

Overview further linear motion products

Contents

8	Overview further linear motion products	171-177
8.1	Linear positioning actuator LPA	172
8.2	Compact linear actuator telescopic CLAT	172
8.3	Electromechanical screw ram ALS / ALSR	173
8.4	High performance linear actuator HLA	173
8.5	Electromechanical linear actuator ELA	173
8.6	Linear actuator TARVOS	174
8.7	Telescopic lifting column TELESTO	174
8.8	Telescopic lifting column PHOENIX	174
8.9	High performance worm gear screw jack MERKUR H	175
8.10	Linear motion precision screws	175
8.11	Screw jacks in imperial sizes (mechanical actuators)	176
8.12	Electric cylinder in imperial sizes	177
8.13	Linear actuator in imperial sizes	177
9	Questionnaire	178-179
10	Pfaff-silberblau subsidiaries	180-181
	Service	182
	Company profile	183

8

9

10

Overview further linear motion products



8.1 Linear positioning actuator LPA

With the new development "Linear Positioning Actuator LPA", it is possible to move loads of 500 N with a speed up to 30 m/min and a duty cycle up to 90 % related on one hour. Dynamic load of maximum 2000 N is possible by reducing linear speed.

The maximum admissible static load is 5000 N depending on screw length. This new linear actuator is especially designed for the automation industry, where high speeds, high duty cycle and high precision are absolutely required. The heart of the new is a hardened and spiral-toothed bevel gear, designed to retain the ball screw. All the parts are integrated in aluminium housing of high quality. A ball screw serves as screw, with a diameter of 16 and with two different pitches 5 or 20.

Application areas:

- Positioning actuator
- Handling engineering
- Automation
- Robots
- Packaging machines
- Automatic assembling machines

Characteristics:

- Aluminium housing
- High precision
- Replacement accuracy ± 0.08 mm
- Lifting speed up to 0.5 m/sec
- Low maintenance
- Various options (motors, anti-turn device, etc.)



8.2 Compact linear actuator telescopic CLAT for highest performance and smallest installation dimensions

The totally new CLAT series combines the three most important requirements of electromechanical linear actuators. They move high lifting loads while being able to fit into extremely small installation dimensions and come complete with drive motor, gear and a three-fold tubular construction.

Plus complete encapsulation of the thrust tube and gear unit, high efficiency ratings due to the use of helical gearing, and high pitch and positioning accuracy due to the use of high-quality threaded screws.

Smallest installation dimensions are made possible by the telescoped drive screw in conjunction with the telescoped tube covering. The compact, high-quality unit stands for long industrial service life. CLAT can be used in all installation positions, even overhead installations.

Overview further linear motion products

8.3 Electromechanical screw ram ALS /ALSR

The "ALS" electromechanical screw ram is a universal drive system for a wide range of applications within the machine building industry. With a choice of 4 sizes, a modular design in "ALS" compact version and "ALSR" cylinder version it is possible to obtain the optimal design features to suit your specific requirements. The system is particularly ideal for single drive applications on linear motion projects. The "ALSR" version consists of the "ALS" standard version plus a fully enclosed shaft and piston structure, with the tubes protected against corrosion.

Available in 4 standard sizes

- Lifting capacities ranging from 12.5 to 100 kN
- Lifting speeds of 0.5 m/min to 10 m/min
- With trapezoidal or ball screw
- Direct motor attachment possible
- Standard stroke lengths of up to 1.5 m, special lengths are also available



8.4 High performance linear actuator HLA

Multifarious useable drive element consisting of a drive mechanism with two possible transmission stages as well as a shaft and thrust tube design.

Available 4 standard sizes

- Lifting loads up to 100 kN
- Lifting speeds from 0.025 m/min to 10 m/min
- Enclosed design
- Self-supporting tube-in-tube system
- Two possible transmission stages
- With trapezoidal or ball screw
- Use in multi-screw lifting systems is possible



8.5 Electromechanical linear actuator ELA

Electromechanical linear actuators (ELA) consist of a completely enclosed aluminium housing with worm gearing and axial bearing driven by a standard supplied electric motor as well as a thrust and shaft tube construction. Trapezoidal or ball screws. It is possible to install ELAs in any position and the thrust and guide mechanism is designed for both compressive and tensile loading. Other distinguishing features include robust construction and reliability giving ELAs a wide range of applications. The use of weather-resistant materials in their construction means they are also suitable for outdoor use.

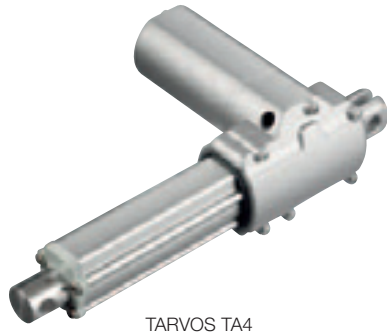
Available in 4 standard sizes

- Lifting capacities ranging from 2 to 10 kN
- Stroke lengths of 100 to 800 mm
- Wide range of accessories (flexible protection boots, shaft encoder, control unit, lift limitation etc.)



More information on www.pfaff-silberblau.com

Overview further linear motion products



TARVOS TA4

8.6 Linear actuator TARVOS

The linear actuator TARVOS is making perfect the scope of supply of ALLTEC in the lower and middle service range. Due to its reliability as well as almost noise-less operation the compact and robust design of the TARVOS actuator can be applied in different kind of industries such as mechanical engineering, vehicle and shipbuilding, home and air condition technology as well as furniture and medicine technology.

- Standard construction for lifting forces from 100 N up to 2000 N (other lifting forces upon request)
- Suitable for push and pull applications
- Self-contained and maintenance free actuation system
- High performance DC-motors: 12 V, 24 V und 36 V
- Protection class up to IP 66
- Economic installation
- Different kind of sensors optionally available
- Control modules and controls upon request



8.7 Telescopic lifting column TELESTO

The light telescopic lifting column TELESTO was specially designed for requirements of the furniture industry and is providing a cost-saving technology to move flat screens up to 60 inch screen size.

Mounting brackets are available optionally. By means of the mounting brackets it is possible to assemble all standard screens on the lifting column.

- Lifting speed 35 mm/s
- Lifting force 600 N
- Operating voltage 24 V
- Easy installation by Plug & Play connections
- Including control module and IR-Remote



8.8 Telescopic lifting column PHOENIX

Precision and strength combined. They come together to form the PHOENIX, the compact, extremely strong and fast lifting system with integrated guides. A system of high-quality anodized precision aluminium profiles, a MERKUR worm gear screw jack and a directly mounted motor. PHOENIX is a master in absorbing high compression and tensile forces. It performs well independently, but does even more as a lifting system in a kit. With electrical or mechanical synchronization.

- Enclosed, low-maintenance design
- Admissible off-center load pick-up
- Self-locking mechanism in the trapezoidal version (TGT)
- High lifting speed with the two-start trapezoidal or ball screw
- Short delivery time
- Inductive limit switch for setting the upper and lower end positions
- Conforms with European EN 1494 (VBG 8) regulation and rating IP 55
- Numerous options: control unit, encoders, servo motor and much more.
- Power range from 5 to 25 kN lifting force
- Variable stroke lengths

More information on www.alltec.de

Overview further linear motion products

8.9 High performance worm gear screw jack MERKUR H

The MERKUR H, the new high performance cubic screw jack meets even the highest demands. With speeds of up to 3,000 rpm and with torques that are, on average, twice as high as for the standard MERKUR version, the MERKUR H moves the heaviest of loads more quickly than other screw jacks commonly available on the market. It is available in five model sizes with lifting capacities of 6.5 kN to 130 kN. Furthermore, its high-quality machining makes it suitable for continuous operation, even when subject to extreme temperatures ranges and harsh environmental.

Available in 5 standard sizes

Size		M1H	M2H	M3H	M4H	M5H
Max. lifting capacity /max. tensile load	kN	6,5	13	35	65	130
Max. permitted drive-shaft torque	Nm	8	20	45	90	190
Max. lifting speed with Tr screw	m/min.	3	3	3	3	3
Max. lifting speed with ball screw	m/min.	3,75	3,75	2,5	4,3	3,3



8.10 Linear motion precision screw



Our linear motion precision screws give you the confidence that only an experienced manufacturer can provide and also offer a way of rising above the performance and ideas your competitors can offer.

Our extensive standard range can save you a fortune in purchasing, design and warehousing costs. The range includes trap-ezoidal screws from 12 mm to 190 mm diameter and ball screws from 6 mm to 125 mm diameter.

More information on www.alltec.de



8.11 Screw jacks in imperial sizes (mechanical actuators)

Product range

- Machine screw and ball screw actuators (screw jacks) ranging in size from 1/4 to 250 tons
- Specialty actuators: Stainless steel, Anti-Backlash, Anode jacks, Micro-miniature, Continuous duty
- Powered actuators: Gear reducer driven, C-face driven, Handwheels
- Actuator controls: Control panels, Rotary limit switches, Potentiometer/Transducers, Encoders, Rotary counters
- Power transmission components: Bevel gear boxes, Couplings, Connecting shafts, Pillow and Flange blocks

Features & Benefits

- Broadest range of actuator capacities and types in the industry
- Modular concept allows for unlimited number of configurations
- 3D Modeling capability on www.duffnorton.com

Overview further linear motion products

8.12 Electric cylinder in imperial sizes

Product range

- High speeds up to 379 in/min (160 mm/sec)
- High capacities up to 50,000 lbs. (222.5 kN)
- Stroke lengths up to 13 feet (3.96 meters)
- Continuous duty ratings (SCN Series)
- Low power requirements (SCN Series)
- Aluminum bronze worm gears (SCW Series)
- Helical & helical bevel gears (SCN Series)
- Ball screw or acme screw
- Clevis mounting or trunnion mounting
- Controls

Features & Benefits

- Excellent replacement for hydraulic cylinders
- Broadest combination of speeds and capacities in the industry
- Durable construction means less maintenance and longer service life
- 3D Modeling capability on www.duffnorton.com



8.13 Linear actuator in imperial sizes

Product range

Industrial actuators:

- Capacities from 25 to 2500 lbs. (11 to 11.13 kN)
- Speeds up to 2.4 in/sec (61 mm/sec)
- Stroke lengths up to 24 in (609.6 mm)
- Multiple AC & DC voltages
- Custom actuators available

Commercial actuators:

- Capacities to 1350 lbs. (6 kN)
- Speeds up to 1.8 in/sec (45.7 mm/sec)
- Stroke lengths up to 24 in. (609.6 mm)
- Multiple AC & DC voltages
- Custom actuators available

Features & Benefits

- Manufacturing actuators for over 40 years
- 3D Modeling capability on www.duffnorton.com
- Excellent replacement for hydraulic cylinders

