

Technical data Linear thrust units with multi-turn actuators for modulating duty

Type	Stroke ¹⁾	Thrust ²⁾		Thrust at modulating torque ³⁾	Valve attachment	Stem thread ⁴⁾	Factor ⁵⁾	Suitable multi-turn actuator	Output speed ⁶⁾	Running speed	Thrust at stall torque ⁷⁾	Weight ⁸⁾
	Max. in [mm]	Min. lbs [kN]	Max. lbs [kN]	Max. lbs [kN]					[rpm]	in/min [mm/min]	Max. lbs [kN]	approx. lbs [kg]
LE 12.1	1.97 [50]	1,350 [6]	2,585 [11.5]	1,349 [6]	F07 F10	26 x 5 LH	2.6	SAR 07.2	4.8	0.95 [24]	5,175 [23]	18 [8]
	3.94 [100]								6.7	1.34 [34]		20 [9]
									9.6	1.89 [48]		
	7.87 [200]								13	2.56 [65]		22 [10]
									19	3.74 [95]		
	15.75 [400]								26	5.12 [130]		29 [13]
									38	7.48 [190]		
LE 25.1	19.79 [500]								54	10.63 [270]		31 [14]
	1.97 [50]	2,698 [12]	5,170 [23]	2,698 [12]	F07 F10	26 x 5 LH	2.6	SAR 07.6	4.8	0.95 [0.24]	9,442 [42]	18 [8]
	3.94 [100]								6.7	1.34 [34]		20 [9]
									9.6	1.89 [48]		
	7.87 [200]								13	2.56 [65]		22 [10]
									19	3.74 [95]		
	15.75 [400]								26	5.12 [130]		29 [13]
									38	7.48 [190]		
LE 50.1	19.79 [500]								54	10.63 [270]		31 [14]
	2.48 [63]	4,496 [20]	8,430 [37.5]	4,496 [20]	F10	32 x 6 LH	3.2	SAR 10.2	4.8	1.14 [29]	13,489 [60]	22 [10]
									6.7	1.34 [34]		
	4.92 [125]								9.6	2.29 [58]		26 [12]
									13	3.07 [78]		
	9.84 [250]								19	4.49 [114]		33 [15]
									26	6.14 [156]		
	15.75 [400]								38	8.98 [228]		40 [18]
LE 70.1									54	12.76 [324]		
	3.15 [80]	6,744 [30]	14,388 [64]	6,744 [30]	F14	40 x 7 LH	3.9	SAR 14.2	4.8	1.34 [34]	20,682 [92]	51 [23]
									6.7	1.85 [47]		
	6.30 [160]								9.6	2.64 [67]		26 [12]
									13	3.58 [91]		
	12.60 [320]								19	5.24 [133]		71 [32]
									26	7.17 [182]		
	15.75 [400]								38	10.47 [266]		77 [35]
LE 100.1									54	14.88 [378]		
	3.15 [80]	14,388 [64]	26,977 [120]	11,690 [52]	F14	40 x 7 LH	3.9	SAR 14.6	4.8	1.34 [34]	40,466 [180]	51 [23]
									6.7	1.85 [47]		
	6.30 [160]								9.6	2.64 [67]		57 [26]
									13	3.58 [91]		
	12.60 [320]								19	5.24 [133]		71 [32]
									26	7.17 [182]		
	15.75 [400]								38	10.47 [266]		77 [35]
LE 200.1									54	14.88 [378]		
	3.94 [100]	24,729 [110]	48,784 [217]	19,558 [87]	F16	48 x 8 LH	4.6	SAR 16.2	4.8	1.54 [39]	67,443 [300]	99 [45]
									6.7	2.13 [54]		
	7.87 [200]								9.6	3.03 [77]		110 [50]
									13	4.09 [104]		
	15.75 [400]								19	5.98 [152]		137 [62]
									26	8.19 [208]		
	19.79 [500]								38	11.97 [304]		150 [68]
									54	17.00 [432]		

Weight base	Type	LE 12.1	LE 25.1	LE 50.1	LE 70.1	LE 100.1	LE 200.1
	approx. lbs [kg]	24 [11]			88 [40]		

General information

AUMA linear thrust units type LE 12.1 – LE 200.1 are used in combination with multi-turn actuators on valves which require linear travel. The linear thrust units convert the output torque of the multi-turn actuator into axial thrust. For other applications, please consult AUMA. 100 % load may only be applied for a short time during opening and closing.

1) – 8) Refer to notes on page 2.

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Notes on table on page 1	
1) Stroke	Higher strokes on request
2) Thrust	For min./max. settings of torque switching at actuator, tolerance $\pm 20\%$.
3) Thrust for modulating torque.	Permissible maximum thrust for modulating torque
4) Stem thread	LH = Stem extension for clockwise rotation of multi-turn actuator
5) Factor	Conversion factor for torque (T in Nm) into thrust (F in kN) for a mean adhesion factor of 0.15 ($T = F \times f$)
6) Output speed	Higher speeds on request
7) Thrust at stall torque	Thrust for modulating actuator stall torque and 100 % nominal voltage
8) Weight	Weight indicated does neither include multi-turn actuator nor base

Features and functions	
Type of duty	Intermittent duty S4 – 25 %; based on maximum thrust for modulating torque
Self-locking	Yes
Input speed	Refer to page 1
Closing direction	Standard: LH Stem extension for clockwise rotation of multi-turn actuator Option: RH Stem retraction for clockwise rotation of multi-turn actuator

Valve attachment	
Output drive types	Coupling stud with metric thread (for dimensions, refer to Dimensions Linear thrust unit LE 12.1 – LE 200.1
	Standard: With flange according to DIN 3358
	Options: Base (without valve mounting flange) Spring-loaded

Service conditions	
Ambient temperature	Standard: $-13\text{ }^{\circ}\text{F}$ to $176\text{ }^{\circ}\text{F}$ ($-25\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$) Options: $32\text{ }^{\circ}\text{F}$ to $+248\text{ }^{\circ}\text{F}$ ($0\text{ }^{\circ}\text{C}$ to $+120\text{ }^{\circ}\text{C}$) $-40\text{ }^{\circ}\text{F}$ to $+140\text{ }^{\circ}\text{F}$ ($-40\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$) $-76\text{ }^{\circ}\text{F}$ to $+140\text{ }^{\circ}\text{F}$ ($-60\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$)
Enclosure protection according to EN 60529	Standard: IP67
Corrosion protection	Standard: KS Suitable for use in areas with high salinity, almost permanent condensation, and high pollution. Option: KX Suitable for use in areas with extremely high salinity, permanent condensation, and high pollution.
Base coating	Two-component iron-mica combination
Base color	Standard: AUMA silver-gray (similar to RAL 7037) Option: Available colors on request

Further information	
EU Directives	Machinery Directive: (2006/42/EC)
Reference documents	Technical data SAR .2 Electrical data SAR .2 Dimensions LE 12.1 – LE 200.1 with SA 07.2 – SA 16.2/SAR 07.2 – SAR 16.2