

LinMot®

Industrial Linear Motors



Purely electrical drive system



Freely positionable along the entire stroke



For precise and dynamic positioning tasks



Linear motor technology provides longer life



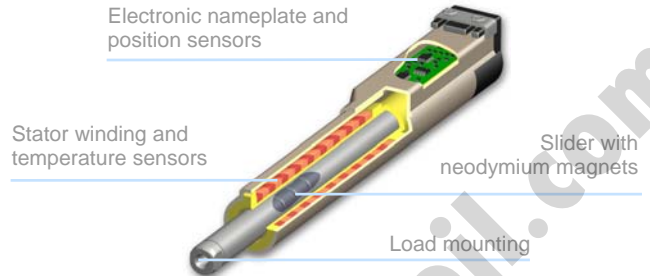
IP67 protection class and clean room certification







The linear motor technology for industrial applications

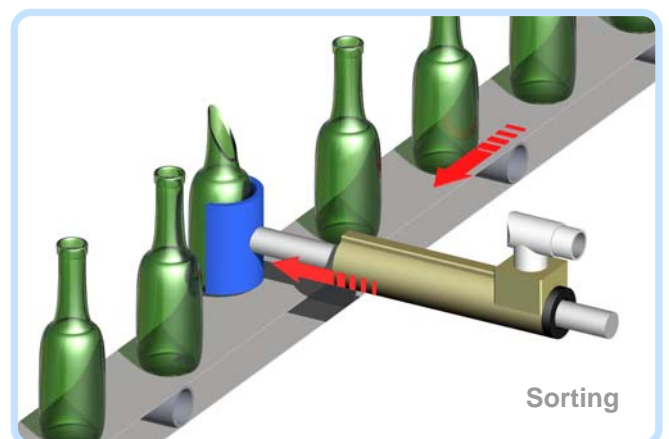
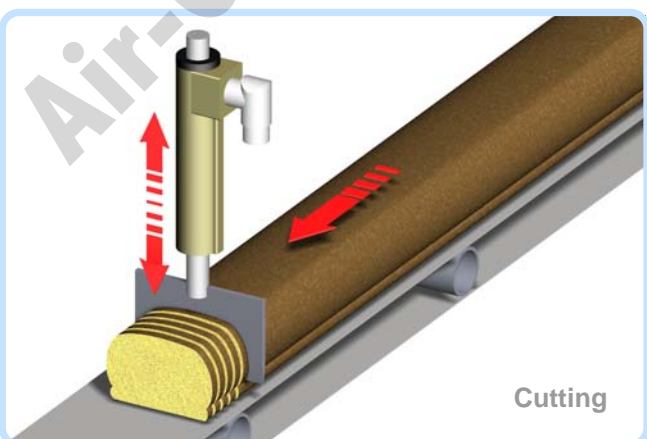
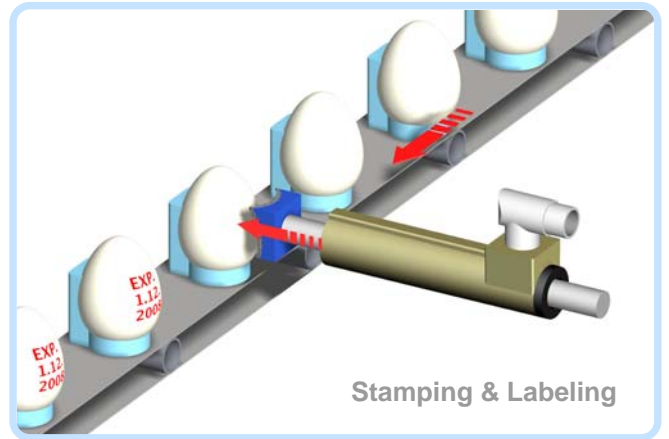
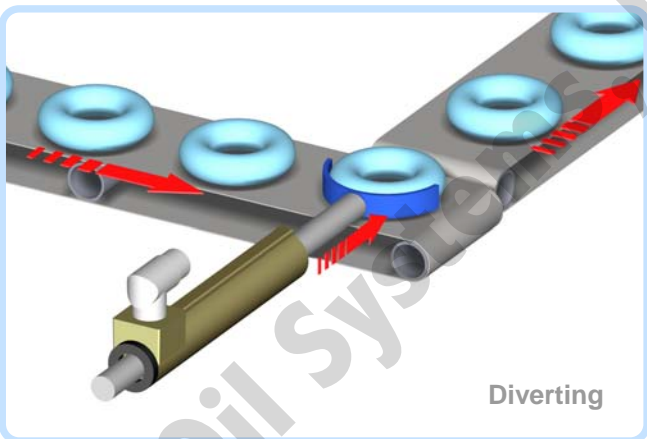
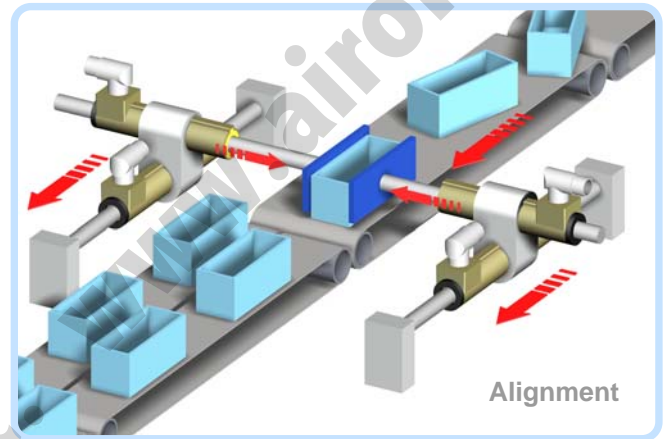
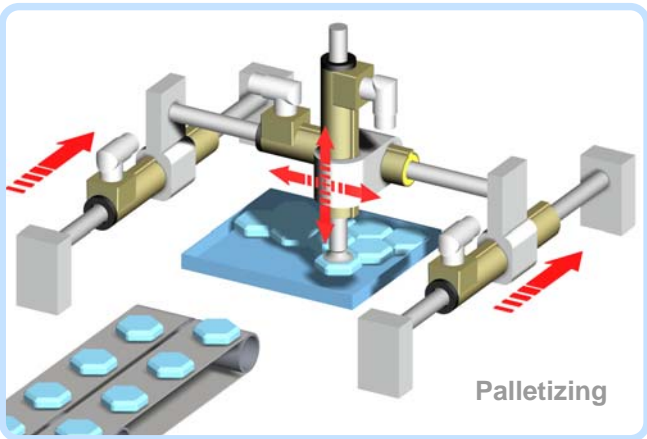
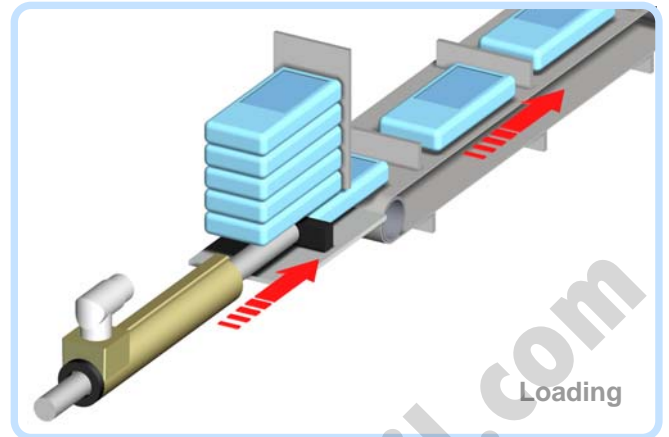
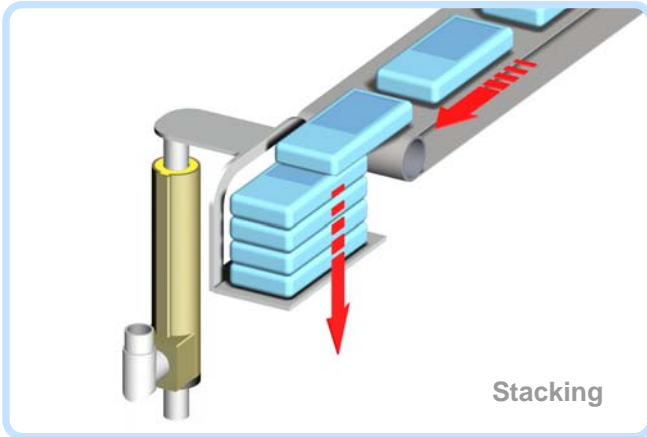
LinMot Industrial Linear Motors

LinMot linear motors are direct electromagnetic drives. The linear motion is generated without wear, with no intermediary mechanical gearboxes, spindles, or belts.

The motor is made up of just two parts: the slider and the stator. The slider is made of neodymium magnets, which are mounted in a high-precision stainless steel tube. The stator contains the motor windings, slider bearings, position sensors, temperature monitoring, and microprocessor circuitry with an integrated electronic nameplate.



-  **Flexible**
-  **Reliable**
-  **Dynamic and Precise**
-  **Replacement for Pneumatics**
-  **Replacement for Servo Motors**
-  **Replacement for Cam Disks**



LinMot Fields of Application

LinMot linear motors and servocontrollers are built for use in harsh, demanding industrial environments. Their exceptional technical properties, low-maintenance operation, and extremely long life set them apart.

The new MPC Multi Position Cylinder System is a product family that is specially designed to meet the requirements of simple positioning applications, such as the replacement of pneumatic cylinders.



Packaging Machines



Assembly & Handling Systems



Semiconductor, Electronics, CD/DVD



Laboratory Automation



Printing & Labeling



...many more

Feeding

Insertion

Escapement

Folding

Sealing

Loading

Stacking

Palletizing

Unloading

Diverting

Assembly

Press joining

Pressing

Punching

Vibrating

Mixing

Separation

Lime application

Flying carpet

Synchronous insertion

Fill level metering

Blister filling

Pallet filling

Bottle and tube filling

Sealer control

Printer's mark alignment

Pad printing

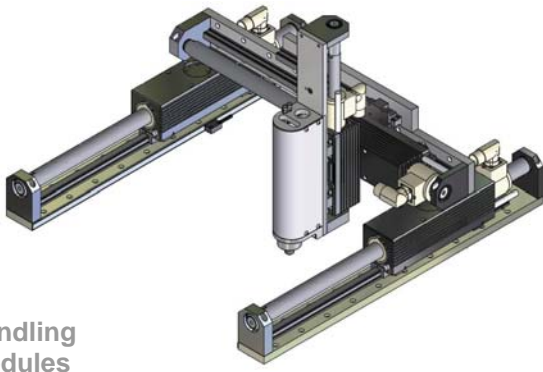
Doctor blade controls

Label positioning

Label application

Camera positioning

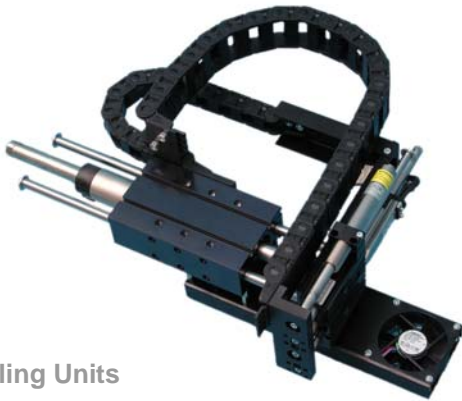
Lighting positioning



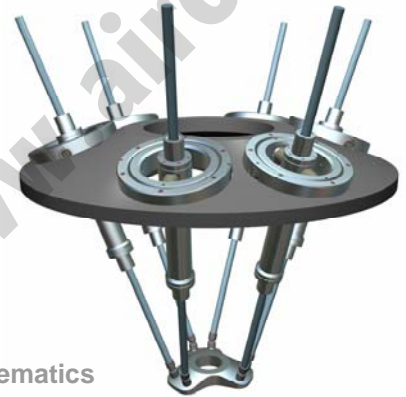
Handling Modules



Assembly Modules

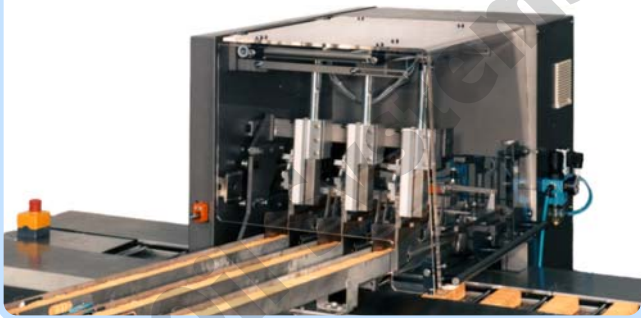


Labeling Units



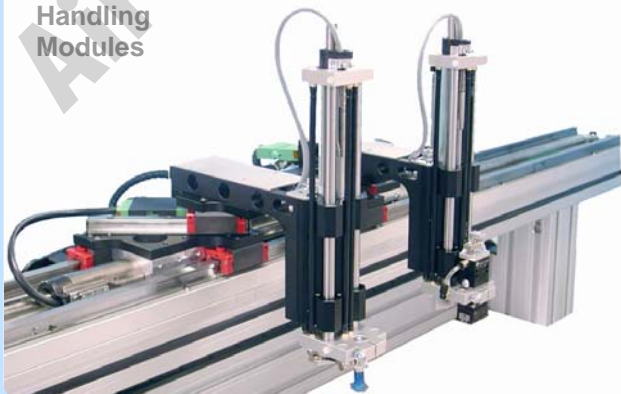
Parallel Kinematics

Packaging Machines



High Speed Palletizing Systems

Handling Modules



Logistic Systems

Linear Motors

LinMot linear motors are brushless synchronous motors, with integrated position measurement, overload protection, and an electronic nameplate.

The linear motion is generated directly by electromagnetic forces, without the wear associated with mechanical elements.

All motor components are cast in a solid steel tube and are thus optimally protected from damage and contamination (IP67).

The motors are available in two versions, with direct cable exit or a rotating angle plug.









Motors with Cable Exit



Short Motor

Motors with Plug Connector

-  **Direct Linear Drive**
-  **Integrated Position Measurement**
-  **Freely positionable along the entire stroke**
-  **Highly dynamic, with accelerations up to 400m/s²**
-  **Long service life: no gearboxes or seals**
-  **Clean room certificate / IP67 protection class**

Linear Modules

LinMot linear guides are compact guide units with integrated ball bearings or sleeve bearings for use with LinMot linear motors.







They are used to mount the moving load, to absorb external forces, and as an anti-rotation guide. They provide high-precision guidance and allow dynamic, precise positioning of the load.



Bridge Guides B01



Linear Guides H01

-  **Allow high speeds and accelerations**
-  **Dynamic and precise load positioning**
-  **Mounting plate with central mounting holes**
-  **Simple installation and compact form factor**
-  **Mechanically interchangeable with pneumatic H-guides**
-  **Available with ball bearings or sintered sleeve bearings**

Servo Controllers

Servo Controller Series E1000

Servo Controller Series E1100

Servo Controller Series E100



RS 232



CANopen

EtherCAT

RS 485



ETHERNET POWERLINK

SERCOS interface

The wide range of controller products allows rapid implementation of simple applications with two end positions, up to complex, high-precision multi-axis applications with synchronization to a main electronic shaft.

Connection to an overarching control system can be made via analog, digital, or serial interfaces, fieldbuses, or ETHERNET. The wide variety of fieldbus interfaces and protocols ensure simple integration with a master PLC, industrial PC, or proprietary controller.



Single and multi-axis controllers with integrated power stage



Precise control of position, speed, acceleration, and force



Execution of internally stored motion profiles or sequences



Electronic cam disc for synchronization with a main drive



Digital trigger inputs and analog target value inputs



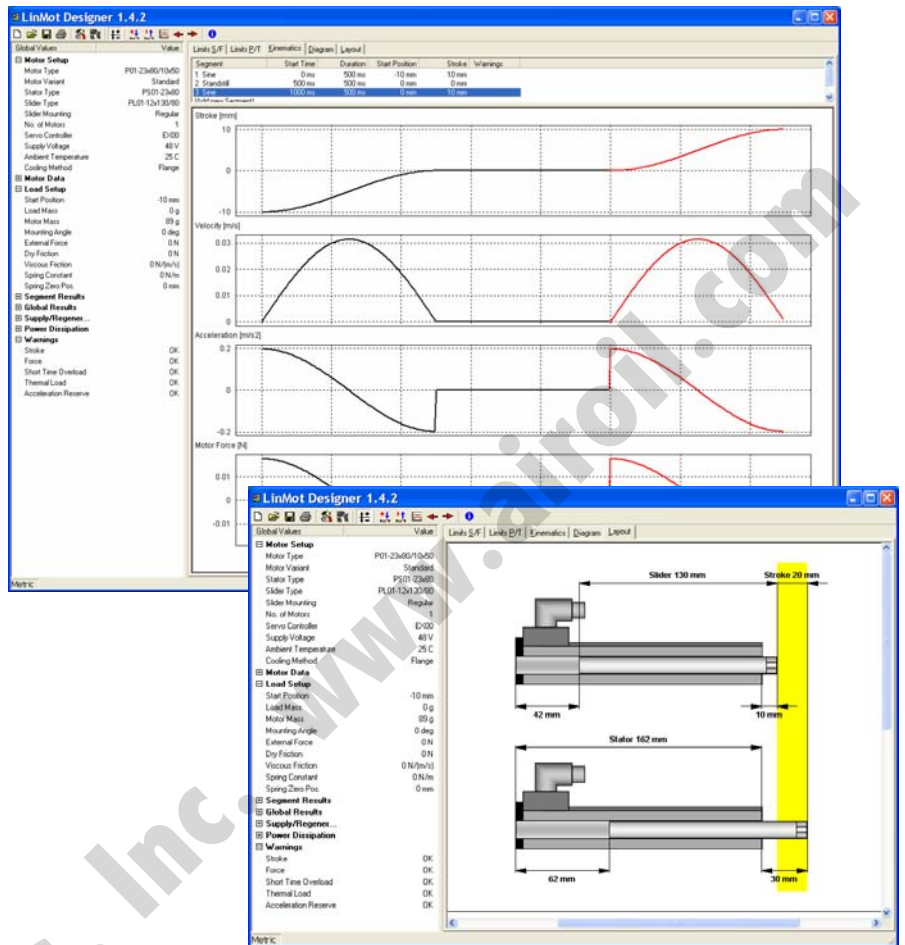
Serial communications, fieldbuses, and industrial ETHERNET

Software

Motor Sizing Software

LinMot Designer provides the user with a high-end layout tool for linear motions.

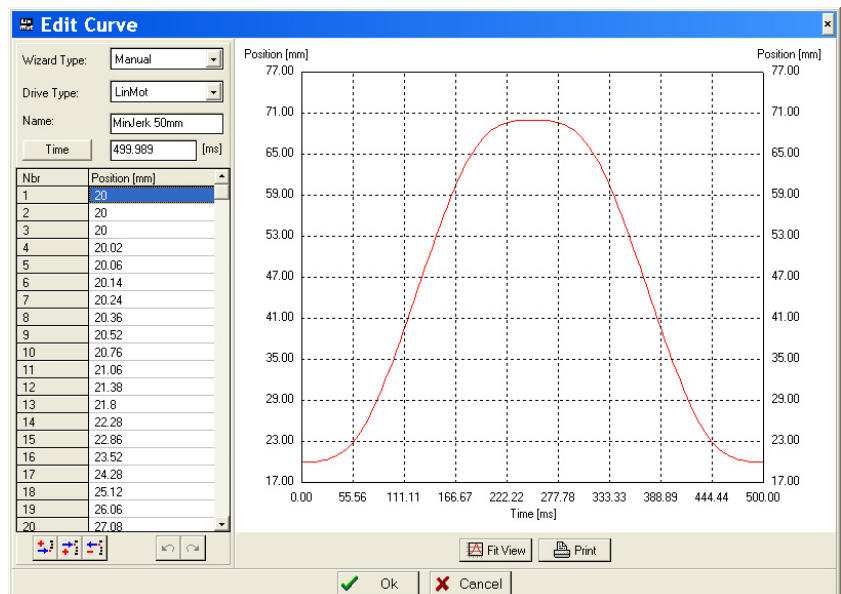
Applications can be analyzed in seconds, and optimized according to various criteria. The integrated database then selects the appropriate LinMot drive components, without the need for extensive manual calculations.



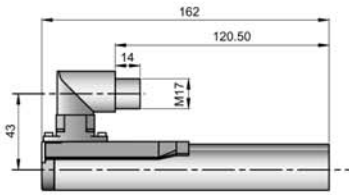
Configuration Software

Two different versions of the operating software are available to match the intended users and their requirements. The simple version allows the beginner to implement point-to-point motions very quickly.

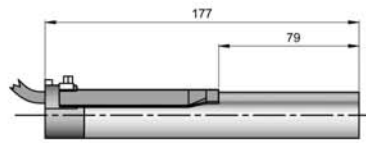
Experienced users can also configure complex drive tasks very easily using the standard version.



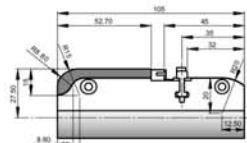
P01-23x80 Series



P01-23x80-R

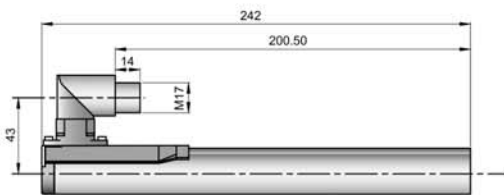


P01-23x80
P01-23x80-R20



P01-23Sx80

P01-23x160 Series

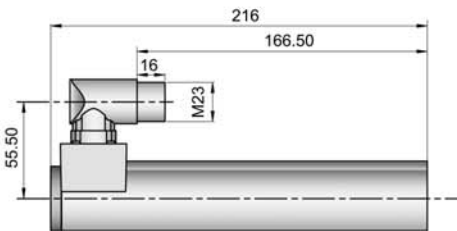


P01-23x160-R

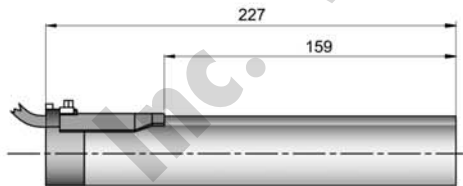


P01-23x160
P01-23x160-R20

P01-37x120 Series

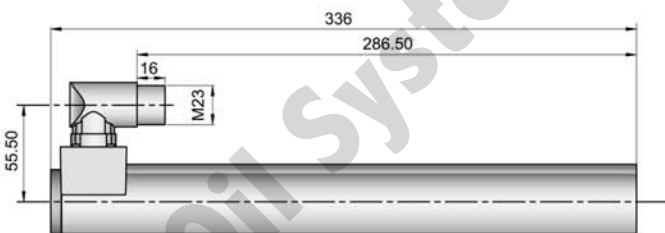


P01-37x120-C

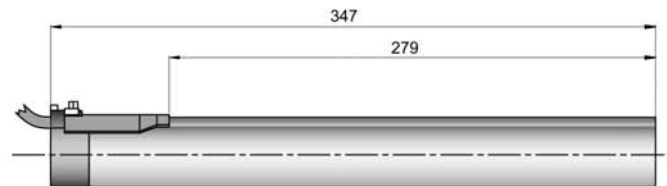


P01-37x120
P01-37x120-C20

P01-37x240 Series

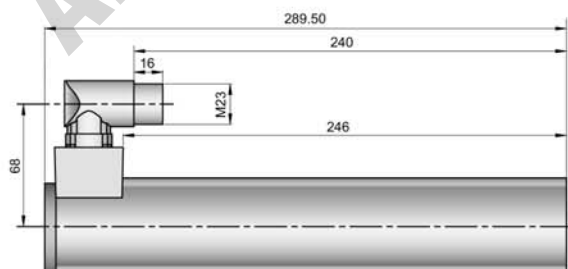


P01-37x240-C



P01-37x240
P01-37x240-C20

P01-48x240 Series



P01-48x240-C

Motor Type	Max. stroke [mm]	Cont. force [N]		Maximum force [N]				Slider mass [g]	Slider ø [mm]	Slider length [mm]	Stator mass [g]	Stator ø [mm]	Stator length [mm]				
		with flange and fan	with flange	Controller E100	Controller E1000	Controller E1100	Controller E1100-HC							Connector Type			
P01-23x80 Series																	
P01-23x80/10x50	50	15	8	29	39	39	39	89	12	130	265 (246)	23 (23x40)	162 (105)				
P01-23x80/30x90	90	16	9	33	44	44	44	118									
P01-23x80/50x110	110	16	9	33	44	44	44	135									
P01-23x80/80x140	140	16	9	33	44	44	44	171									
P01-23x80/150x210	210	16	9	33	44	44	44	220									
P01-23x80/210x270	270	16	9	33	44	44	44	271									
P01-23x80/280x340	340	16	9	33	44	44	44	330									
P01-23x80/340x400	400	16	9	33	44	44	44	465									
P01-23x80/440x500	500	16	9	33	44	44	44	465									
P01-23x80/620x680	680	16	9	33	44	44	44	610									
P01-23x80/710x770	770	16	9	33	44	44	44	690									
P01-23x160 Series																	
P01-23x160/70x70	70	17	9	24	49	32	49	112	12	200	450	23	242				
P01-23x160/40x100	100	23	12	32	65	43	65	137									
P01-23x160/0x140	140	31	17	43	63	63	86	171									
P01-23x160/70x210	210	31	17	43	63	63	86	220									
P01-23x160/130x270	270	31	17	43	63	63	86	271									
P01-23x160/200x340	340	31	17	43	63	63	86	330									
P01-23x160/260x400	400	31	17	43	63	63	86	380									
P01-23x160/360x500	500	31	17	43	63	63	86	465									
P01-23x160/540x680	680	31	17	43	63	63	86	610									
P01-23x160/630x770	770	31	17	43	63	63	86	685									
P01-37x120 Series																	
P01-37x120/20x100	100	54	30	61	122	82	163	460	20	240	740	37	216				
P01-37x120/80x160	160	54	30	61	122	82	163	600									
P01-37x120/180x260	260	54	30	61	122	82	163	829									
P01-37x120/280x360	360	54	30	61	122	82	163	1064									
P01-37x120/380x460	460	54	30	61	122	82	163	1297									
P01-37x120/480x560	560	54	30	61	122	82	163	1529									
P01-37x120/580x660	660	54	30	61	122	82	163	1762									
P01-37x120/680x760	760	54	30	61	122	82	163	1994									
P01-37x120/780x860	860	54	30	61	122	82	163	2227									
P01-37x120/980x1060	1060	54	30	61	122	82	163	2692									
P01-37x120/1180x1260	1260	54	30	61	122	82	163	3157									
P01-37x120/1380x1460	1460	54	30	61	122	82	163	3622									
P01-37x240 Series																	
P01-37x240/100x100	100	58	31	71	119	95	180	496		20				305	1350	37	336
P01-37x240/40x160	160	83	44	102	169	136	257	635									
P01-37x240/60x260	260	100	55	122	203	163	308	829									
P01-37x240/160x360	360	100	55	122	203	163	308	1064									
P01-37x240/260x460	460	100	55	122	203	163	308	1297									
P01-37x240/360x560	560	100	55	122	203	163	308	1529									
P01-37x240/460x660	660	100	55	122	203	163	308	1762									
P01-37x240/560x760	760	100	55	122	203	163	308	1994									
P01-37x240/660x860	860	100	55	122	203	163	308	2227									
P01-37x240/860x1060	1060	100	55	122	203	163	308	2692									
P01-37x240/1060x1260	1260	100	55	122	203	163	308	3157									
P01-37x240/1260x1460	1460	100	55	122	203	163	308	3622									
P01-48x240 Series																	
P01-48x240/30x180	180	257	145	117	234	156	585	1460	28		350	1900	48	290			
P01-48x240/90x240	240	257	145	117	234	156	585	1740									
P01-48x240/180x330	330	257	145	117	234	156	585	2160									
P01-48x240/300x450	450	257	145	117	234	156	585	2720									
P01-48x240/390x540	540	257	145	117	234	156	585	3140									
P01-48x240/480x630	630	257	145	117	234	156	585	3560									
P01-48x240/600x750	750	257	145	117	234	156	585	4120									
P01-48x240/690x840	840	257	145	117	234	156	585	4540									
P01-48x240/900x1050	1050	257	145	117	234	156	585	5510									
P01-48x240/1080x1230	1230	257	145	117	234	156	585	6350									
P01-48x240/1290x1440	1440	257	145	117	234	156	585	7330									

Values for PS01-23Sx80 in parentheses

LinMot®

Everything for linear motion from a single source

NTI AG

Haerdlistrasse 15
CH - 8957 Spreitenbach
Switzerland
Phone: +41-(0)56-419 91 91
Fax: +41-(0)56-419 91 92
E-Mail: office@linmot.com
Web: www.linmot.com

LinMot, Inc.

5750 Townline Road
Elkhorn, WI 53121
USA
Phone: 877-546-3270
Fax: 800-463-8708
E-Mail: sales@linmot-usa.com
Web: www.linmot-usa.com



Controllers



Motor Cables



Linear Motors



Linear Modules



Flanges

Air-Oil Systems, Inc. www.airoil.com