



i AA1121 | Linear actuator (lifting height 10 mm, peak force 800 N)

The linear actuator sets new standards for the electronic control of valves and linear adjusting units. With a lifting height of 10 mm and a peak force of 800 N, new standards are achieved with regard to the power density of linear actuators. The complete adjusting axis is defined with a size of only 49 x 49 x 92 mm (flange square x overall length).

The linear actuator is equipped with integrated power electronics that is controlled simply and extremely fast via EtherCAT. For easy commissioning the well-known Drive Manager can be used. A continuous force of 150 N can be generated with the actuator. Accelerations of 7 m/s² and linear speeds of 100 mm/s allow exceptionally short control cycles. Mounting via a B5 flange is possible without special tools in the tightest of spaces. The shaft is provided as standard with an M8x1 external thread, on which commercially available adaptors such as ball heads or tensioning hooks common in pneumatic/hydraulic applications can be mounted. For connection in the protective low voltage range < 48 V DC a robust M12 plug can be used. The fieldbus connections for EtherCAT IN/OUT are realised with M8 plugs.

An absolute stroke measuring system is integrated, allowing an accuracy of 0.01 mm to be achieved so that previously necessary limit switches are not required. In comparison with conventional pneumatics, the linear actuator achieves a much higher positioning accuracy, resulting in higher process safety. This holds above all for distributed systems. Depending on the application, the use of an electronic actuator can save up to 75 % energy in comparison with pneumatic actuators, so that the linear actuator enables a rapid return on investment. Beckhoff supplies the necessary preassembled cables and the software to go with the actuators.

Data for 50 V DC	AA1121-0000
Standstill force	200 N
Rated force	150 N
Rated power	15 W
Peak force (F _P)	800 N
Standstill current	I _{rms} = 2.5 A
Rated current	I _{rms} = 1.9 A
Peak current	I _{rms} = 10.0 A
Max. movement	10 mm
Max. acceleration	7 m/s ²
Weight	840 g
Dimensions (W x H x D)	flange code A2: 49 mm x 49 mm x 92 mm (flange square x overall length)

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Dimensions	a	b	d	x _e	x _u	l	r	k
AA1121	ø28	M8	16 mm	71.5 mm	81.5 mm	19.5 mm	49 mm	92 mm



Product announcement

estimated market release 3rd quarter 2019