54).

- Avoid jets of water.

## 1.2 Notes on possible personal injury

### WARNING

#### **Crush hazard arising from moving parts.**

The form-fit version of the electric actuator contains moving parts (actuator and plug stems), which can injure hands or fingers if inserted into the actuator.

- Do not insert hands or finger into the yoke while the valve is in operation.
- Disconnect the supply voltage and protect it against unintentional reconnection before performing any work on the control valve.
- Do not impede the movement of the actuator or plug stem by inserting objects into their path.

### WARNING

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

Over time, markings, labels and nameplates on the actuator 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 actuator due to the supply voltage exceeding the permissible tolerances.**

The Types 5824 and 5825 Electric Actuators are designed for use according to regulations for low-voltage installations.

- Observe the permissible tolerances of the supply voltage.

**!** NOTICE

**Risk of actuator damage due to excessively high tightening torques.**

Observe the specified torques when tightening the Types 5824 and 5825 Electric Actuators. Excessive tightening torques lead to parts wearing out more quickly.

→ Observe the specified tightening torques.

**Risk of damage to the electric actuator by moving the actuator stem too far.**

The actuator stem of the electric actuators can be adjusted manually.

→ Move the actuator stem only as far as the bottom or top end position.

**Risk of damage to the electric actuator due to incorrect connection of the voltage.**

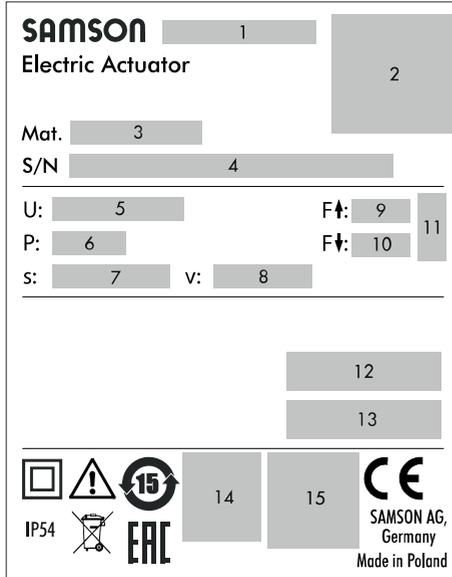
The electric actuators have terminals to retract the stem (eL terminal) and to extend the stem (aL terminal).

→ Do not apply a voltage to eL and aL at the same time.

## 2 Markings on the device

### 2.1 Nameplate

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.



- 1 Type designation
- 2 Data Matrix code
- 3 Material no.
- 4 Serial number, date of manufacture
- 5 Supply voltage; power line frequency
- 6 Power consumption
- 7 Rated travel
- 8 Stroking speed
- 9 Thrust (actuator stem retracts)
- 10 Thrust (actuator stem extends)

- 11 Fail-safe action



- 12  Resistance transmitters

- 13  Limit contact

- 14 DIN test with register number (only version with "actuator stem extends" fail-safe action)

- 15 Other mark of conformity

## Markings on the device

### 2.2 Device code

<b>Electric actuator</b>	<b>Type 5824-</b>	x	x
<b>Rated travel/adaptation</b>			
6 mm/force locking		1	
12 mm/force locking		2	
15 mm/form-fit		3	
<b>Movement of the actuator stem</b>			
Standard stroking speed			0
Faster motor			3

<b>Electric actuator</b>	<b>Type 5825-</b>	x	x
<b>Rated travel/adaptation</b>			
6 mm/force locking		1	
12 mm/force locking		2	
15 mm/form-fit		3	
<b>Movement of the actuator stem</b>			
Standard stroking speed, fail-safe action: stem extends			0
Faster motor, fail-safe action: stem extends			3
Standard stroking speed, fail-safe action: stem retracts			5

### 3 Design and principle of operation

The actuator contains a reversible synchronous motor and a maintenance-free gear. The motor is switched off by torque switches or in case of overload.

The force of the motor is transmitted to the actuator stem (3) via gear and crank disk. When the actuator stem extends, the actuator piston (3) pushes against the valve's plug stem.

When the actuator stem retracts (force-locking attachment), the plug stem follows the movement of the actuator stem as a result of the return spring in the valve.

When the actuator stem retracts (form-fit attachment), the plug stem is connected to the actuator stem and follows its movement.

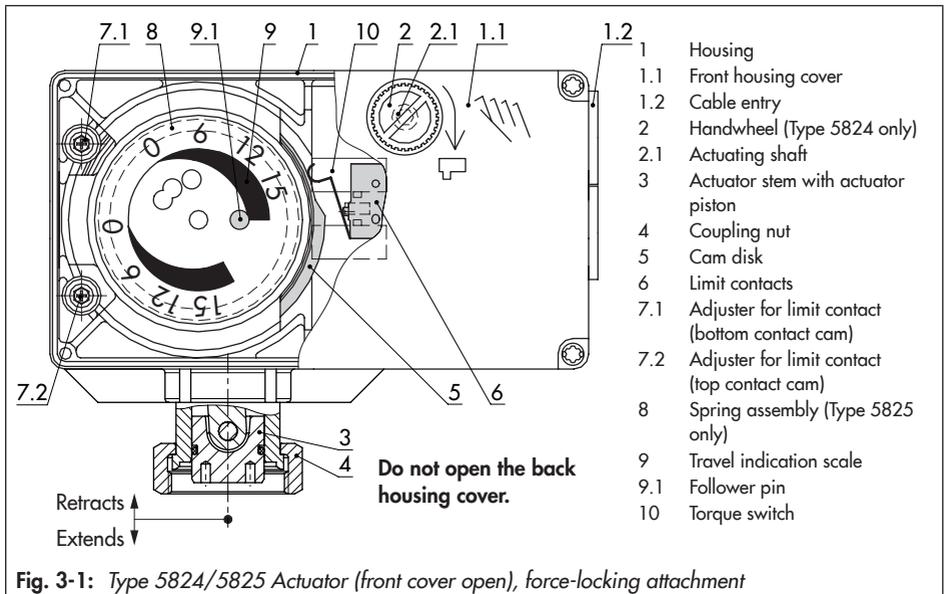
#### Type 5824 without fail-safe action

The actuator without fail-safe action has a handwheel (2) used to manually position the valve. Travel and direction of action can be read off the travel indication scale (9).

### 3.1 Fail-safe action

#### Type 5825 with fail-safe action

The actuator contains a spring mechanism (8) and an electromagnet. The actuator is moved by the force of the spring to the fail-safe position when the electromagnet (terminals L and N) is de-energized. The direction of action depends on the actuator version



## Design and principle of operation

and cannot be changed. The Type 5825 Actuator is available with fail-safe action "**actuator stem extends**" or "**actuator stem retracts**".

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### **i** Note

*The actuator stem of Type 5824 Actuator remains in its last position in the event of supply voltage failure.*

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### **!** NOTICE

**Increased wear and shortened service life of the actuator.**

➔ *Do not use the fail-safe action to control the valve position.*

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A handwheel (2) is not fitted on the front housing cover of Type 5825. Manual override is possible, after removing the front cover, using a 4 mm Allen key. The actuator returns to its original position as soon as the Allen key is released.

### **Testing according to DIN EN 14597**

The Type 5825 Electric Actuator with fail-safe action "actuator stem extends" is tested by the German technical surveillance association TÜV according to DIN EN 14597 in combination with different SAMSON valves. Tested versions are indicated on the nameplate. Refer to Technical data.

The registration number is available on request.

## 3.2 Versions

### **Version with faster motor**

The Types 5824-13/-23/-33 and Types 5825-13/-23 have a more powerful motor in a housing at the back of the actuator.

## 3.3 Additional equipment

### **Limit contacts**

Optionally, the actuator can be equipped with two limit contacts. They consist of two changeover switches. Their switching positions are changed independently from one another by continuously adjustable cam disks.

Limit contacts are not suitable for retrofitting.

### **Resistance transmitter**

Optionally, the actuator can be equipped with a resistance transmitter. It is linked to the gear and produces a resistance signal between approx. 0 and 1000  $\Omega$  (usable range 0 to 800  $\Omega$ ) proportional to the valve travel. It can be used to assess the process of the actuator stem.

The resistance transmitter is not suitable for retrofitting.

### 3.4 Technical data

**Table 3-1:** *Technical data · Type 5824*

Type		5824					
		-10	-13	-20	-23	-30	-33
Fail-safe action		Without					
Rated travel	mm	6 <sup>1)</sup>	6 <sup>1)</sup>	12	12	15	15
Stroking speed							
	Standard: 0.18 mm/s	•	–	•	–	•	–
	Faster motor: 0.36 mm/s	–	•	–	•	–	•
Transit time for rated travel	approx. s	35 <sup>1)</sup>	18 <sup>1)</sup>	70	36	90	45
Thrust	Extends N	700	700	700	700	700	700
	Retracts N	–	–	–	–	700	700
Attach-ment	Force-locking	•	•	•	•	–	–
	Form-fit	–	–	–	–	•	•
Manual override		Yes					
<b>Supply voltage</b>							
24 V, 50 Hz		•	–	•	–	•	–
230 V, 50 Hz/60 Hz <sup>2)</sup>		•	•	•	•	•	•
Power consumption	Approx. VA	3	6	3	6	3	6
<b>Permissible temperatures<sup>4)</sup></b>							
Ambient		0 to 50 °C					
Storage		–20 to +70 °C					
<b>Safety</b>							
Degree of protection		IP 54 according to EN 60529 <sup>3)</sup>					
Class of protection		II according to EN 61140					
Device safety		According to EN 61010-1					
Noise immunity		According to EN 61000-6-2 and EN 61326					
Noise emission		According to EN 61000-6-3 and EN 61326					
Vibration		According to EN 60068-2-6 and EN 60068-2-27					
Conformity							

## Design and principle of operation

Type	5824					
	-10	-13	-20	-23	-30	-33
<b>Additional electrical equipment</b> (not suitable for retrofitting)						
<b>Two limit contacts</b> , max. 230 V, 1 A	•	•	•	•	•	•
<b>One resistance transmitter</b> , 0 to 1000 $\Omega \pm 15\%$ , max. 200 mW (90 % of final value at rated travel)	•	–	•	–	•	•
<b>Materials</b>						
Housing, housing cover	Plastic (PPO with glass fiber reinforcement)					
Coupling nut M32x1.5	Brass					
<b>Weight</b> kg (approx.)	<b>0.75</b>	<b>1.00</b>	<b>0.75</b>	<b>1.00</b>	<b>0.75</b>	<b>0.75</b>

- 1) Actuators with 6 mm travel can also be used for valves with 7.5 mm travel (45 s transit time, 22.5 s for actuator with faster motor).
- 2) Special version
- 3) The degree of protection IP 54 can only be achieved up to device index **.03** when the actuator is installed in the up-right position. See last two figures of the configuration ID written on the nameplate, e.g. Var-ID xxxxxx.xx, for the device index.
- 4) The permissible medium temperature depends on the valve on which the electric actuator is mounted. The limits in the valve documentation apply.

**Table 3-2: Technical data · Type 5825**

Type		5825									
		-10	-13	-20	-23	-30	-33	-15	-25	-35	
Fail-safe action		Extends						Retracts			
Rated travel	mm	6 <sup>1)</sup>	6 <sup>1)</sup>	12	12	15	15	6 <sup>1)</sup>	12	15	
Stroking speed											
	Standard: 0.18 mm/s	•	–	•	–	•	–	•	•	•	
	Faster motor: 0.36 mm/s	–	•	–	•	–	•	–	–	–	
Transit time for rated travel	approx. s	35 <sup>1)</sup>	18 <sup>1)</sup>	70	36	90	45	35 <sup>1)</sup>	70	90	
Transit time for rated travel in the event of fail-safe action	approx. s	4	4	6	6	7	7	4	6	7	
Thrust	Extends	N	500	500	500	500	280	280	500	500	280
	Retracts	N	–	–	–	–	280	280	–	–	280
Thrust in the event of fail-safe action	N	500	500	500	500	280	280	– <sup>3)</sup>	– <sup>3)</sup>	280	
Attachment	Force-locking		•	•	•	•	–	–	•	•	–
	Form-fit		–	–	–	–	•	•	–	–	•
Manual adjuster		Possible <sup>2)</sup>									
<b>Supply voltage</b>											
24 V, 50 Hz		•	–	•	–	•	–	•	•	•	
230 V, 50 Hz/60 Hz <sup>4)</sup>		•	•	•	•	•	•	•	•	•	
Power consumption	Approx. VA	4	8	4	8	4	8	4	4	4	
<b>Permissible temperatures <sup>6)</sup></b>											
Ambient		0 to 50 °C									
Storage		–20 to +70 °C									
<b>Safety</b>											
Degree of protection		IP 54 according to EN 60529 <sup>5)</sup>									
Class of protection		II according to EN 61140									
Device safety		According to EN 61010-1									
Noise immunity		According to EN 61000-6-2 and EN 61326									
Noise emission		According to EN 61000-6-3 and EN 61326									
Vibration		According to EN 60068-2-6 and EN 60068-2-27									

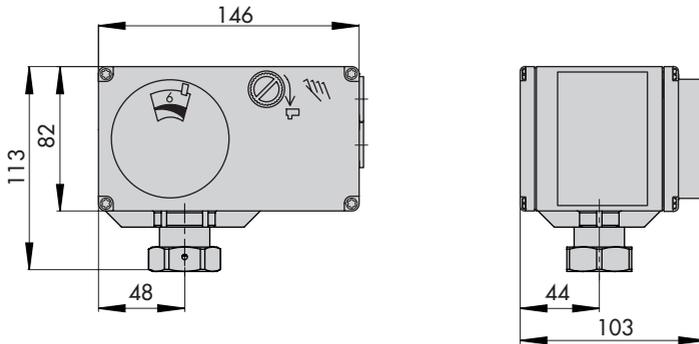
## Design and principle of operation

Type	5825									
	-10	-13	-20	-23	-30	-33	-15	-25	-35	
Conformity										
Testing according to DIN EN 14597				-	-	-	-	-	-	-
<b>Additional electrical equipment</b> (not suitable for retrofitting)										
<b>Two limit contacts</b> , max. 230 V, 1 A	•	•	•	•	•	•	•	•	•	•
<b>One resistance transmitter</b> , 0 to 1000 $\Omega \pm 15\%$ , max. 200 mW (90 % of final value at rated travel)	•	-	•	-	•	•	•	•	•	•
<b>Materials</b>										
Housing, housing cover	Plastic (PPO with glass fiber reinforcement)									
Coupling nut M32x1.5	Brass									
<b>Weight</b>	kg (approx.)	<b>1.00</b>	<b>1.25</b>	<b>1.00</b>	<b>1.25</b>	<b>1.00</b>	<b>1.25</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

- 1) Actuators with 6 mm travel can also be used for valves with 7.5 mm travel (45 s transit time, 22.5 s for actuator with faster motor).
- 2) Manual override using 4 mm Allen key (after removing the front cover); actuator always returns to fail-safe position after release.
- 3) Safety spring pulls actuator stem to retracted end position; valve operated by valve spring.
- 4) Special version
- 5) The degree of protection IP 54 can only be achieved up to device index **.03** when the actuator is installed in the upright position. See last two figures of the configuration ID written on the nameplate, e.g. Var.-ID xxxxxxx.xx, for the device index.
- 6) The permissible medium temperature depends on the valve on which the electric actuator is mounted. The limits in the valve documentation apply.

### 3.5 Dimensions

Type 5824-10 and Types 5825-10/-15/-25



Types 5824-13/-23/-33 and Types 5825-13/-23 (version with faster motor)

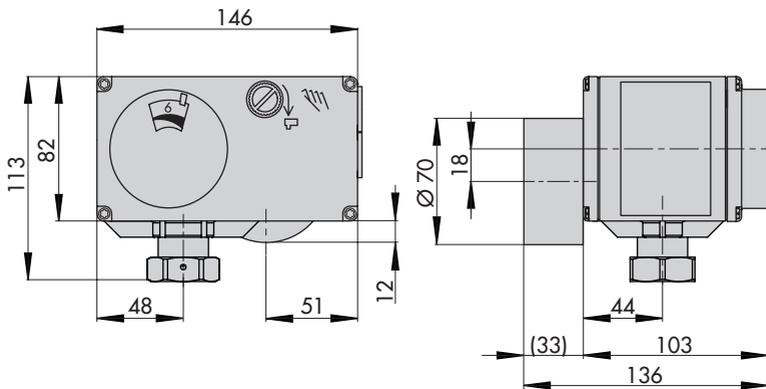
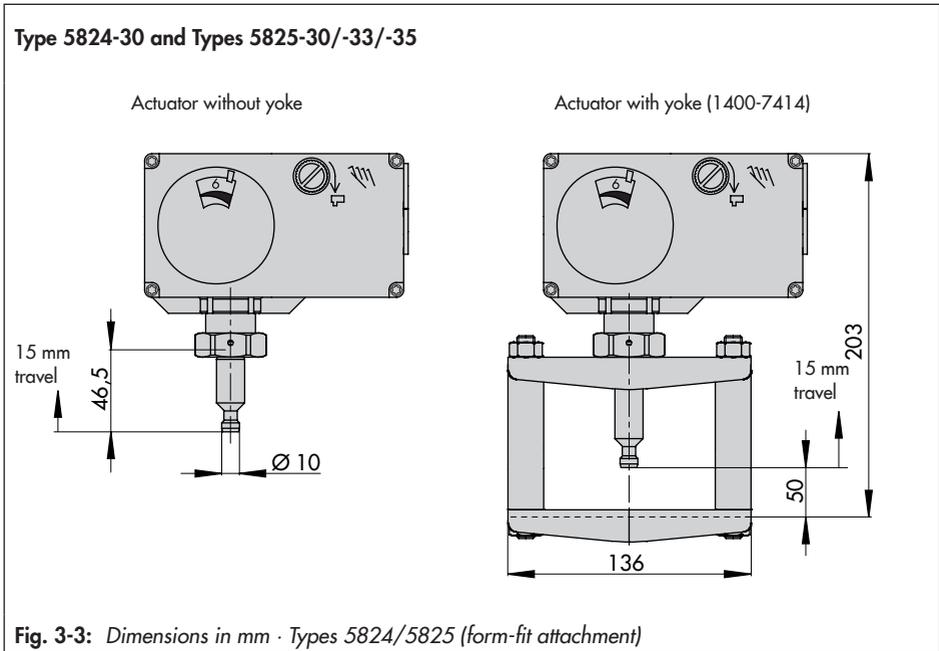


Fig. 3-2: Dimensions in mm · Types 5824/5825 (force-locking attachment)



## 4 Shipment and on-site transport

The work described in this section is only to be performed by personnel appropriately qualified to carry out such tasks.

### 4.1 Accepting the delivered goods

After receiving the shipment, proceed as follows:

1. 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).

### 4.2 Removing the packaging from the actuator

#### **i** Note

Do not remove the packaging until immediately before mounting and start-up.

1. Remove the packaging from the electric actuator.
2. Check scope of delivery (see Fig. 4-1).
3. Dispose of the packaging in accordance with the valid regulations.

1x	Type 5824 or Type 5825 Electric Actuator
1x	Document IP 5824-1 (Important Product Information)

Fig. 4-1: Scope of delivery

### 4.3 Transporting the actuator

- Protect the electric actuator against external influences (e.g. impact).
- Protect the electric actuator against moisture and dirt.
- Observe the permissible transportation temperature of  $-20$  to  $+70$  °C.

### 4.4 Lifting the actuator

Due to the low service weight, lifting equipment is not required to lift the electric actuator.

### 4.5 Storing the actuator

#### **!** NOTICE

*Risk of electric actuator 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.

#### **i** Note

We recommend regularly checking the electric actuator and the prevailing storage conditions during long storage periods.

## Shipment and on-site transport

### Storage instructions

- Protect the electric actuator against external influences (e.g. impact).
- Protect the electric actuator against moisture and dirt.
- Make sure that the ambient air is free of acids or other corrosive media.
- Observe the permissible storage temperature from  $-20$  to  $+70$  °C.
- Do not place any objects on the electric actuator.

## 5 Installation

### 5.1 Installation conditions

#### Work position

If not described otherwise in the valve documentation, the work position for the control valve is the front view looking onto the operating controls.

#### Mounting orientation

The control valve can be installed in the pipeline in any desired position. However, a suspended mounting position of the actuator is not permissible (see Fig. 5-1).

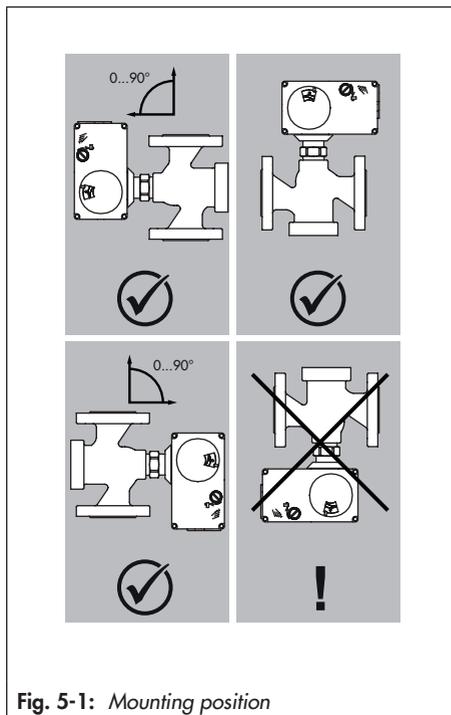


Fig. 5-1: Mounting position

#### ! NOTICE

**Risk of actuator damage due to adverse weather conditions.**

→ Do not use the actuator outdoors.

#### i Note

The degree of protection IP 54 can only be achieved up to device index .03 when the actuator is installed in the upright position. See the last two figures of the configuration ID written on the nameplate for the device index.

### 5.2 Preparation for installation

Before mounting, make sure the following conditions are met:

- The actuator is not damaged.

Proceed as follows:

Lay out the necessary material and tools to have them ready during mounting.

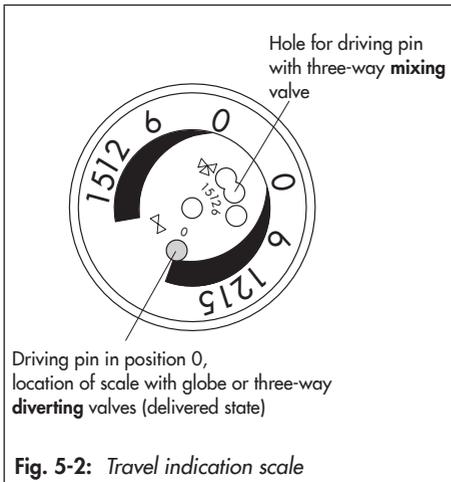
#### Cover screws

The front housing cover of the electric actuator is fastened using TORX PLUS® screws, size 10IP.

- To loosen and tighten the screws, the following screwdrivers can be used:
- TORX® T10
  - TORX PLUS® 10IP
  - Flat-blade screwdriver with 0.8 mm blade thickness and 4.0 mm blade width

### 5.3 Aligning the travel indication scale

The travel indication scale has two opposed scales. Which scale is to be used depends on the valve version. In the delivered state, the scale alignment applies to globe valves and three-way diverting valves. The alignment needs to be changed when a three-way mixing valve is used.



**Globe and three-way diverting valves:** the driving pin is in position 0 (delivered state).

**Three-way mixing valve:**

change the alignment of the scale.

➔ Carefully open the front housing cover.

**Tip**

We recommend screwing the bottom screws of the open front housing cover into the top holes of the housing.

- ➔ Remove scale, turn it and replace it so that the pin is positioned over the appropriate hole (6, 12 or 15) corresponding to the rated travel (6, 1 or 15 mm travel).
- ➔ Close the front housing cover.

### 5.4 Mounting the actuator

The actuator is mounted either directly onto the valve or using a yoke depending on the valve version used (see Fig. 5-3).

#### 5.4.1 Type 5824: force-locking attachment

1. Turn the handwheel (2) counterclockwise to retract the actuator stem.
2. Place the actuator on the valve connection and fasten with the coupling nut (4).

Tightening torque	20 Nm
-------------------	-------

## 5.4.2 Type 5824: form-fit attachment

- Place the actuator on the yoke and fasten with the coupling nut (4).

Tightening torque	20 Nm
-------------------	-------

Place actuator with yoke (15) on the valve and fasten with the nut (17).

Tightening torque	150 Nm
-------------------	--------

### **i** Note

A spacer (see Fig. 5-3) is required to mount a Type 3323 Three-way Valve (DN 65 to 80).

- Pull plug stem until it reaches the actuator stem or extend actuator stem using the handwheel (2).
- Position the clamps of the stem connector (16) included in the accessories on the ends of the actuator stem and plug stem and screw tight.

## 5.4.3 Type 5825: force-locking attachment

### "Actuator stem extends" fail-safe action

The actuator stem must be retracted before the actuator can be mounted onto the valve. The stem can be retracted either mechanically or electrically. Both methods are described below.

### Retracting the actuator stem mechanically

- Unfasten the front housing cover and place a 4 mm Allen key on the red actuating shaft.
- Retract the actuator stem: turn Allen key **counterclockwise** and **only as far as** the top end position which is at the point where the torque switch is activated (see Fig. 5-4).

### **!** NOTICE

**Risk of damage to the actuator by moving the actuator stem too far.**

➔ Move the actuator stem only as far as the top end position.

- Hold Allen key in place and fasten valve and actuator together using the coupling nut.

Tightening torque	20 Nm
-------------------	-------

Remove Allen key and carefully replace the front housing cover.

### Retracting the actuator stem electrically

- Remove the front housing cover.
- Perform electrical wiring as described in section 5.6 and carefully replace the front housing cover.
- Retract actuator stem:
  - Apply the supply voltage and retract the actuator stem electrically until it reaches the end position (voltage applied to eL and N or using controller).

---

**NOTICE**

***Risk of damage to the actuator due to incorrect connection of the voltage.***

→ Do not apply a voltage to eL and aL at the same time.

- 
4. Fasten valve and actuator together using the coupling nut.

Tightening torque	20 Nm
-------------------	-------

**"Actuator stem retracts" fail-safe action**

→ Place the actuator on the valve connection and fasten with the coupling nut.

Tightening torque	20 Nm
-------------------	-------

### 5.4.4 Type 5825: form-fit attachment

→ Mount the actuator with fail-safe action (stem extends or retracts) according to section 5.4.2.

## 5.5 Installing the control valve into the pipeline

---

**NOTICE**

***Degree of protection not achieved due to incorrect mounting position.***

→ Install the control valve according to section 5.1.

---

---

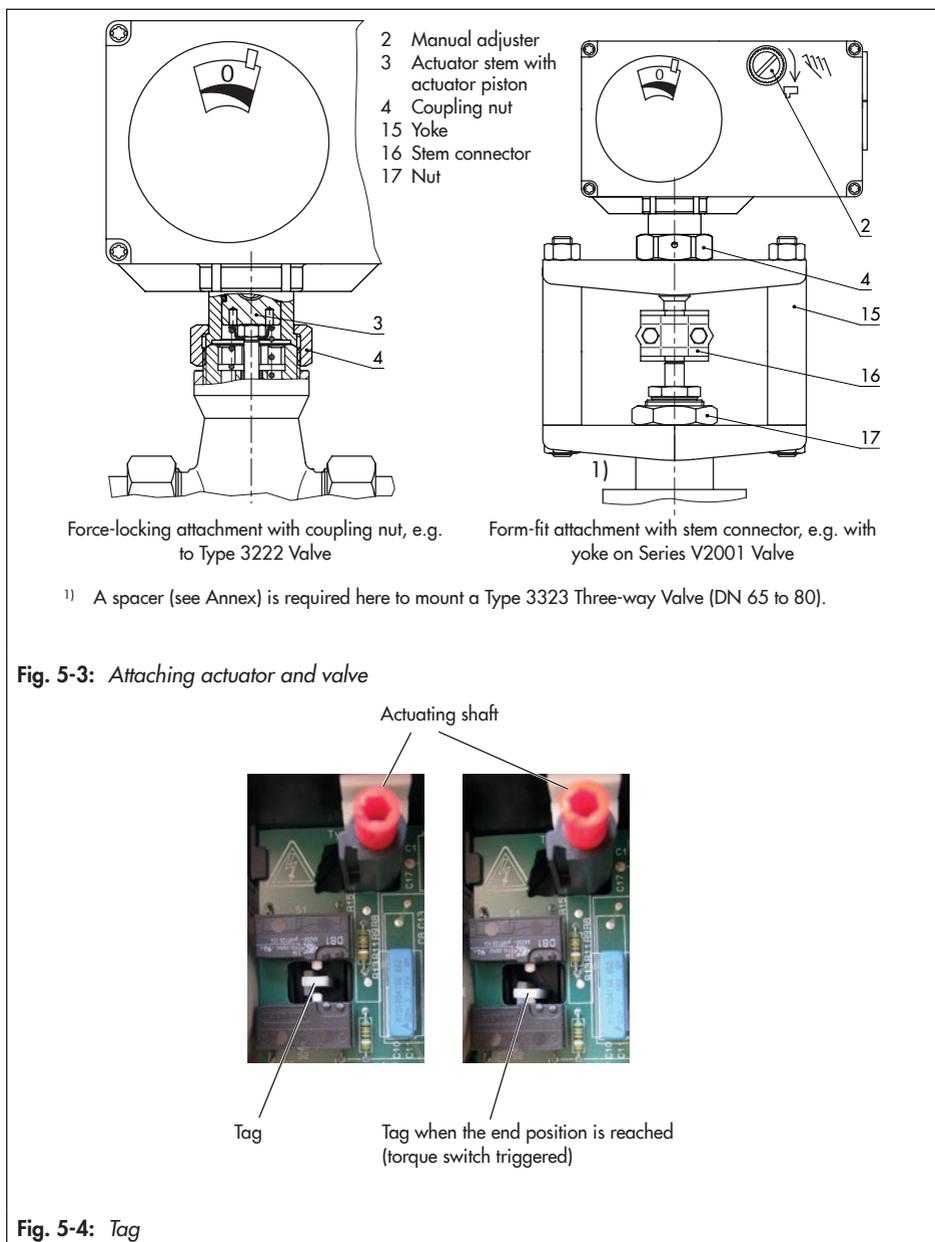
**NOTICE**

***Risk of actuator damage due to direct contact with steam.***

→ During mounting, make sure that the actuator cannot come into contact with a jet of steam during operation.

---

→ Install the valve into the pipeline according to the specifications in the mounting and operating instructions of the valve.



## 5.6 Electrical connection

---

### **⚠ DANGER**

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

- Upon installation of the electric cables, you are required to observe the regulations concerning low-voltage installations according to DIN VDE 0100 as well as the regulations of your local power supplier.
  - Use a suitable voltage supply which guarantees that no dangerous voltages reach the device in normal operation or in the event of a fault in the system or any other system parts.
  - Only perform the electrical connection after switching off the supply voltage. Make sure the supply voltage cannot be switched on again unintentionally.
- 

- Voltage applied to **eL** causes the actuator motor to retract the actuator stem.
  - Voltage applied to **aL** causes the actuator motor to extend the actuator stem.
- 

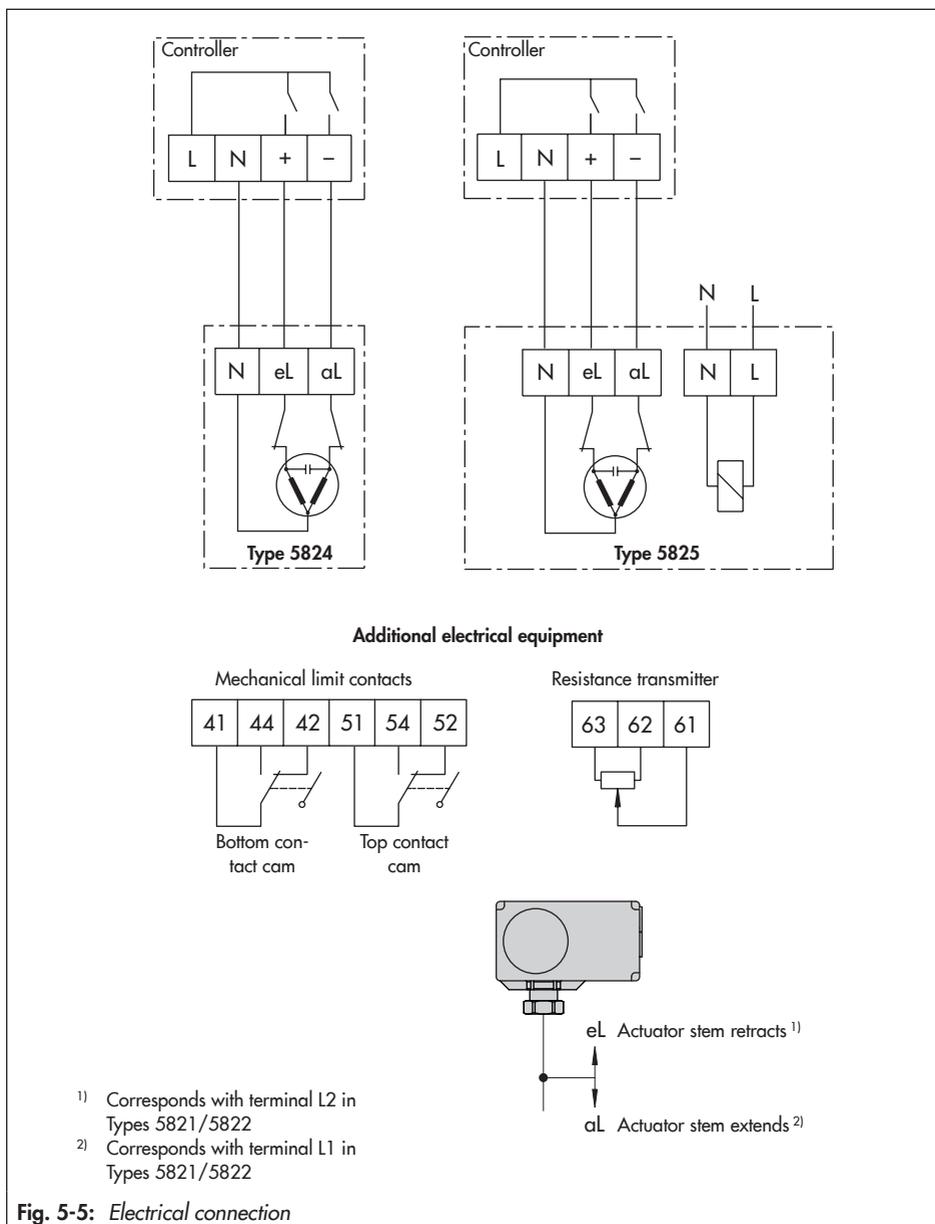
### **ⓘ NOTICE**

#### ***Risk of damage to the actuator due to incorrect connection of the voltage.***

- Do not apply a voltage to **eL** and **aL** at the same time.
- 

### **Wiring**

- Guide the wires through the cable entries into the housing and connect as shown in Fig. 5-5.
- The interference suppression capacitors in the output circuit of the connected controller must not exceed a value of 2.5 nF to ensure the proper functioning of the actuator.
- Connect actuators operated in parallel over separate contacts to prevent the actuators hunting in the end positions due to a shared OPEN and CLOSED contact.
- Connect the supply voltage additionally to terminals L and N in **Type 5825**.





## 6 Operation

### 6.1 Device overview and operating controls



### 6.1.1 Actuating shaft (opened front housing cover)

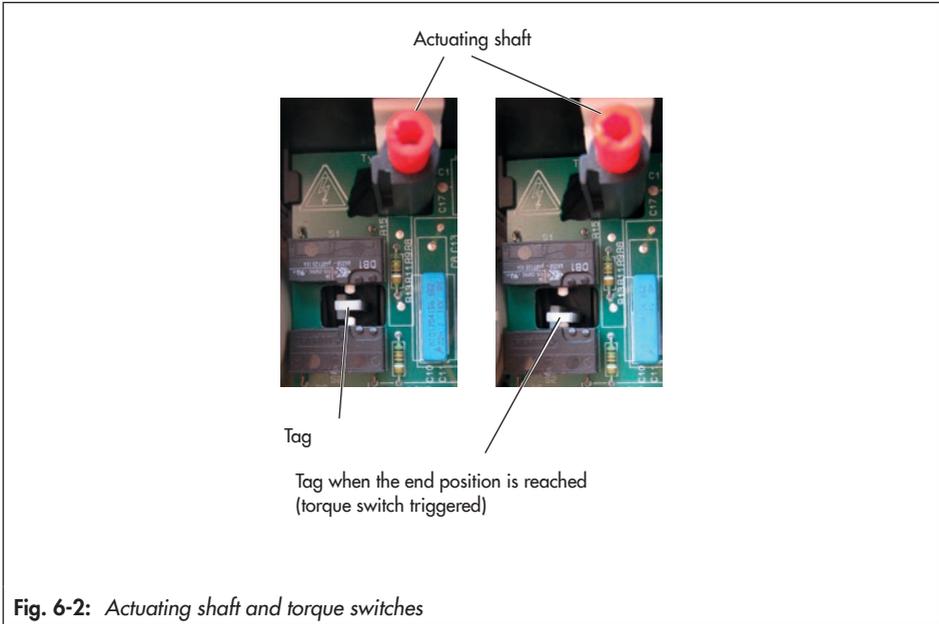


Fig. 6-2: Actuating shaft and torque switches

## 7 Start-up

Once the actuator has been mounted correctly and the wiring has been performed as described in the 'Installation' section, the electric actuator is ready for use and can be controlled by a three-step signal (see specifications in technical data).

### 7.1 Adjusting the limit contacts

#### **⚠ DANGER**

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

Before installing electrical accessories, switch off the supply voltage and disconnect the signal line.

#### **i Note**

The limit contacts are not suitable for retrofitting.

The limit contacts (see the 'Design and principle of operation' section) can optionally be used as make or break contacts.

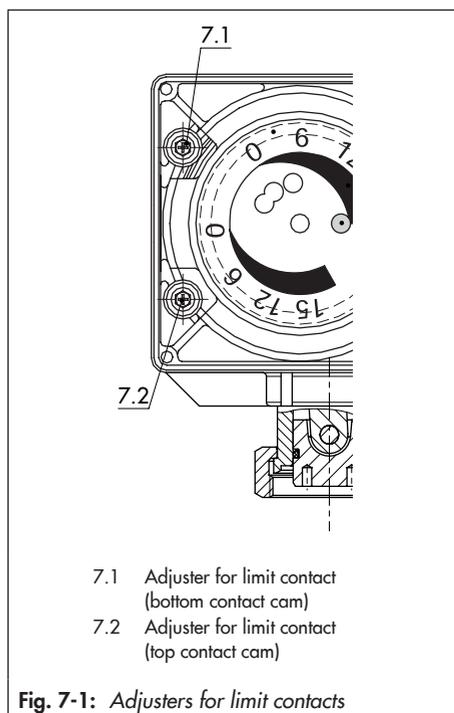
**Terminal assignment (see the 'Installation' section and Fig. 7-1):**

- Terminals 41, 44, 42:  
→ Bottom cam disk, adjuster 7.1
  - Terminals 51, 54, 52:  
→ Top cam disk, adjuster 7.2
1. Remove the front housing cover.
  2. Move the actuator stem to the position at which switching point is to be activated.
  3. Use a 4 mm Allen key to turn the adjusters (see the 'Design and principle of operation' section) up to the point where the contact is triggered.

eration' section) up to the point where the contact is triggered.

#### **💡 Tip**

The angle of rotation of the cam disks is limited. Therefore, use preferably the adjuster (7.1) for the lower travel range and the adjuster (7.2) for the upper travel range (see Fig. 7-1).



**Fig. 7-1:** Adjusters for limit contacts

## 7.2 Adjusting the resistance transmitter

### **⚠ DANGER**

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

→ Before installing electrical accessories, switch off the supply voltage and disconnect the signal line.

### **i Note**

The resistance transmitter is not suitable for retrofitting.

As the valve passes through its travel range, the resistance value changes from 0  $\Omega$  to approx. 80 % of its nominal value. Turn a screwdriver placed on the slotted shaft to calibrate the resistance transmitter.

### **Calibrating the actuator with an extended actuator stem at 0 $\Omega$**

1. Connect ohmmeter to terminals 61 and 62 (see the 'Electrical connection' section).
2. Move the actuator stem to the bottom end position.
3. Turn the resistance transmitter counterclockwise as far as it will go. The ohmmeter indicates the initial value of approx. 0  $\Omega$  .

### **Calibrating the actuator with a retracted actuator stem at 0 $\Omega$**

1. Connect ohmmeter to terminals 61 and 63 (see the 'Installation' section).
2. Move the actuator stem to the top end position.
3. Turn the resistance transmitter clockwise as far as it will go. The ohmmeter indicates the initial value of approx. 0  $\Omega$  .
4. **Only for actuators with 6 or 12 mm travel:** slowly turn the resistance transmitter counterclockwise up to the point where the resistance changes from 0  $\Omega$  .

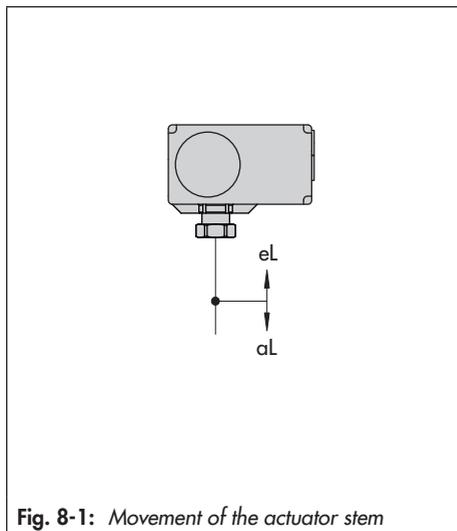
## 8 Operation

After connecting the supply voltage, the actuator is ready for use.

### 8.1 Three-step operation

In three-step operation, the actuator stem is moved in the corresponding direction by applying a signal to the terminal eL or aL (see Fig. 8-1).

Actuators with fail-safe action additionally require a constant supply voltage (see the 'Installation' section).



### 8.2 Handwheel

Travel and direction of action can be read off the scale of the travel indicator (see Fig. 8-2).

#### Type 5824 Actuator

To manually move the actuator stem one millimeter, the handwheel must be turned approx. 4 turns (see Fig. 8-2):

- Turn clockwise: the actuator stem extends.
- Turn counterclockwise: the actuator stem retracts.



## Operation

### Type 5825 Actuator

To manually move the actuator stem one millimeter, the actuating shaft must be turned approx. 4 turns using a 4 mm Allen key (see Fig. 8-3).

In this case, the housing cover must be opened (see the 'Installation' section).

### Direction of rotation

- Turn clockwise: the actuator stem extends (see Fig. 8-1).
- Turn counterclockwise: the actuator stem retracts (see Fig. 8-1).



Fig. 8-3: Type 5825 Electric Actuator

## 9 Malfunctions

→ Troubleshooting (see Table 9-1).

### **i** Note

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

**Table 9-1:** Troubleshooting

Error	Possible reasons	Recommended action
Actuator stem does not move.	Actuator is blocked.	→ Check attachment. → Remove the blockage.
	No or incorrect supply voltage connected.	→ Check the supply voltage and connections.
Actuator stem does not move through the whole range.	No or incorrect supply voltage connected.	→ Check the supply voltage and connections.

### 9.1 Emergency action

The valve, on which the actuator with fail-safe action is mounted, is moved to its fail-safe position upon failure of the supply voltage (see the 'Design and principle of operation' section). Plant operators are responsible for emergency action to be taken in the plant.

### Tip

Emergency action in the event of valve failure is described in the associated valve documentation.



## 10 Servicing

The work described in this section is only to be performed by personnel appropriately qualified to carry out such tasks.

### **i** Note

*The electric actuator was checked by SAMSON before it left the factory.*

*– 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.*

The actuator requires no maintenance.

We recommend inspection and testing according to Table 10-1.

**Table 10-1:** *Recommended inspection and testing*

Inspection and testing	Action to be taken in the event of a negative result
Check the markings, labels and nameplates on the electric actuator for their readability and completeness.	→ Immediately renew damaged, missing or incorrect nameplates or labels.
	→ Clean any inscriptions that are covered with dirt and are illegible.
Check the electric wiring.	→ Tighten any loose terminal screws (see the 'Installation' section).
	→ Renew damaged wires.



## 11 Decommissioning

The work described in this section is only to be performed by personnel appropriately qualified to carry out such tasks.

### DANGER

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

- Before disconnecting live wires, switch off the supply voltage at the actuator and protect it against unintentional reconnection.

### WARNING

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

While working on the valve, residual medium can flow out of the valve and, depending on its properties, cause personal injury, e.g. (chemical) burns.

- Wear protective clothing, safety gloves and eye protection.

### WARNING

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

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

- Allow components and pipelines to cool down or warm up to the ambient temperature.
- Wear protective clothing and safety gloves.

To decommission the electric actuator for maintenance work or disassembly, proceed as follows:

- Put the control valve out of operation. See associated valve documentation.
- Disconnect the supply voltage and protect it against unintentional reconnection.



## 12 Removal

The work described in this section is only to be performed by personnel appropriately qualified to carry out such tasks.

### **⚠ DANGER**

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

→ Before disconnecting live wires, switch off the supply voltage at the actuator and protect it against unintentional reconnection.

### **⚠ WARNING**

**Risk of personal injury due to hot components.**

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

### **⚠ WARNING**

**Risk of personal injury due to residual process medium.**

While working on the valve, residual medium can flow out of the valve and, depending on its properties, cause personal injury, e.g. (chemical) burns.

→ Wear protective clothing, safety gloves and eye protection.

## 12.1 Force-locking attachment

### Version without fail-safe action

1. Retract the actuator stem using the hand-wheel (see the 'Operation' section).
2. Open the front housing cover.
3. Disconnect and remove the wires of the connection cables from the terminals.
4. Unscrew the coupling nut (4 in Fig. 12-4) and remove the actuator from the valve connection.

### Version with "actuator stem extends" fail-safe action

1. Open the front housing cover.
  2. Disconnect and remove the wires of the connection cables from the terminals.
  3. Retract the actuator stem with a 4 mm Allen key (see the 'Operation' section).
- Hold the actuating shaft in place after retracting the actuator stem to prevent it from extending again.
4. Unscrew the coupling nut (4 in Fig. 12-4) and remove the actuator from the valve connection.

### Version with "actuator stem retracts" fail-safe action

- Proceed as for the version without fail-safe action.

### 12.2 Form-fit attachment

#### Version without fail-safe action

1. Retract the actuator stem using the hand-wheel (see the 'Operation' section).
2. Open the front housing cover.
3. Disconnect and remove the wires of the connection cables from the terminals.
4. Unfasten the stem connector clamps (16 in Fig. 12-4) between the actuator stem and the plug stem.
5. Undo the nut (17 in Fig. 12-4) and remove the rod-type yoke (15 in Fig. 12-4) together with the actuator from the valve.
6. Undo the coupling nut (4 in Fig. 12-4) and remove the actuator from the rod-type yoke (15 in Fig. 12-4).

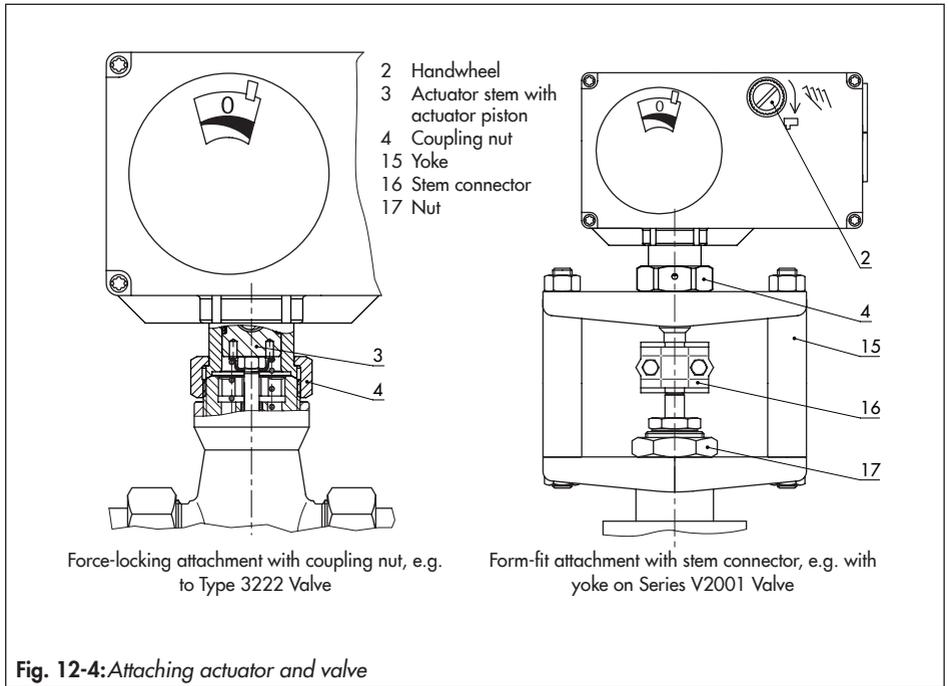
#### Version with "actuator stem extends" fail-safe action

1. Open the front housing cover.
  2. Disconnect and remove the wires of the connection cables from the terminals.
  3. Unfasten the stem connector clamps (16 in Fig. 12-4) between the actuator stem and the plug stem.
  4. Retract the actuator stem with a 4 mm Allen key (see the 'Operation' section).
- ➔ Hold the actuating shaft in place after retracting the actuator stem to prevent it from extending again.
5. Undo the nut (17 in Fig. 12-4) and remove the rod-type yoke (15 in Fig. 12-4) together with the actuator from the valve.

6. Undo the coupling nut (4 in Fig. 12-4) and remove the actuator from the rod-type yoke (15 in Fig. 12-4).

#### Version with "actuator stem retracts" fail-safe action

- ➔ Proceed as for the version without fail-safe action.



**Fig. 12-4:** Attaching actuator and valve



## 13 Repairs

If the actuator does not function properly according to how it was originally configured or does not function at all, it is defective and must be exchanged.

---

**!** NOTICE

***Risk of actuator damage due to incorrect service or repair work.***

- Do not perform any repair work on your own.
  - Contact SAMSON's After-sales Service.
- 

### 13.1 Returning the actuator to SAMSON

Defective actuators can be returned to SAMSON for examination.

Proceed as follows to return devices:

1. Remove the electric actuator from the valve (see the 'Removal' section).
2. Continue as described on our website at
  - ▶ [www.samsongroup.com](http://www.samsongroup.com) > Service & Support > After-sales Service > Returning goods .



## 14 Disposal



SAMSON is a producer registered at the following European institution  
▶ <https://www.ewrn.org/national-registers/national-registers>.  
WEEE reg. no.:  
DE 621 94439 / FR 025665

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

---

### **i** Note

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

---

### 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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## 15 Certificates

The following certificates are included on the next pages:

- EU declarations of conformity
- UKCA declarations of conformity
- TR CU certificate
- Declaration of incorporation

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

- ▶ [www.samsongroup.com](http://www.samsongroup.com) > Products & Applications > Product selector > Actuators > 5824
- ▶ [www.samsongroup.com](http://www.samsongroup.com) > Products & Applications > Product selector > Actuators > 5825

### 15.1 Information on the UK sales region

The following information corresponds to the Pressure Equipment (Safety) Regulations 2016, STATUTORY INSTRUMENTS, 2016 No. 1105 (UKCA marking). It does not apply to Northern Ireland.

#### Importer

SAMSON Controls Ltd  
Perrywood Business Park  
Honeycrook Lane  
Redhill, Surrey RH1 5JQ  
Tel.: +44 1737 766391

E-mail: ▶ [sales-uk@samsongroup.com](mailto:sales-uk@samsongroup.com)

Website: ▶ [uk.samsongroup.com](http://uk.samsongroup.com)

## EU declaration of conformity for Type 5824

SMART IN FLOW CONTROL



### EU Konformitätserklärung / EU Declaration of Conformity / Déclaration UE de conformité

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller/  
This declaration of conformity is issued under the sole responsibility of the manufacturer/  
La présente déclaration de conformité est établie sous la seule responsabilité du fabricant.  
Für das folgende Produkt / For the following product / Nous certifions que le produit

#### Elektrischer Stellantrieb / Electric Actuator / Servomoteur électrique Typ/Type/Type 5824

wird die Konformität mit den einschlägigen Harmonisierungsrechtsvorschriften der Union bestätigt /  
the conformity with the relevant Union harmonisation legislation is declared with/  
est conforme à la législation d'harmonisation de l'Union applicable selon les normes:

EMC 2014/30/EU	EN 61000-6-2:2005, EN 61000-6-3:2010 +A1:2011
LVD 2014/35/EU	EN 60730-1:2016, EN 61010-1:2010
RoHS 2011/65/EU	EN 50581:2012

Hersteller / Manufacturer / Fabricant:

SAMSON AKTIENGESELLSCHAFT  
Weismüllerstraße 3  
D-60314 Frankfurt am Main  
Deutschland/Germany/Allemagne

Frankfurt / Francfort, 2017-07-29

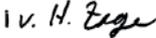
Im Namen des Herstellers/ On behalf of the Manufacturer/ Au nom du fabricant.

Gert Nahler  
Zentralabteilungsleiter/Head of Department/Chef du département  
Entwicklung Automation und Integrationstechnologien/  
Development Automation and Integration Technologies

Hanno Zager  
Leiter Qualitätssicherung/Head of Quality Management/  
Responsable de l'assurance de la qualité

co\_5824-01\_06\_en\_100\_07.pdf

## EU declaration of conformity for Type 5825

SMART IN FLOW CONTROL	
<b>EU Konformitätserklärung / EU Declaration of Conformity / Déclaration UE de conformité</b>	
<p>Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller/ This declaration of conformity is issued under the sole responsibility of the manufacturer/ La présente déclaration de conformité est établie sous la seule responsabilité du fabricant. Für das folgende Produkt / For the following product / Nous certifions que le produit</p>	
<b>Elektrischer Stellantrieb / Electric Actuator / Servomoteur électrique Typ/Type/Type 5825/ 2770</b>	
<p>wird die Konformität mit den einschlägigen Harmonisierungsrechtsvorschriften der Union bestätigt / the conformity with the relevant Union harmonisation legislation is declared with/ est conforme à la législation d'harmonisation de l'Union applicable selon les normes:</p>	
EMC 2014/30/EU	EN 61000-6-2:2005, EN 61000-6-3:2010 +A1:2011
LVD 2014/35/EU	EN 60335-1:2012
RoHS 2011/65/EU	EN 50581:2012
<p>Hersteller / Manufacturer / Fabricant:</p> <p style="text-align: center;"><b>SAMSON AKTIENGESELLSCHAFT</b> Weismüllerstraße 3 D-60314 Frankfurt am Main Deutschland/Germany/Allemagne</p> <p>Frankfurt / Francfort, 2017-07-29 Im Namen des Herstellers/ On behalf of the Manufacturer/ Au nom du fabricant.</p>	
 <hr/> <p>Gert Nahler Zentralabteilungsleiter/Head of Department/Chef de département Entwicklung Automation und Integrationstechnologien/ Development Automation and Integration Technologies</p>	 <hr/> <p>Hanno Zager Leiter Qualitätssicherung/Head of Quality Management/ Responsable de l'assurance de la qualité</p>
<p><small>cs_5825-0_2770-0_96_m_fru_1607.pdf</small></p> <hr/> <p>SAMSON AKTIENGESELLSCHAFT Weismüllerstraße 3 60314 Frankfurt am Main</p> <p style="text-align: right;">Telefon: 069 4009-0 · Telefax: 069 4009-1507 E-Mail: samson@samson.de</p> <p style="text-align: right;">Revison 07</p>	

## UKCA declaration of conformity for Type 5824

**UK  
CA** UK DECLARATION OF CONFORMITY  
ORIGINAL



This declaration of conformity is issued under the sole responsibility of the manufacturer.

For the following product:

**Electric Actuator Type 5824**

the conformity with the following relevant UK regulatory requirements is declared with:

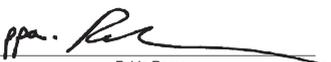
<b>UK Regulation / Statutory Instrument</b>	<b>Designated Standard</b>
SI 2016 No. 1091 The Electromagnetic Compatibility Regulations 2016	EN 61000-6-2:2005 EN 61000-6-3:2007+A1:2011
SI 2016 No. 1101 The Electrical Equipment (Safety) Regulations 2016	EN 60730-1:2011 EN 61010-1:2010/A1:2019
SI 2012 No. 3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	EN IEC 63000:2018

Manufacturer:

SAMSON AKTIENGESELLSCHAFT  
Weismuellerstrasse 3  
60314 Frankfurt am Main  
Germany

Frankfurt am Main, 2022-12-14

Signed for and behalf of the manufacturer:

  
Fabio Roma  
Vice President Smart Products & Components

  
Sebastian Krause  
Director Development Valves & Actuators

Revision 00

Classification: Public · SAMSON AKTIENGESELLSCHAFT · Weismuellerstrasse 3 · 60314 Frankfurt am Main, Germany

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## UKCA declaration of conformity for Type 5825

**UK  
CA** UK DECLARATION OF CONFORMITY  
ORIGINAL



This declaration of conformity is issued under the sole responsibility of the manufacturer.

For the following product:

**Electric Actuator Type 5825 / 2770**

the conformity with the following relevant UK regulatory requirements is declared with:

**UK Regulation / Statutory Instrument**

SI 2016 No. 1091  
The Electromagnetic Compatibility Regulations 2016

SI 2016 No. 1101  
The Electrical Equipment (Safety) Regulations 2016

SI 2012 No. 3032  
The Restriction of the Use of Certain Hazardous Substances  
in Electrical and Electronic Equipment Regulations 2012

**Designated Standard**

EN 61000-6-2:2005  
EN 61000-6-3:2007+A1:2011

EN 60730-1:2011  
EN 61010-1:2010/A1:2019

EN IEC 63000:2018

Manufacturer:

SAMSON AKTIENGESELLSCHAFT  
Weismuellerstrasse 3  
60314 Frankfurt am Main  
Germany

Frankfurt am Main, 2022-12-14

Signed for and behalf of the manufacturer:

  
Fabio Roma  
Vice President Smart Products & Components

  
Sebastian Krause  
Director Development Valves & Actuators

Revision 00

Classification: Public · SAMSON AKTIENGESELLSCHAFT · Weismuellerstrasse 3 · 60314 Frankfurt am Main, Germany

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**ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ**



## СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ЕАЭС RU C-DE.ЭА11.В.00049/19

Серия **RU** № **0197358**

**ОРГАН ПО СЕРТИФИКАЦИИ** Общества с ограниченной ответственностью «ТМС РУС». Место нахождения (адрес юридического лица): Российская Федерация, 127083 город Москва, улица Верхняя Масловка, дом 20, строение 2; адрес места осуществления деятельности: Российская Федерация, 127083 город Москва, улица Верхняя Масловка, дом 20, строение 2, помещения № 18, 28. Аттестат аккредитации № РОСС RU.0001.11ЭА11 от 02.07.2015. Номер телефона: +7 (495) 221-18-04; адрес электронной почты: info@tms-cs.ru.

**ЗАЯВИТЕЛЬ** Общество с ограниченной ответственностью «Самсон Контролс». Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: Российская Федерация, 109544, город Москва, бульвар Энтузиастов, дом 2, этаж 5, комната 11. ОГРН 1037700041026. Номер телефона: +7 (495) 777-45-45; адрес электронной почты: samson@samson.ru.

**ИЗГОТОВИТЕЛЬ** «SAMSON AG Mess- und Regeltechnik». Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: Weismullerstrasse 3, D-60314 Frankfurt am Main, Германия.

**ПРОДУКЦИЯ** Приводы электрические типы 3274, 3374, 3375, 5724, 5725, 5757, 5824, 5825, 5857. Изготовление в соответствии со стандартами, указанными в приложении к сертификату соответствия на бланке № 0676634. Серийный выпуск.

**КОД ТН ВЭД ЕАЭС** 8501 10 930 0

**СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ** технических регламентов Таможенного союза «О безопасности низковольтного оборудования» (ТР ТС 004/2011); «Электромагнитная совместимость технических средств» (ТР ТС 020/2011)

**СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ** протоколов сертификационных испытаний № ГБОУ-5418, ГБОУ-5419, ГБОУ-5420 от 18.09.2019, выданных Испытательной лабораторией Ассоциации экспертов по сертификации и испытаниям продукции «Сертификационный центр НАСТХОЛ», аттестат аккредитации РОСС RU.0001.21ГБОУ; № 190919-004-006-02/ИР от 24.10.2019, выданных испытательной лабораторией Общества с ограниченной ответственностью «Иновационные решения», аттестат аккредитации РОСС RU.0001.21АВ90; акта о результатах анализа состояния производства № 00062-А от 04.07.2019 органа по сертификации Общества с ограниченной ответственностью «ТМС РУС»; руководств по эксплуатации 3428-ЭП-2019.РЭ, 3428-5720-5750-2018.РЭ. Схема сертификации – 1с.

**ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ** Стандарты, в результате применения которых на добровольной основе обеспечивается соблюдение требований технических регламентов: ГОСТ 12.2.007.0-75 «Система стандартов безопасности труда. Изделия электротехнические. Общие требования безопасности»; раздел 8 ГОСТ 33804.9.2-2013 «Совместимость технических средств электромагнитная. Устойчивость к электромагнитным помехам технических средств, применяемых в промышленных зонах»; раздел 7 ГОСТ 33804.6.4-2013 «Совместимость технических средств электромагнитная. Электромагнитная помехи от технических средств, применяемых в промышленных зонах». Назначенный срок службы – 12 лет. Назначенный срок хранения – 2 года. Условия хранения указаны в руководстве по эксплуатации 3428-ЭП-2019.РЭ, 3428-5720-5750-2018.РЭ.

**СРОК ДЕЙСТВИЯ С** 05.12.2019 **ПО** 04.12.2024

**ВКЛЮЧИТЕЛЬНО**

Руководитель (уполномоченное лицо) органа по сертификации Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы))	  М.П. (И.О.С.) М.П. (И.О.С.)
	
	Ванькович Евгения Владимировна Ходоров Владимир Игоревич

15-6

EB 5824-1 EN



Declaration of incorporation

EINBAUERKLÄRUNG  
ORIGINAL



**Einbauerklärung nach Maschinenrichtlinie 2006/42/EG**

Für folgendes Produkt:  
**Stellantrieb Typ 5824 / 5825**

Wir, die SAMSON AG, erklären, dass der elektrische Stellantrieb Typ 5824 / 5825 eine unvollständige Maschine im Sinne der Maschinenrichtlinie 2006/42/EG ist und die sicherheitstechnischen Anforderungen nach Anhang I Artikel 1.1.2, 1.1.3, 1.1.5, 1.2.1, 1.2.2, 1.2.3, 1.2.5, 1.2.6, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.7, 1.3.8.2, 1.3.9, 1.4.1, 1.5.3, 1.5.4 und 1.5.8 der Richtlinie eingehalten werden. Die speziellen Unterlagen nach Anhang VII Teil B wurden erstellt.

Die Inbetriebnahme der von uns gelieferten Erzeugnisse darf nur erfolgen, wenn vorher festgestellt wurde, dass die Maschinen oder Anlagen, in die die Produkte eingebaut werden sollen, den Bestimmungen der EG-Maschinenrichtlinie 2006/42/EG entsprechen.

Der Anwender ist verpflichtet, das Erzeugnis den anerkannten Regeln der Technik und der Einbau- und Bedienungsanleitung entsprechend einzubauen und Gefährdungen, die am Stellventil vom Durchflussmedium und Betriebsdruck sowie vom Stelldruck und von beweglichen Teilen ausgehen können, durch geeignete Maßnahmen zu verhindern.

Die zulässigen Einsatzgrenzen und Montagehinweise der Geräte ergeben sich aus der entsprechenden Einbau- und Bedienungsanleitung und stehen im Internet unter [www.samsongroup.com](http://www.samsongroup.com) in elektronischer Form zur Verfügung.

Produktbeschreibung siehe:

- Elektrischer Antrieb Typ 5824: Einbau- und Bedienungsanleitung EB 5824-1 / EB 5824-2
- Elektrischer Antrieb Typ 5825: Einbau- und Bedienungsanleitung EB 5824-1 / EB 5824-2

Folgende technischen Normen und/oder Spezifikationen wurden angewandt:

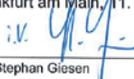
- VCI/VDMA/VGB – Leitfadens Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen, Mai 2018
- VCI/VDMA/VGB – Zusatzdokument zum „Leitfadens Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen vom Mai 2018“, Stand Mai 2018 in Anlehnung an DIN EN ISO 12100:2011-03

Bemerkungen:

- Restgefahren siehe Angaben in der Einbau- und Bedienungsanleitung
- Weiterhin sind die in den Einbau- und Bedienungsanleitungen aufgeführten mitgeltenden Dokumente zu beachten.

Für die Zusammenstellung der technischen Unterlagen ist bevollmächtigt:

SAMSON AG, Weismüllerstraße 3, 60314 Frankfurt am Main, Germany  
Frankfurt am Main, 11. August 2021

  
i.V. Stephan Giesen  
Zentralabteilungsleiter  
Produktmanagement

  
i.V. Sebastian Krause  
Zentralabteilungsleiter  
Strategische Entwicklung Ventile und Antriebe

Revision 00

## 16 Annex

### 16.1 Accessories

For mounting on form-fit valves	Order no.
Rod-type yoke	1400-7414
Spacer to mount the actuator on Type 3323 Valve (DN 65 to 80)	0340-3031

### 16.2 After-sales service

Contact our after-sales service for support concerning service or repair work or when malfunctions or defects arise.

#### E-mail contact

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 SAMSON product catalogs.

#### Required specifications

Please submit the following details:

- Type designation
- Configuration ID/material number
- Serial number









**EB 5824-1 EN**



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