SIEMENS

OEM



Electric actuators

Manual adjuster

SSY319...

ASK199

for valves VXG48..., VXB489R...,
VVP459..., VXP459..., VMP459..., VVG549...

- **AC 230 V operating voltage, 3-position control signal**
- **Positioning force 300 N**
- **Manual override with indication of current position and direction of travel**
- **Force-dependent switch-off in both end positions, and in the event of overload**
- **für Direktmontage ohne Werkzeug mittels Überwurfmutter**
- **Plug-in connecting cable**
- **Anti-locking gear mechanism; no maintenance required**

Use

For operation of Siemens two-port and three-port valves with a nominal stroke of 5.5 mm for water-based control of low-temperature hot water and cooling water in heating, ventilation and air conditioning systems.

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Siemens Building Technologies
HVAC Products

Types

Type	Operating voltage	Positioning time at 50 Hz	Control signal	Connecting cable
SSY319	AC 230 V	150 s	3-position	1.5 m
SSY319/30				3.0 m
ASK199	Manual adjuster			

Accessories

Type	Description
ASY98	Retaining screw for cable connector

Ordering

When ordering please specify the quantity, product name and type code.

Example: **10 actuators, type SSY319**

The minimum order quantity is 10 actuators.

Delivery

The actuators are delivered in multiple packs of 10 together with the associated cables. Mounting instructions are enclosed.

Compatibility

Type code	Valve type	k_{vs} [m^3/h]	PN class	Data sheet
VXG48...	Three-port valves	6.3 - 20	PN16	N4467
VXB489R...		1.6 - 16		Q4491
VVP459...	Two-port valves	0.63 - 25		Q4845
VXP459...	Three-port valves	0.63 - 25		Q4845
VMP459...	Three-port valves with T-bypass	0.63 - 4		Q4845
VVG549...	Two-port valves	0.25 – 6.3	PN25	Q4380

k_{vs} = Nominal flow rate of cold water (5 ... 30 °C) through the fully open valve (H_{100}), by a differential pressure of 100 kPa (1 bar).

Other combinations on request.

Technical design / Mechanical design

When the actuator is driven by a 3-position signal, it generates a stroke which is transmitted to the valve stem.
The description of operation in this document applies to those versions of the valve which close when de-energized (NC operation).

3-position control signal

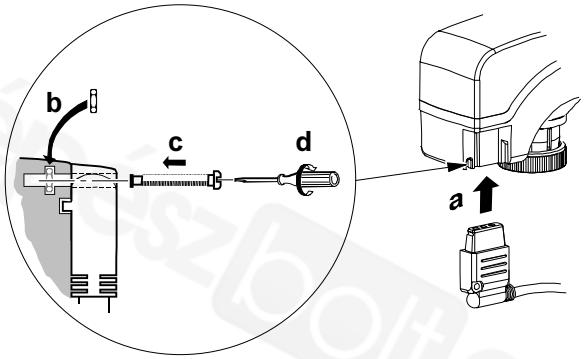
- Voltage at Y1: Stem extended: valve opens
- Voltage at Y2: Stem retracted: valve closes
- No voltage at Y1 or Y2: Actuator maintains its current position

Accessories

Retaining screw



Type **ASY98** to secure cable connector.



The cable-connector snaps into position, but can be additionally secured with the retaining screw.

Notes

Engineering

The admissible temperatures (see «Technical data») must be observed. The connecting cable of the actuator can come into contact with the hot valve body without harm, provided the temperature of the latter does not exceed 90°C.

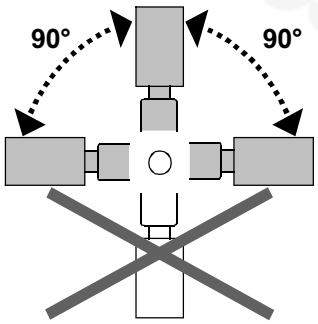
Mounting

Mounting instructions **4 319 5623 0** are enclosed with each multiple pack.

Assemble with the screwed fittings; no tools or adjustments are necessary.
The actuator should be installed so that it is initially in Position 0:

- Position the actuator and tighten the union nut manually.
- Ensure that there is no lateral pull on the installed actuator.

Orientation



Commissioning

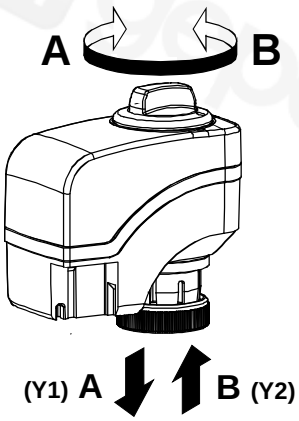
- Check the wiring
- Check the functioning of the actuator:
  – Actuator stem extended (position indicator from Pos. 0 to Pos. 1): Valve opens
  – Actuator stem extended (position indicator from Pos. 1 to Pos. 0): Valve closes
- The actuator must only be operated in conjunction with a correctly mounted valve.

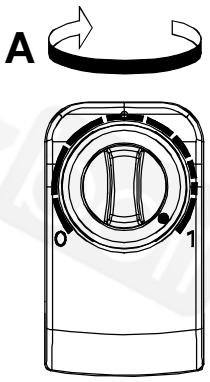
⚠ **Caution** **Owing to the stroke/force-dependent switch-off feature, the correct operation of the actuator is only assured when the actuator is mounted on the valve.**

Manual adjuster

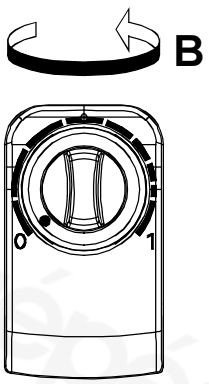
The actuators can be adjusted manually to any position between **0** and **1**. However, if the actuators receive a control signal from the controller, this will take precedence in determining the position.

Note To retain the manually set position, unplug the connecting cable or disable the control signal.





Position indicator in Pos. 1:
Valve open



Position indicator in Pos. 0:
Valve closed

Maintenance

⚠ When servicing the SSY310… actuator, make sure that the operating voltage is disconnected (e.g. remove the plug).

Repairs

The SSY319... actuators and ASK119 manual adjusters cannot be repaired; they must be replaced as complete units.

Disposal



The actuators includes electrical and electronic components, and must not be disposed of as domestic waste. There are no electrical components in the manual adjusters. They can be separated into their constituent materials and disposed of accordingly. **Current local legislation must be observed**.

Warranty

The technical data relating to specific applications is valid only in conjunction with the Siemens valves listed in this data sheet under «Compatibility».

The use of these actuators SSY319... and ASK119 manual adjusters with third-party valves invalidates any warranty offered by Siemens Building Technologies / HVAC Products.

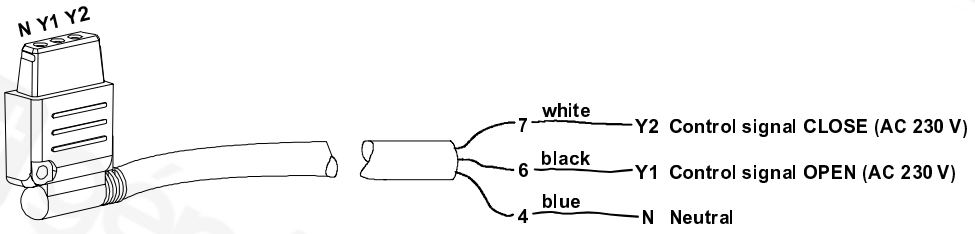
Technical data

Power supply	Operating voltage	AC 230 V		
	Voltage tolerance	± 15 %		
	Frequency	50 / 60 Hz		
	Power consumption	6 VA		
	Fuse protection for incoming cable	Max. 3 A		
Control	Control signal	3-position		
Operating data	Positioning time for a 5.5 mm stroke	150 s		
	Nominal stroke	5.5 mm		
	Nominal force	300 N		
	Admissible temperature of medium in the connected valve	>1 ... +110 °C		
Electrical connections	Connecting cable			
	SSY319	1.5 m 3-core to EN 60320 / IEC 60227		
	SSY319/30	3.0 m 3-core to EN 60320 / IEC 60227		
Industry standards	Meets the requirements for **CE** marking:			
	EMC Directive	89/336/EWG	Emission	EN 50081-1
			Immunity	EN 61000-6-2
	Low Voltage Directive	73/23/EWG		EN 60730-1
	Protection class	II to EN 60730		
	Housing protection standard	IP40 to EN 60529		
Dimensions / Weight	Dimensions	See «Dimensions»		
	Coupling thread to valve	Union nut, G 3/4"		
	Weight			
	SSY319...	0,3 kg		
	ASK199	0,145 kg		
Housing	Cover	Plastic / Anthracite, RAL 9011		
	Base	Plastic / Light gray, RAL 7035		

General ambient conditions

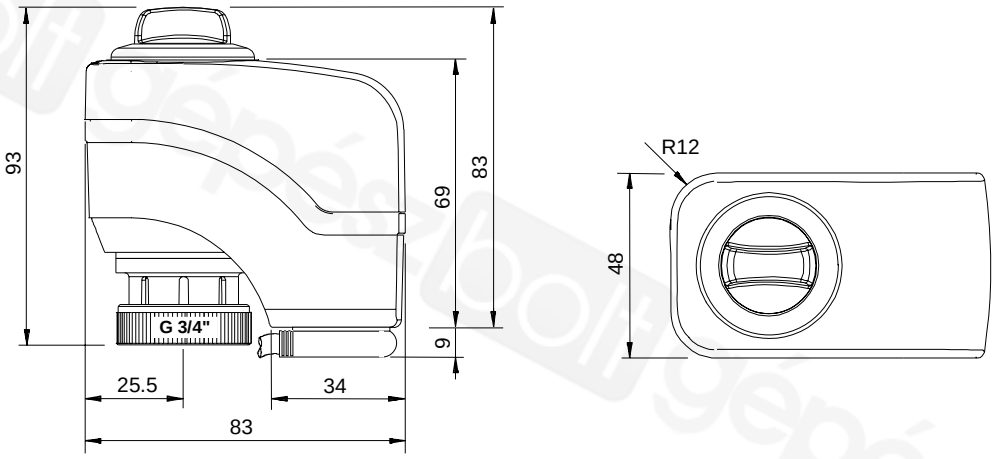
	Operation IEC 721-3-3	Transport IEC 721-3-2	Storage IEC 721-3-1
Environmental conditions	Class 3K3	Class 2K3	Class 1K3
Temperature	+1 ... +50 °C	–25 ... +70 °C	–5 ... +50 °C
Humidity	5 ... 85 %rh	< 95 %rh	5 ... 95 %rh

Connecting cable for SSY319...



Dimensions

All dimensions in mm



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