

# ACTUATOR SERIES 90 PROPORTIONAL



Proportional

ESBE actuator Series 90 for operating ESBE mixing valves DN 15–100. This series is provided with adjustable cam discs to obtain adjustable operating range 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. The actuator is provided with a disconnection for manual operation and has an indication on the front showing valve position.

Supply voltage 24 V AC/DC. The actuator factory setting is 0-10V, 90°, 120s. Any adjustments are made by removal of the front cover.

## SUITABLE MIXING VALVES

- Series VRG100\*
- Series VRG200\*
- Series VRG300\*
- Series VRH100\*
- Series VRB100\*
- Series VBF100, DN20-65\*
- Series MG
- Series G
- Series F
- Series BIV
- Series T, TM
- Series H and HG

\*Separate adaptor kit is required, see below

## ADAPTOR KITS

Required adaptor kits for easily fitting onto an ESBE rotary mixing valve is available in three 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, VRH, VRB and VBF can be ordered separately.

Art. No.

16051300 (= supplied with actuator)

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

16053300 \_\_\_\_\_ ESBE valve series VRG, VRH, VRB

13905100 \_\_\_\_\_ ESBE valve series VBF100

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

Art. No.

16053600 \_\_\_\_\_ BRV, Meibes, Oventrop<sup>\*\*</sup>, Watts

16053900 \_\_\_\_\_ Honeywell Centra ZR, DR, DRG, DRU (DN15–50)

16051700 \_\_\_\_\_ Honeywell Centra Kompakt DRK/ZRK

16051300 \_\_\_\_\_ Sauter MH32...H42...

16052600 \_\_\_\_\_ Schneider Electric/TAC-TRV

16052500 \_\_\_\_\_ Siemens VBG31, VBI31, VBF21, VCI31<sup>\*\*\*</sup>

16051400 \_\_\_\_\_ TA-VTR, TA-STM

16051500 \_\_\_\_\_ Viessmann (DN20–25)

## OPTIONS

Art. No.

98100690 \_\_\_\_\_ Separate auxiliary switch

## 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

Weight: \_\_\_\_\_ 0,8 kg



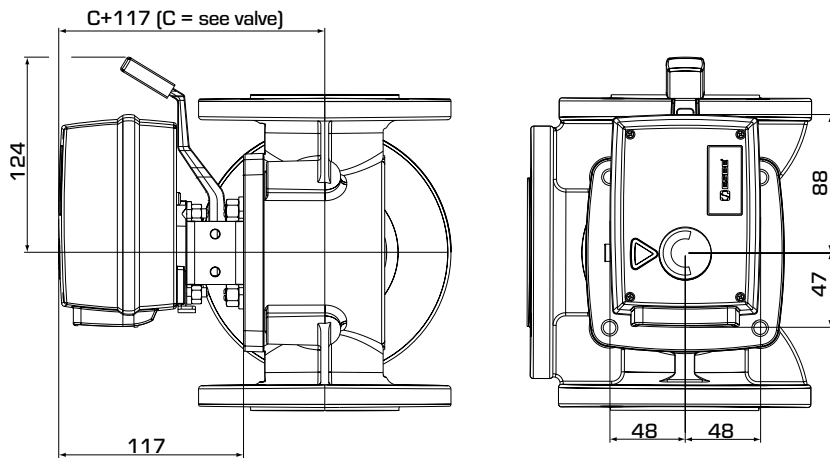
LVD 2014/35/EU  
EMC 2014/30/EU  
RoHS 2011/65/EU

Wiring - Please see the Installation instruction

Notes: \*\*For Oventrop mixing valves until ~2015 (old design of the housing). \*\*\* ≤ DN50

# ACTUATOR

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Installation dimensions for Actuator Series 90

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

Art. No.	Reference	Voltage [V]	Running time [s]	Torque [Nm]	Control signal	Remark
12550500	93P	24	60 – 390 <sup>1),2)</sup>	15	0-10 V, 2-10 V, 0-20 mA, 4-20 mA <sup>1)</sup>	Operating range 90°/180°/355° <sup>1)</sup>

Note 1) Factory settings are: 90° operating range, 0 – 10 V control signal and 120s running time.

2) The running time relates to set turning angel. More information can be found in the installation instruction.