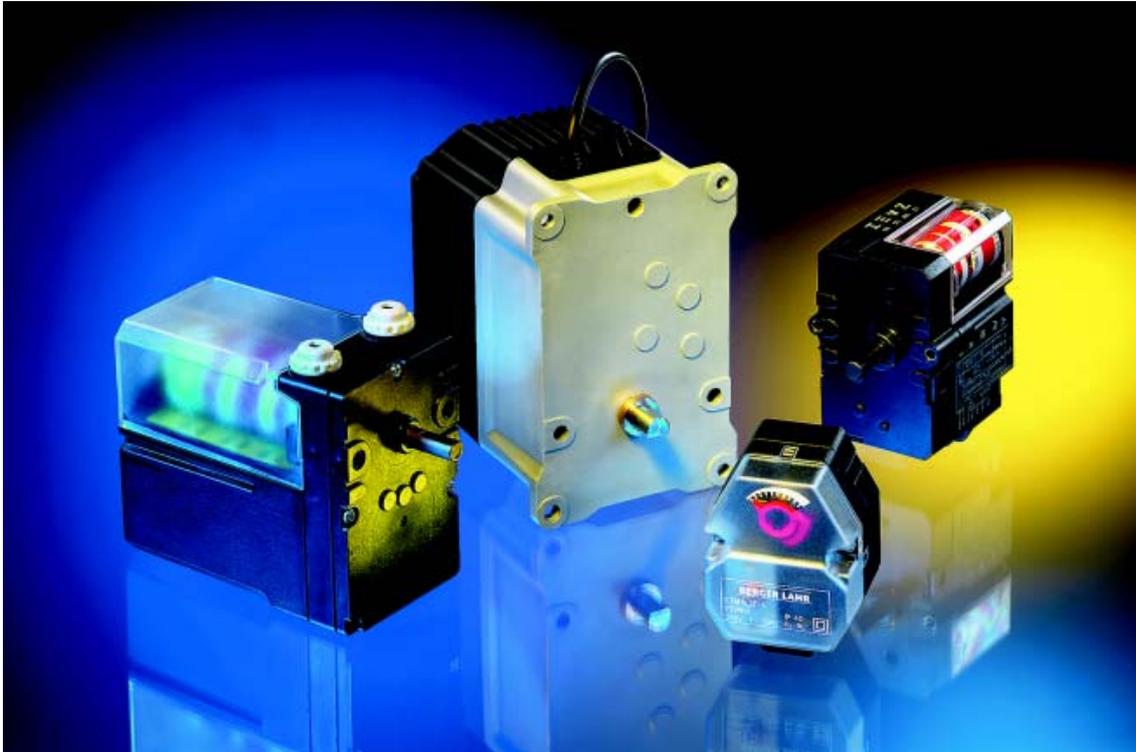


# Actuators



## Actuators

You can use the actuators from Berger Lahr to position flaps, valves or slides with great precision. Inside the compact servo drive housing there is a motor, a gearbox and a control unit. There is a choice of three actuator types to solve your positioning problems: STM, STA and STE.

### Overview actuators

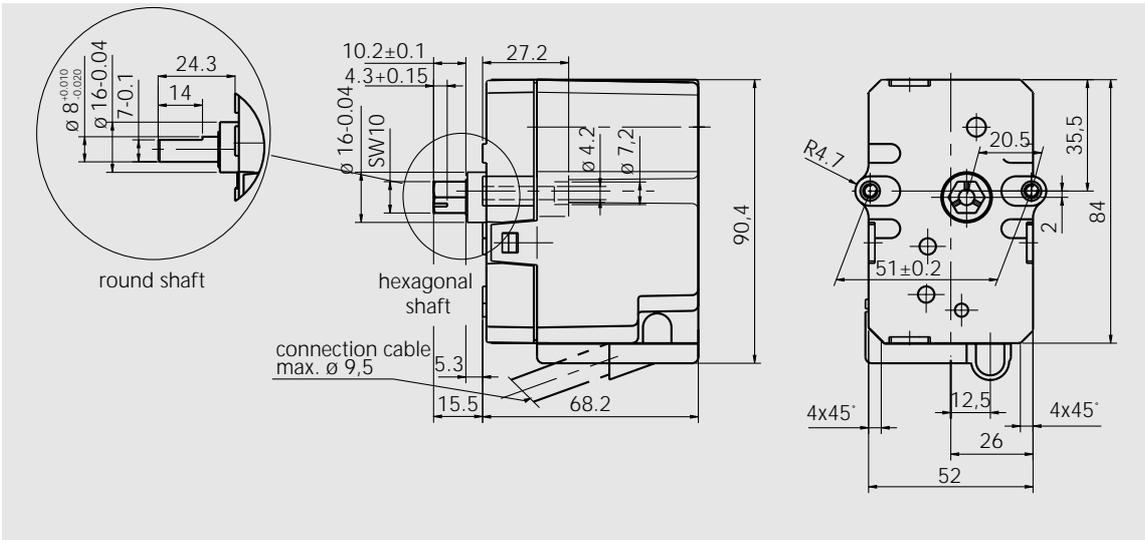
Actuator type	Description
STE	Actuators of type STE are controlled by analogue signals (current or voltage). The angle of rotation of the shaft can be set via analogue signals. The operating range can be freely defined between 0 and 90°. Any angle of rotation can be selected within the defined operating range. Depending on the version, the setpoint can be set as a voltage from 0 to 10 V or as a current from 4 to 20 mA. The limits of the operating range can also be safeguarded by two limit switches.
STA	Actuators of type STA are available with 3, 4 or 5 cams. Two cams serve to define the limits, and the others are available for controlling external devices. The cams are continuously adjustable. Actuators of type STA are also fitted with 1 or 2 relays. Switching actions for controlling the motor are controlled via these relays. STA actuators are used to move air flaps in oil and gas burners. Various wiring arrangements are available for connecting to standard burners. Actuators of type STA can be supplied to run clockwise or anti-clockwise.
STM	Actuators of type STM are constructed in the same way as actuators of type STA. They differ in having no relays. Actuators of type STM are available in clockwise and anti-clockwise versions.

## Type code for Actuators

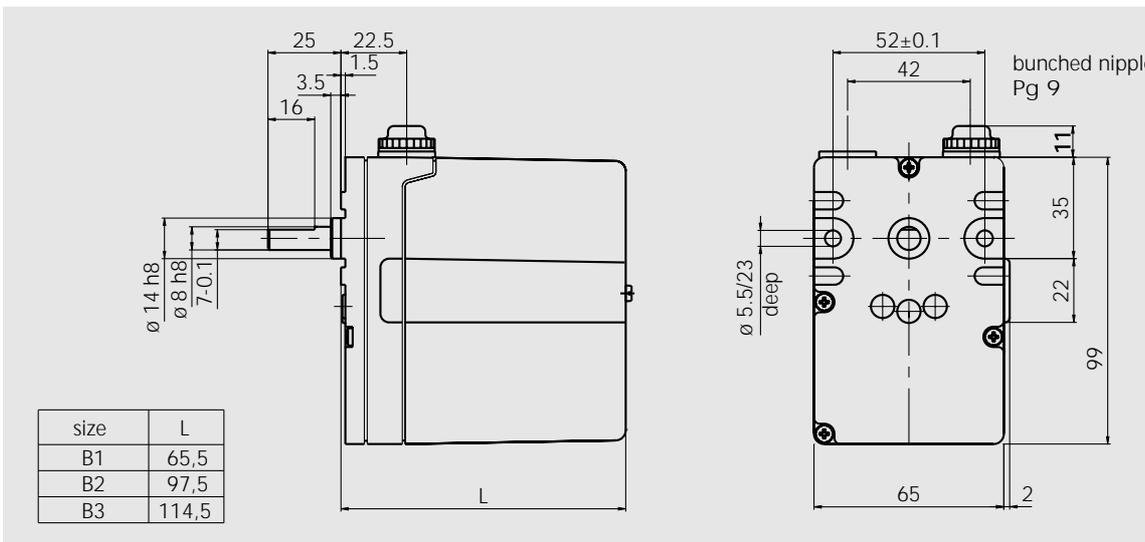
<b>Example</b>	<b>STM30 B3.37/6 – 51N R P</b>
<b>Product family</b> Actuators	
<b>Actuator type</b> STE = electronic actuator STA = actuator with cams and relais STM = actuator with cams	<b>STM30 B3.37/6 – 51N R P</b>
<b>Running time for 90°</b> Example: 30 = 30 seconds for running time for 90°	<b>STM30 B3.37/6 – 51N R P</b>
<b>Size / case</b> B0, B1, B2, B3, Q3	<b>STM30 B3.37/6 – 51N R P</b>
<b>Motor type :</b> RSM 36/8, RSM 36/12, RSM 37/6, RSM 41/6, RSM 42/6, RSM 51/6	<b>STM30 B3.37/6 – 51N R P</b>
<b>Operation program / wiring</b> Example: 51N 5 = Number of function cams 1 = Counter number N = Cams	<b>STM30 B3.37/6 – 51N R P</b>
<b>Sense of rotation</b> R = Right L = Left	<b>STM30 B3.37/6 – 51N R P</b>
<b>Potentiometer installation</b> P = Prepared for potentiometer installation POT = Potentiometer integrated (if no P or POT => not prepared for potentiometer installation, no potentiometer integrated)	<b>STM30 B3.37/6 – 51N R P</b>

## Areas of application

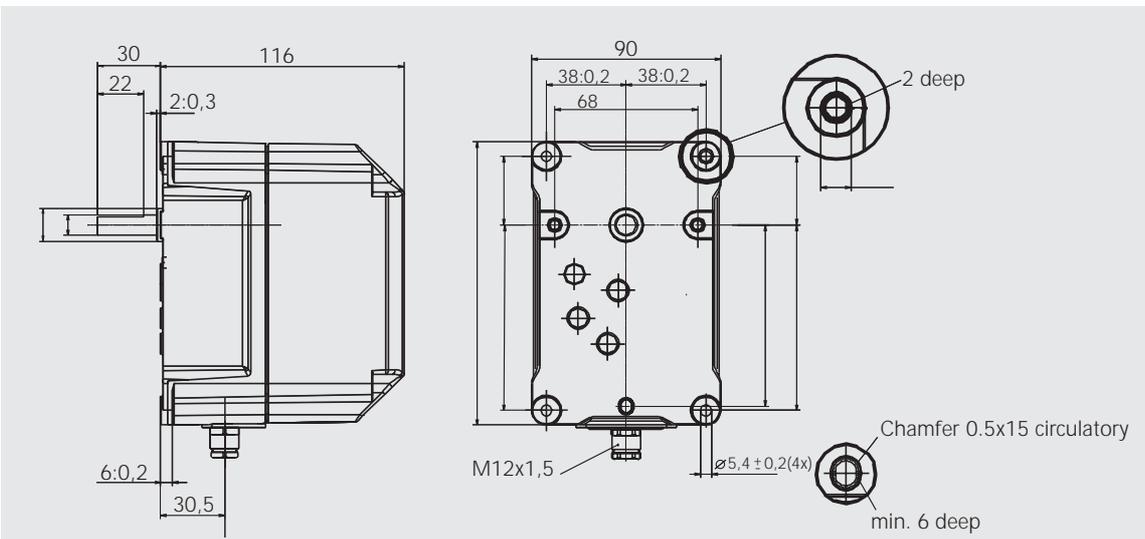
- Air valves for oil and gas burners
- Exhaust valves on boilers
- Mixing valves
- Electrically adjustable armatures
- Slide movements
- Part-turn valve actuators
- Positioning tasks in the construction of apparatus and machines
- Valves for water treatment
- Electrical engineering, open and closed loop control tasks
- Weighing and dosing technology
- Drive technology
- Control technology: Control of ball valves, flow control



Size B0



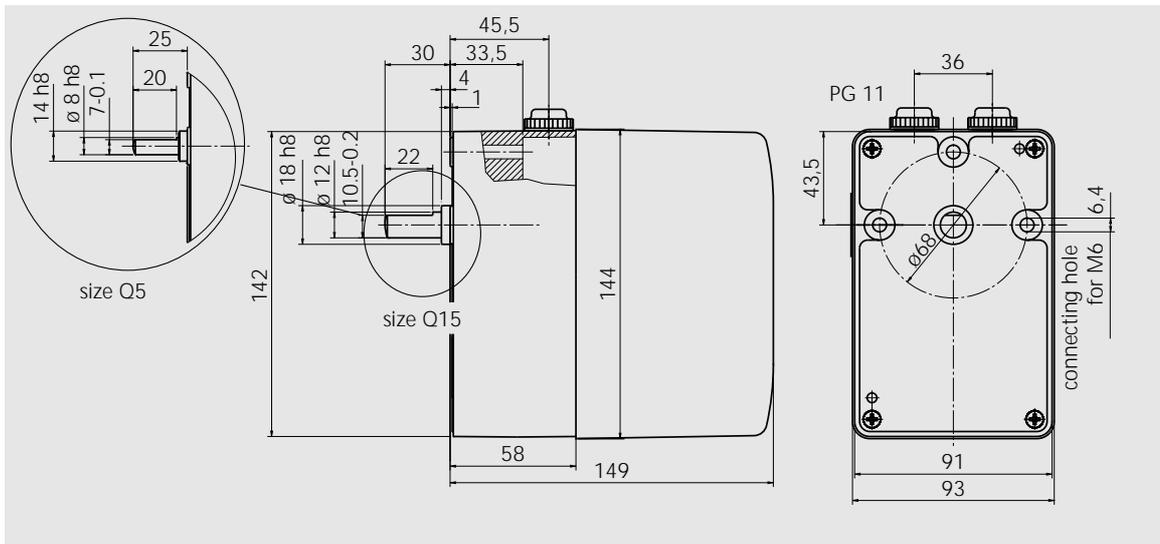
Sizes B1, B2, B3



Sizes Q3

# Actuators

## Scale drawings



Sizes Q5, Q15