



2022|23

Linear motors -
the ideal direct drive

www.fischer-elektromotoren.de

Innovation with dynamics
made in Baden-Württemberg,
Germany



FISCHER
Elektromotoren

INDIVIDUAL

LINEAR MOTORS

Our range of linear motors is as extensive as your requirements.

The work and the products of our customers determine our product range. Our company has stood for innovative and individual drive solutions for over 30 years. Our aim is to always ensure tailor-made performance and to produce exactly the linear motor that perfectly meets the technical requirements of our clients.

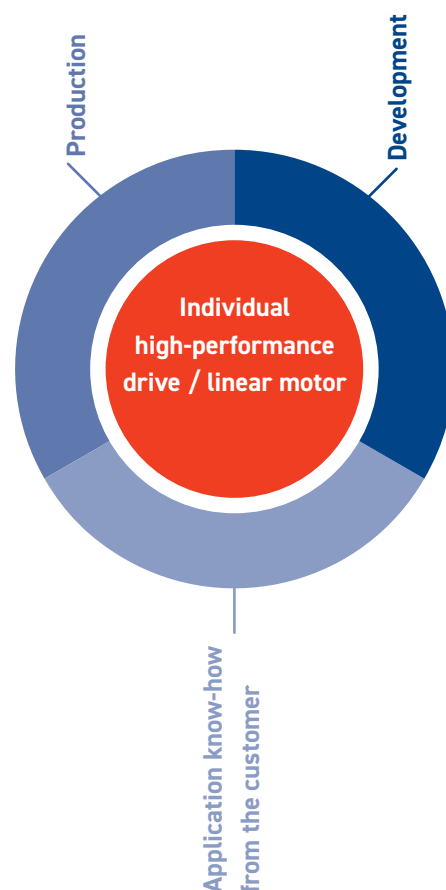
We combine experience with innovative ideas like barely any other company. This is an enormous advantage for our customers, because we don't start from scratch, but build on existing empirical values. In this way, we create specific drive solutions that ensure that our customers' products can perform absolute precision work at the highest level.



Because we love teamwork, the customer is a member of our team.

We regard interaction with the customer's development experts as the optimal boundary condition for the development and manufacture of top-class linear motors.

Numerous leading companies rely on our know-how in drive technology, which is based on two strong pillars: engineering and manufacturing. In close coordination with our clients, these two areas cooperate at our company. We supplement this cooperation with our customers' specific user knowledge. This results in unique linear motors that meet the customer's expectations right down to the smallest detail. This approach has made us what we are today: one of the leading specialists in individual linear motors.



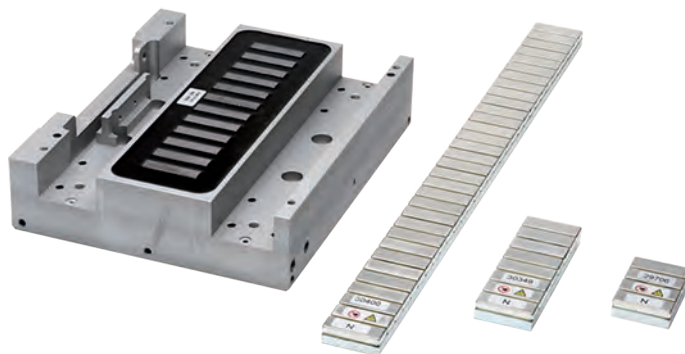
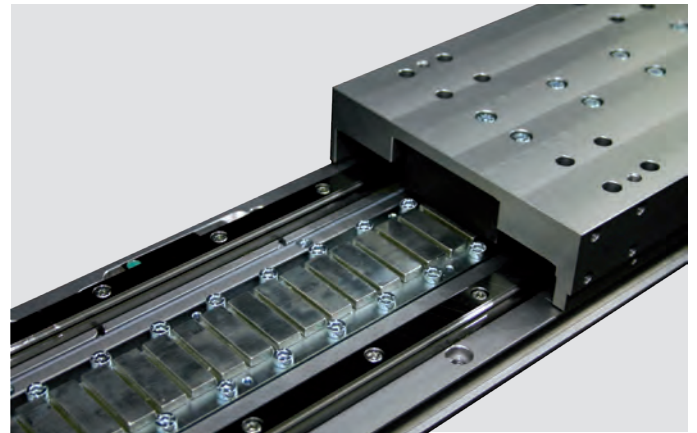
Linear motors impress with a wide variety of applications.

The design principle of linear motors predestines this drive technology for integration into production plants of all kinds as well as wherever power and efficiency are required with a comparatively small housing volume and complete rotation can be dispensed with. Depending on the size, the range of applications is therefore enormous.

Fischer linear motors can be found, for example, in medical technology and laboratory automation, semiconductor production, in micro-positioning tables and in classic mechanical engineering.



Linear motors are successfully used in machine tools, positioning and handling systems as well as in machining centres, where they impress with their high dynamics, precision and acceleration.



Linear motors from Fischer: precise, powerful and reliable.

A word about the technology.

Linear motors can be used wherever translative movements have to be performed. In other words, a linear motor does not generate rotary motion, but implements the physical principle of translation.

Linear motors can implement such two-way movements in a highly efficient and powerful manner.

Linear motors are fast, powerful, very efficient and highly precise in relation to the size of the motor.

Since they operate virtually without abrasion, they are ideally suited for medical and cleanroom technology. Linear motors from Fischer are the first choice, especially where very high precision, high repetition frequency and dynamics are called for.

There is no need for force-transmitting components such as spindles or toothed-belt drives. Components and assemblies that are not installed in the first place are not stressed. Only the linear guides are subject to a certain amount of wear.

- No lubrication required
- Low maintenance, low wear
- Low operating costs
- Robust basic construction
- Quiet
- Very high acceleration
- Very high maximum speeds
- Absolutely precise positioning



The success story of linear motors is no coincidence, because in a technical system comparison, linear motors convince with an impressive overall performance.

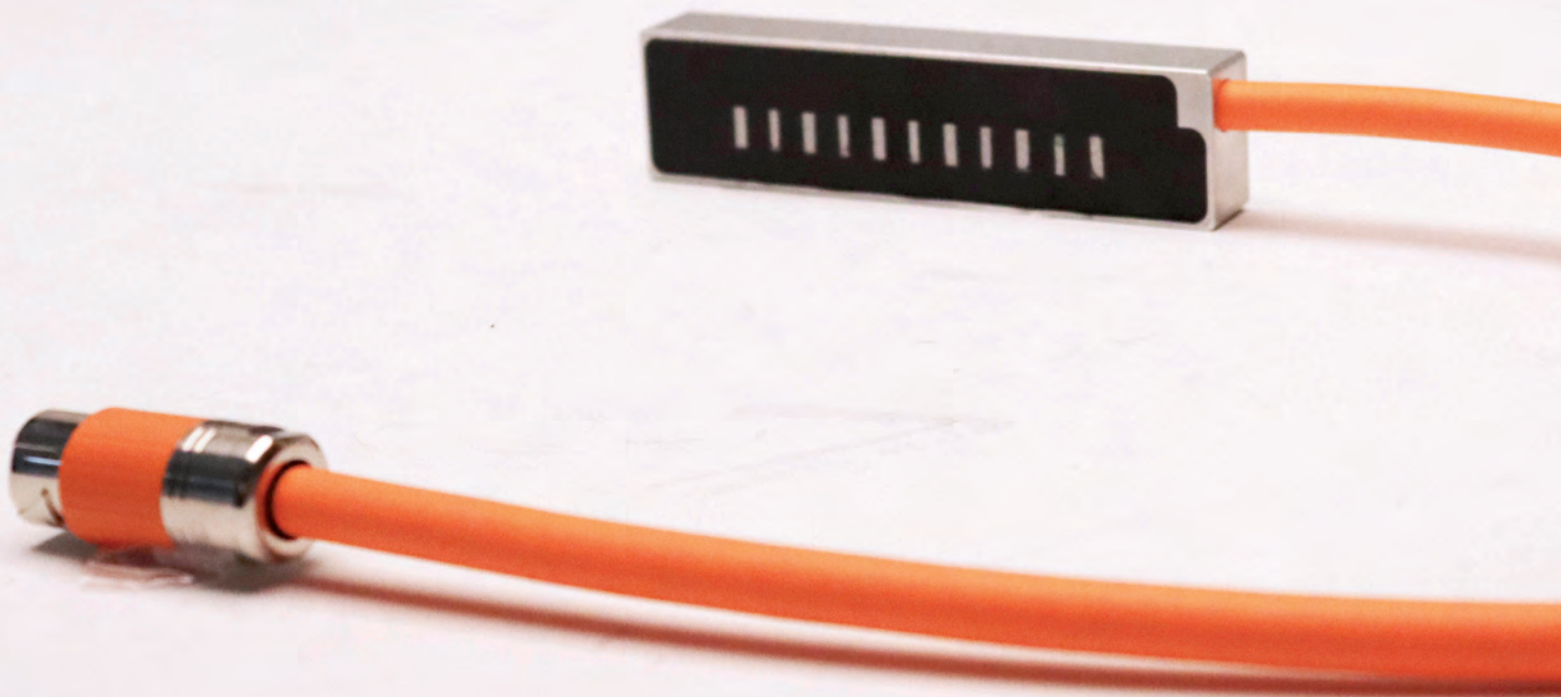
Each drive system has its own specific advantages and strengths, and we are aware of that. Nevertheless, it is the sum of good properties that makes Fischer linear motors the first choice for many applications in mechanical engineering, robotics and machining centres. In addition to the above-mentioned elimination of additional power-transmitting components, linear motors are particularly convincing in the areas of dynamics, power transmission, travel path length and, in particular, positioning accuracy.

With Fischer linear motors, machines and plants can be designed to be more powerful, more flexible and more cost-effective.





Performance and cost-effectiveness speak for linear motors from Fischer.

Drive technology solutions for translative movements on one plane can also be provided, for example, with toothed-belt drives, rack and pinion drives or pneumatic spindle systems. All three systems mentioned here impress with good performance in individual areas. From our point of view, however, it is the linear motors that impress with their performance overall.

In addition, linear motors from Fischer are characterised by lower operating and maintenance costs.



Linear motors in technical system comparison.

	Dynamics	Positioning accuracy	Force transmission	Travel path length
Linear motor 	✓✓✓	✓✓✓	✓✓	✓✓✓
Spindle system 	✓	✓	✓✓✓	✓
Rack and pinion 	✓✓	✓	✓✓	✓✓
Toothed belt 	✓✓	✓	✓	✓



A blue-tinted photograph of three men in a workshop setting. They are gathered around a laptop, looking at the screen with interest. The man on the left is smiling slightly. The man in the middle has glasses and a mustache. The man on the right is also smiling. The background shows a wall with a grid of geometric shapes and some equipment.

Getting the best people at one able as early as possible – that's how to create the best solution.

We love it when we come into contact with the first concepts of a customer project. If we sit at the same table at a very early stage, we all still have a lot of room for improvement when it comes to truly new and outstanding solutions. Groundbreaking, cost-effective and outstanding solutions are possible when both sides contribute their core competencies and lots of innovative spirit. In this way, unique products are created in cooperation with our customers that can score points in the market with real advantages.

Striving for leadership in the market requires innovation.

To make real innovations possible, we offer development, prototyping, production and integration services from a single source. When it comes to drive technology, we are absolute believers. From the initial idea to the design and implementation, we support the client with words and deeds if required!

Of course, the interfaces are also individual.

Customer-specific linear motors are almost the norm for us. Accordingly, the electrical connection options are also adapted to the subsequent use and installation situation in a customer-oriented manner.

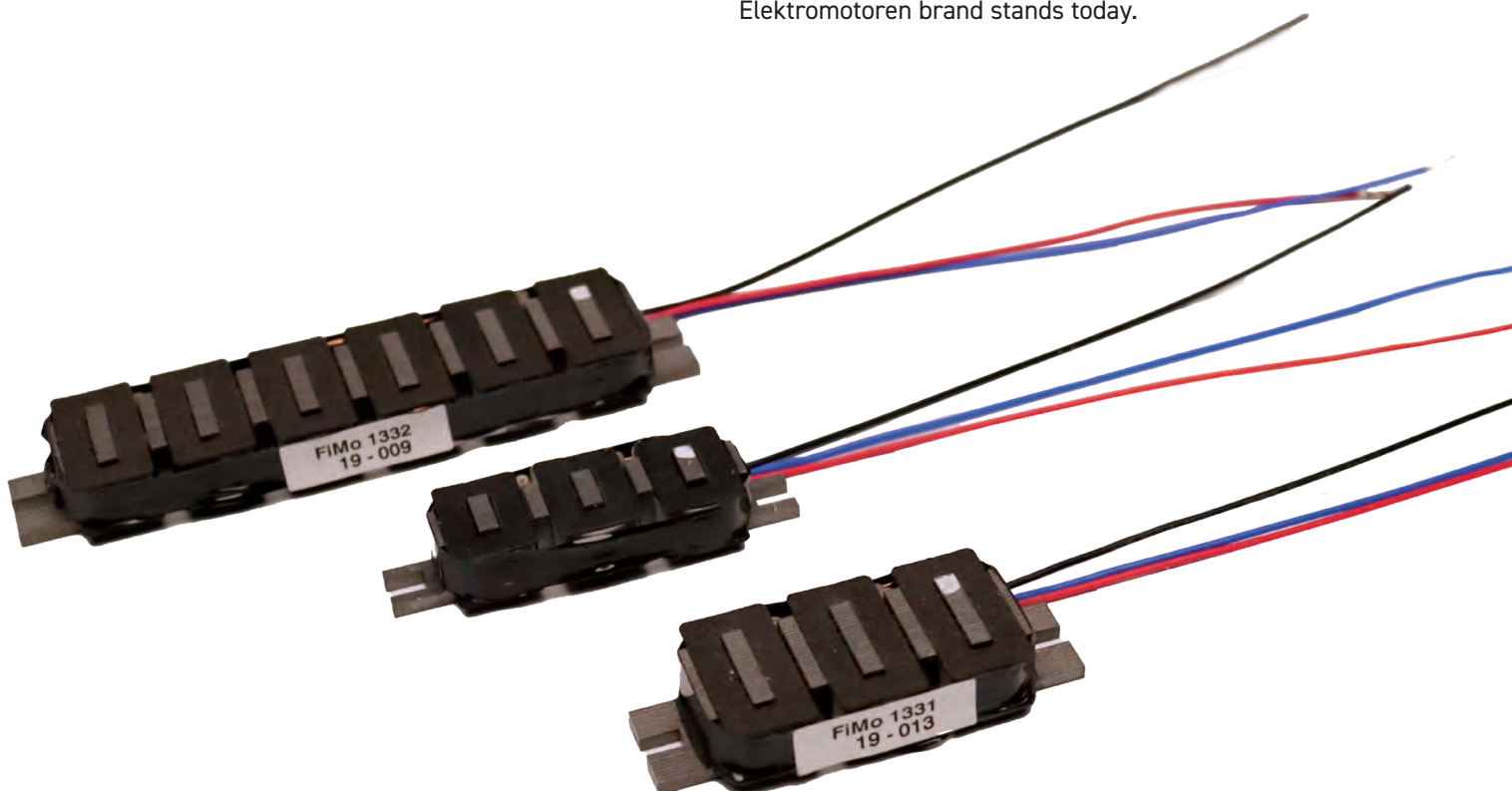
Depending on how complex the customer's specifications are with regard to additional components (such as measuring systems, temperature sensors, etc.), a second or even third cable outlet is necessary in addition to the power cable. The following fundamentally applies: Fischer electric motors contain precisely the connections demanded by the customer. Be it temperature monitoring, actuators or sensors – we adapt the connection technology to suit your requirements. The implementation of this connection technology is also freely selectable:

- Cable with plug – variable cable lengths
- Open-cable version with wire-end ferrules – variable cable lengths
- Mounting box on the motor housing



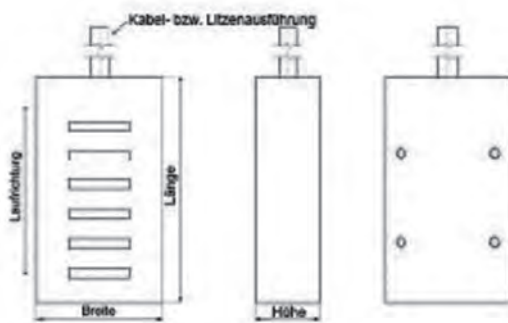
Perfect function and top quality, because anything else is expensive.

What we manufacture must meet the highest quality requirements. We secure our passion for development and our specialist know-how in production through a high level of material, process and system expertise as well as with very strict quality inspections. Error-free processes are the basis of the special quality and goodness for which the Fischer Elektromotoren brand stands today.



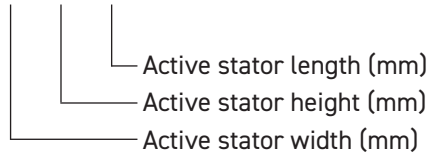
Dimensions and performance data

Dimensions - technical data

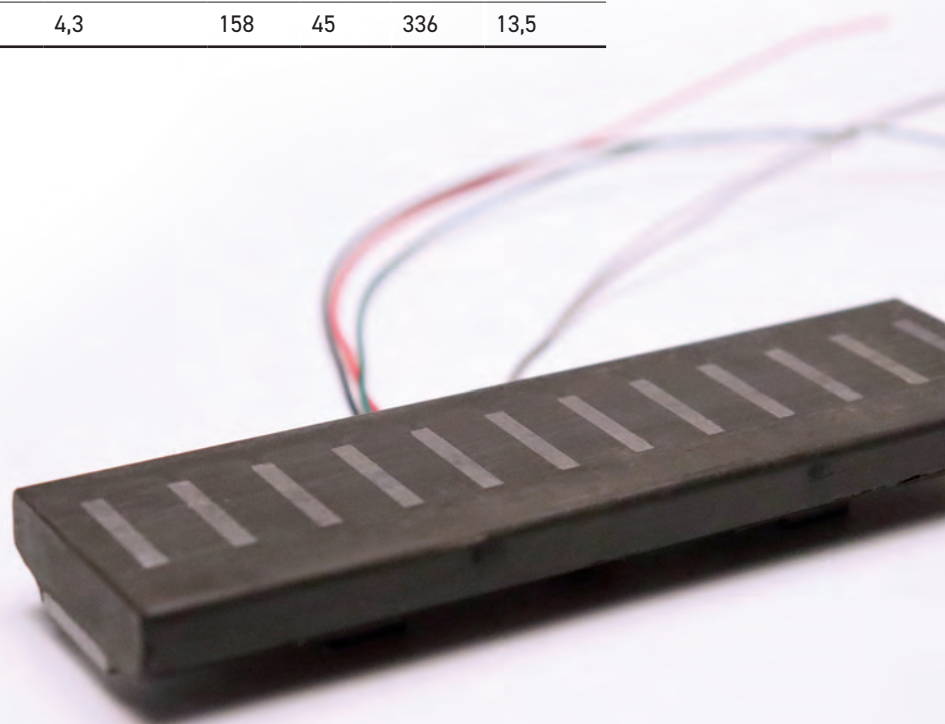


Type breakdown:

LIMO 022-008-100



	Designation	Nominal force [N]	Peak force [N]	Velocity [m/s]	Width [mm]	Height [mm]	Length [mm]	Weight- [kg]
Installation height 30 mm	LIMO 035-025-100	45	165	5	70	30,6	120	0,65
	LIMO 035-025-200	90	330	5	70	30,6	220	1,35
Installation height 35 mm	LIMO 018-030-100	45	130	8,9	52,5	35	120	0,81
	LIMO 035-030-100	90	250	5	70	35	125	1,3
	LIMO 045-030-100	120	330	4,3	80	35	120	1,62
	LIMO 035-030-200	180	510	4,4	70	35	220	2,6
	LIMO 045-030-200	240	660	4,9	80	35	220	3,25
	LIMO 035-030-300	270	760	4,1	70	35	318	3,9
	LIMO 070-030-200	380	1000	4,2	108	35	220	5,3
	LIMO 070-030-300	550	1510	4,5	108	35	318	7,9
Installation height 45 mm	LIMO 030-040-100	90	270	9,4	67	45	127,5	1,6
	LIMO 030-040-210	180	530	4,5	67	45	232	3,1
	LIMO 060-040-100	180	530	4,6	98	45	127,5	2,65
	LIMO 030-040-310	270	800	4,2	67	45	331,9	4,7
	LIMO 045-040-210	270	800	4,9	85	45	232	3,72
	LIMO 060-040-210	360	1060	4,3	98	45	232	5,3
	LIMO 060-040-310	540	1600	4,6	98	45	336	7,9
	LIMO 090-040-210	540	1600	4,3	128	45	232	6,5
	LIMO 090-040-310	810	2400	3,8	128	45	336	9,75
	LIMO 120-040-310	1100	3200	4,3	158	45	336	13,5





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