

Technical data Linear actuators for modulating duty

Type	Stroke	Operating force	Motor protection ¹⁾	Valve attachment	Trapezoidal thread	Positioning speed ²⁾	Weight
	Max. [mm]	[kN]		Standard EN ISO 5210 DIN 3210		[mm/min]	approx. [kg]
SBA 06-1	35	0.6	B	F05	8 x 1,5	8 10	2.1
SBA 06-2		0.9	B	F05	8 x 1,5	13.2 16	2.1
SBA 06-3		1.2	B	F05	8 x 1,5	20	2.1
SBA 06-4	35	2.0	B	F05	10 x 2	8 10 13.2	2.1
SBA 12	75	1.2	B	F05	14 x 3	25	8.0
SBA 20	75	2.0	B	F05	14 x 3	15	8.0
SBA 45-2	75	3.5	B	F05	14 x 3	25 50	8.0
SBA 45-3	75	4.5	B	F05	14 x 3	25 50	8.0
SBA 45-4	75	6.0	B	F05	14 x 3	17 34	8.0
SBA 80-1	80	6.0	B	G0	20 x 4	13.5	13
SBA 80-2		8.0	B	G0	20 x 4	25	13
SBA 80-3		12	T	G0	20 x 4	50	13
SBA 80-4	80	15	B B T	G0	20 x 4	13.5 22 40	13
SBA 200-1	100	15	B	G0	26 x 5	15	19
SBA 200-2		20	T T	G0	26 x 5	25 50	19
SBA 200-3	100	25	T	G0	26 x 5	25	19

General information

Linear actuators for modulating and open-close automation

Notes on table

- 1) Motor protection B = stall-proof motor (S1 - 100 %), T = thermoswitch for temperature monitoring
- 2) 50 Hz For 60 Hz, operating times and power consumption increase by 20 %

Features and functions of actuator

Type of duty	Modulating duty:	Intermittent duty S3 - 50 %, with maximum number of starts of 600 starts per hour Intermittent duty S1 - 100 %, with maximum number of starts of 1,200 starts per hour; not available for all versions (option)
Motor	Synchronous motor, asynchronous motor	

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Mains voltage, mains frequency	Standard voltages:																													
	1-phase AC current Voltages/frequencies <table><tr><td>Volt</td><td>230</td><td>220</td></tr><tr><td>Hz</td><td>50</td><td>60</td></tr></table>										Volt	230	220	Hz	50	60														
	Volt	230	220																											
	Hz	50	60																											
	Options:																													
	3-phase AC current Voltages/frequencies <table><tr><td>Volt</td><td>380</td><td>400</td><td>400</td><td>440</td></tr><tr><td>Hz</td><td>50</td><td>50</td><td>60</td><td>60</td></tr></table> 1-phase AC current Voltages/frequencies <table><tr><td>Volt</td><td>24</td><td>24</td><td>115</td><td>110</td></tr><tr><td>Hz</td><td>50</td><td>60</td><td>50</td><td>60</td></tr></table>										Volt	380	400	400	440	Hz	50	50	60	60	Volt	24	24	115	110	Hz	50	60	50	60
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	Hz	50	50	60	60																									
	Volt	24	24	115	110																									
	Hz	50	60	50	60																									
DC current Voltages <table><tr><td>Volt</td><td>24</td></tr></table>										Volt	24																			
Volt	24																													
Permissible variation of mains voltage: ±10 %																														
Permissible variation of mains frequency: ±5 %																														
Further supply voltages on request																														
Motor protection	Stall-proof motor or thermoswitch for temperature monitoring																													
Heater (option)	Heating resistor with thermoswitch against moisture with automatic temperature control, max. 15 Watt, supply voltage 24, 115, 230 V/50/60 Hz [HZ/WVP]																													
Cable entry	SBA 06-1/-2/-3 SBA 06-4 3 x M16 x 1.5 SBA 12 SBA 20 SBA 45-2/-3 SBA 45-4 SBA 80-1/-2/-3 SBA 80-4 2 x M16 x1.5 and 1 blanking plug M16 x 1.5 SBA 200-1/-2 SBA 200-3 2 x M20 x 1.5 and 1 blanking plug M20 x 1.5																													
Manual operation	Handwheel																													
Electrical connection	Standard:	Internal terminal rail, for terminal assignment refer to terminal plan																												
	Option:	10-pole compact plug silver/24-pole with additional compartment at actuator [KS]																												
Local controls (option)	Local controls with MANUAL/AUTO change-over. Push button for directions OPEN and CLOSE.																													

Features and functions of actuator controls		
End position seating	Standard:	2 load-dependent switches, 250 V AC - Switching capacity for resistive load, max. 5 A, for inductive load, max. 3 A (SBA 06 – SBA 45) - Switching capacity for resistive load, max. 10 A, for inductive load, max. 5 A (SBA 80 – SBA 200)
	Options:	- Additional limit switches for signalling the end positions or intermediate positions, freely adjustable max. 250 V AC max. 5 A (resistive load), max. 3 A (inductive load), max. 2 switches for SBA 06 – SBA 45 [2WE], max. 4 switches for SBA 80 – SBA 200 [4WE] - Additional limit switches for signalling the end positions or intermediate positions, freely adjustable with gold contacts for low voltage, max. 30 V AC, max. 0.1 A (resistive load), max. 2 switches for SBA 06 – SBA 45 [2WE-G], max. 4 switches for SBA 80 – SBA 100 [4WE-G]
Digital inputs	Standard:	None
	Option:	With 2 inputs (reversing contactors) for OPEN and CLOSE, option for: 24 V DC; 1.7 W appropriate for PLC [WSE] 24 V AC/DC 110 V AC 230 V AC
Positioner (option)	Positioning electronics for actuator control [PEL] Input 0 – 10 V, 0/4 – 20 mA, output 0 – 10 V, 0/4 – 20 mA	

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Position feedback signal, analogue (options)	- Potentiometer 100/130/200/500/1,000/5,000 Ω or 10 kΩ [POT] Linearity fault $\leq 0.5\%$, max. 1.5 W, wiper current 30 mA, max. 2 units, max. 1 unit for SBA 06 - Electronic position feedback, 2-/3-/4-wire system [ESR] Output 0/4 – 20 mA, supply voltage 24 V DC (not possible for SBA 06) - Potentiometer tested by TÜV for fails-safe position feedback (also appropriate for Lamtec regulation systems) [C-POT]
Fieldbus (option)	Profibus DP-V0 for actuator control in housing IP66 [PBD100] Mounted to actuator with plug/socket connector M12, 5-pole, 2 x M20 cable glands

Service conditions

Mounting position	Any position, but not suspended downward	
Installation altitude	$\leq 2\,000$ m above sea level $> 2\,000$ m above sea level on request	
Ambient temperature	Standard:	$-20\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$
	Options:	$-40\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$
	Other options on request	
Enclosure protection according to EN 60529	IP43 (SBA 06-1/-2/-3), IP54 (SBA06-4), IP65 (SBA 12 – SBA 200)	
Corrosion protection	Standard:	C2 according to EN ISO 12944-2
	Option:	C3/C4 according to EN ISO 12944-2
Coating	Standard:	Powder coating
	Option:	Special coating for corrosion protection C3/C4
Colour	Standard:	Grey: RAL 7015 (housing) Green: RAL 5021 (hood)
	Option:	Available colours on request
Lifetime	AUMA linear actuators meet or even exceed the lifetime requirements of EN 15714-2. Detailed information can be provided on request.	

Further information

Inspection certificate	On request
EU Directives	Electromagnetic Compatibility (EMC): (2014/30/EU) Low Voltage Directive: (2014/35/EU) Machinery Directive: (2006/42/EC)
Reference documents	Dimensions Linear actuators SBA 06 – SBA 200 Electrical data Linear actuators SBA 06 – SBA 200