## **ACTUATOR**

## **SERIES 90 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.



Proportional

#### **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.



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.



Turn the valve to the desired position.



To return bring the where it lo turns to the upper position. 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 VRG200\*
- Series VRG300\*
- Series VRB100\*
- Series MG
- Series G
- Series F
- Series BIV
- Series T, TM Series H and HG
- \*Separate adaptor kit is required,

#### **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 separetely. Art. No.

1605 13 00 (= supplied with actuator) ESBE valve series MG, G, F, BIV, T, TM, H, HG \_\_\_\_\_ ESBE valve series VRG, VRB

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

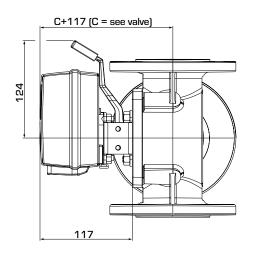
|  | Art. No.   |
|--|------------|
| BRV  | 1605 35 00 |
| Centra ZR, DR, DRG, DRU (≤DN50)                    | 1605 16 00 |
| Centra Kompakt DRK/ZRK                             | 1605 17 00 |
| CTC, linear movement                               | 1605 19 00 |
| BRV, Meibes, Oventrop, Watts                       | 1605 36 00 |
| Sauter MH32H42                                     | 1605 13 00 |
| Siemens VBG31, VBI31, VBF21, VCI31                 | 1605 25 00 |
| TA-VTR, TA-STM                                     | 1605 14 00 |
| Schneider Electric/TAC-TRV                         | 1605 26 00 |
| Viessmann (all nominal diameters)                  | 1605 15 00 |
| WITA   | 1605 18 00 |
| 00 Various adaptor kits for built-in mixing valves | 1605 20-24 |

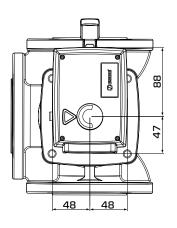
| T <sub>e</sub>           |                                     |
|--------------------------|-------------------------------------|
|                          | TECHNICAL DATA Ambient temperature: |
| to automatic operation,  | 7 Williams Companies Co.            |
| ever to the position     | Power supply:24 ± 10% V A           |
| ocks, and the button re- | Power consumption:                  |
| ne unner position. The   | Englasura nations                   |

max. +55°C \_ min. -15°C AC/DC, 50/60 Hz 5 VA IP 54 Enclosure rating: Protection class: See table Torque: Rating auxiliary switch: 6(3)A 250 VAC Weight: 0.8 kg ( **E** LVD 2006/95/EC EMC 2004/108/EC RoHS 2002/95/EC

# **ACTUATOR**

# **SERIES 90 PROPORTIONAL**





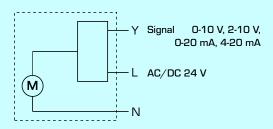
Installation dimensions for Actuator Series 90 with ESBE series MG, G, F, T/TM, H/HG and BIV mixing valves

## SERIES 90, PROPORTIONAL 24 V AC/DC

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