

ACTUATOR

SERIES ARA600 3-POINT

ESBE Actuator Series ARA600 for operating ESBE mixing valves DN 15-50. The actuators have an operating range of 90° and can easily be manually operated. Patented + Registered design.



3-point



3-point, auxiliary switch

OPERATION

The ESBE series ARA600 is a compact actuator designed for operating rotary mixing valves DN 15-50. The actuators ARA6X1, ARA6X2, ARA6X3 and ARA6X4 are controlled by 3-point 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 actuator.

VERSIONS

The ESBE actuators with 3-point signal control are available for 24 or 230 VAC, 50 Hz and it is supplied with an attached 1.5 m connection cable. A wide range of different running times is also available, from 30 to 1200 seconds.

An auxiliary switch, which can be set in any position, is available either as a pre-mounted component fitted to the actuator (ARA6X2 and ARA6X4) or as an optional kit to be ordered separately. The auxiliary switch is easily set by a unique solution, by just lifting off the turning knob the switch cam is accessible, no tools or disassembly required.

SUITABLE MIXING VALVES

Thanks to the special interface between the actuator series ARA600 and the ESBE valve series VRG and VRB, the unit as a whole has a unique stability and precision when regulating. The actuator series ARA600 is also easily mounted on the ESBE valve series MG, G, F, BIV, T, TM, H and HG.

- Series VRG100
- Series MG
- Series VRG200
- Series G
- Series VRG300
- Series F ≤ DN40
- Series VRB100
- Series BIV
- Series T and TM
- Series H and HG

LINKAGE KITS

The actuator is supplied complete with an adaptor kit for easily fitting onto an ESBE rotary mixing valve. Adaptor kits can also be ordered separately.

Art. No.

1600 04 00 ___ ESBE valve series G, MG, F, BIV, T, TM, H, HG

1600 05 00 (= supplied with actuator)

___ ESBE valve series VRG, VRB, G, MG, F, BIV, T, TM, H, HG

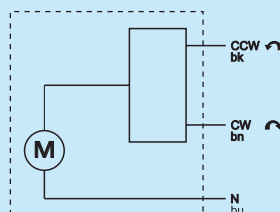
TECHNICAL DATA

Ambient temperature: _____ max. +55°C
 _____ min. -5°C
 Power supply: _____ 24 ± 10% VAC, 50 Hz
 _____ 230 ± 10% VAC, 50 Hz
 Power consumption: 24 V _____ 2 VA
 230 V _____ 5 VA
 Enclosure rating: _____ IP41
 Protection class: _____ II
 Torque: _____ See table
 Rating auxiliary switch: _____ 6(3)A 250 VAC
 Weight: _____ 0.4 kg

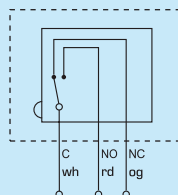
CE LVD 2006/95/EC
 EMC 2004/108/EC
 RoHS 2002/95/EC

WIRING

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



Actuator, series:
 ARA641 — ARA644,
 ARA651 — ARA654,
 ARA661 — ARA664,
 ARA671 — ARA674



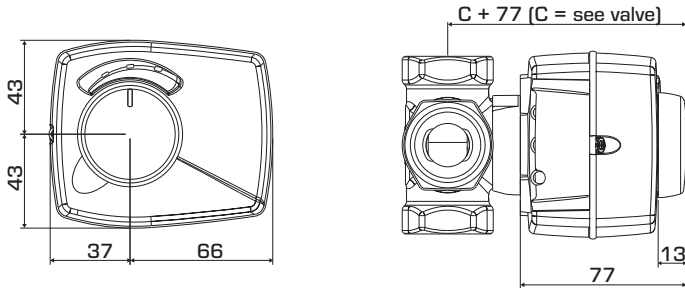
Actuator with pre-mounted auxiliary switch, series:
 ARA642, ARA644, ARA652, ARA654, ARA662, ARA664,
 ARA672, ARA674, ARA692, ARA694

The actuators are fitted with two separate cables, one cable for actuator regulation and one for the auxiliary switch.

To set the switch position, remove the actuator knob and turn the green cam sleeve to the desired position.

ACTUATOR

SERIES ARA600 3-POINT



Installation dimensions for Actuator Series ARA600 with ESBE VRG100, VRG200, VRG300 and VRB100 mixing valves

SERIES ARA600, 3-POINT 24 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Control signal*	Torque [Nm]	Note
1210 01 00	ARA643	24	30	3-point SPDT	6	
1210 06 00	ARA644					1)
1210 02 00	ARA653	24	60	3-point SPDT	6	
1210 07 00	ARA654					1)
1210 03 00	ARA663	24	120	3-point SPDT	6	
1210 08 00	ARA664					1)
1210 04 00	ARA673	24	240	3-point SPDT	6	
1210 09 00	ARA674					1)
1210 05 00	ARA693	24	120/240/480/1200	3-point SPDT	6	
1210 10 00	ARA694					1)

SERIES ARA600, 3-POINT 230 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Control signal*	Torque [Nm]	Note
1210 11 00	ARA641	230	30	3-point SPDT	6	
1210 16 00	ARA642					1)
1210 12 00	ARA651	230	60	3-point SPDT	6	
1210 17 00	ARA652					1)
1210 13 00	ARA661	230	120	3-point SPDT	6	
1210 18 00	ARA662					1)
1210 14 00	ARA671	230	240	3-point SPDT	6	
1210 19 00	ARA672					1)
1210 15 00	ARA691	230	120/240/480/1200	3-point SPDT	6	
1210 20 00	ARA692					1)

* 3-point SPDT = Single Pole Double Throw Note 1) With premounted auxiliary switch

Adaptor kits for other mixing valves are available as follows:

- Art. No.
 1600 06 00 _____ Meibes
 1600 07 00 _____ Watts
 1600 08 00 _____ Honeywell Corona
 1600 09 00 _____ Lovato

OPTION

- Auxiliary switch kit _____ Art. No. 1620 07 00
 Cable hatch _____ Art. No. 1620 08 00

ACTUATOR

SERIES ARA600 2-POINT

ESBE Actuator Series ARA600 for operating ESBE mixing valves DN 15-50. The actuators have an operating range of 90° and can easily be manually operated. Patented + Registered design.

OPERATION

The ESBE series ARA600 is a compact actuator designed for operating rotary mixing valves DN 15-50. The actuators ARA6X5, ARA6X6, ARA6X7 and ARA6X8 are controlled by 2-point (on/off) signal, and are recommended for diverting 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 actuator.

In addition to the 2-point signal control, all the actuators can also be used for 3-point signal control.

VERSIONS

The ESBE actuators with 2-point signal control are available for 24 or 230 VAC, 50 Hz and are supplied with a 1.5 m connection cable attached. Different running times are available, from 15 to 60 seconds.

An auxiliary switch, which can be set in any position, is available either as a pre-installed component fitted to the actuator (ARA6X6 and ARA6X8) or as an optional kit to be ordered separately. The auxiliary switch is easily set by a unique solution, by just lifting off the turning knob the switch cam is accessible, no tools or disassembly required.



2-point



2-point, auxiliary switch

SUITABLE MIXING VALVES

Thanks to the special interface between the actuator series ARA600 and the ESBE valve series VRG and VRB, the unit as a whole has a unique stability and precision when regulating. The actuator series ARA600 is also easily mounted on the ESBE valve series MG, G, F, BIV, T, TM, H and HG.

- Series VRG100
- Series MG
- Series VRG200
- Series G
- Series VRG300
- Series F ≤ DN40
- Series VRB100
- Series BIV
- Series T and TM
- Series H and HG

LINKAGE KITS

The actuator is supplied complete with an adaptor kit for easily fitting onto an ESBE rotary mixing valve. Adaptor kits can also be ordered separately.

Art. No.

1600 04 00 ___ ESBE valve series G, MG, F, BIV, T, TM, H, HG

1600 05 00 (= supplied with actuator)

___ ESBE valve series VRG, VRB, G, MG, F, BIV, T, TM, H, HG

TECHNICAL DATA

Ambient temperature: _____ max. +55°C
 _____ min. -5°C

Power supply: _____ 24 ± 10% VAC, 50 Hz
 _____ 230 ± 10% VAC, 50 Hz

Power consumption: 24 V _____ 2 VA
 230 V _____ 5 VA

Enclosure rating: _____ IP41

Protection class: _____ II

Torque: _____ See table

Rating auxiliary switch: _____ 6(3)A 250 VAC
 Weight: _____ 0.4 kg

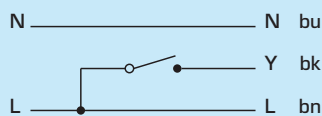
CE LVD 2006/95/EC
 EMC 2004/108/EC
 RoHS 2002/95/EC

WIRING

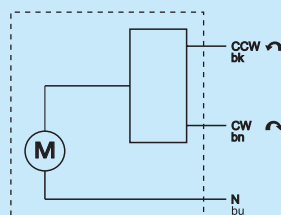
The actuator should be preceded by a multi-pole contact breaker in the fixed installation.

2-point control signal

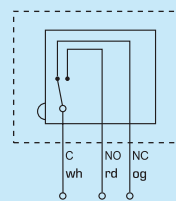
*The direction of rotation is selected by jumper setting.



3-point control signal



Auxiliary switch



Actuator, series:

ARA635 – ARA638, ARA645 – ARA648, ARA655 – ARA658

Actuator with auxiliary switch, series:

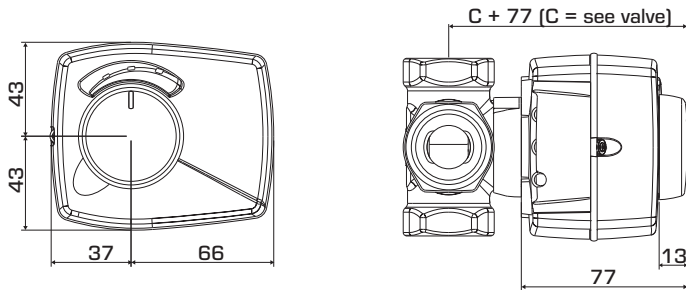
ARA636, ARA638, ARA646, ARA648, ARA656, ARA658

The actuators are fitted with two separate cables, one cable for actuator regulation and one for the auxiliary switch.

To set the switch position, remove the actuator knob and turn the green cam sleeve to the desired position.

ACTUATOR

SERIES ARA600 2-POINT



Installation dimensions for Actuator Series ARA600 with ESBE VRG100, VRG200, VRG300 and VRB100 mixing valves

SERIES ARA600, 2-POINT 24 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Control signal*	Torque [Nm]	Note
1212 01 00	ARA637	24	15	2-point SPST	3	2)
1212 04 00	ARA638					1), 2)
1212 02 00	ARA647	24	30	2-point SPST	6	1)
1212 05 00	ARA648					
1212 03 00	ARA657	24	60	2-point SPST	6	1)
1212 06 00	ARA658					

SERIES ARA600, 2-POINT 230 V AC

Art. No.	Reference	Voltage [V AC]	Running time 90° [s]	Control signal*	Torque [Nm]	Note
1212 07 00	ARA635	230	15	2-point SPST	3	2)
1212 10 00	ARA636					1), 2)
1212 08 00	ARA645	230	30	2-point SPST	6	1)
1212 11 00	ARA646					
1212 09 00	ARA655	230	60	2-point SPST	6	1)
1212 12 00	ARA656					

* 2-point SPST = Single Pole Single Throw Note 1) With premounted auxiliary switch 2) Recommended only for valves DN 15-32.

Adaptor kits for other mixing valves are available as follows:

Art. No.
 1600 06 00 _____ Meibes
 1600 07 00 _____ Watts
 1600 08 00 _____ Honeywell Corona
 1600 09 00 _____ Lovato

OPTION

Auxiliary switch kit _____ Art. No. 1620 07 00
 Cable hatch _____ Art. No. 1620 08 00

ACTUATOR SERIES ARA600 PROPORTIONAL



Proportional

ESBE Actuator Series ARA600 for operating ESBE mixing valves DN 15-50. The actuators have an operating range of 90° and can easily be manually operated. Patented + Registered design.

OPERATION

The ESBE series ARA600 is a compact actuator designed for operating rotary mixing valves DN 15-50. The actuators ARA6X9 are controlled by 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 actuator.

In addition to the proportional signal control, actuators series ARA639 can also be used for 3- and 2-point signal control.

VERSIONS

The actuators ARA6X9 are available for 24 V AC/DC, 50/60 Hz power supply. An auxiliary switch, which can be set in any position, is available as an optional kit to be ordered separately. The auxiliary switch is easily set by a unique solution, by just lifting off the turning knob the switch cam is accessible, no tools or disassembly required.

The ARA659 can be set to running times of 45 and 120 seconds and is supplied with a 1.5 m cable attached.

The ARA639 can be set to running times of 15, 30, 60 and 120 seconds. The ARA639 also have the additional features of proportional analogue output signal for monitoring devices etc, optional advanced noise reduction of the input signal and positioning memory for fast startup after power failure.

SUITABLE MIXING VALVES

Thanks to the special interface between the actuator series ARA600 and the ESBE valve series VRG and VRB, the unit as a whole has a unique stability and precision when regulating. The actuator series ARA600 is also easily mounted on the ESBE valve series MG, G, F, BIV, T, TM, H and HG.

- Series VRG100
- Series MG
- Series VRG200
- Series G
- Series VRG300
- Series F ≤ DN40
- Series VRB100
- Series BIV
- Series T and TM
- Series H and HG

LINKAGE KITS

The actuator is supplied complete with an adaptor kit for easily fitting onto an ESBE rotary mixing valve. Adaptor kits can also be ordered separately.

Art. No.

1600 04 00 ___ ESBE valve series G, MG, F, BIV, T, TM, H, HG

1600 05 00 (= supplied with actuator)

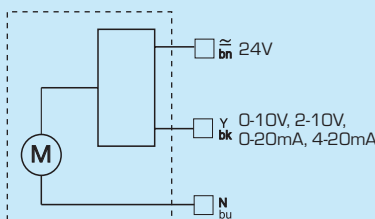
___ ESBE valve series VRG, VRB, G, MG, F, BIV, T, TM, H, HG

TECHNICAL DATA

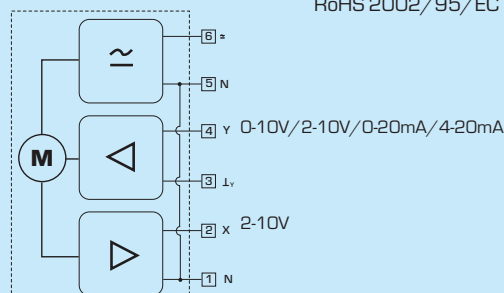
Ambient temperature: _____ max. +55°C
 _____ min. -5°C
 Power supply: _____ 24 ± 10% VAC/DC, 50/60 Hz
 Enclosure rating: _____ IP41
 Protection class: _____ II
 Torque: _____ See table

WIRING

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



Actuator series ARA659



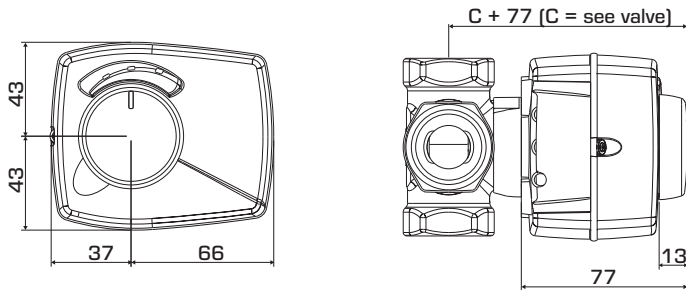
Actuator series ARA639

Power consumption - Operation, AC: _____ 5 W
 DC: _____ 2.5 W
 Power consumption - Dimensioning, AC: _____ ARA639, 11 VA
 _____ ARA659, 8 VA
 DC: _____ ARA639, 6 VA
 _____ ARA659, 4 VA
 Rating auxiliary switch: _____ 6(3)A 250 VAC
 Weight: _____ 0.4 kg

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

ACTUATOR

SERIES ARA600 PROPORTIONAL



Installation dimensions for Actuator Series ARA600 with ESBE VRG100, VRG200, VRG300 and VRB100 mixing valves

SERIES ARA600, PROPORTIONAL 24 V AC/DC

Art. No.	Reference	Voltage [V]	Running time 90° [s]	Control signal	Torque [Nm]	Note
1252 01 00	ARA639	24	15/30/60/120	0..10 V, 2..10 V, 0..20mA, 4..20mA	6	
1252 02 00	ARA659	24	45/120	0..10 V, 2..10 V, 0..20mA, 4..20mA	6	

Adaptor kits for other mixing valves are available as follows:

Art. No.
 1600 06 00 _____ Meibes
 1600 07 00 _____ Watts
 1600 08 00 _____ Honeywell Corona
 1600 09 00 _____ Lovato

OPTION

Auxiliary switch kit _____ Art. No. 1620 07 00
 Cable hatch _____ Art. No. 1620 08 00