

# ACTUATOR

## SERIES ARA500 PWM / PROPORTIONAL

ESBE Actuator Series ARA500 for operating ESBE mixing valves DN 15-50. The actuators have an operating range of 90° and can easily be manually operated.



PWM / Proportional

### OPERATION

The ESBE series ARA500 is a compact actuator designed for operating rotary mixing valves DN 15-50. The actuator is controlled by PWM (Pulse-Width Modulation) or 0-10V / 0-20mA proportional signal, and are recommended for mixing applications. The actuator has an operating range of 90° and the valve can easily be manually operated by the pull and turn knob on the front of the cover.

### VERSIONS

The ARA598 actuator are available for 12-24 V DC or 24 V AC, 50/60 Hz power supply. The actuator is supplied with a plug in contact (Molex). Running time is 15, 30, 60 or 120 seconds. The ARA598 actuator also have the additional features of positioning memory for fast startup after power failure.

An auxiliary switch fixed to 45° is available as an option. (Mainly for VRB valve applications).

### SUITABLE MIXING VALVES

Thanks to the special interface between the actuator series ARA500 and the ESBE valve series VRG100, VRG200, VRG300 and VRB100, the unit as a whole has a unique stability and precision when regulating.

- Series VRG100
- Series VRG200
- Series VRG300
- Series VRB100
- Series HG

### LINKAGE KITS

The actuator is delivered either mounted together with valve from ESBE factory or otherwise supplied complete with an adaptor kit for easily fitting onto an ESBE rotary mixing valve series VRG / VRB.

### DELIVERY

Series deliveries are as a multi-package-solution since the ESBE series ARA500 is targeted specific towards OEM customer segment.

### TECHNICAL DATA

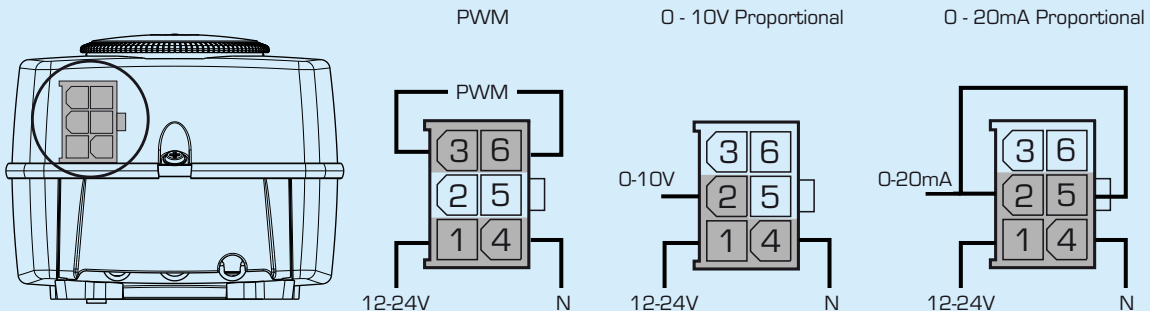
Ambient temperature: \_\_\_\_\_ max. +55°C  
 \_\_\_\_\_ min. -5°C  
 Power supply AC: \_\_\_\_\_ 24V ± 10%, 50/60 Hz  
 Power supply DC: \_\_\_\_\_ 12 - 24 V + 10%/- 0%  
 Enclosure rating: \_\_\_\_\_ IP20  
 Protection class: \_\_\_\_\_ II  
 Torque: \_\_\_\_\_ See table

Power consumption - Dimensioning, 12V: \_\_\_\_\_ TBD VA  
 24V: \_\_\_\_\_ TBD VA  
 PWM signal: \_\_\_\_\_ 4-15 V (max 10mA)  
 PWM frequency: \_\_\_\_\_ 50-4000 Hz  
 Rating auxiliary switch: \_\_\_\_\_ 6(3)A 250 VAC  
 Weight: \_\_\_\_\_ 0.4 kg

CE LVD 2006/95/EC  
 EMC 2004/108/EC  
 RoHS 2011/65/EC

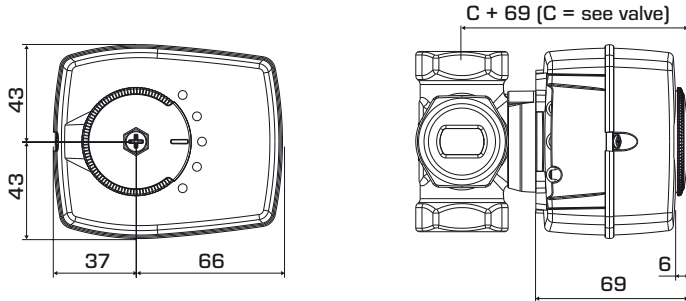
### WIRING

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



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Installation dimensions for Actuator Series ARA500 with ESBE VRG100, VRG200, VRG300 and VRB100 mixing valves.

### PRODUCT ASSORTMENT

SERIES ARA500, PWM / PROPORTIONAL – With plug-in contact (Molex)

| Art. No.   | Reference | Voltage                    | Running time 90° [s] | Control signal           | Torque [Nm] | Note |
|------------|-----------|----------------------------|----------------------|--------------------------|-------------|------|
| 1214 21 10 | ARA598    | 24 VAC alt.<br>12 – 24 VDC | 15, 30, 60, 120      | PWM, 0..10 V,<br>0..20mA | 6           | 1)   |

Note 1) This art.no. describes a neutral single pack version. There will be an other art.no. for multi-package-solution.

SERIES ARA500, OPTION – Auxiliary switch-

| Art. No.   | Reference                                       | Note |
|------------|---|------|
| 1620 07 00 | ESBE ARA801, Auxiliary switch kit ARA600/ARA500 |      |

SERIES ARA500, OPTION – Cable with molex connector (for plug-in-contact versions)

| Art. No.   | Reference                                   | Note                                      |
|------------|---|---|
| 4605 04 00 | ESBE ALZ801, 6-wire IP20, cable length 1.6m | For versions with plug-in contact (Molex) |