

Technical data Linear actuators for open-close and modulating duty

Type	Stroke	Operating force		Motor protection ¹⁾	Valve attachment	Trapezoidal thread	Positioning speed ²⁾		Weight
	Max. [mm]	Min. [kN]	Max. [kN]		Standard EN ISO 5210		Min. [mm/s]	Max. [mm/s]	approx. [kg]
SDL 20	55	0.5	2.0	E	F05	14 x 3	1.2	7.5	14
SDL 50	55	1.5	15	E	F05	14 x 3	0.2	0.5	14
SDL 100	85	4.0	15	E	F07	20 x 5	0.3	1.8	14

General information

Linear actuators for modulating and open-close automation

Notes on table

1) Motor protection	E = electronic cut-out
2) Positioning speed	Maximum positioning speed and operating force cannot appear simultaneously.

Features and functions of actuator

Type of duty	Open-close duty: Short-time duty S2 - 15 min, class A Modulating duty: Intermittent duty S4 - 30 %, with maximum number of starts of 1,200 starts per hour																														
Motor	Step motor (SDL 50), brushless DC motor (SDL 20/SDL 100)																														
Mains voltage, mains frequency	Standard voltages: <table border="1" style="margin-left: 20px;"> <tr> <th colspan="3">1-phase AC current</th> </tr> <tr> <th colspan="3">Voltages/frequencies</th> </tr> <tr> <td>Volt</td> <td>100 – 240</td> <td>100 – 240</td> </tr> <tr> <td>Hz</td> <td>50</td> <td>60</td> </tr> </table> <p>Options:</p> <table border="1" style="margin-left: 20px;"> <tr> <th colspan="3">3-phase AC current</th> </tr> <tr> <th colspan="3">Voltages/frequencies</th> </tr> <tr> <td>Volt</td> <td>180 – 300</td> <td>180 – 300</td> </tr> <tr> <td>Hz</td> <td>50</td> <td>60</td> </tr> </table> <table border="1" style="margin-left: 20px;"> <tr> <th colspan="2">DC current</th> </tr> <tr> <th colspan="2">Voltages</th> </tr> <tr> <td>Volt</td> <td>24</td> </tr> </table> <p>Permissible variation of mains voltage: ±10 % Permissible variation of mains frequency: ±5 % Further supply voltages on request</p>	1-phase AC current			Voltages/frequencies			Volt	100 – 240	100 – 240	Hz	50	60	3-phase AC current			Voltages/frequencies			Volt	180 – 300	180 – 300	Hz	50	60	DC current		Voltages		Volt	24
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Motor protection	Electronic cut-out																														
Self-locking	None																														
Cable entry	3 blanking plugs M20 x 1.5																														
Manual operation	Handwheel																														
Electrical connection	Spring-loaded terminal rail in separate terminal compartment, "Ex e" increased safety, cross section max. 4 mm ²																														
End position seating	Electronic selection of torque or travel for both directions																														
Local controls (option)	Local controls at actuator [VSS] (for watertight version only)																														

Features and functions of actuator controls

Interface	<ul style="list-style-type: none"> I/O board; 2 limit switches 1 A, 260 V AC [2WE] I/O board; 2 limit switches and 1 intermediate position switch 1 A, 260 V AC [2WE + 1WE]
Control	<ul style="list-style-type: none"> Analogue 0 – 10 V input impedance > 100 kOhm, 0/4 – 20 mA input impedance 50 Ohm Control inputs 24 V DC, galvanic isolation Ri = 1,500 Ohm (I > 10 mA) OPEN, STOP, LOCAL-REMOTE, RESET
Position feedback signals	Analogue 0 – 10 V, 0/4 – 20 mA, load max. 500 Ohm via contactless sensor

We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.

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Status signals	Collective fault signal 24 V DC, I _{max} . 50 mA, galvanically isolated	
Configuration	<ul style="list-style-type: none"> • Setting via remote: <ul style="list-style-type: none"> - Initialisation/zero point reset • Setting via DIP switches: <ul style="list-style-type: none"> - Input signal/output signal - Rising, falling signal - Type of duty • Setting via programming switches: <ul style="list-style-type: none"> - Torque, speed, number of turns), type of seating, operating parameters, configuration parameters 	
Display	Option:	Display with 2x16 LCD blue [ANZ-DIS]

Service conditions		
Positioning accuracy	< 0.5 %	
Mounting position	Any position, but not suspended downward	
Installation altitude	≤ 2 000 m above sea level > 2,000 m above sea level on request	
Ambient temperature	Standard:	-20 °C to +60 °C (SDL 20/SDL 50) -20 °C to +55 °C (SDL 100)
	Options:	-40 °C to +60 °C (SDL 20/SDL 50) -40 °C to +55 °C (SDL 100) Other options on request
Enclosure protection according to EN 60529	Standard:	IP67
	Option:	IP68 [A-IP68]
Explosion protection according to EN 60079-1	Option:	II 2G EEx de IIB T4
Corrosion protection	Standard:	C2 according to EN ISO 12944-2
	Option:	C3/C4 according to EN ISO 12944-2
Finish coating	Powder coating	
Colour	RAL 5021, 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): (2004/108/EC) Low Voltage Directive: (2006/95/EC) Machinery Directive: (2006/42/EC)
Reference documents	Dimensions Linear actuators SDL 20 – SDL 100 Electrical data Linear actuators SDL 20 – SDL 100