

# ACTUATOR SERIES 90 3-POINT



3-point

ESBE actuator Series 90 for operating ESBE mixing valves DN 15–100. This series is provided with adjustable cam discs to obtain an operating range 30°–180° or even 270°, depending on version, which makes 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. By adjusting the cam discs an operating range from 30° to 180° can be obtained. The actuator is provided with a disconnection for manual operation and has an indication on the front showing valve position.

The 3-point signal control actuator is available for 24 V AC, 50/60 Hz, or 230V, 50 Hz with different running times as shown in the table.

## 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\*\*, 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\*\*\*

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

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

## OPTIONS

Art. No.

98100690 \_\_\_\_\_ Separate auxiliary switch, see table next page marked \*\*

## TECHNICAL DATA

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

\_\_\_\_\_ min. -15°C

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

\_\_\_\_\_ 230 ± 10% V AC, 50 Hz

Power consumption: \_\_\_\_\_ Actuator 24 V AC, 2 VA

\_\_\_\_\_ Actuator 230 V AC, 5 VA

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

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

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

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

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

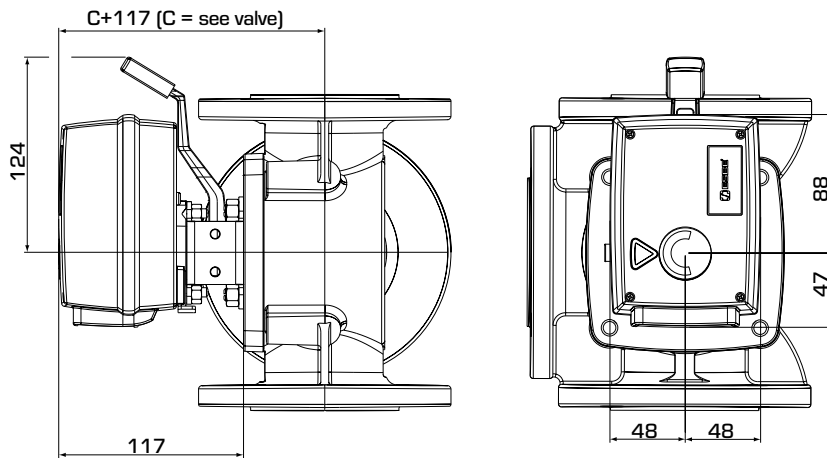
CE LVD 2014/35/EU  
EMC 2014/30/EU  
RoHS 2011/65/EU



Wiring - Please see the Installation instruction

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

# ACTUATOR SERIES 90 3-POINT



Installation dimensions for  
Actuator Series 90

## SERIES 90, 3-POINT 24 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Torque [Nm]	Control signal*	Remark
12050200	91	24	15	5	3-point SPDT	Separate auxiliary switch as option**
12050600	92		60	15	3-point SPDT	Separate auxiliary switch as option** With premounted auxiliary switch
12051100	92M	24	120	15	3-point SPDT	Separate auxiliary switch as option**
12050700	92-2	24	240	15	3-point SPDT	Separate auxiliary switch as option**
12051300	93	24				

## SERIES 90, 3-POINT 230 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Torque [Nm]	Control signal*	Remark
12051700	94	230	15	5	3-point SPDT	Separate auxiliary switch as option**
12051800	94M					With premounted auxiliary switch
12051900	95	230	60	15	3-point SPDT	Separate auxiliary switch as option**
12052200	95M					With premounted auxiliary switch
12052000	95-2	230	120	15	3-point SPDT	Separate auxiliary switch as option**
12052100	95-2M					With premounted auxiliary switch
12052300	96	230	240	15	3-point SPDT	Separate auxiliary switch as option**
12052400	96M					With premounted auxiliary switch

\* 3-point SPDT = Single Pole Double Throw