

Rotary actuator for butterfly valves

- Nominal torque 35 Nm
- Nominal voltage AC 230 V
- Control Open-close, 3-point
- With integrated auxiliary switch



Technical data

Mechanical data	Housing material	Aluminium pressure casting
Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 198...253 V
	Power consumption in operation	10 W
	Power consumption in operation note	incl. heating
	Power consumption at rest	4.8 W
	Power consumption for wire sizing	14.4 VA
	Current consumption	0.6 A
	Auxiliary switch	2 x SPDT, 1 x 3° / 1 x 87°
	Switching capacity auxiliary switch	3 A, AC 230V
Functional data	Connection supply / control	Terminals 1.5 mm ² (Wire 0.5...1.5 mm ²)
	Parallel operation	No
	Torque motor	35 Nm
	Manual override	Temporary with open-end wrench
	Angle of rotation	90° (internal electrical end stops)
	Running time motor	15 s
	Duty cycle	30 % (= active time 15 s / operating time 20 s)
	Sound power level motor max.	70 dB(A)
	Position indication	Mechanical (integrated)
Safety	Protection class IEC/EN	I Protective earth
	Degree of protection IEC/EN	IP67
	EMC	CE according to 2004/108/EC
	Low-voltage directive	CE according to 73/23/EEC
	Mode of operation	Type 1
	Control pollution degree	4
	Ambient temperature	-20...65°C,
	Non-operating temperature	-30...80°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Mechanical data	Connection flange	F05
Weight	Weight approx.	2 kg

Safety notes



- Caution: Power supply voltage!
- This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.

Product features

Direct mounting	Simple direct mounting on the butterfly valve. The mounting orientation in relation to the butterfly valve can be selected in 90° (angle) increments.
Manual override	Manual operation with open-end wrench (rotating the open-end wrench in clockwise direction opens the butterfly valve).
Internal heating	An internal heater prevents condensation buildup.
High functional reliability	The internal limit switches interrupt the voltage supply to the motor. In addition, a motor thermostat provides overload protection because at 135°C it interrupts the voltage supply.
Combination valve/actuator	Refer to the butterfly valve documentation for suitable butterfly valves, their permitted medium temperatures and closing pressures.

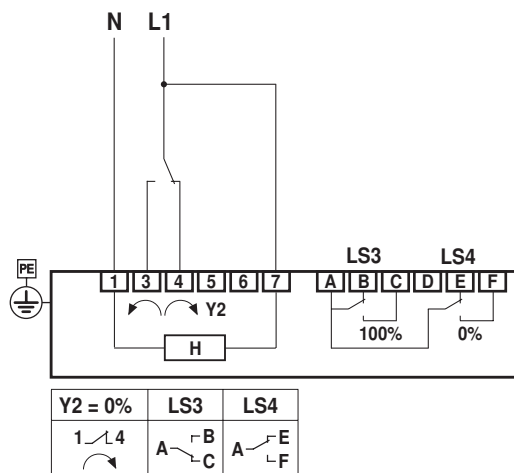
Electrical installation



Notes

- Caution: Power supply voltage!

Wiring diagrams



H: Internal heating
 LS3: Auxiliary switch 100%
 (butterfly valve open)
 LS4: Auxiliary switch 0%
 (butterfly valve closed)

Settings



Notes

- Limit switches TC1/TC2 and angle of rotation limitation are provided with sealing varnish and may not be adjusted.

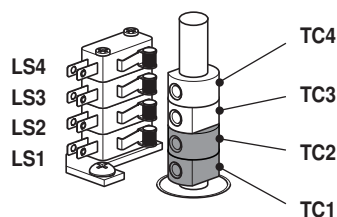
Setting cam

The setting cams for limit and auxiliary switches can be accessed by removing the housing cover.

Optionally, auxiliary switches LS4 / LS3 can be connected for signalling.

Limit switches LS2 / LS1 interrupt the voltage to the motor and are controlled by setting cams TC...

The setting cams turn with the stem. The butterfly valve closes when the stem is turning clockwise (cw) and opens when the stem is turning counterclockwise (ccw).

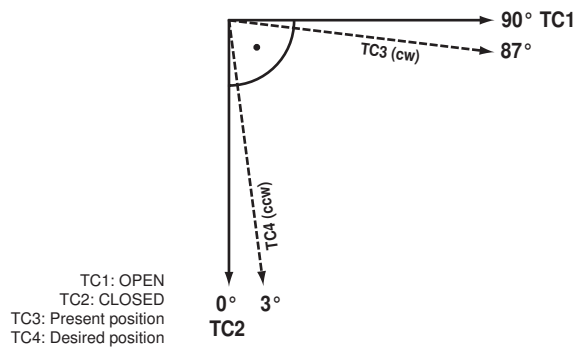


TC1/TC2 with sealing varnish: limit switches are secured against adjustment

Settings

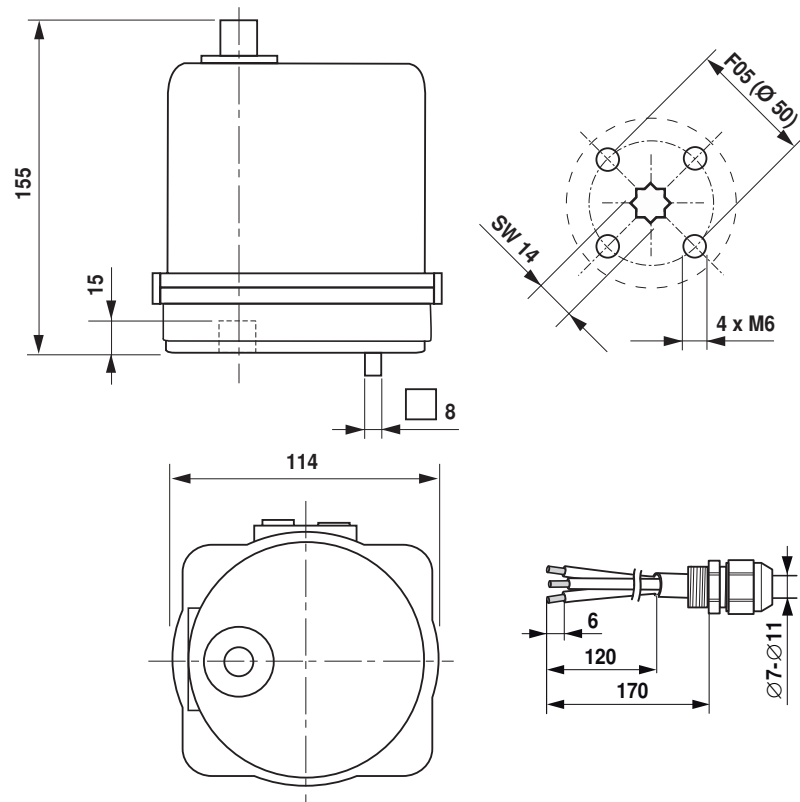
Settings of setting cams TC..

- TC4 for auxiliary switch position closed (factory setting 3°).
- TC3 for auxiliary switch position open (factory setting 87°).
- TC2 for limit switch closed (0°).
- TC1 for limit switch open (90°).



Dimensions [mm]

Dimensional drawings



Further documentation

- Data sheets for butterfly valves
- Installation instructions for actuators and/or butterfly valves
- Notes for project planning for butterfly valves