

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

| Type | Stroke | Thrust ¹⁾ | | Mean thrust ²⁾ | Valve attachment | Stem thread ³⁾ | Factor ⁴⁾ | Suitable multi-turn actuator | Output speed | Running speed | Thrust at stall torque ⁵⁾ | Weight ⁶⁾ |
|----------|-----------|----------------------|-----------|---------------------------|------------------|---------------------------|----------------------|------------------------------|--------------|---------------|--------------------------------------|----------------------|
| | Max. [mm] | Min. [kN] | Max. [kN] | Max. [kN] | | | | | [rpm] | [mm/min] | Max. [kN] | approx. [kg] |
| LE 12.1 | 50 | 4 | 11.5 | 6 | F07 F10 | 26 x 5 LH | 2.6 | SAEx 07.2 | 4 | 20 | 23 | 8 |
| | 100 | | | | | | | | 5.6 | 28 | | 9 |
| | 200 | | | | | | | | 8 | 40 | | 10 |
| | 400 | | | | | | | | 11 | 55 | | 13 |
| | 500 | | | | | | | | 16 | 80 | | 14 |
| | | | | | | | | | 22 | 110 | | |
| LE 25.1 | 50 | 8 | 23 | 12 | F07 F10 | 26 x 5 LH | 2.6 | SAEx 07.6 | 4 | 20 | 42 | 8 |
| | 100 | | | | | | | | 5.6 | 28 | | 9 |
| | 200 | | | | | | | | 8 | 40 | | 10 |
| | 400 | | | | | | | | 11 | 55 | | 13 |
| | 500 | | | | | | | | 16 | 80 | | 14 |
| | | | | | | | | | 22 | 110 | | |
| LE 50.1 | 63 | 12.5 | 37.5 | 20 | F10 | 32 x 6 LH | 3.2 | SAEx 10.2 | 4 | 24 | 60 | 10 |
| | 125 | | | | | | | | 5.6 | 33 | | 12 |
| | 250 | | | | | | | | 8 | 48 | | 15 |
| | 400 | | | | | | | | 11 | 66 | | 18 |
| | | | | | | | | | 16 | 96 | | |
| | | | | | | | | | 22 | 132 | | |
| LE 70.1 | 80 | 25 | 64 | 32 | F14 | 40 x 7 LH | 3.9 | SAEx 14.2 | 4 | 28 | 92 | 23 |
| | 160 | | | | | | | | 5.6 | 39 | | 26 |
| | 320 | | | | | | | | 8 | 56 | | 32 |
| | 400 | | | | | | | | 11 | 77 | | 35 |
| | | | | | | | | | 16 | 112 | | |
| | | | | | | | | | 22 | 154 | | |
| LE 100.1 | 80 | 50 | 128 | 42 | F14 | 40 x 7 LH | 3.9 | SAEx 14.6 | 4 | 28 | 180 | 23 |
| | 160 | | | 42 ⁷⁾ | | | | | 5.6 | 39 | | 26 |
| | 320 | | | | | | | | 8 | 56 | | 32 |
| | 400 | | | | | | | | 11 | 77 | | 35 |
| | | | | | | | | | 16 | 112 | | |
| | | | | | | | | | 22 | 154 | | |
| LE 200.1 | 100 | 87 | 217 | 72 | F16 | 48 x 8 LH | 4.6 | SAEx 16.2 | 4 | 32 | 300 | 45 |
| | 200 | | | 72 ⁷⁾ | | | | | 5.6 | 44 | | 50 |
| | 400 | | | | | | | | 8 | 64 | | 62 |
| | 500 | | | | | | | | 11 | 88 | | 68 |
| | | | | | | | | | 16 | 128 | | |
| | | | | | | | | | 22 | 176 | | |

| Weight base | Type | LE 12.1 | LE 25.1 | LE 50.1 | LE 70.1 | LE 100.1 | LE 200.1 |
|-------------|--------------|---------|---------|---------|---------|----------|----------|
| | approx. [kg] | 11 | | | 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.

The tests to ensure conformity with ATEX directive 94/9/EC were performed according to the technical data. For other applications, please consult AUMA. 100 % load may only be applied for a short time during opening and closing. During running operation, sufficient pause times have to be respected. The type of duty must not be exceeded.

1) – 7) Refer to notes on page 2.

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| Notes on table | |
|---------------------------|--|
| 1) Thrust | For min./max. settings of torque switching at actuator, tolerance $\pm 20\%$. |
| 2) Mean thrust | Permissible average thrust for the whole travel. For more than 3 cycles (1 cycle = OPEN-CLOSE-OPEN) without stop. Please consult AUMA. |
| 3) Stem thread | LH = Stem extension for clockwise rotation of multi-turn actuator |
| 4) Factor | Conversion factor for torque (T in Nm) into thrust (F in kN) for a mean adhesion factor of 0.15 ($T = F \times f$) |
| 5) Thrust at stall torque | Thrust for actuator stall torque and 100 % nominal voltage |
| 6) Weight | Weight indicated does neither include multi-turn actuator nor base |
| 7) Mean thrust 42 and 72 | Maximum for 2 cycles without stop. For more than 2 cycles please contact AUMA. |

| Features and functions | | |
|------------------------|--|--|
| Explosion protection | Linear thrust unit: | II2G c IIC T4 according to ATEX CD 94/9/EC |
| | Multi-turn actuator | II2G c IIC T4 according to ATEX CD 94/9/EC |
| Type of duty | Short-time duty S2, max. 3 cycles (OPEN-CLOSE-OPEN) based on mean thrust and standard ambient temperature. | |
| Self-locking | Yes | |
| Input speed | Refer to page 1 | |

| Valve attachment | | |
|--------------------|---|--|
| Valve attachment | Refer to Dimensions Mounting dimensions Linear thrust unit LE 12.1 – LE 200.1 | |
| Output drive types | Standard: | For stem thread, refer to page 1 |
| | Option: | RH = Stem retraction for clockwise rotation of multi-turn actuator |

| Service conditions | | | |
|--|-------------------------------------|---|--|
| Ambient temperature | Standard: | –25 °C to +40 °C | |
| | Options: | –40 °C to +40 °C | |
| | | –60 °C to +40 °C | |
| | | Special sizings with temperatures up to +60 °C are possible, please contact AUMA. | |
| Enclosure protection according to EN 60529 | Standard: | IP 67 | |
| Corrosion protection | Standard: | KS | Suitable for installation in industrial units, in water or power plants with a low pollutant concentration as well as for installation in occasionally or permanently aggressive atmosphere with a moderate pollutant concentration (e.g. wastewater treatments plants, chemical industry) |
| | Options: | KX | Suitable for installation in extremely aggressive atmospheres with high humidity and high pollutant concentration |
| Finish coating base | Two-component iron-mica combination | | |
| Colour base | Standard: | AUMA silver-grey (similar to RAL 7037) | |
| | Option: | Other colours are possible on request. | |

| Further information | |
|---------------------|--|
| EU Directives | ATEX Directive: (94/9/EC) Machinery Directive: (2006/42/EC) |
| Reference documents | Technical data SAEx .2 Electrical data SAEx .2 |