Linear Motors

LinMot motors are highly dynamic linear direct drives with outstanding efficiency. The simple and robust tubular design facilitates the installation of the motor, reduces the space requirement and achieves an unrivalled power density. In contrast to conventional drive solutions, LinMot solutions do not require mechanical transmission elements - this simplifies the design, reduces wear and thus minimises maintenance effort and costs.

High dynamics

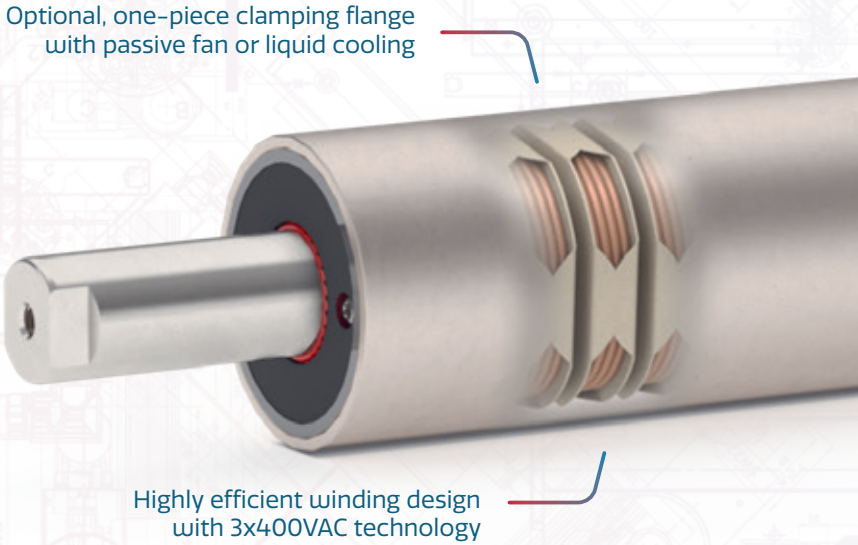
Freely positionable with programmable parameters

Control of the process variables

Plug & Play

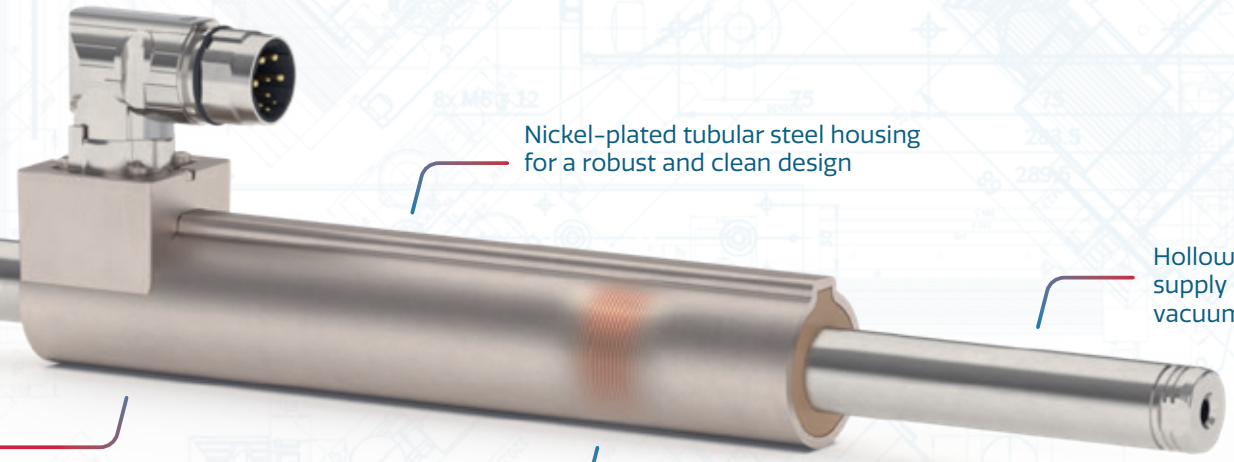
Series P10

The P10 series motors are the most powerful motors from LinMot and comprise two motor families characterised by 3-phase technology. They are controlled via servo drives with direct mains supply. The integrated position sensors, which supply the standard encoder signals on the market, mean that these motors can also be controlled very easily with drives from other manufacturers.



Series P01

The P01 series of compact low-voltage drives covers a wide range of applications and performs dynamic positioning tasks in the low to medium load range. Together with the short motors and the P02 motors, they comprise 8 sizes. The slider lengths vary and provide a stroke range from a few millimetres up to 1830 mm. Peak forces of up to 1024 N are also easily achieved.



Nickel-plated tubular steel housing for a robust and clean design

Hollow slider option for the supply of compressed air or vacuum

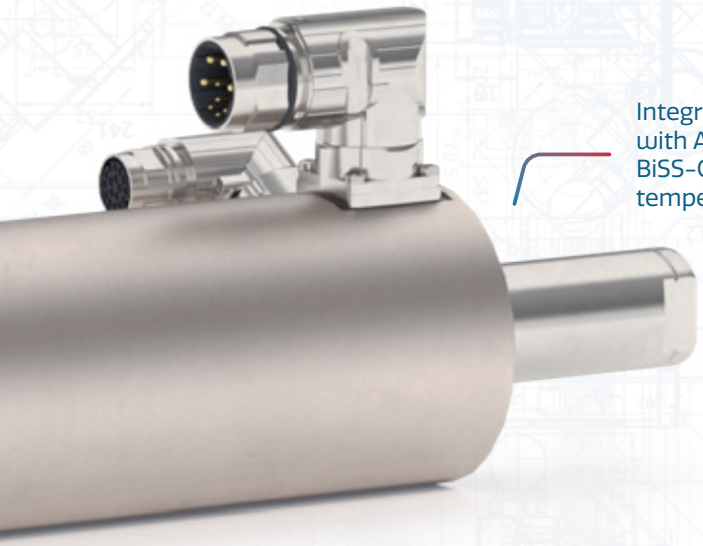
Highly efficient motor winding

Ready for industry 4.0

Overload protection

High precision

Long service life



Integrated position sensors optionally with A/B, Sin/Cos or BiSS-C output and PTC or PT1000 temperature monitoring

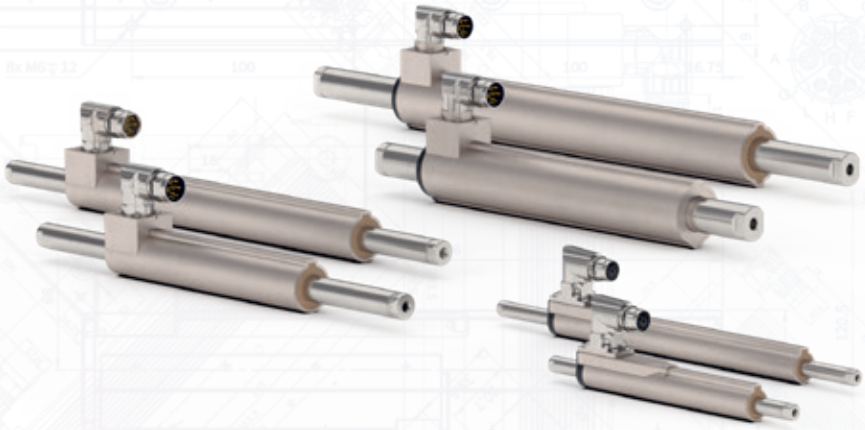
Interchangeable plain bearing kits

The design of linear motors makes them a standard element in mechanical engineering, often replacing pneumatic drives and mechanical cam discs. Applications range from fast positioning, lifting and pushing movements through synchronous pick and place applications to complete gantry palletising robots.

P01 Motors
Universal

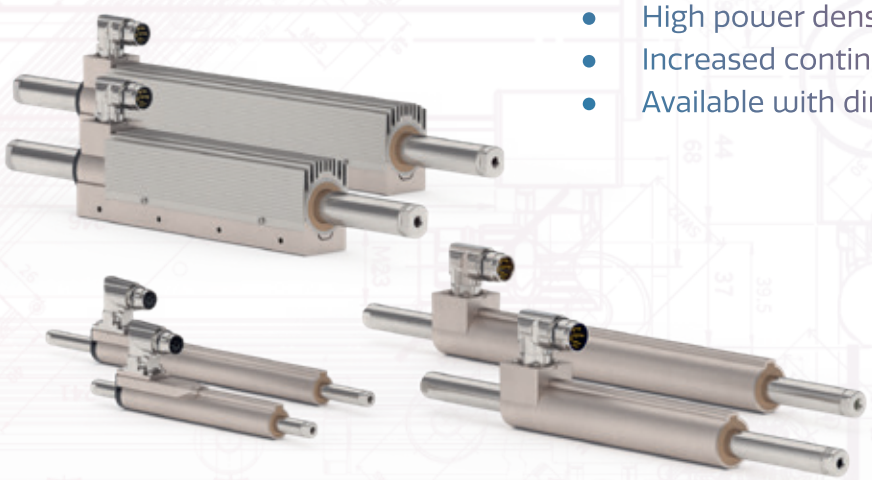
- Universal design for a wide range of applications
- Highly dynamic motors
- Available with cable outlet or rotatable IP67 connector

Stroke up to	mm	1830
Max. force	N	44-1024
Nominal force	N	11-354
Max. speed	m/s	6.9
Repeatability	mm	0.05/0.01
Stator length	mm	162-409



P02 Motors
High Performance

- Particularly strong magnetic circuit for increased force and operating temperature
- High power density motors
- Increased continuous force and acceleration
- Available with directly integrated mounting flange



Stroke up to	mm	1830
Max. force	N	44-1024
Nominal force	N	11-409
Max. speed	m/s	8.2
Repeatability	mm	0.05/0.01
Stator length	mm	162-409

Short Motors
Compact

Stroke up to	mm	1860
Max. force	N	29-255
Nominal force	N	11-68
Max. speed	m/s	8.2
Repeatability	mm	0.05/0.01
Stator length	mm	90/105/150

- Compact design
- Use where space is limited
- Integrated mounting flange
- Selectable cable outlet for 3 positions (rear/left/right)

P10-54
Power Packages

Stroke up to	mm	2240
Max. force	N	892
Nominal force	N	278
Max. speed	m/s	11.1
Repeatability	mm	0.01
Stator length	mm	222-402

- 230VAC and 3x400VAC technology
- Rotatable push-pull TWIN connector for power and encoder cables
- 1-piece clamping flange
- Can also be controlled with standard servo drives from third-party suppliers

P10-70
High Power

Stroke up to	mm	1770
Max. force	N	557-2720
Nominal force	N	68-914
Max. speed	m/s	7.4
Repeatability	mm	0.05/0.01
Stator length	mm	180-500

- 3x400VAC technology
- Extremely high accelerations
- Separate connection for sensor and power cable
- Can also be controlled with standard servo drives from third-party suppliers

Specifications at a Glance

Motor Family P01/P02	Max. stroke	Max. force	Max. cont. force	Options: Hollow shaft	Options: Stainless steel	Options: Functional Safety
P01-23	780 mm	86.4 N	30 N	✓		
P02-23S	780 mm	67.1 N	24 N	✓		
P01-23 HP	780 mm	138 N	46 N	✓	✓	✓
P01-37	1480 mm	308 N	96 N	✓		
P01-37S	1480 mm	255 N	67 N	✓		
P01-37 HP	1480 mm	255 N	87 N	✓	✓	✓
P01-48	1710 mm	1020 N	340 N	✓	✓	
P01-48 HP	1740 mm	1020 N	408 N	✓	✓	✓

Motor Family P10	Max. stroke	Max. force	Max. cont. force	Options: Hollow shaft	Options: Stainless steel	Options: Functional Safety
P10-54	1540 mm	871 N	270 N	✓		
P10-70	1450 mm	2720 N	890 N	✓	✓	