MEMOTEC

LINEAR MOTION SYSTEMS

EN

Linear movements are widely spread in the industrial daily routine.
An especially versatile and reliable solution is available trough the usage of linear axes. Thereby our linear axes based on an inherently stiff aluminium profile offer an enormous variety of possible use and combination. In principal the axes are available in two series each in several sizes with or without drive.
You may choose from our following standard products or a special individual solution. We'd be happy to advise you.

GUIDING SYSTEMS

LF
Linear axes with shaft guidance in three sizes

The guide shafts are precision-ground and made of resistant, hardened steel. This series is an ideal and cost-efficient solution for simple applications.

LF-0	Fz 1.100 N	Mx 30 Nm	My | Mz 60 Nm
LF-1	Fz 2.500 N	Mx 85 Nm	My | Mz 170 Nm
LF-2	Fz 4.250 N	Mx 190 Nm	My | Mz 400 Nm

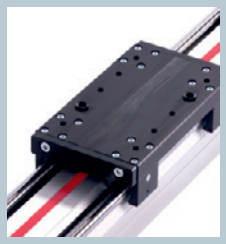
SLF
Linear axes heavy duty with profile rail guide in four sizes

Our heavy duty profiles with ground profile rails are the basis for linear axes working very precisely whilst enduring heavy loads in all directions.

SLF-00	Fz 3.000 N	Mx 80 Nm	My | Mz 300 Nm
SLF-01	Fz 5.000 N	Mx 250 Nm	My | Mz 500 Nm
SLF-02	Fz 8.500 N	Mx 600 Nm	My | Mz 1200 Nm
SLF-03	Fz 12.000 N	Mx 1200 Nm	My | Mz 2400 Nm

DRIVE SYSTEMS
Pneumatic drives

P
Pneumatic cylinder (rodless)

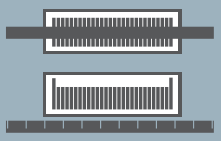


Due to the missing piston rod this drive is ideal for extremely long strokes. Pneumatic drives are most suited if only two stopping positions have to be reached.
The Economy option already integrates the shock absorbers in the end position in a cost-saving way.

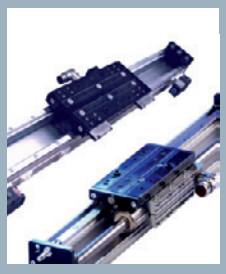
PK .DUO
Pneumatic piston rod cylinder

Being used in millions worldwide the drive via piston rod cylinder guarantees an extremely long lifespan and offers likewise a broad range of application possibilities. All ready available normed cylinders can be integrated without difficulties.
The DUO edition offers furthermore the option to move two slides on one axis independently from each other.

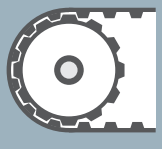
DRIVE SYSTEMS
Electric drives



L | LR .DUO
Linear motor



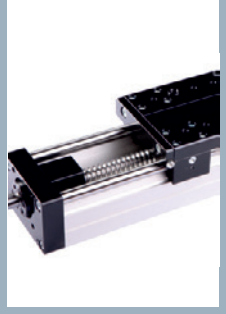
Highly dynamic movements and most precise repetitions are the features of this drive system. Linear motors work absolutely wear-free. An unlimited number of positions are programmable.
With us linear motors are available in the flat as well as the tubular technology. The DUO edition is also available.



R .DUO
Toothed belt

The toothed belt forms the basis for a reliable and likewise economical drive system with easy to handle components. It can be rapidly changed after many thousand cycles, thus reducing machine down times.
The DUO edition with its two independently moveable slides grants further application diversity and saves likewise construction space and costs.

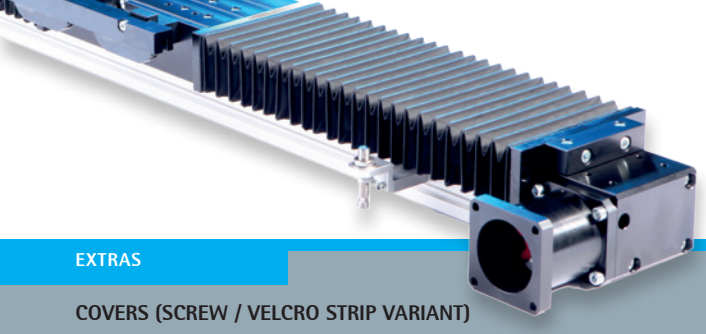
S | ST .DUO
Spindle



The most accurate positioning of great loads – especially the ball screw is the perfect drive for many operating conditions. The rotating balls reduce friction, and therefore wear and utility costs, respectively.
If less accuracy is needed the cheaper trapezoidal spindle [ST] can be integrated instead.
The DUO edition with its two driven slides offers parallel as well as opposing movements for the purpose of clamping, positioning, etc.

Z
Toothed rack

The toothed rack is a robust drive for dynamic movements and the transmittance of large forces. It is especially designed for the use in cantilever and Z-axes.



Tailor made. We determine and manufacture the most suitable linear axis with adequate extras and accessories for you. Our experts evaluate your project and design the drive and motor so it matches your needs.

No drive without control unit. Of course, we'd be happy to take on this task as well together with our partners.

EXTRAS

COVERS (SCREW / VELCRO STRIP VARIANT)

- **Bellows set**
  The bellows protects guide and drive from soiling. It prevents the penetration of dust and dirt particles.
- **Bellows set metal sheds**
  The bellows with metal sheds offers furthermore protection from sparks and chips. Hence the high-end axis remains precise over a long period of time.

DRIVE ELEMENTS

- **Gear / Motor add-on set**
  They serve to adapt gear and motor to the linear axis. Thus the connecting flange and the shaft coupling are being customized to fit the actually used gear and / or motor.
- **Motor add-on set parallel**
  It offers the possibility to place the motor laterally, i.e. parallel to the linear axis via redirection through a belt transmission. This compact form saves space if the installation area is limited in length.
- **Motors**
  The right type is crucial for the functionality of the axis. Determination and dimensioning are done project by project.

FASTENING ELEMENTS

Simple to mount and easy to change - the first set-up, refurbishments or repairs are quickly done with our fastening elements.

- **Fixing block**
- **Fixing set**
- **Sliding block**
- **Thread insert**

END SWITCHES

- **Hardware switch set fix / variable**
  Mechanical end switches as positive opening contact protect the linear axis reliably from damage due to control errors.
- **Proximity switch set**
  The proximity switch set provides additional safety for the linear axis. If the drive system does not stop in time this switch prevents the transgression of the designated distance. If needed, counting processes can also be performed. The proximity switch set is the right choice for end position limitation and as reference position.
- **Cylinder switch set**
  It is used for detecting the end position of the piston rod.

SECURITY ELEMENTS

- **End position set fix / variable**
  Buffers guarantee the gentle braking of the slide when reaching its end position. Hence the pneumatic end position damping is being relieved, thus prolonging the lifespan of the piston.
- **Rod clamping (fall protection)**
  A rod clamping element secures the slide against inadvertent drops, even in case of energy loss.
- **Cylinder clamping (fall protection)**
  It secures the position of the linear axis and serves as fall protection for vertical axes in case of energy loss.

CONNECTING ELEMENTS

- **Connection plates**
  They are used to connect axes to each other or to attach any structures provided by the customer and can be manufactured in the specific dimensions required.
- **Angle add-on set**
  Hereby the attachment to or of further axes can be realized without any difficulty.

DISPLACEMENT MEASURING SYSTEMS

- **External**
  The external displacement measuring system assures the exact control regarding all stopping positions wanted. There are various options depending on the accuracy needed. It can also be used in addition to an internal one.
- **Internal**
  This one is already integrated in the linear motor and therefore automatically included in the delivery.

USAGE

Bellows set metal sheds — Bellows set

LF | SLF

LF | SLF

Motor add-on set

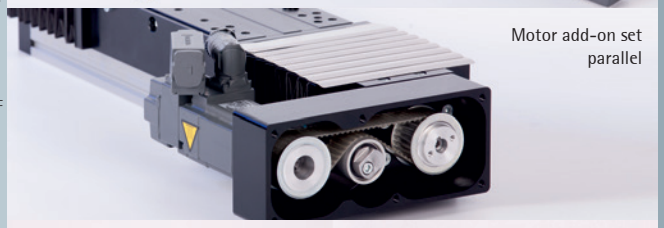
R
S | ST | Z

Gear add-on set

S | ST

Motor add-on set parallel

LF | SLF



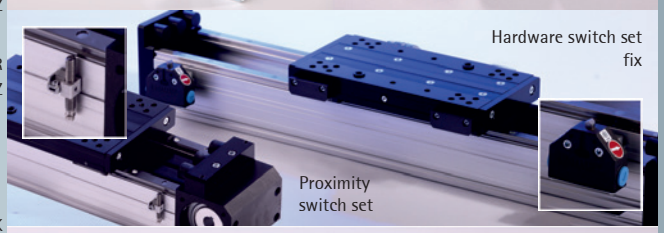
SLF
LF

Fastening elements

L | LR | R
S | ST | Z

Hardware switch set fix

L | LR | R
S | ST | Z



Proximity switch set

PK

End position set fix

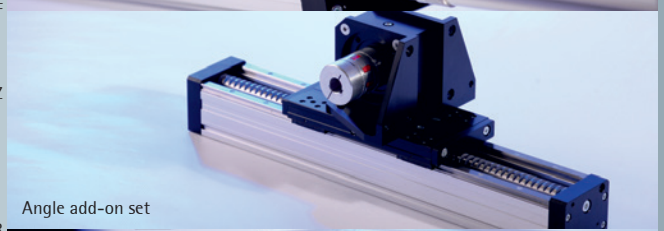
P

L | LR | R
S | ST | Z

Cylinder clamping

PK

LF | SLF



Z

Angle add-on set

L | LR

LR

Displacement measuring system external

Hamburg
A7
Berlin
Leinefelde-Worbis
Kassel
A38
Leipzig
Erfurt
A7
Frankfurt
am Main
Nuremberg
Stuttgart
Munich

EFRE
EUROPA FÜR THÜRINGEN
EUROPÄISCHER FONDS FÜR REGIONALE ENTWICKLUNG
EUROPÄISCHE UNION

MEMOTEC GmbH & Co. KG | Dünblick 5b | 37327 Leinefelde-Worbis OT Beuren | Germany
Phone +49 (0)3605 5444 0 | Fax +49 (0)3605 5444 24
E-Mail info@memotec.de | **www.memotec.de**

TÜV SÜD
ISO 9001