

# ACTUATOR

## SERIES ALD100 AND ALD200

ESBE series ALD offers excellent performance in applications with requirements of forces 900N, 1200N or 2000/2200N.



3-point/Proportional

### OPERATION

ESBE series ALD is designed for proportional signal (0..10V, 2..10V, 0..20mA or 4..20mA) or 3-point (increase/decrease) signal. Supply voltage 24 VAC or 230 VAC. Force 900N /1200N/ 2000N.

The actuator is simple to install. It is designed for direct fitting on ESBEs control valves. No adaptor kit is required. The actuator is suitable for control valves with a stroke of either 10 .. 25 mm or 10 .. 45 mm and has a built-in force limitation.

The actuators series ALD for proportional signals are automatically adjusted for the actual valve stroke.

Actuators with premounted spring return are also available.

### FUNCTION

– The Actuator

The actuator receives a control signal from a controller. Linear movement is transmitted by a screw via a gear wheel to the stem of the valve.

– Manual operation

The actuator is simple to operate manually by a wheel or a crank. (Versions with spring return function applied are not able to be manually operated).

– Position indicator

The end positions of movement are set by a red and a blue

indicator on the bracket. Actuators for proportional signals are also equipped with a 0..10 V DC position feedback signal, where 0 V always corresponds to the closed position and 10 V to the open position.

– Sequence control

Actuators (0..10V versions) are able to be controlled in sequence.

### SUITABLE CONTROL VALVES

#### SERIES ALD120/ALD220

- Series VLA121, VLA221, VLA131
- Series VLA325, VLA335, VLA425
- Series VLB225, VLB235 ≤ DN80

- Series VLE122, VLE222, VLE132
- Series VLF125, VLF135, VLF335
- Series VLE325
- Series VLC125, VLC225
- Series VLC325, VLC425

#### SERIES ALD140/ALD240

- Series VLF335
- Series VLB225, VLB235

### OPTIONS

Stem heater DN 15–50, 24 V (stroke 10..25):

Art. No. 2610 19 00

Stem heater DN 65–150, 24 V (stroke 10..45):

Art. No. 2610 20 00

### TECHNICAL DATA

Supply voltage (±10%): \_\_\_\_\_ See table  
 Ambient temperature: \_\_\_\_\_ -20°C - +50°C \*  
 \_\_\_\_\_ with spring return applied 0°C - +50°C  
 Ambient humidity: \_\_\_\_\_ max. 90% RH non condensing  
 Enclosure rating: \_\_\_\_\_ IP 43  
 \_\_\_\_\_ with spring return applied IP 65  
 Protection class: \_\_\_\_\_ II (24 V)  
 \_\_\_\_\_ I (230 V)  
 Weight: \_\_\_\_\_ See table  
 Stroke: \_\_\_\_\_ 10..25 or 10..45 mm  
 Duty cycle: \_\_\_\_\_ max. 30%/h  
 \_\_\_\_\_ with spring return applied max. 100%/h

Material

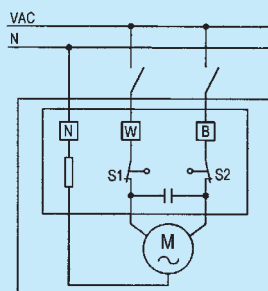
Cover: \_\_\_\_\_ Plastic / Metal  
 Housing: \_\_\_\_\_ Aluminum / Steel

\* If the actuator is used in applications with media temperatures below 0°C, the valve should be equipped with a stem heater.

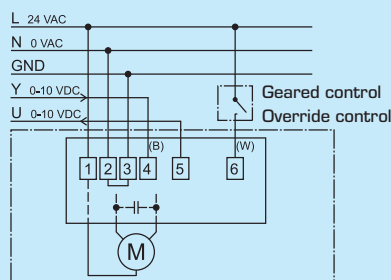
CE LVD 2006/95/EC  
 EMC 2004/108/EC  
 RoHS 2002/95/EC

### WIRING

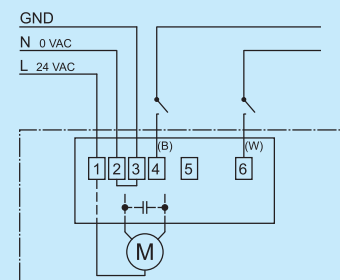
The motor should be preceded by a multi-pole contact breaker in the fixed wiring.



Series ALD121, ALD221, ALD141, ALD241



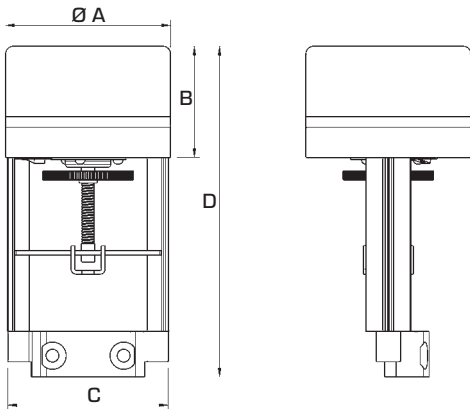
Series ALD124, ALD224, ALD144, ALD244 - 0..10V/0..20mA



Series ALD124, ALD224, ALD144, ALD244, 3-point

# ACTUATOR

## SERIES ALD100 AND ALD200



### SERIES ALD124 AND ALD224, PROPORTIONAL OR 3-POINT CONTROL SIGNAL 24 VAC

Art. No.	Reference	Supply voltage [VAC]	Force [N]	Running time [s]	Stroke [mm]	Power consump. [VA]	A	B	C	D	Note	Weight [kg]
2215 02 00	ALD124	24 VAC, 50Hz	900	150	20	7.0	110	75	118	215	1)	1.3
2215 06 00			1200			5.0	130	101		260		1.7
2215 04 00	ALD224		900	70		25.0	192	185	118	462	1), 2)	8.7

Note 1) 0...10V, 2...10V, 0...20mA, 4...20mA or 3-point control signal. 2) With spring return. Closing time: ~ 5s/20mm

### SERIES ALD144 AND ALD244, PROPORTIONAL OR 3-POINT CONTROL SIGNAL 24 VAC

Art. No.	Reference	Supply voltage [VAC]	Force [N]	Running time [s]	Stroke [mm]	Power consump. [VA]	A	B	C	D	Note	Weight [kg]
2215 10 00	ALD144	24 VAC, 50Hz	1200	300	40	5.0	130	101	118	330	1)	1.8
2215 12 00			2000	190						360		2.5
2215 14 00	ALD244		2200	140		25.0	192	185	118	570	1), 3)	10.0

Note 1) 0...10V, 2...10V, 0...20mA, 4...20mA or 3-point control signal. 3) With spring return. Closing time: ~ 10s/40mm

### SERIES ALD121 AND ALD221, 3-POINT CONTROL SIGNAL 230 VAC

Art. No.	Reference	Supply voltage [VAC]	Force [N]	Running time [s]	Stroke [mm]	Power consump. [VA]	A	B	C	D	Note	Weight [kg]
2215 01 00	ALD121	230 VAC, 50Hz	900	150	20	6.0	110	75	118	215		1.3
2215 05 00			1200			5.0	130	101		260		1.7
2215 03 00	ALD221		900	70		25.0	192	185	118	462	2)	8.7

Note 2) With spring return. Closing time: ~ 5s/20mm

### SERIES ALD141 AND ALD241, 3-POINT CONTROL SIGNAL 230 VAC

Art. No.	Reference	Supply voltage [VAC]	Force [N]	Running time [s]	Stroke [mm]	Power consump. [VA]	A	B	C	D	Note	Weight [kg]
2215 09 00	ALD141	230 VAC, 50Hz	1200	300	40	5.0	130	101	118	330		1.8
2215 11 00			2000	190						360		2.5
2215 13 00	ALD241		2200	140		25.0	192	185	118	570	3)	10.0

Note 3) With spring return. Closing time: ~ 10s/40mm