

## NEW: ELAX<sup>®</sup> Linear Motor Slide

These new, electric linear motor slides ELAX<sup>®</sup> are predestined for fast, precise positioning tasks. Furthermore, the programmable force processes open new application possibilities in handling, assembly and inspection. With these features the ELAX<sup>®</sup> linear motor slide also convinced the jury of the chamber of commerce and won the Swiss Innovation Award 2015! Moreover these components are extremely robust and sustainable. In our endurance tests we achieve over 350 million cycles under maximal stress and highest dynamics without re-lubrication or maintenance.



### Your Immediate Benefits

- New applications thanks to force processes
- Flexible positioning
- High dynamics, up to 3m/s (9.84 fps)
- High precision +/-10µm, resolution 1µm
- No noise, little vibrations
- One-cable connection
- Modular system with strokes of 30-150mm (1.18"-5.90")

### Your Benefits in the Long Run

- Maintenance-free for >350 million cycles
- Constantly stable accuracy
- High cycle rates
- No exchange of dampers
- No replacement of sensor cables
- Savings in time and maintenance
- Less energy consumption

Winner of Swiss Innovation Award 2015



INDUSTRIE- UND HANDELSKAMMER  
ZENTRSCHWEIZ

# ELAX® Series

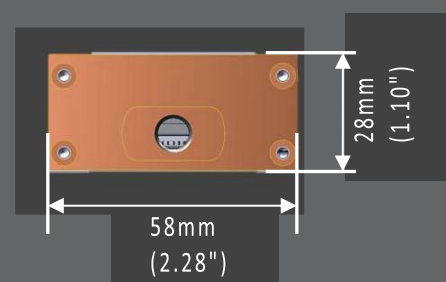


Type	Stroke [mm]	Force Fn/Fp [N]	Weight Slider [g]	Weight Total [g]
Ex 30F20	30 (1.18")	20/60 (4.5/13.5 lbf)	195 (0.43 lbs)	560 (1.23 lbs)
Ex 50F20	50 (1.97")	20/60 (4.5/13.5 lbf)	265 (0.58 lbs)	630 (1.39 lbs)
Ex 80F20	80 (3.15")	20/60 (4.5/13.5 lbf)	340 (0.75 lbs)	780 (1.72 lbs)
Ex 110F20	110 (4.33")	20/60 (4.5/13.5 lbf)	415 (0.91 lbs)	945 (2.08 lbs)
Ex 150F20	150 (5.90")	20/60 (4.5/13.5 lbf)	490 (1.08 lbs)	1110 (2.45 lbs)

## ELAX® Installation Dimensions



Type	L min [mm]	L max [mm]
Ex 30F20	110 (4.33")	140 (5.51")
Ex 50F20	130 (5.12")	180 (7.09")
Ex 80F20	178 (7.01")	258 (10.16")
Ex 110F20	208 (8.19")	318 (12.52")
Ex 150F20	268 (10.55")	418 (16.46")



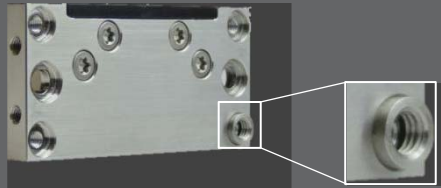
## Modular Design with Direct Screw Connection

Perfect modularity – A determining key factor in the development of the ELAX® linear motor slides with direct drive. No matter if held flat, upright, as cross table or as linear cantilever, the ELAX® slides can be directly screwed together by dowel bushings without the need of adapter plates. The hole matrix always has a grid of 20 x 50mm (0.79" x 1.97").



Y-Z Pick and Place flat

**Front flange**  
Stainless steel,  
57mm x 27.5mm x 6mm  
(2.24" x 1.08" x 0.24")  
  
Hole matrix 20 x 50mm  
(0.79" x 1.97").



Dowel bushing



Y-Z Pick and Place upright



X-Y-Z area cantilever



X-Y cross table

## Compatible with the compact XENAX® Xvi Servo Controller

- Patented "Force Calibration" for the force processes "Force Limitation", "Force Control", "Force Monitoring"
- Webserver for set-up with web browser
- Position controller with S-curve profile generator
- Digital input and output with 24V source driver
- Fully programmable for stand-alone handling operations with Master Slave function up to 4 axes
- Bus modules: EtherCAT®, Profinet®, EtherNet/IP® etc.
- Separate logic power (24V), output stage (24V-75V)
- Functional safety, TÜV certified, optional
- UL certified, optional



EtherNet/IP  
EtherCAT  
ETHERNET  
POWERLINK

PROFI  
NET  
CANopen

## Smart, Praxis Oriented Features

### One-cable connection reduces cabling requirements

The one-cable connection from Jenny Science simplifies the whole machine cabling complexity. In addition, the cable chains are more compact and lighter, need less room and achieve higher dynamics.



### Variable cable connection offers more constructive flexibility

As an option, the cable connection can be oriented on the left side in order to keep the space behind the ELAX® free for more compact machine installations.



### Weight compensation in vertical oriented applications

This new constructed weight compensation relieves the linear motor in the ELAX® slide. The linear motor heats far less and this saving of energy can be used for higher dynamics. In case of power interruption, the slide remains in position or drives upwards depending on the adjustment of the spring force - without air pressure and without electricity.



### Force Limitation / Force Control / Force Monitoring

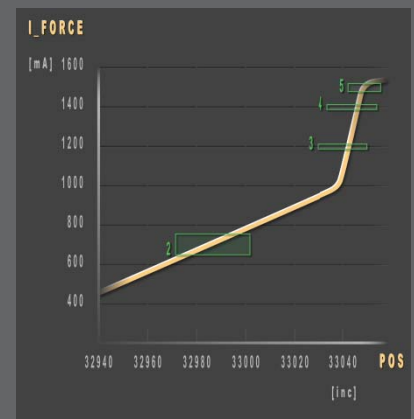
The patented function "Force Calibration" is able to precisely measure and define forces in applications. Thus the following 3 common force processes are possible:

**"FORCE LIMITATION"**: Driving to a position with high speed, continue driving with limited force (e.g. pad printing).

**"FORCE CONTROL"**: Driving with minimal force until part touch, increase force, continue driving until force or position is reached (e.g. inserting parts).

**"FORCE MONITORING"**: Definition of a "Force Sector" (rectangular field) in a force/way diagram (e.g. button or switch inspection).

Minimal force 50g, maximal force 6000g, force resolution 25g.



### Chrome steel cover for food- and pharmaceutical industry or for clean rooms of laboratory automation or medical technology

With this chrome steel cover the modular matrix holes and threads are covered and the surface is smooth and easy to clean.

