

Electric Actuator

Type 3374



Application

Electric actuator designed for use in industrial plants and in heating, ventilation and air-conditioning systems.



The Type 3374 Electric Actuators are linear actuators available with or without fail-safe action. They can be combined with valves from various SAMSON series.

Special features:

- 15 or 30 mm travel
- Voltage supply 230 V or 24 V with 50 Hz or 60 Hz or 110 V/60 Hz
- Synchronous motor with planetary gear
- Motor switched off by torque-dependent switches
- Mechanical override

Standard version

Type 3374 · Actuator optionally available with either integrated yoke or central attachment using a M30 x 1.5 ring nut including necessary coupling parts.

Typetested version · Actuator with fail-safe action "actuator stem extends" for various SAMSON valves. Register number available on request.

Further versions with

- Two adjustable two-way limit switches
- Two potentiometers

Digital positioner

- Automatic travel calibration
- Different operating modes can be selected using selector switch

Setting by means of TROVIS-VIEW:

- Additional functions can be set and transferred using a PC or a memory pen
- Characteristic either linear, equal percentage or freely determinable by entering the desired points
- Priority position
- Action selectable when input signal fails

No further potentiometers are available for version with digital positioner.



Fig. 1 · Type 3374 Electric Actuator with integrated yoke attached to V2001 Globe Valve

Principle of operation

The electric actuators consist of a reversible synchronous motor and a maintenance-free planetary gear with ball screw. The motor is switched off by torque-dependent switches when the end positions are reached or in case of overload.

The Type 3374 Actuators with integrated yoke (Fig. 3a) are primarily combined with the following valves:

- V2001 Series
- Type 3260 in DN 65 to DN 150
- Type 3214 in DN 65 to DN 100
- Type 3214 balanced by a diaphragm, DN 125 to 250

The Type 3374 Actuators with central attachment are primarily combined with valves with yokes of their own:

- Series 240 (Fig. 3b)
- Type 3214 balanced by a bellows, DN 125 to 250 (Fig. 3c)

Fail-safe action

The Type 3374 Actuators are optionally available with fail-safe action:

Actuator stem extends

Upon the power supply failure, the actuator stem extends

Actuator stem retracts

Upon the power supply failure, the actuator stem retracts

Ordering text

Electric Actuator	Type 3374- ...
Rated travel	15 or 30 mm
Version with fail-safe action	Actuator stem extends or retracts only with 15 mm travel
Electrical connection	230 V/50 Hz or 60 Hz, 24 V/50 Hz or 60 Hz or 110 V/60 Hz

Additional electrical equipment (see Table 1)

Two limit switches	
Two potentiometers	0 to 1000 Ω
Digital positioner	

Specifications subject to change without notice.

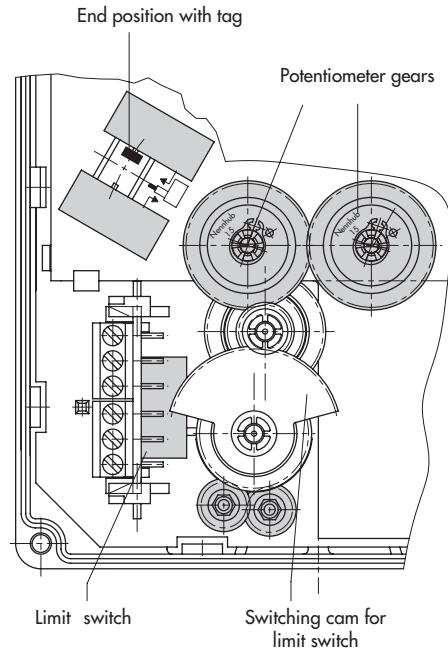
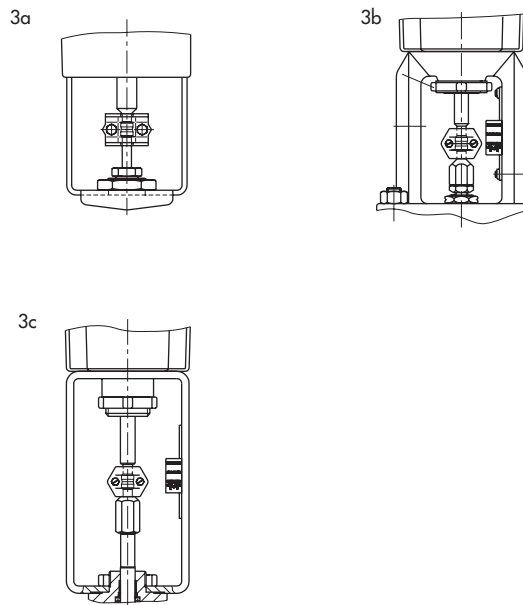


Fig. 2 · Partial view with opened cover



With integrated yoke for

3a · V2001 Series, Type 3260 (DN 65 to DN 150)
Type 3214 (DN 65 to DN 250)

With central attachment for

3b · Series 240
3c · Type 3214 (DN 125 to DN 250)
Series 240 (Type 3241 and Type 3244)

Fig. 3 · Attachment to various valves

Table 1 · Technical data

Type	3374	-10	-11	-15	-21	-26	-31	-36
Fail-safe action		Without			With			
	Operating direction	–			Actuator stem extends		Actuator stem retracts	
Valve attachment over	Ring nut	–	–	•	–	•	–	•
	Yoke	•	•	–	•	–	•	–
Rated travel	mm	30	15	30	15		15	
Actuating time for rated travel ¹⁾	s	240/120 ¹⁾	120/60 ¹⁾	240/120 ¹⁾	120/60 ¹⁾		120/60 ¹⁾	
Actuating time in case of fail-safe action	s	–			12			
Positioning force in N	Stem extends	2500			2000			
	Stem retracts	2500			500			
Power supply		230 V, +10/–15 %, 50/60 Hz 24 V, +10/–15 %, 50/60 Hz 120 V (90...132 V), 60 Hz						
Power consumption	VA	Max. 18						
Switchoff		Torque-dependent						
Perm. ambient temperature	°C	5 to 60						
Storage temperature	°C	–20 to +70						
Degree of protection		IP 54 according to DIN IEC 529 · Suspended mounting not permissible! IP 65 with cable glands (M20x1.5 with metal nut SW 23/24)						
Overvoltage category		II						
Design and inspection		EN 61 010 Edition 3.94						
Class of protection		II						
Noise immunity		EN 61000-6-2						
Noise emission		EN 61000-6-3						
Manual override		Hex wrench · No adjustment possible after fail-safe action is triggered Manual override in actuators with safety function only possible when op. voltage is connected						
Weight	Approx. kg	3.2	3.2	3.3	3.9	4.0	3.5	3.6
Additional electrical equipment								
Limit switches		Two travel-dependent adjustable limit switches · 250 VAC, 3 A						
Potentiometers		Two potentiometers: 0 ... 1000 Ω (900 Ω at rated travel), max. 1 m · Not with version inc. positioner						
Digital positioner								
Input and output		4(0) to 20 mA · 2(0) to 10 V						
Operating modes		Can be selected using selector switch Additional settings can be determined using TROVIS-VIEW and can be transferred using a PC or memory pen						
Characteristic		Linear or freely determinable characteristic; adjustable over TROVIS-VIEW						
Travel adjustment		During automatic initialization procedure						
Interface		Data transmission with settings, operating status, error messages per SAMSON interface protocol						

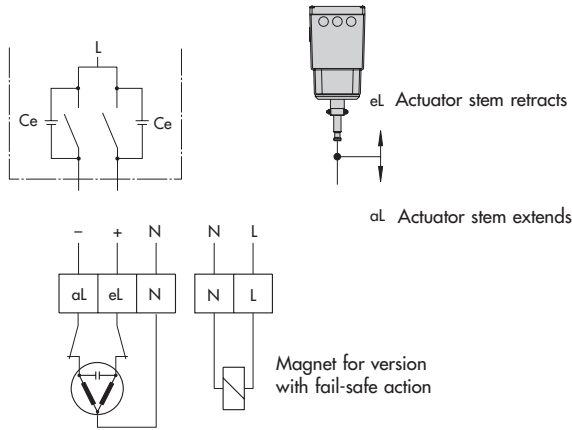
¹⁾ Half the actuating time for actuators with 50 Hz mains frequency

Table 2 · Materials · Material no. according to DIN EN

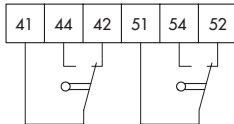
Housing and cover	PPO glass-fiber reinforced
Central attachment and yoke	Flange: Aluminum, connecting thread M30 x 1.5 Formed sheet: 1.4301H in injected into housing, bore hole 30 mm
Actuator stem	1.4305

Electrical connection

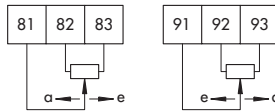
Version for three-point stepping signal



Limit switches (optional)

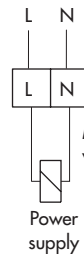
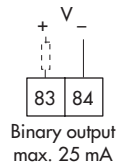
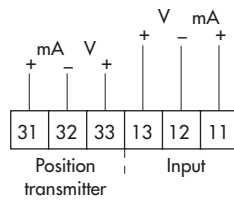
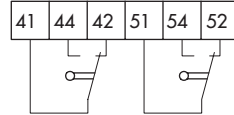


Potentiometer (optional)



Version with digital positioner

Limit switches (optional)



Dimensions in mm

