

# MOUNTING AND OPERATING INSTRUCTIONS



## EB 8331-3 EN

Translation of original instructions



## Type 3374 Electric Actuator 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 3374 Electric Actuator is designed to operate a mounted globe valve used in industrial applications as well as in heating, ventilation and air-conditioning systems. The actuator is designed to operate under exactly defined conditions (e.g. thrust, travel).

Therefore, operators must ensure that the 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 the 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 actuator is 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 actuator 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.

## Safety instructions and measures

### Personal protective equipment

No personal protective equipment is required for the direct handling of the electric actuator. 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 3374 Electric Actuator<sup>1)</sup> causes the valve to move to a certain fail-safe position. The fail-safe action of SAMSON actuators is specified on the actuator nameplate.

<sup>1)</sup> Type 3374-21/-26/-31/-36

### 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 3374 Electric Actuator is 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 5868 for Type 3213 and Type 3214 Globe Valves
  - ▶ EB 8012 for Type 3241 Globe Valve, ANSI and JIS version
  - ▶ EB 8015 for Type 3241 Globe Valve, DIN version
  - ▶ EB 8026 for Type 3244 Three-way 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.
- 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 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.

#### **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 Type 3374 Electric Actuator is designed for use according to regulations for low-voltage installations.

→ Observe the permissible tolerances of the supply voltage.

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

Observe the specified torques when tightening the mounting parts of Type 3374 Electric Actuators. Excessive tightening torques lead to parts wearing out more quickly.

→ Observe the specified tightening torques.

#### **Risk of damage to the electric actuator due to incorrect operation of the manual override.**

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

→ Do not operate the manual override while the actuator is in operation. Only operate the manual override of actuators without fail-safe action in the de-energized state.

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

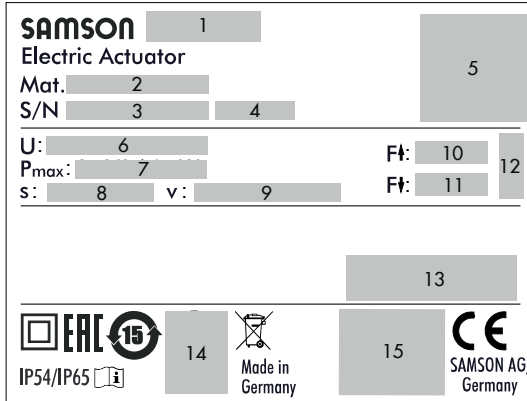
The electric actuator has terminals to **retract** the stem (eL terminal) and to **extend** the stem (aL terminal).

→ 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 Material number
- 3 Serial number
- 4 Date of manufacture
- 5 Data Matrix code
- 6 Supply voltage; power line frequency
- 7 Power consumption
- 8 Rated travel
- 9 Stroking speed
- 10 Thrust (actuator stem retracts)
- 11 Thrust (actuator stem extends)
- 12 Fail-safe action

- 13 Additional electrical equipment

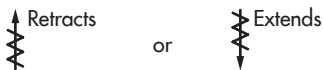


Mechanical limit contacts



Resistance transmitter

- 14 Testing according to DIN EN 14597
- 15 Other mark of conformity





### 3 Design and principle of operation

The Type 3374 Electric Actuator is used in industrial plants as well as in heating, ventilation and air-conditioning systems.

The actuator is a linear actuator which is controlled by a three-step signal. It is suitable for form-fit attachment to various SAMSON valve series, depending on the version **with or without fail-safe action**.

#### Principle of operation

The synchronous motor is switched off by torque switches in the end positions and in case of overload. The force of the motor is transmitted to the actuator stem over gearing and ball screw drive.

#### 3.1 Fail-safe action

The Type 3374 Electric Actuator is available with or without fail-safe action.

Type 3374-2x and Type 3374-3x Actuators are able to perform a fail-safe action and contain a spring assembly and an electromagnet. The actuator is moved by the force of the spring to the fail-safe position when the electromagnet is de-energized.

The direction of action depends on the actuator version and cannot be reversed.

#### Testing according to DIN EN 14597

The Type 3374 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 (the register number is available on request).

### 3.2 Versions

The Type 3374 Actuator is optionally available with either integrated yoke (see Fig. 3-1) or using an M30x1.5 ring nut (see Fig. 3-2) including the necessary stem connecting parts.



Fig. 3-1: Construction with integrated yoke (form B)



Fig. 3-2: Construction for mounting with ring nut (form A)

### 3.3 Additional equipment

The actuator can be equipped with mechanical limit contacts or with resistance transmitters to influence the tasks of control equipment.

#### **Mechanical 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.

The limit contacts are suitable for retrofitting. The installation and adjustment of the mechanical limit contacts is described in the 'Installation' section.

#### **Resistance transmitter**


Optionally, the actuator can be equipped with resistance transmitters. They are linked to the gear and produce a resistance signal between approx. 0 and 1000  $\Omega$  (usable range 0 to 900  $\Omega$ ) proportional to the valve travel. They can be used to process the position of the actuator stem. The resistance transmitters are suitable for retrofitting. The installation and adjustment of the mechanical limit contacts is described in the 'Installation' section.

### 3.4 Technical data

**Table 3-1:** *Technical data · Type 3374*

Type 3374		-10	-11	-15	-17	-21	-26	-31	-36
Version with		Yoke		Ring nut		Yoke	Ring nut	Yoke	Ring nut
Fail-safe action		Without				Extends		Retracts	
Testing according to DIN EN 14597		-				•		-	
Rated travel	mm	30	15	30		15			
Stroking speed									
Standard	mm/s	0.125			0.1	0.125			
Fast	mm/s	0.25			-	0.25			
In the event of fail-safe action	mm/s	-				1.25			
Transit time for rated travel									
Standard	s	240	120	240	300	120	120	120	120
Fast	s	120	60	120	-	60	60	60	60
In the event of fail-safe action	s	-	-	-	-	12	12	12	12
Thrust	Retracts	2.5 kN			5 kN	0.5 kN			
	Extends	2.5 kN			5 kN	2 kN			
Manual override		With hex wrench				With hex wrench only possible when supply voltage is connected (see the 'Operation' section). Adjustment not possible after fail-safe action has been triggered.			
Motor switch-off		Torque switches							
Duty type		S1 - 100 % according to EN 60034-1							
<b>Electrical connection</b>									
Supply voltage	V					230, ±10 % <sup>1)</sup> 24, ±10 % <sup>1)</sup>			

## Design and principle of operation

Type 3374		-10	-11	-15	-17	-21	-26	-31	-36
Power line frequency	Hz	50 or 60			50	50 or 60			
Power consumption	VA	7.5/13 <sup>2)</sup>			13	10.5/16 <sup>2)</sup>			
<b>Permissible temperature ranges<sup>3)</sup></b>									
Temperature ranges <sup>2)</sup>	Ambient	5 to 60 °C							
	Storage	-25 to +70 °C							
<b>Materials</b>		Housing and cover: Plastic (glass-fiber reinforced PPO)							
<b>Weight</b>									
	kg (approx.)	3.2	3.2	3.3	3.3	3.9	4.0	3.5	3.6
<b>Safety</b>									
Degree of protection		IP 54 acc. to EN 60529, (IP 65 with three cable glands <sup>4)</sup> ) Suspended mounting position not approved							
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 61326-1							
Noise emission		According to EN 61000-6-3 and EN 61326-1							
Conformity									
<b>Additional equipment</b>									
Limit contacts		Two adjustable limit contacts with changeover switches; 230 V/1 A · Without contact protection							
Resistance transmitters		Two resistance transmitters; 0 to 1000 Ω ± 15 %, max. 200 mW usable range approx. 0 to 900 Ω							

1) Voltage tolerance for actuators tested according to DIN EN 14597: -15/+10 %

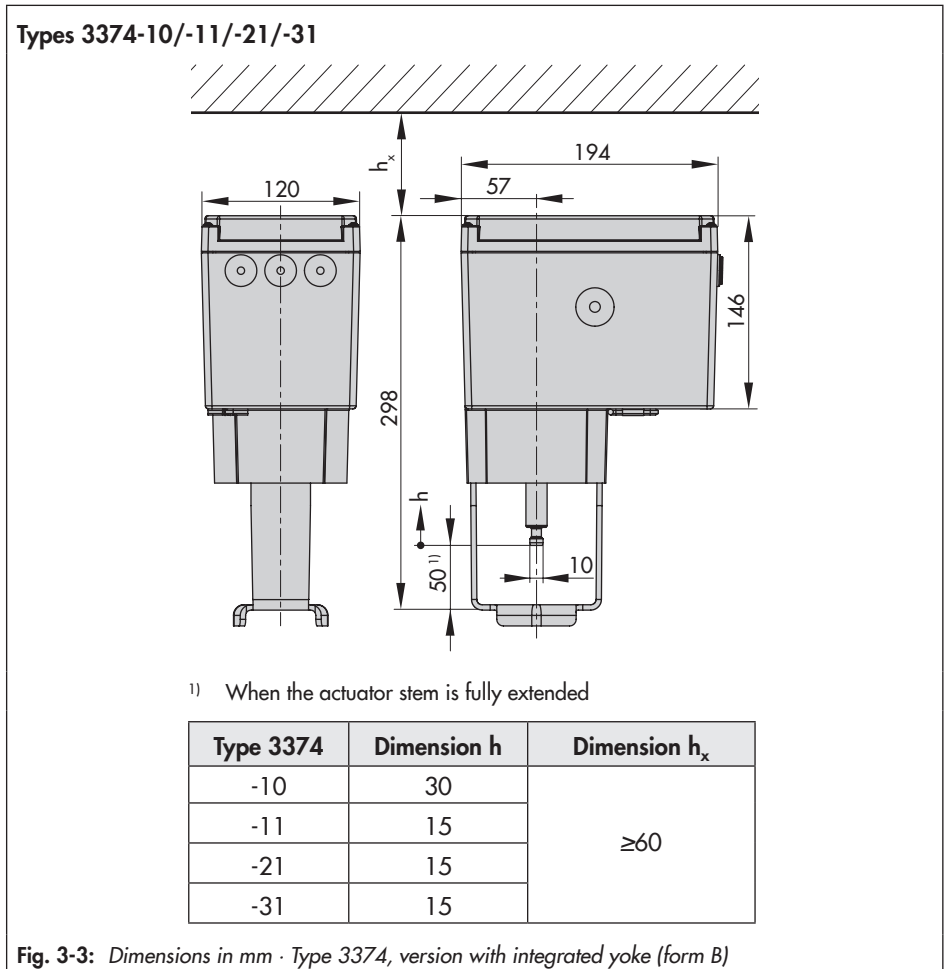
2) Actuator with faster motor

3) The permissible medium temperature depends on the valve on which the electric actuator is mounted. The limits in the valve documentation apply.

4) Cable glands M20x1.5 with metal nut SW 23/24

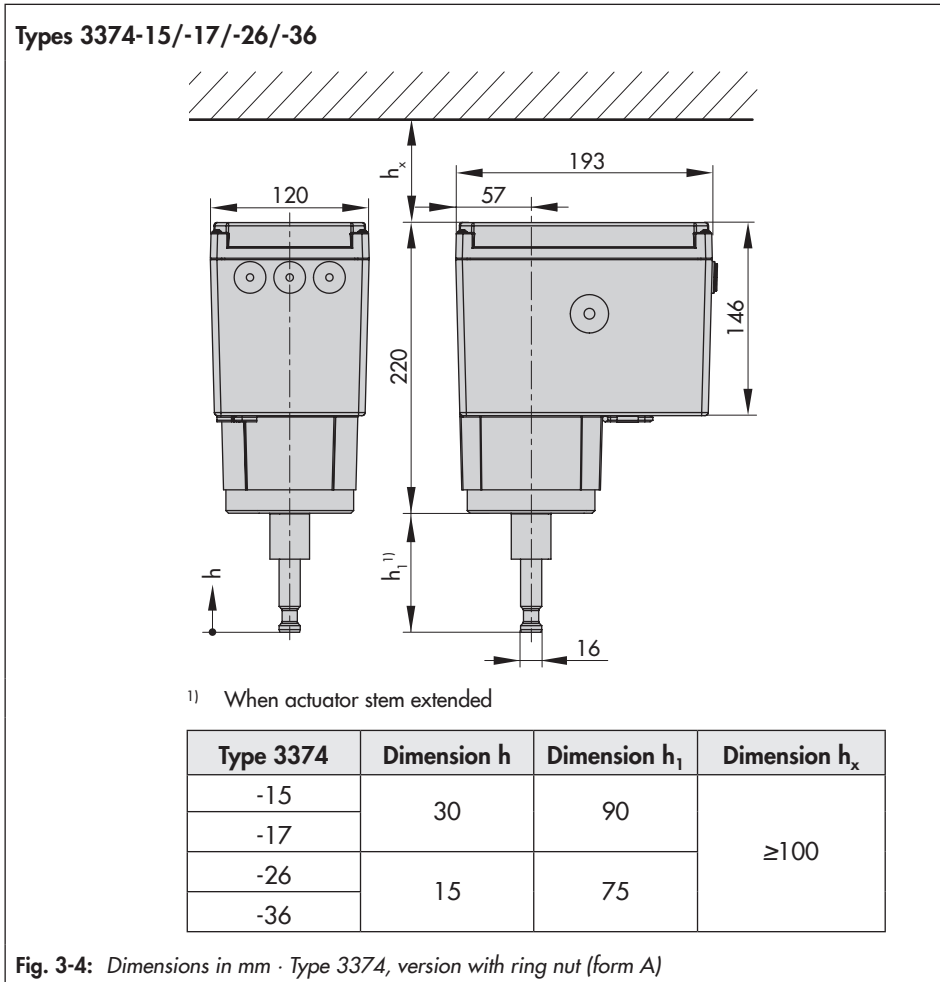


### 3.5 Dimensions



**i Note**

The dimension  $h_x$  indicates the minimum clearance required to be able to operate the actuator. Sufficient clearance must be available to facilitate wiring and operation. We recommend a minimum clearance of 600 mm.



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The dimension  $h_x$  indicates the minimum clearance required to be able to operate the actuator. Sufficient clearance must be available to facilitate wiring and operation. We recommend a minimum clearance of 600 mm.

## 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 3374-xx Electric Actuator
1x	Document IP 8331-3 (Important Product Information)
for Types 3374-10, -11, -21, -31:	
1x	Accessory 1400-6817, consisting of
2x	Stem connector for Ø 10 mm stem
2x	M5 hex bolt
2x	M5 hex nut
for Types 3374-15, -17, -26, -36:	
1x	Accessory 0900-2679, consisting of
2x	Stem connector for Ø 16 mm stem
2x	M6 screw
1x	M30x1.5 ring nut

**Fig. 4-1:** Scope of delivery

### 4.3 Transporting the actuator

- Protect the actuator against external influences (e.g. impact).
- Protect the actuator against moisture and dirt.
- Observe the permissible transportation temperature of  $-25$  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

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### **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.
- 

### **Note**

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

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### **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  $-25$  to  $+70$  °C.
- Do not place any objects on the electric actuator.

## 5 Installation

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

### 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).

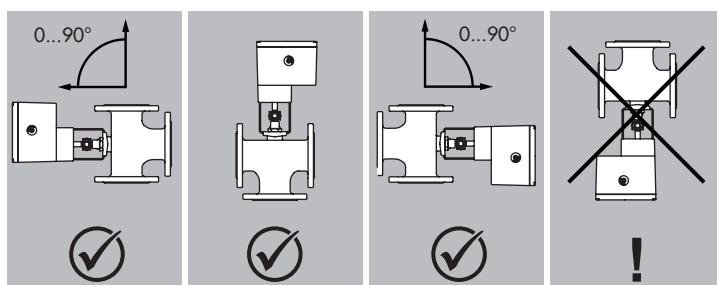


Fig. 5-1: *Mounting position*

### 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

Phillips screws are used to fasten the actuator housing cover. Use a POZIDRIV® PZ2 screwdriver to undo and tighten the screws.

### 5.3 Mounting the actuator

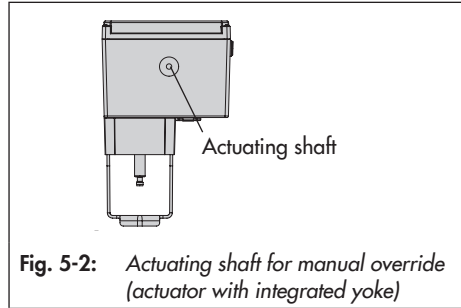
#### 5.3.1 Construction with integrated yoke (form B)

##### Attachment

- Series V2001 Valves (DN 15 to 80)
- Type 3260 (DN 65 to 80)
- Type 3260 (DN 100 to 150, only with Type 3374-10)
- Type 3214 (DN 65 to 100)

➔ See Fig. 5-3.

1. Remove protective covers and unscrew nut (6) from the valve.
2. Retract actuator stem (3) as described in the 'Operation' section (see Fig. 5-2 and Fig. 5-3).



**Fig. 5-2:** Actuating shaft for manual override (actuator with integrated yoke)

#### **i Note**

For actuators with "actuator stem extends" fail-safe action (see nameplate), the supply voltage must be applied to allow the actuator stem be retracted. To apply the supply voltage, proceed as described in section 5.6.

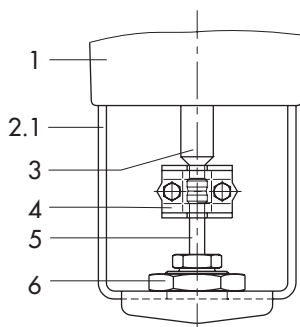
3. Place the actuator with yoke onto the valve and fasten using nut (6, width across flats 36).

Tightening torque	100 Nm
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4. When the plug stem (5) fits closely onto the actuator stem (3), attach both stem connector clamps (4) and fasten with screws.

**Types 3374-10/-11/-21/-31 (depending on valve travel)**

**Connection with yoke (form B)**  
Attachment to Series V2001 Valves,  
Type 3260 (DN 65 to 150),  
Type 3214 (DN 65 to 100)



- |     |                |
|-----|----------------|
| 1   | Actuator       |
| 2.1 | Actuator yoke  |
| 3   | Actuator stem  |
| 4   | Stem connector |
| 5   | Plug stem      |
| 6   | Nut            |

**Fig. 5-3:** Attachment to Series V2001 Valves

### Attachment

- Series V2001 Valves (DN 65 to 100)
- ➔ See Fig. 5-4.

#### **i** Note

The V2001 mounting kit (see Annex) is required for mounting the actuator on Series V2001 (DN 65 to 100).

1. Remove protective covers.
2. **Actuator without fail-safe action and with fail-safe action "actuator stem retracts":**

Retract the actuator stem using the manual override (see the 'Operation' section).

**Actuator with fail-safe action "actuator stem extends":**

Apply the supply voltage. Retract the actuator stem using the manual override (see the 'Operation' section).

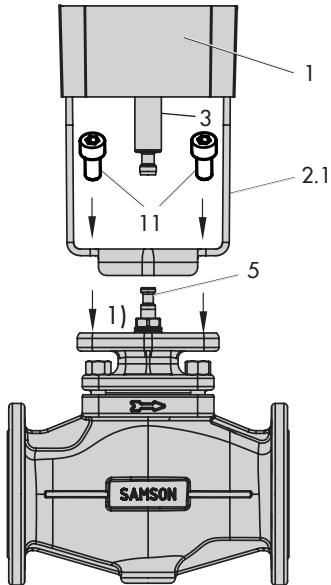
3. Place the actuator with yoke onto the valve and fasten using the screws (11).

#### **i** Note

A spacer (see Fig. 5-4) is required to mount a Type 3323 Three-way Valve (DN 65 to 80).

4. Switch off the supply voltage.
- ➔ The actuator stem extends.
5. Extend the actuator stem until the actuator stem (3) rests on the plug stem (5).
6. Position the two stem connector parts (see Fig. 5-5) from the V2001 mounting kit and fasten tight.

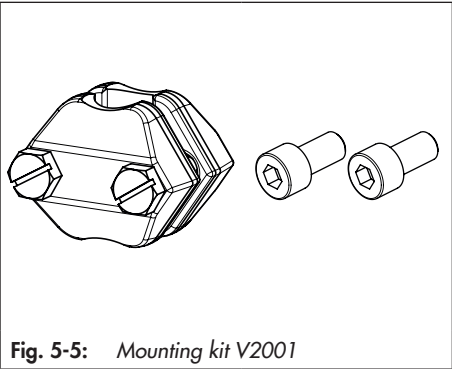
**Types 3374-10/-11/-21/-31**  
**Connection with yoke (form B)**  
 Attachment to Series V2001 Valves  
 (DN 65 to 100)



- 1 Actuator
- 2.1 Actuator yoke
- 3 Actuator stem
- 5 Plug stem
- 11 Screws

<sup>1)</sup> A spacer (see Annex) is required here to mount a Type 3323 Three-way Valve (DN 65 to 80).

**Fig. 5-4:** Attachment - Version with actuator yoke and V2001 accessories



**Fig. 5-5:** Mounting kit V2001

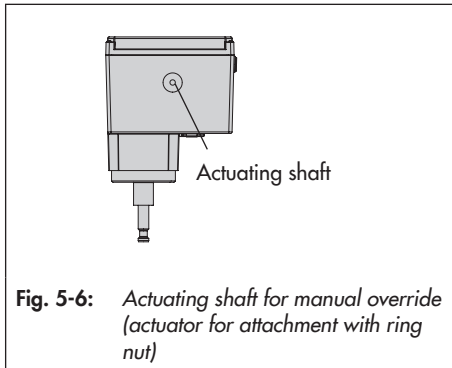
### 5.3.2 Construction with ring nut (form A)

#### Attachment to Series 240 Valves

→ See Fig. 5-7.

1. Push the plug stem (5) down to close the valve.
2. Turn the stem connector nut (8) until the dimension  $x = 75$  mm (DN 100 and larger:  $x = 90$  mm) from the top of the yoke to the middle of the stem connector nut (8) is achieved. Lock this position with the lock nut (9).
3. Retract actuator stem (3) as described in the 'Operation' section (see Fig. 5-6 and Fig. 5-7).





**Fig. 5-6:** Actuating shaft for manual override (actuator for attachment with ring nut)

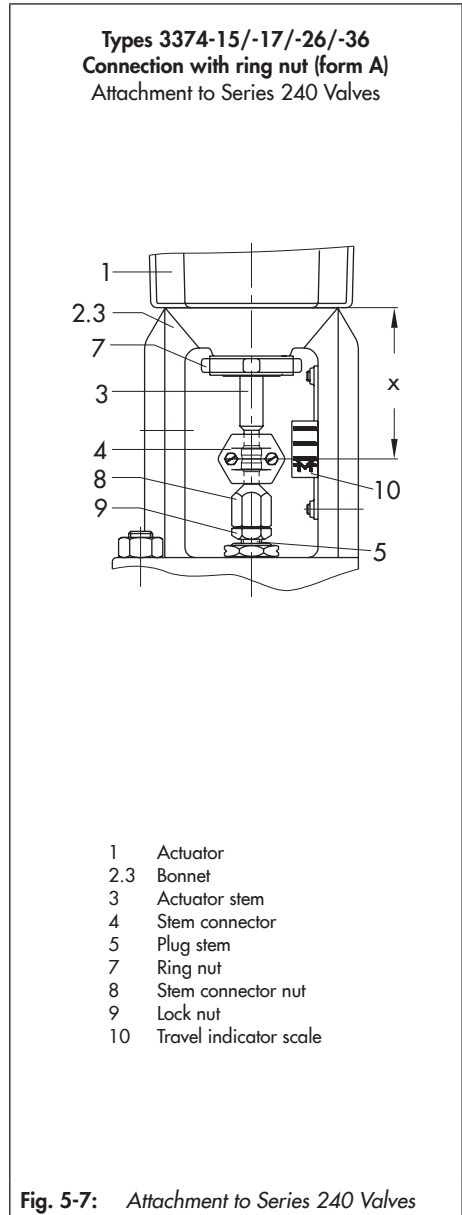
**i Note**

For actuators with "actuator stem extends" fail-safe action, the supply voltage must be applied to allow the actuator be retracted. To apply the supply voltage, proceed as described in section 5.6.

4. Place actuator onto the valve bonnet (2.3) and secure using the ring nut (7).
5. When the stem connector nut (8) rests on the actuator stem (3), attach both stem connector clamps (4) and fasten with screws.

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

6. Move the actuator stem (3) to the end position (valve closed) as described in the 'Operation' section.
7. Align travel indicator scale (10) with the middle of the stem connector (4) and screw tight.



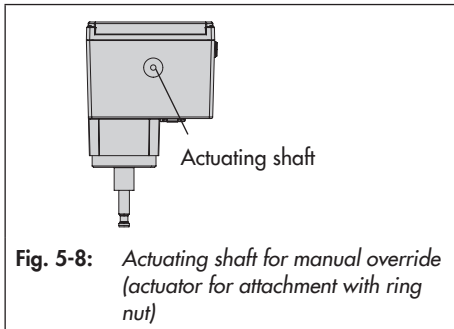
**Fig. 5-7:** Attachment to Series 240 Valves

## Installation

### Attachment to Type 3214 Valve (DN 125 to 250)

→ See Fig. 5-9.

1. Retract actuator stem (3) as described in the 'Operation' section (see Fig. 5-8 and Fig. 5-9).



**Fig. 5-8:** Actuating shaft for manual override (actuator for attachment with ring nut)

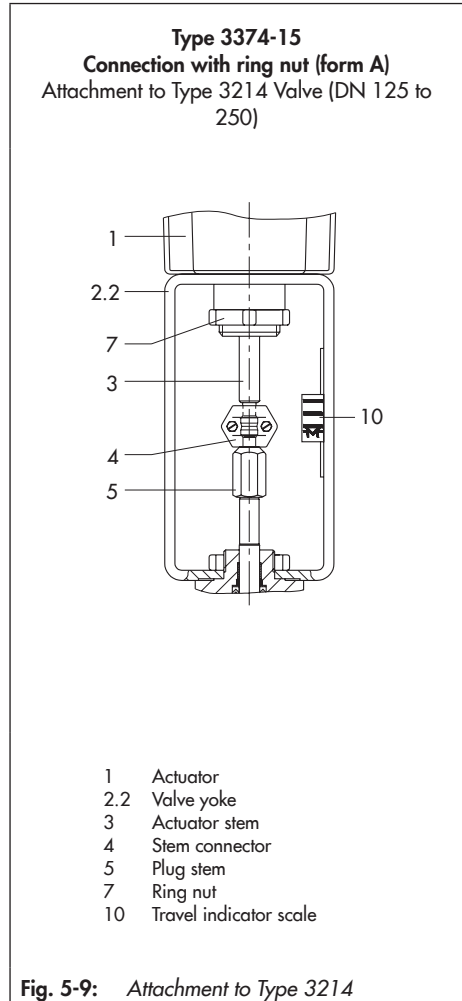
#### **i Note**

For actuators with "actuator stem extends" fail-safe action (see nameplate), the supply voltage must be applied to allow the actuator stem be retracted. To apply the supply voltage, proceed as described in section 5.6.

2. Place actuator onto the valve and secure using the ring nut (7). If necessary, retract the actuator stem slightly beforehand.
3. When the stem connector nut (5) rests on the actuator stem (3), attach both stem connector clamps (4) and fasten with screws.

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

4. Move the actuator stem (3) to the end position (valve closed) as described in the 'Operation' section.
5. Align travel indicator scale (10) with the middle of the stem connector (4) and screw tight.



**Fig. 5-9:** Attachment to Type 3214

## 5.4 Installing the control valve into the pipeline

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

## 5.5 Installing additional equipment

### **⚠ DANGER**

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

- Before installing electrical accessories, switch off the supply voltage and protect it against unintentional reconnection.
- Disconnect the signal line.

### 5.5.1 Retrofitting limit contacts

To install the mechanical limit contacts, the following retrofit kits are required depending on the equipment (see Annex):

- Basic unit:  
Order no. 1400-8829 (see Fig. 5-10)
- Mechanical limit contacts:  
Order no. 1402-0898 (see Fig. 5-11)

#### **i Note**

*The retrofitting of the limit contacts varies depending on whether the actuator is fitted with resistance transmitters or not.*

- Actuators without resistance transmitters:  
see page 5-9.
- Actuators with resistance transmitters: see page 5-11.

#### **💡 Tip**

*We recommend applying a small amount of lubricant (e.g. Vaseline) to the spindles on the gear faces and to the sides of the cogs.*

#### **i Note**

*To undo the screws on the housing cover, use a POZIDRIV® PZ2 screwdriver to get enough hold on the screw heads.*

#### **i Note**

*The contact cams (19, Fig. 5-11 on page 5-8) are ready-mounted to the cam holder (20) and the retaining rings (9) to form the contact cam unit (21, see Fig. 5-14 on page 5-11).*

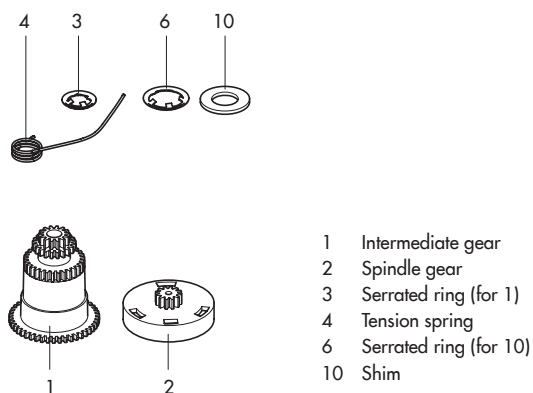
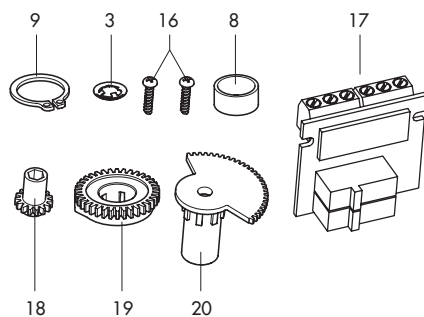


Fig. 5-10: Basic unit



- 3 Serrated ring  
 8 Spacer  
 9 Retaining ring  
 16 Screw WN 1412  
 17 Terminal board  
 18 Adjustment gear  
 19 Contact cam  
 20 Cam holder

Fig. 5-11: Mechanical limit contacts

**Actuators without resistance transmitters**

1. Unscrew screws on housing cover and take the cover off the actuator.
2. Move the actuator stem to the end position depending on the fail-safe action "actuator stem extends" or "actuator stem retracts" (see the 'Operation' section).
3. Unscrew fastening screws. Slide the actuator board (12) from its guiding to the right. Slightly lift the board and continue pushing it further towards the cable entry.
4. Clip the spindle gear (2) onto the sleeve (13). Make sure the side latch is properly engaged in the groove of the sleeve.
5. Slide the intermediate gear (1) onto the spindle 1 (11.1), mount the serrated ring (3) and push it down as far as it will go.
6. Slide the spacer (8) onto the spindle (11.2).
7. Place the tension spring (4) on to the corresponding spindle, ensuring that the long wire of the tension spring rests on the spacer (8) and on the intermediate gear (1).
8. Place both ready-assembled contact cams (19) with the cog first onto the cam holder (20).
9. Slide adjustment gears (18) onto their spindles and fasten with one screw each. Check whether the adjustment gears can be turned easily. If not, slightly loosen its screw again.
10. Turn both contact cams (19) on the cam holder (20) as illustrated in Fig. 5-13 corresponding with the position of the actuator stem.
11. Slide the cam holder (20) with both contact cams (19) onto the spindle 2 (11.2) corresponding with the position of the actuator stem as illustrated in Fig. 5-14. Make sure that the outermost cog of the cam support (20) engages in the gear-wheel of the intermediate gear (1). In addition, the adjustment gears (18) must engage properly in the corresponding gears of the contact cams (19).
12. Secure the cam holder (20) and intermediate gear (1) with the serrated ring (3); push down the serrated ring as far as it will go.
13. Position the terminal board (17) at the base of the support at a 45° angle (approx.) with the switches pointing towards the gears. Swivel the upper end of the terminal board towards the gears until the board is in a vertical position and properly engaged in the support.
14. Slide the actuator board (12) back into its guiding. Make sure that the gears are properly engaged. Fasten the board using screws.
15. Adjust limit contacts as described in the 'Start-up' section.
16. Replace cover. Briefly turn the fastening screws counterclockwise with a screwdriver to center them. Then fasten down the cover by tightening the screws.

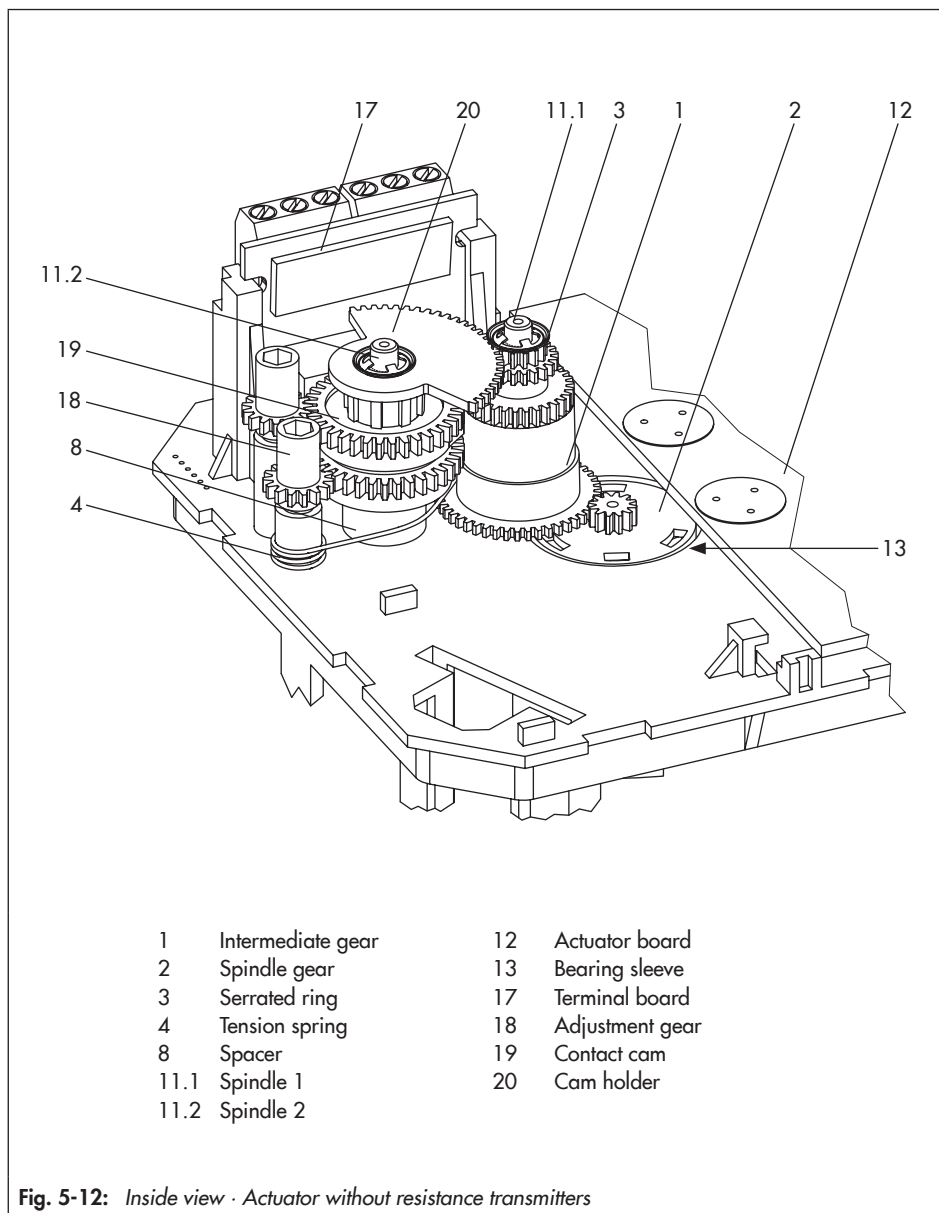
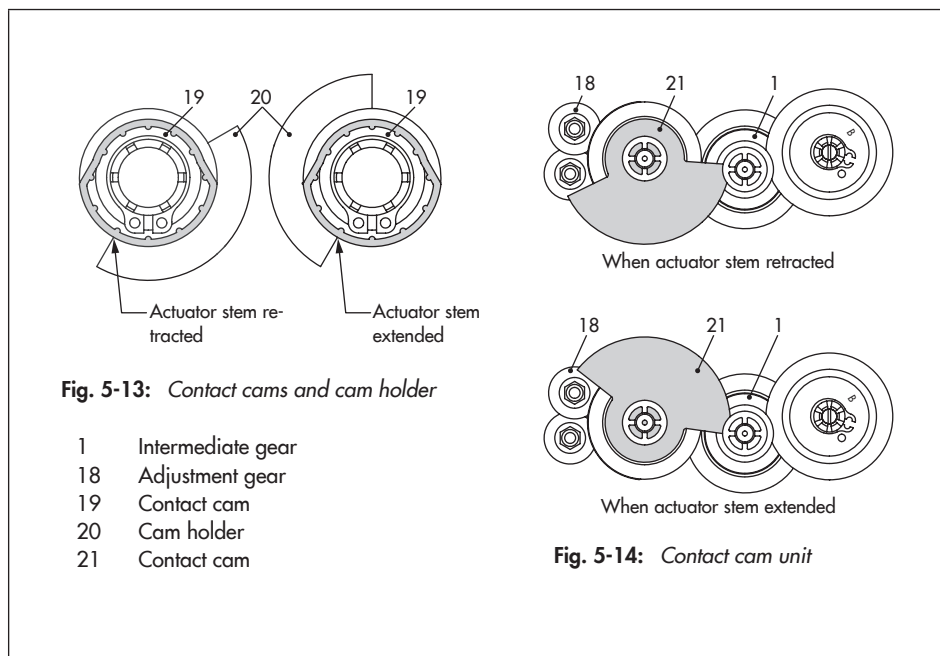


Fig. 5-12: Inside view · Actuator without resistance transmitters

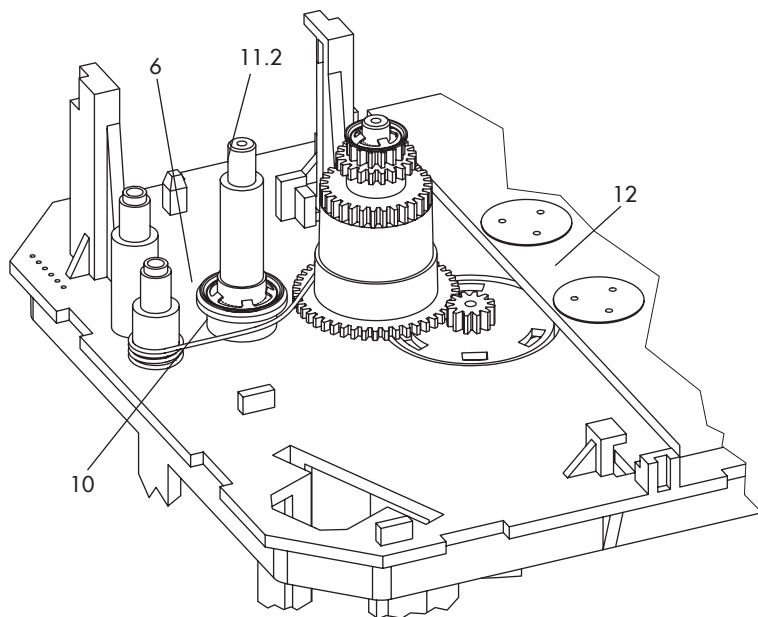


### Actuators with resistance transmitters

1. Unscrew screws on housing cover and take the cover off the actuator.
2. Move the actuator stem to the end position depending on the fail-safe action "actuator stem extends" or "actuator stem retracts" (see the 'Operation' section).
3. Remove serrated ring (6) and shim (10) from spindle 2 (11.2). See Fig. 5-15.
4. Continue as described in item 5-9 on page 8.

#### **i** Note

*The basic unit is not required for the version with resistance transmitter.*



- 6 Serrated ring
- 10 Shim
- 11.2 Spindle 2
- 12 Actuator board

Fig. 5-15: Inside view - Actuator with resistance transmitters



## 5.5.2 Installing the resistance transmitters

An actuator board with the corresponding resistance transmitters and gear wheels is required for a resistance transmitter retrofit. Which actuator board is to be used depends on the actuator type designation as well as the power supply and transit time specifications (see Annex).

---

### **i** Note

*The retrofitting of the resistance transmitters varies depending on whether the actuator is fitted with limit contacts or not.*

- *Actuators without limit contacts: see instructions below.*
  - *Actuators with limit contacts: see page 5-15.*
- 

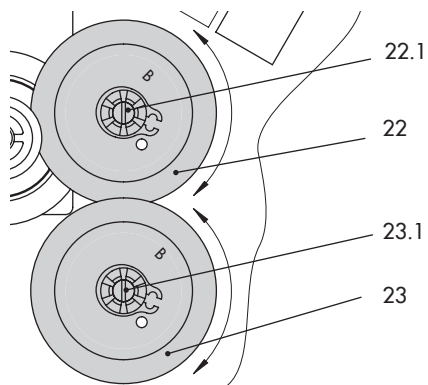
### **Actuators without limit contacts**

If the actuator does not have limit contacts, an additional retrofit kit (see Fig. 5-10) is required.

1. Unscrew fastening screws. Slide the actuator board (12) from its guiding to the right. Slightly lift the board and continue pushing it further towards the cable entry.
2. Clip the spindle gear (2) onto the sleeve (13). Make sure the latch is properly en-

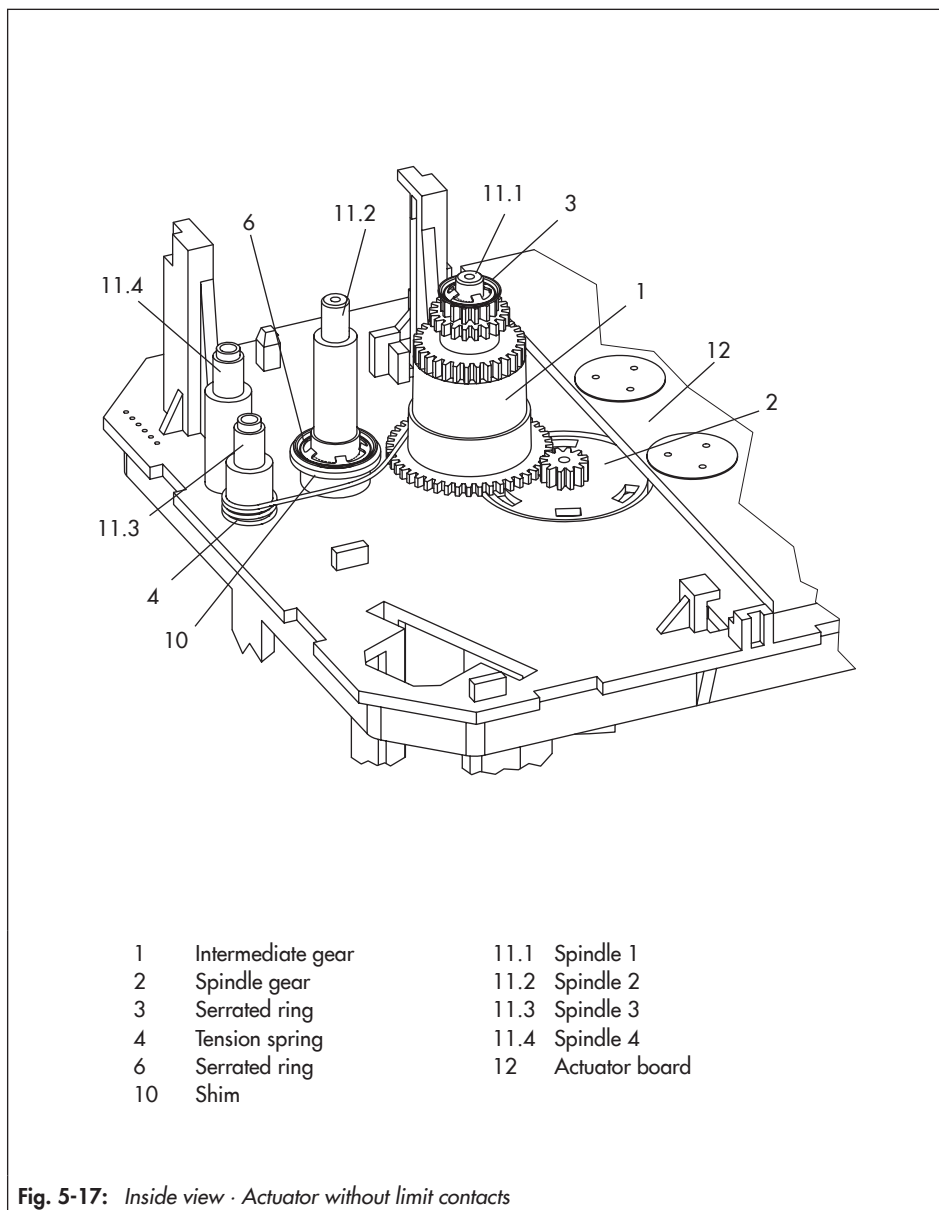
gaged in the groove of the sleeve. Slide the intermediate gear (1) onto the spindle 1 (11.1), mount the serrated ring (3) and push it down as far as it will go.

3. Place the tension spring (4) onto the spindle 3 (11.3), ensuring that the long wire of the tension spring rests on the intermediate gear (1) and that the short wire of the spring is located between spindle 3 (11.3) and spindle 4 (11.4). Mount the shim (10) on spindle 2 (11.2). Place the serrated ring (6) and push it down as far as it will go.
4. The resistance transmitter gears (22 and 23) fitted with retaining rings must be put onto their shafts to correspond with the rated travel of the valve. The rated travel inscription 'A' for 30 mm rated travel or 'B' for 15 mm rated travel must be legible from above (see Fig. 5-16).
5. Slide the actuator board (12) into its guiding. Make sure that the gears are properly engaged. Fasten the board using screws.



- |      |                          |      |                          |
|------|--------------------------|------|--------------------------|
| 22   | Gear for potentiometer 1 | 23   | Gear for potentiometer 2 |
| 22.1 | Axis of potentiometer 1  | 23.1 | Axis of potentiometer 2  |

**Fig. 5-16:** Gears with retaining rings



### Actuators with limit contacts

1. Unscrew screws on housing cover and take the cover off the actuator.
2. Move the actuator stem to the end position depending on the fail-safe action "actuator stem extends" or "actuator stem retracts" (see the 'Operation' section).
3. Unscrew fastening screws. Slide the actuator board (12) from its guiding to the right. Slightly lift the board and continue pushing it further towards the cable entry.

4. Slide new actuator board into its guiding. Make sure that the gears are properly engaged. Fasten the board using screws.

---

**i Note**

*The basic unit is not required for the version with limit contacts.*

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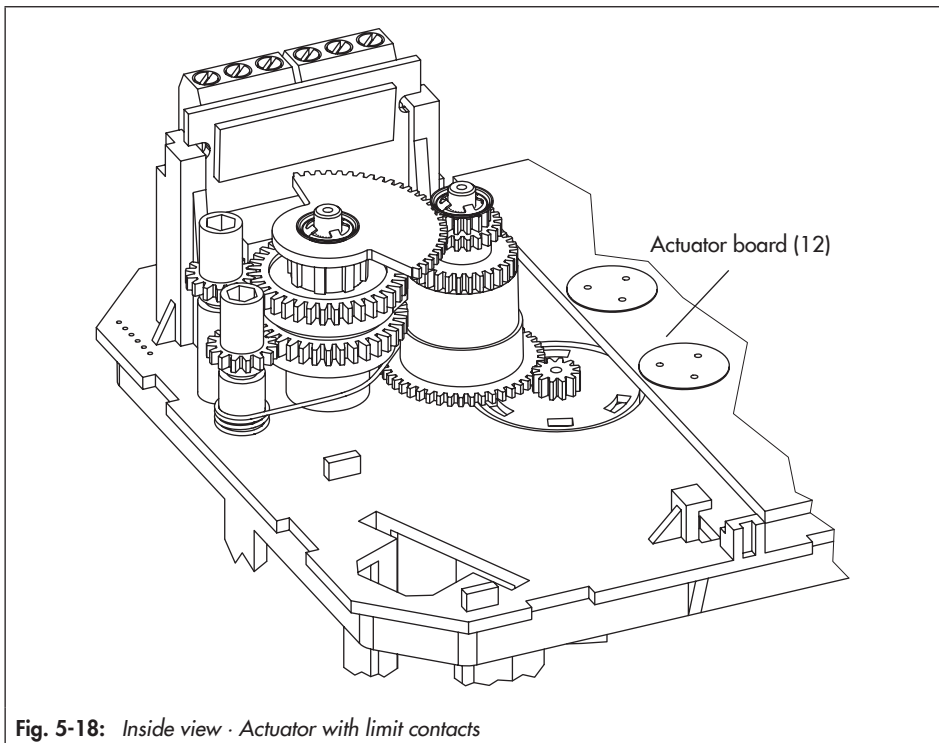


Fig. 5-18: Inside view · Actuator with limit contacts

## 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.*
- 

- *Connect the wiring as shown in Fig. 5-19.*
- *Guide the cables to the spring-cage terminals from the top.*

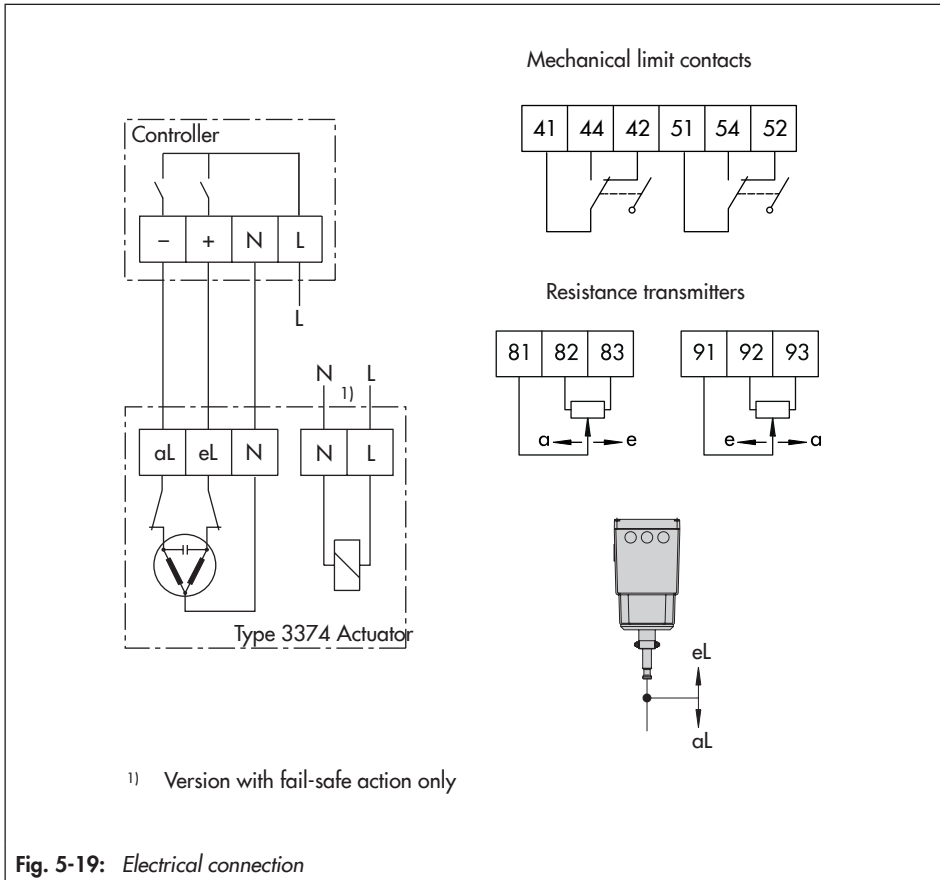
*After applying the supply voltage, the actuator is ready for use.*

---

### **i Note**

*A maximum of three cable glands can be mounted to the housing for cable entry.*

---



**Table 5-1: Cables and stranded wires that can be used**

Cable	Cross section
Single-wire H05(07) V-U <sup>1)</sup>	0.2 to 1.5 mm <sup>2</sup>
Fine-wire H05(07) V-K <sup>1)</sup>	0.2 to 1.5 mm <sup>2</sup>
With wire ferrule acc. to DIN 46228-1	0.25 to 1.5 mm <sup>2</sup>
With wire ferrule and sleeve acc. to DIN 46228-4	0.25 to 0.75 mm <sup>2</sup>

<sup>1)</sup> Length of insulation to be stripped off wire ends: 8 mm

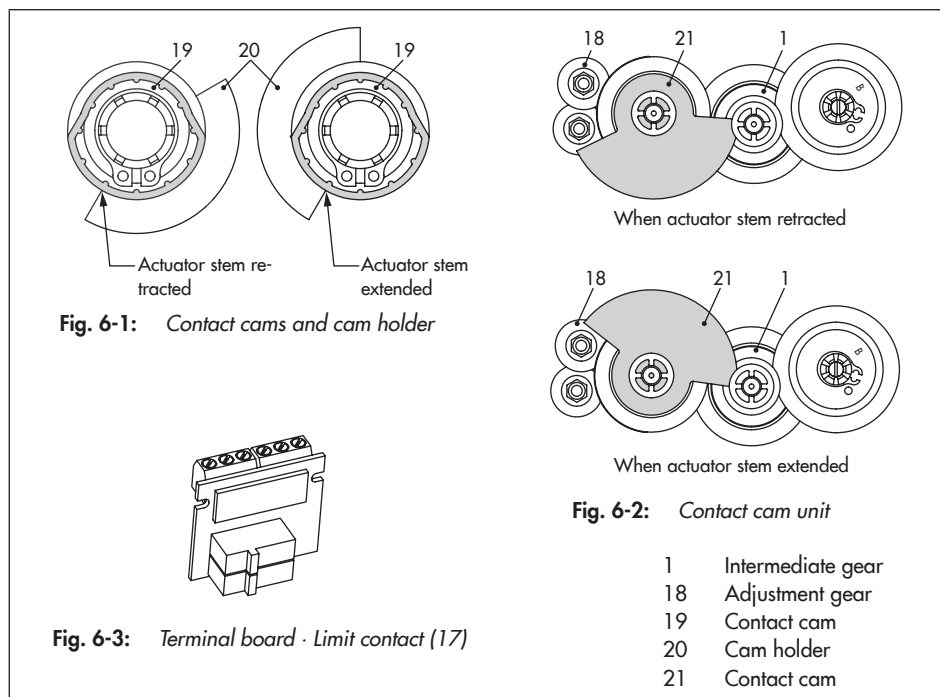
## 6 Start-up

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 according to the technical data (see the 'Design and principle of operation' section).

### 6.1 Adjusting the limit contacts

1. Unscrew screws on housing cover and take the cover off the actuator.
2. Connect supply voltage.

3. Use the motor or manual override to move the actuator stem to the point at which the contact should react.
4. Use the 4 mm hex wrench to turn spindle of the adjustment gears (18) for the upper limit contact or for the lower limit contact until the associated contact cam on the cam holder (20) triggers the switch contact of the upper or lower microswitch on the terminal board (17).
5. Replace cover. Briefly turn the fastening screws counterclockwise with a screwdriver to center them. Then fasten down the cover by tightening the screws.



## 6.2 Adjusting the resistance transmitter

The gears of the resistance transmitters (22) and (23) must be put onto their shafts to correspond with the rated travel of the valve. The rated travel inscription 'A' for 30 mm rated travel or 'B' for 15 mm rated travel must be legible.

If this is not the case, pull both potentiometer gears off their shafts and put them back on again with the reverse side of the wheel facing upwards, ensuring they are aligned fairly flush with the potentiometer shaft.

### Zero adjustment

1. Use the motor or manual override to move the valve to the desired end position.
2. Use a screwdriver to adjust the potentiometer shafts (22.1) and (23.1).
3. Calibrate the resistance transmitters using an ohmmeter correspondingly.

#### Actuator stem extended:

Terminals 81/82 = 0  $\Omega$

Terminals 91/93 = 0  $\Omega$

#### Actuator stem retracted:

Terminals 81/83 = 0  $\Omega$

Terminals 91/92 = 0  $\Omega$

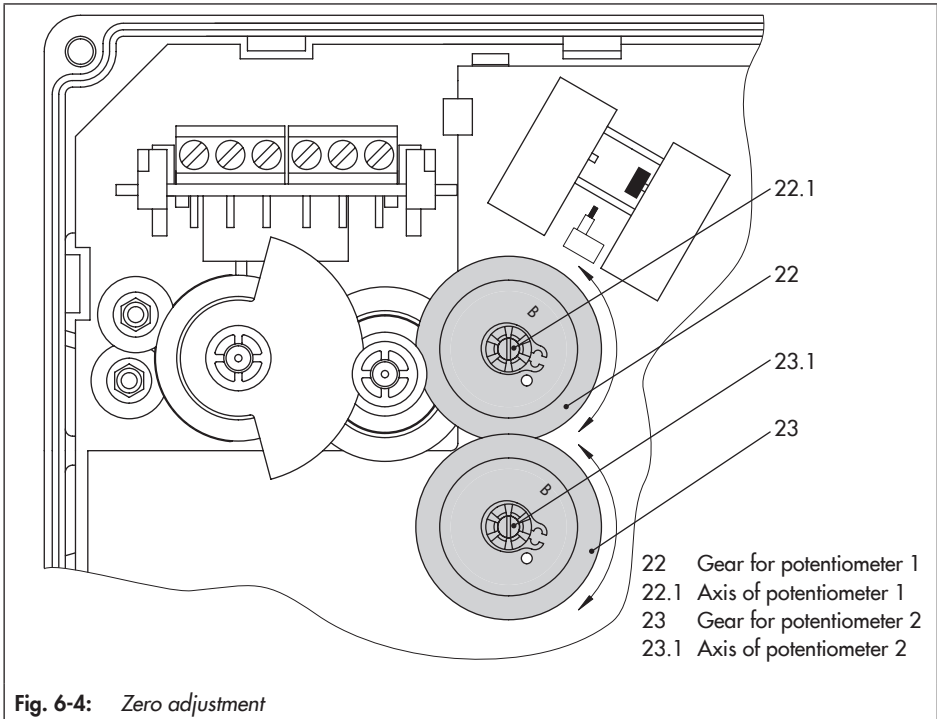


Fig. 6-4: Zero adjustment



## 7 Operation

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

### 7.1 Three-step mode

In three-step mode, the actuator stem is moved in the corresponding direction by applying a signal to the terminal eL or aL (see Fig. 7-1).

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

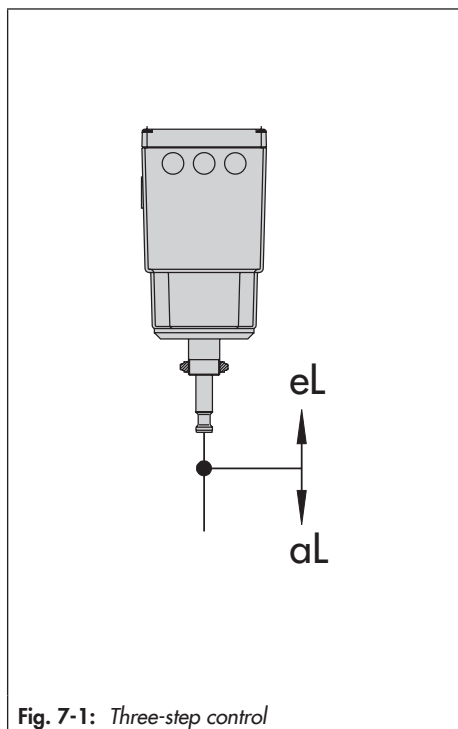


Fig. 7-1: Three-step control

### 7.2 Mechanical override

To operate the manual override, place a 4 mm hex wrench on the red actuator shaft located at the side of the housing (see Fig. 7-2). Turn the hex wrench clockwise to move the actuator in 'aL' direction and counterclockwise to move it in the 'eL' direction (see Fig. 7-1). The hex wrench is included in the scope of delivery. It is attached to the bottom of the housing.



Fig. 7-2: Actuating shaft for manual override

#### **i** Note

Manual override is only possible in actuators with fail-safe action when the supply voltage (terminals L and N) is connected.



## 8 Malfunctions

→ Troubleshooting (see Table 8-1).

### **i** Note

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

**Table 8-1:** 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.

### 8.1 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.



## 9 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.*
- Only use original spare parts by SAMSON, which comply with the original specifications.*

The actuator requires no maintenance.

We recommend inspection and testing according to Table 9-1.

**Table 9-1:** *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.	<ul style="list-style-type: none"> <li>➔ Immediately renew damaged, missing or incorrect nameplates or labels.</li> <li>➔ Clean any inscriptions that are covered with dirt and are illegible.</li> </ul>
Check the electric wiring.	<ul style="list-style-type: none"> <li>➔ If any terminal screws are loose, tighten them (see the 'Installation' section).</li> <li>➔ Renew damaged wires.</li> </ul>



## 10 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, safety gloves and eye protection.

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

- Put the control valve out of operation. See associated valve documentation.





## 11 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 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.*

## 11.1 Construction with integrated yoke

### Actuator without fail-safe action

1. Disconnect the supply voltage and protect it against unintentional reconnection.
2. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
3. Disconnect the wires of the connecting lines at the actuator.
4. Remove the connecting lines.
5. Retract actuator stem as described in the 'Operation' section.
6. Undo the stem connector parts between the plug and actuator stems.
7. Loosen the nut at the yoke.
8. Lift the actuator off the valve.

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

1. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
2. Retract actuator stem as described in the 'Operation' section.
3. Undo the stem connector parts between the plug and actuator stems.
4. Loosen the nut at the yoke.
5. Lift the actuator off the valve.
6. Disconnect the supply voltage and protect it against unintentional reconnection.

## Removal

- The actuator stem moves to the fail-safe position.
- 7. Disconnect the wires of the connecting lines.
- 8. Remove the connecting lines.

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

1. Disconnect the supply voltage and protect it against unintentional reconnection.
- The actuator stem moves to the fail-safe position.
2. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
  3. Disconnect the wires of the connecting lines at the actuator.
  4. Remove the connecting lines.
  5. Undo the stem connector parts between the plug and actuator stems.
  6. Loosen the nut at the yoke.
  7. Lift the actuator off the valve.

## 11.2 Construction with ring nut

### **Actuator without fail-safe action**

1. Disconnect the supply voltage and protect it against unintentional reconnection.
2. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
3. Disconnect the wires of the connecting lines at the actuator.

4. Remove the connecting lines.
5. Retract actuator stem as described in the 'Operation' section.
6. Undo the stem connector parts between the plug and actuator stems.
7. Unscrew the ring nut on the valve bonnet.
8. Lift the actuator off the valve.

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

1. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
  2. Retract actuator stem as described in the 'Operation' section.
  3. Undo the stem connector parts between the plug and actuator stems.
  4. Unscrew the ring nut on the valve bonnet.
  5. Lift the actuator off the valve.
  6. Disconnect the supply voltage and protect it against unintentional reconnection.
- The actuator stem moves to the fail-safe position.
7. Disconnect the wires of the connecting lines.
  8. Remove the connecting lines.

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

1. Disconnect the supply voltage and protect it against unintentional reconnection.

- The actuator stem moves to the fail-safe position.
- 2. Make sure that a signal from the controller cannot act upon the actuator. If necessary, disconnect the wires connecting the controller.
- 3. Disconnect the wires of the connecting lines at the actuator.
- 4. Remove the connecting lines.
- 5. Undo the stem connector parts between the plug and actuator stems.
- 7. Unscrew the ring nut on the valve bonnet.
- 8. Lift the actuator off the valve.



## 12 Repairs

If the actuator does not function properly according to how it was originally sized or does not function at all, it is defective and must be repaired or 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 for repair work.*
- 

---

### **i** Note

*Further information on returned devices and how they are handled can be found at*

▶ [www.samsongroup.com](http://www.samsongroup.com) > Service & Support > After-sales Service.

---

### 12.1 Returning the actuator to SAMSON

Defective actuators can be returned to SAMSON for repair.

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 .



## 13 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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## 14 Certificates

The following certificates are included on the next pages:

- EU declaration of conformity
- UKCA declaration 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 our website:

▶ [www.samsongroup.com](http://www.samsongroup.com) > Products & Applications > Product selector > Actuators > 3374

### 14.1 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

Phone: +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

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 3374**

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 61000-6-3:2007 +A1:2011, EN 61326-1:2013
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 de 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

en\_3374\_0\_06\_en\_160\_0007.pdf

SAMSON AKTIENGESELLSCHAFT  
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E-Mail: samson@samson.de

Revision 07

UKCA declaration of conformity

**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 3374**

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 61326-1:2013

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.3A11.B.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.0001.113A11 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: Welsmüllerstrasse 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 ВАЭС** 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 № Г606-5418, Г606-5419, Г606-5420 от 18.09.2019, выданных Испытательной лабораторией Ассоциации экспертов по сертификации и испытаниям продукции «Сертификационный центр НАСТХОЛ», аттестат аккредитации РОСС RU.0001.21Г606; № 190919-004-006-02/ИП от 24.10.2019, выданных Испытательной лабораторией Общества с ограниченной ответственностью «Инновационные решения», аттестат аккредитации РОСС RU.0001.21АВ90; акта о результатах анализа состояния производства № 00082-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. Издательная электротехническая. Общие требования безопасности, раздел 8 ГОСТ 30804.6.2-2013 «Совместимость технических средств электромагнитная. Устойчивость к электромагнитным помехам технических средств, применяемых в промышленных зонах», раздел 7 ГОСТ 30804.6.4-2013 «Совместимость технических средств электромагнитная. Электромагнитные 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))

Ванькова Евгения Владимировна (И.О.)

М.П.

Ходоров Владимир Игоревич (И.О.)

ИП: «ТМС-Самсон» Москва 501111, ИНН: 50-05-080-033, ОГРН: 1050100000000, ОГРНИП: 1050100000000, ОГРНИП: 1050100000000

**ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ**

**ПРИЛОЖЕНИЕ**

К СЕРТИФИКАТУ СООТВЕТСТВИЯ № ЕАЭС RU C-DE.ЭА11.В.00049/19

Серия **RU** № **0676634** Лист 1 из 1

Стандарты, в соответствии с которыми изготавливается продукция

Обозначение стандарта	Наименование стандарта
IEC 60730-1:2013 / Cor. 1:2014	Automatic electrical controls for household and similar use. Part 1. General requirements. Corrigendum 1
EN 61000-6-1:2007	Electromagnetic compatibility (EMC) - Part 6-1: Generic standards - Immunity for residential, commercial and light-industrial environments
IEC 61000-6-2:2016	Electromagnetic compatibility (EMC). Part 6-2: Generic standards. Immunity for industrial environments
EN 61000-6-3:2007 + A1:2011	Electromagnetic compatibility (EMC). Part 6-3: Generic standards. Emission standard for residential, commercial and light-industrial environments
IEC 61010-1:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use. Part 1: General requirements
EN 61326-1:2013	Electrical equipment for measurement, control and laboratory use. EMC requirements. Part 1: General requirements

Руководитель (уполномоченное лицо) органа по сертификации

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы))

*[Handwritten signature]*  
Подпись



Ванькович Евгения Владимировна (И.О.)

Ходоров Владимир Игоревич (И.О.)

Declaration of incorporation

EINBAUERKLÄRUNG  
ORIGINAL



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

Für folgendes Produkt:  
**Stellantrieb Typ 3374**

Wir, die SAMSON AG, erklären, dass der elektrische Stellantrieb Typ 3374 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, 1.3.9, 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 3374; Einbau- und Bedienungsanleitung EB 8331-3 / EB 8331-4

Folgende technischen Normen und/oder Spezifikationen wurden angewandt:

- VCI/VDMA/VGB – Leitfaden Maschinenrichtlinie (2006/42/EG) – Bedeutung für Armaturen, Mai 2018
- VCI/VDMA/VGB – Zusatzdokument zum „Leitfaden 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.

i.V. Stephan Giesen  
Zentralabteilungsleiter  
Produktmanagement

  
i.V.

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

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## 15 Annex

### 15.1 Parts for retrofitting and accessories

Parts for retrofitting	
Basic unit for limit contacts and/or resistance transmitters	Order no. 1400-8829
Mechanical limit contacts	Order no. 1402-0898
Resistance transmitter	Refer to Table 15-1
Gear wheel for resistance transmitter PCB	Order no. 1992-5885
Accessories	
V2001 mounting kit	Order no. 1400-9515
Spacer to mount the actuator on Type 3323 Valve (DN 65 to 80)	Order no. 0340-3031
Set with three cable glands M20x1.5 with metal nut (SW 23/24)	Order no. 1400-8828

**Table 15-1:** Resistance transmitters · Selecting the actuator board<sup>1)</sup>

		Type 3374	-10	-11	-15	-17	-21	-26	-31	-36
Supply voltage	230 V/50 Hz	Standard	Order no. 1180-9601				Order no. 1180-9607			
		Faster motor	Order no. 1180-9604		-		Order no. 1180-9610			
	230 V/60 Hz	Standard	Order no. 1180-9637		-		Order no. 1180-9643			
			Order no. 1180-9603				Order no. 1180-9609			
	24 V/50 Hz	Faster motor	Order no. 1180-9606		-		Order no. 1180-9612			
		Standard	Order no. 1180-9639		-		Order no. 1180-9645			

<sup>1)</sup> For retrofit, additionally two gear wheels (order no. 1992-5885) necessary

## 15.2 After-sales service

Contact SAMSON's 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
- Material number
- Serial number









**EB 8331-3 EN**



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