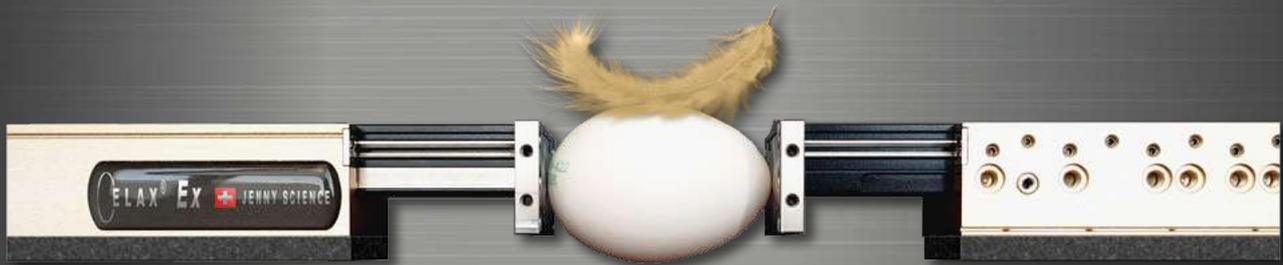


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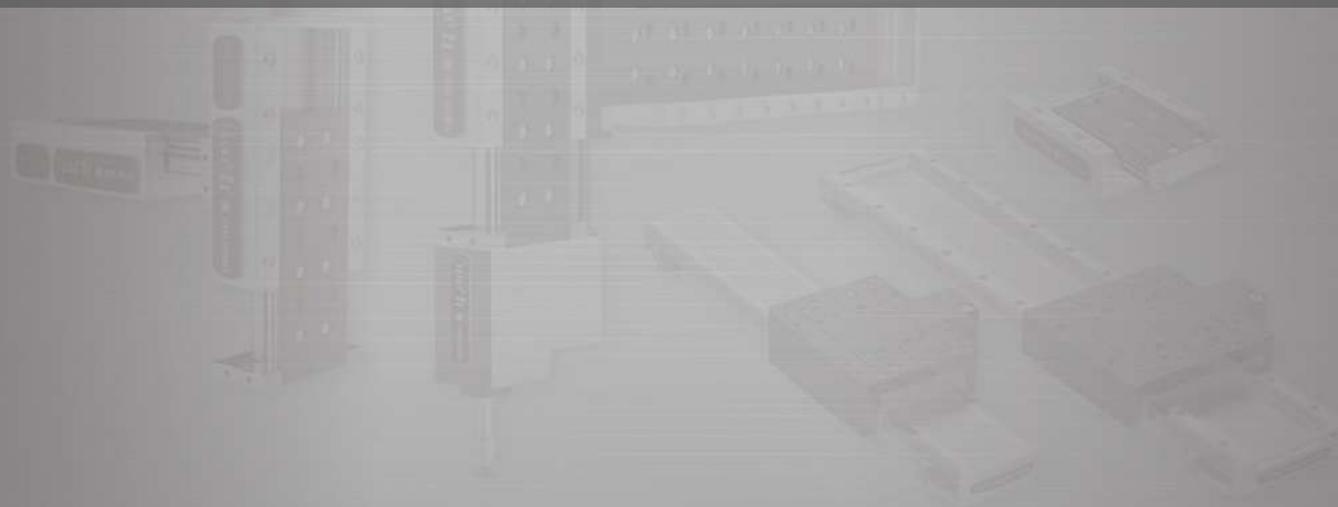
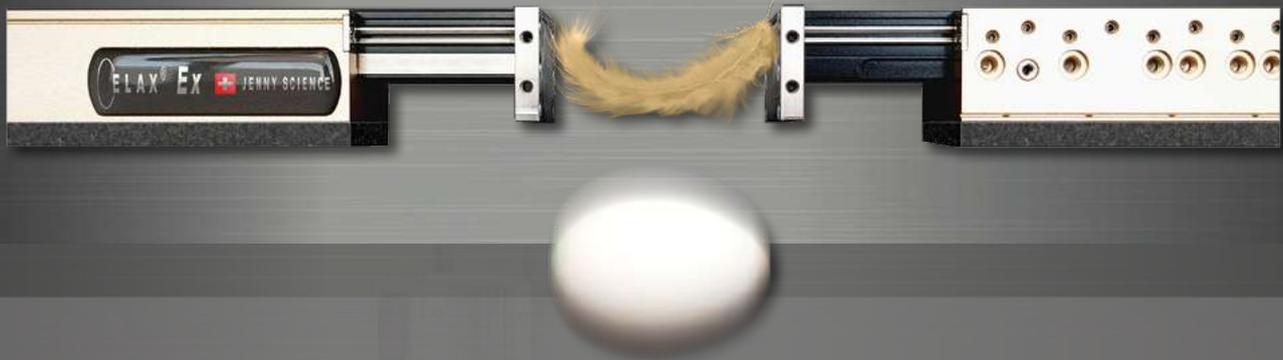


Compact linear motor axes and intelligent,
web-based servo controllers

JENNY SCIENCE



Precision with feelings



CUTTING-EDGE TECHNOLOGY – YOUR BENEFITS

Forceteq[®] – Precision with feelings

Worldwide unique, patented stroke-/force measurement technology

Compact dimensions

Less space requirements, lighter weight, higher dynamics

Modular construction

Shorter development time, simple standardization

Webbrowser GUI

Short set-up time, simple tests with web browser

PLC bus communication

Latest Ethernet bus technologies for connection to market-leading PLCs



Scan the QR code
and learn more
about our USPs!

PRODUCT PORTFOLIO

XENAX[®] servo controller Xvi 75V8, Xvi 48V8

The XENAX[®] servo controllers are precisely adjusted to the LINAX[®] linear motor axes, ELAX[®] electric slides and ROTAX[®] rotary motor axes. All Jenny Science axes are automatically identified and parameterized. Set-up and programming can be taken care of very easily via webbrowser. Another highlight of this servo controller is the Forceteq[®] technology.

LINAX[®] linear motor axes Lxc, Lxu, Lxs, Lxe

Model range (Lxc = compact, Lxu = universal, Lxs = shuttle, Lxe = exclusive)
Model key Lxc 135F10 (c = type, 135 = stroke [mm], 10 = nominal force [N])
Stroke 44-1,600mm
Travel force 8-60N nominal, 24-180N peak

ELAX[®] electric slide Ex

Model Ex 80F20 (80 = stroke [mm], 20 = nominal force [N])
Stroke 30-150mm
Travel force 20N nominal, 60N peak
Single cable solution, halves wiring effort

ROTAX[®] rotary motor axes Rxvp

Model (vp = vacuum pneumatic)
Model key Rxvp 1.5T40 (1.5 = 1,500 rpm, 40 = nominal torque [mN])

Compact rotary motor axes for precise angle rotation with a resolution of 64,000 increments per revolution. Hollow shaft feedthrough for vacuum grippers and single-acting pneumatic grippers, 360° endless rotation.

J E N N Y S C I E N C E  E 

Cutting-edge technology
Perfectly adjusted to each other
From a single source



Scan the QR code
and learn more
about our products!

The front flange on the slider is ideal for modular systems. Sophisticated, vertical cable and tube feedthrough for ROTAX®.

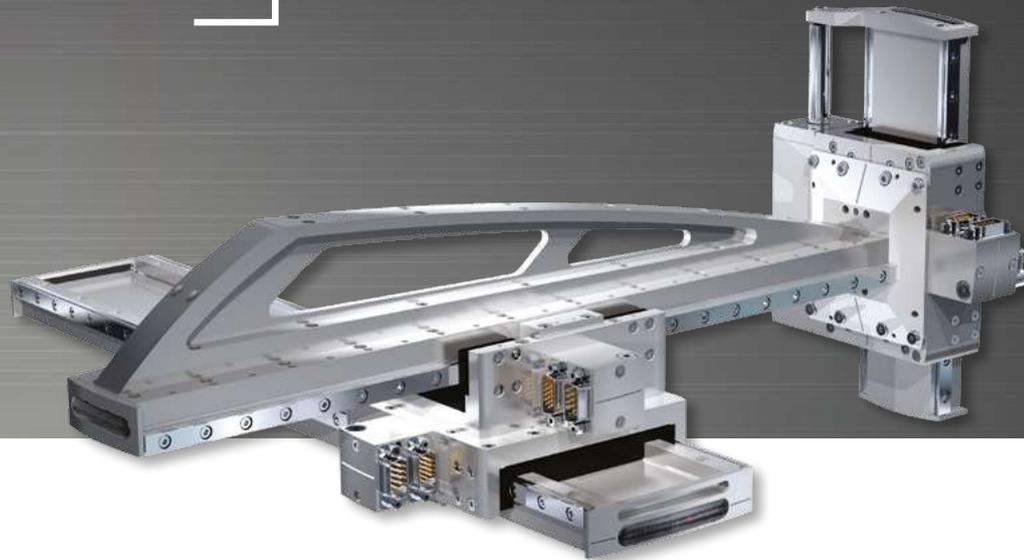


Y-Z AND Y-Z-R PICK AND PLACE

ELAX® Ex / ROTAX® Rxvp 1.5T40

Arrangement	Axes	Function
Y-Z flat	1 x ELAX® Ex 30F20 1 x ELAX® Ex 30F20	Y-axis, horizontal, flat Z-axis, vertical
Y-Z-R upright	1 x ELAX® Ex 150F20 1 x ELAX® Ex 30F20 1 x ROTAX® Rxvp 1.5T40	Y-axis, horizontal, upright Z-axis, vertical R-axis, rotative, vertical

A constantly high level of accuracy thanks to low-maintenance and wear-free linear motor axes. Flexible dimensions selectable according to the size and weight of the product.

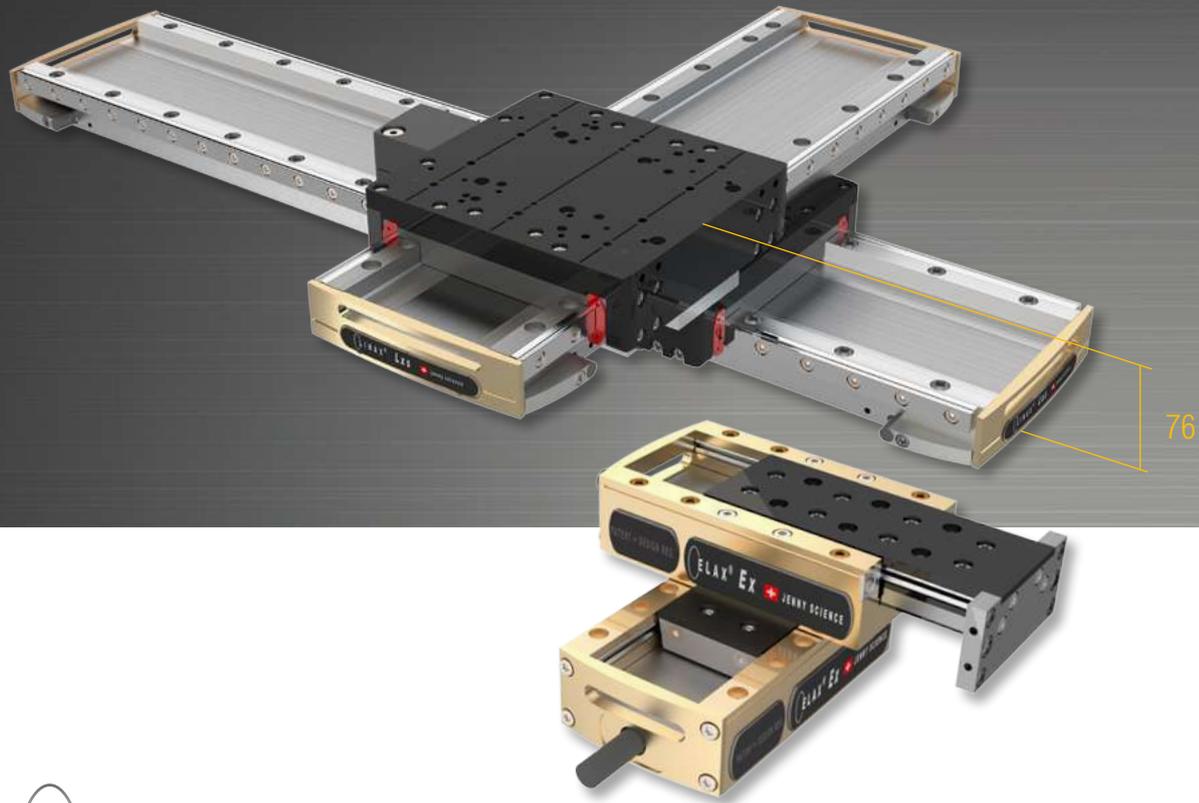


X-Y-Z 3D HANDLING

LINAX® Lxs / Lxu

Arrangement	Axes	Function
X-Y-Z flat	1 x LINAX® Lxs 520F60 1 x LINAX® Lxu 320F60 1 x Cantilever armour to LINAX® Lxu 320F60 1 x LINAX® Lxu 80F60 1 x Weight comp. LINAX® Lxu 80F60	X-axis, horizontal, flat Y-axis, horizontal, flat Reinforce the Y-axis Z-axis, vertical Compensate the payload

Minimum height. Height tolerance measurable and adjustable on <math><10\mu\text{m}</math> of the whole area.

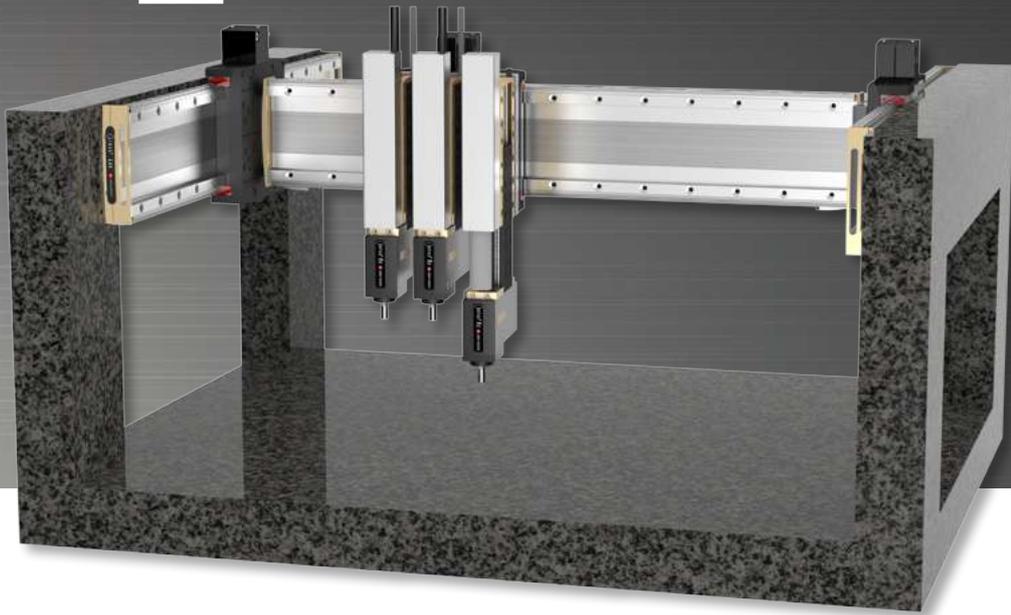


X-Y CROSS TABLE

ELAX[®] Ex / LINAX[®] Lxs

Arrangement	Axes	Function
X-Y LINAX [®]	1 x LINAX [®] Lxs 400F60 1 x LINAX [®] Lxs 320F60	X-axis Y-axis
X-Y ELAX [®]	1 x ELAX [®] Ex30F20 1 x ELAX [®] Ex30F20	X-axis Y-axis

The Y-axes are arranged in an upright position, which means minimal space requirements in relation to the strokes.



X-Y-Z-R GANTRY

LINAX® Lxs / ROTAX® Rxvp 1.5T40

Arrangement	Axes	Function
X-Y-Z-R upright	1 x LINAX® Lxs 400F60 2 x LINAX® Lxs 520F60 3 x LINAX® Ex 50F20 3 x ROTAX® Rxvp 1.5T40	X-axis Y-axis (Gantry) Z-axis R-axis

Precisely adjusted to the Jenny Science products. Automatic identification and basic parameterization. Set-up and programming can be taken care of very easily via webbrowser.

Xvi 48V8

Xvi 75V8



Functional safety, TÜV
SIL 2, PL d, Cat. 3

XENAX[®] SERVO CONTROLLER

Xvi 48V8 / Xvi 75V8

Patented «Force Calibration» for the force processes «Force Limitation», «Force Control», «Force Monitoring»

Webserver for set-up with webbrowser

Position controller with S-curve profile generator

Xvi 48V8: 4 digitale input and 2 output with 24V source driver
Xvi 75V8: 12 digital input and 8 output with 24V source driver

Fully programmable for stand-alone handling operations with Master Slave function up to 4 axes

Xvi 48V8: Separate power input for Logic (24V) and Power Stage (24V - 48V)
Xvi 75V8: Separate power input for Logic (24V) and Power Stage (24V - 75V)

Forcetek® includes a 100% quality control in the production plant

- Stroke- / force diagram with monitoring
- Force limitation
- Force pilot control



Libraries and demo programs for the Ethernet bus connections are available on our website, as well as the relevant tutorials and FAQs!

EtherCAT®

EtherNet/IP™
ODVA

CANopen®

PROFINET®
INDUSTRIAL ETHERNET

Ethernet TCP/IP

ETHERNET POWERLINK

IRT (Isochrone Real Time)

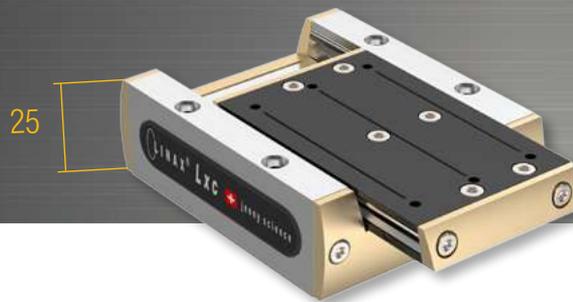


Tutorials



FAQs

Lxc = compact:
 Patented monoblock construction. No cable moving.
 Excellent performance /
 volume ratio.



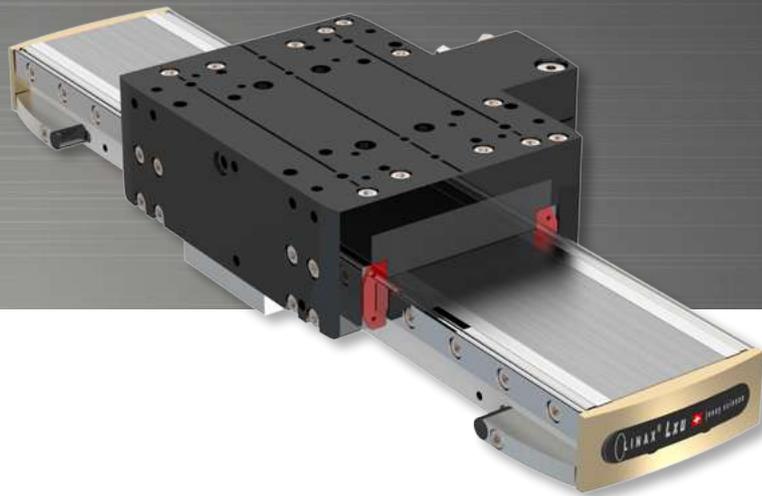
LINAX[®] LXC LINEAR MOTOR AXES

Lxc = compact

Model Lxc	Stroke (mm)	L Install. (mm)	Force Fn/Fp (N)	Weight Slider/Total (g)
44F08 ¹⁾	44	78	08 / 24	130 / 350
85F10 ¹⁾	85	144	10 / 30	230 / 650
135F10	135	194	10 / 30	320 / 880
230F10	230	290	10 / 30	450 / 1,200
80F40 ¹⁾	80	169	40 / 114	520 / 1,470
176F40 ¹⁾	176	265	40 / 114	750 / 2,150
272F40	272	361	40 / 114	1,050 / 2,800

¹⁾ available with weight compensation of up to 3 kg / 6 kg

Lxu = universal:
3 installation options: On the slider, on the ground plate or on the front flange.
4 through holes on the carriage slider allows for flexible installation.



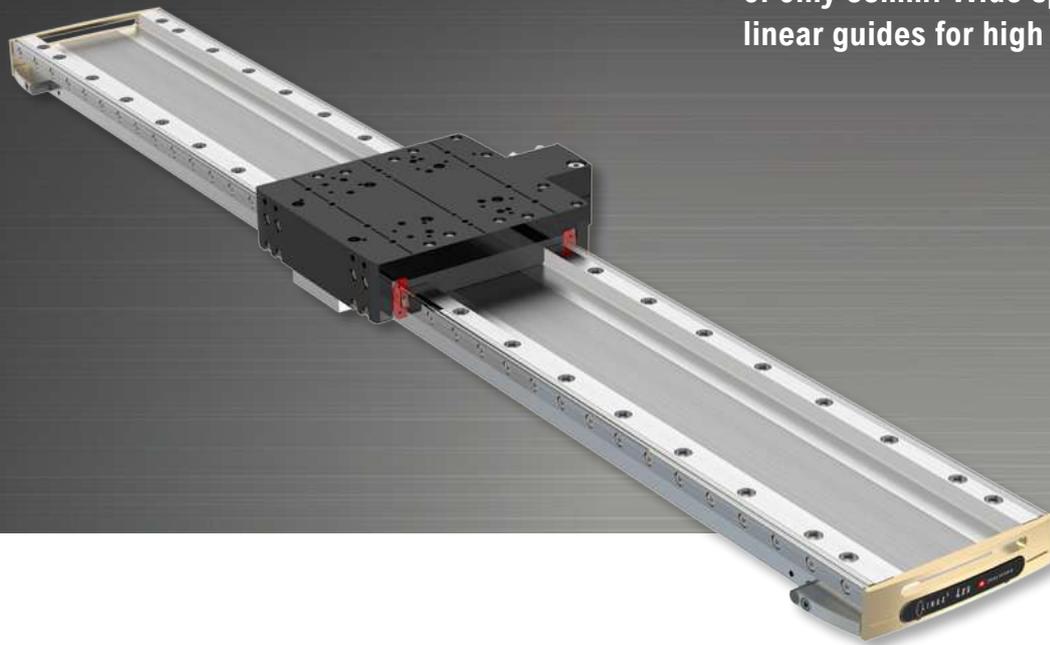
LINAX[®] LXU LINEAR MOTOR AXES

Lxu = universal

Model Lxu	Stroke (mm)	L Install. (mm)	Force Fn/Fp (N)	Weight Slider/Total (g)
40F60 ¹⁾	40	170	60 / 180	950 / 1,700
80F60 ¹⁾	80	210	60 / 180	950 / 1,900
160F60 ¹⁾	160	290	60 / 180	950 / 2,200
240F60	240	370	60 / 180	950 / 2,600
320F60	320	450	60 / 180	950 / 2,900

¹⁾ available with weight compensation of up to 6 kg

Lxs = shuttle:
Long strokes up to
1,600mm. Minimum height
of only 38mm. Wide spaced
linear guides for high loads.



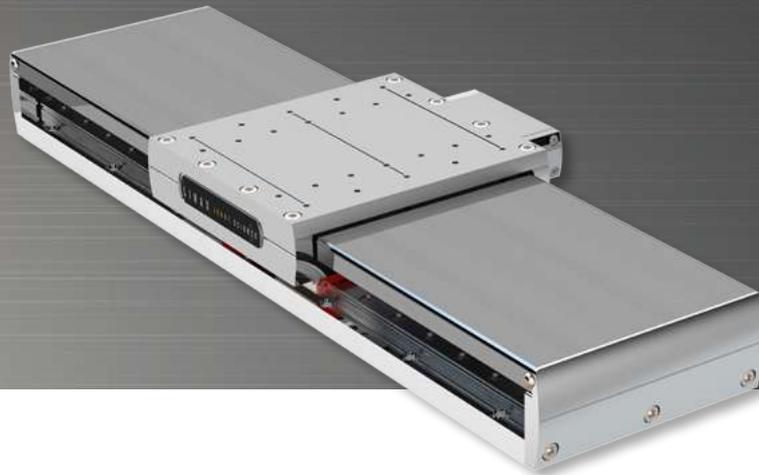
LINAX[®] LXS LINEAR MOTOR AXES

Lxs = shuttle

Model Lxs	Stroke (mm)	L Install. (mm)	Force Fn/Fp (N)	Weight Slider/Total (g)
160F60	160	190	60 / 180	1,000 / 2,600
200F60	200	330	60 / 180	1,000 / 2,800
320F60	320	450	60 / 180	1,000 / 3,400
400F60	400	530	60 / 180	1,000 / 3,900
520F60	520	650	60 / 180	1,000 / 4,500
600F60	600	730	60 / 180	1,000 / 5,000
800F60	800	930	60 / 180	1,000 / 6,000
1000F60	1,000	1,130	60 / 180	1,000 / 7,200
1200F60	1,200	1,330	60 / 180	1,000 / 8,400
1600F60 ¹⁾	1,600	1,730	60 / 180	1,000 / 10,600

¹⁾ available with magnetic measuring system only

Lxe = exclusive:
Protection cover under the carriage slider. Easy cleaning for medical and semiconductor applications.



LINAX[®] LXE LINEAR MOTOR AXES

Lxe = exclusive

Model Lxe	Stroke (mm)	L Install. (mm)	Force Fn/Fp (N)	Weight Slider/Total (g)
250F40	250	386	40 / 114	980 / 3,080
400F40	400	536	40 / 114	980 / 3,850
550F40	550	686	40 / 114	980 / 4,620
800F40	800	936	40 / 114	980 / 5,900
1000F40	1,000	1,136	40 / 114	980 / 6,930

Electric slides for fast, precise pick & place units! Forceteq® stroke- / force measurement technology for QA and inspection to be carried out simultaneously with the assembly process. Modular design with direct fitting of axes on the front flange. Single cable solution.



ELAX® ELECTRIC SLIDE

Ex

Model Ex	Stroke (mm)	L Install. min/ max (mm)	Force Fn/Fp (N)	Weight Slider/Total (g)
Ex 30F20 ¹⁾	30	110 / 140	20 / 60	560
Ex 50F20 ¹⁾	50	130 / 180	20 / 60	630
Ex 80F20 ¹⁾	80	178 / 258	20 / 60	780
Ex 110F20 ¹⁾	110	208 / 318	20 / 60	945
Ex 150F20	150	268 / 418	20 / 60	1,110

¹⁾ available with weight compensation of up to 2 kg



UNIQUE
WORLD -
WIDE!



INDUSTRIE- UND HANDELSKAMMER
ZENTRALSCHWEIZ

WINNER OF SWISS INNOVATION AWARD

Forceteq®

Forceteq® is the worldwide unique, patented stroke-/force measurement technology which is integrated in the XENAX® Xvi servo controller. Therefore, forces can be directly measured without external force-sensors and analysis instruments. Inserted parts always have slight height differences. To compensate for these height differences, a «touch position» is typically recorded and the stroke-/force inspection is started from this «touch position». With Forceteq® technology, it is possible for the first time to carry out an effective quality inspection in an ongoing process.

Rotary motor axes with vacuum / compressed air feed-through. Direct installation on the ELAX® front flange. High level of accuracy and robustness. Single cable solution.



ROTAX® ROTARY MOTOR AXES

Rxvp 1.5T40

Model Rxvp	Shaft (mm)	Rpm	Torque Mn/Mp (mNm)	Weight Total (g) Shaft 15/30mm
Rxvp 1.5T40	15 / 30	1,500	40 / 110	325 / 330
Rxvp 1.5T40 for ELAX® with weight comp.	15 / 30	1,500	40 / 110	345 / 350



DIRECT INSTALL. ON THE ELAX® FRONT FLANGE Ex F20

The ROTAX® rotary axes can be installed directly onto the front flange of an ELAX® electric slide. The slim version of ROTAX® is suitable for applications without weight compensation. The wider version is suitable for ELAX® with weight compensations. The vacuum/ compressed air tube and the connecting cable are feedthrough in a sophisticated vertical guide.

Installation on the LINAX® Lxu ground plate

With a special angle bracket, the ROTAX® rotary motor axes can also be mounted onto the ground plate of a Lxu linear motor axes. The angle bracket has a feedthrough for the vacuum/ compressed air tube and the connecting cable. The modular grid hole system on the ground plate of the Lxu axes allows for the flexible installation of the ROTAX® at different vertical positions.



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