

# ACTUATOR

## SERIES 90 PROPORTIONAL



Proportional

ESBE actuator Series 90 for operating ESBE mixing valves DN 15–150. This series is provided with adjustable cam discs to obtain an operating range 30°–355° which make the series very flexible.

### OPERATION

The ESBE series 90 actuator is a compact actuator for operating rotary mixing valves. The actuator is reversible and is provided with limit switches which are actuated by cam discs. For 1255 01 00 to 1255 03 00 the operating range is 90° alt. 180°, and for 1255 04 00 the operating range is 355°. The actuator is provided with a disconnection for manual operation and has an indication on the front showing valve position.

The actuator is also available in step motor driven versions for regulation with different proportional signals and running times. Supply voltage 24 V AC/DC. The actuators are factory set at 0–10 V and 15 s for 1255 03 00, 60 s for 1255 01 00 resp. 120 s for 1255 02 00. Any adjustments are made by removal of front cover.



1 To operate the valve manually, push the button and use the lever. The electric current is automatically disconnected as long as the button is in the lower position.

2 Turn the valve to the desired position.



3 To return to automatic operation, bring the lever to the position where it locks, and the button returns to the upper position. The current supply is now connected.

### SUITABLE MIXING VALVES

The actuator is supplied complete with an adaptor kit for easily fitting onto an ESBE rotary mixing valve.

- Series VRG100\*
- Series G
- Series VRG200\*
- Series F
- Series VRG300\*
- Series BIV
- Series VRB100\*
- Series T, TM
- Series MG
- Series H and HG

\*Separate adaptor kit is required, see below

### LINKAGE KITS

Required adaptor kits for easily fitting onto an ESBE rotary mixing valve is available in two different styles. Adaptor kit designed for ESBE mixing valve series MG, G, F, BIV, H, HG is supplied with each actuator. Adaptor kits for ESBE mixing valve series VRG and VRB can be ordered separately.

Art. No.

1605 13 00 (= supplied with actuator)

\_\_\_\_\_ ESBE valve series MG, G, F, BIV, T, TM, H, HG

1605 33 00 \_\_\_\_\_ ESBE valve series VRG, VRB

Adaptor kits for other mixing valves and valves built-into boilers are available as follows:

Art. No.

1605 35 00 \_\_\_\_\_ BRV

1605 16 00 \_\_\_\_\_ Centra ZR, DR, DRG, DRU (≤DN50)

1605 17 00 \_\_\_\_\_ Centra Kompakt DRK/ZRK

1605 19 00 \_\_\_\_\_ CTC, linear movement

1605 36 00 \_\_\_\_\_ BRV, Meibes, Oventrop, Watts

1605 13 00 \_\_\_\_\_ Sauter MH32...H42...

1605 25 00 \_\_\_\_\_ Siemens VBG31, VBI31, VBF21, VCI31

1605 14 00 \_\_\_\_\_ TA-VTR, TA-STM

1605 26 00 \_\_\_\_\_ Schneider Electric/TAC-TRV

1605 15 00 \_\_\_\_\_ Viessmann (all nominal diameters)

1605 18 00 \_\_\_\_\_ WITA

1605 20–24 00 \_ Various adaptor kits for built-in mixing valves

### TECHNICAL DATA

Ambient temperature: \_\_\_\_\_ max. +55°C

\_\_\_\_\_ min. -15°C

Power supply: \_\_\_\_\_ 24 ± 10% V AC/DC, 50/60 Hz

Power consumption: \_\_\_\_\_ 5 VA

Enclosure rating: \_\_\_\_\_ IP 54

Protection class: \_\_\_\_\_ II

Torque: \_\_\_\_\_ See table

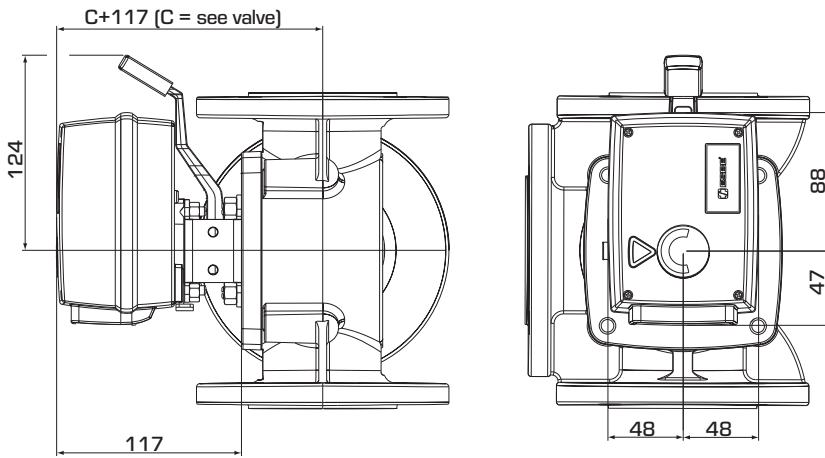
Rating auxiliary switch: \_\_\_\_\_ 6(3)A 250 VAC

Weight: \_\_\_\_\_ 0.8 kg

CE LVD 2006/95/EC  
EMC 2004/108/EC  
RoHS 2002/95/EC

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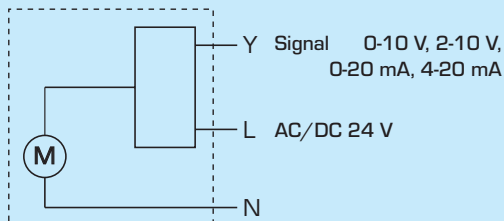
Installation dimensions for Actuator Series 90 with ESBE series MG, G, F, T/TM, H/HG and BIV mixing valves

### SERIES 90, PROPORTIONAL 24 V AC/DC

Art. No.	Reference	Voltage [V]	Running time [s]	Torque [Nm]	Control signal	Remark
1255 03 00	91P	24	15/30/45	4	0-10 V, 2-10 V, 0-20 mA, 4-20 mA	Operating range 90°
1255 01 00	92P		60/90/120	15		Operating range 90°
1255 02 00	92P2		120/180/240	15		Operating range 180°
1255 04 00	92P4		120/240/360	15		Operating range 355°

#### WIRING

The actuator should be preceded by a multi-pole contact breaker in the fixed installation.



Actuator, Art. No.  
1255 01 00, 1255 02 00,  
1255 03 00, 1255 04 00