

R RENOWNED
KNOW-HOW
Automation Technology



RK ROSE+KRIEGER

A Phoenix Mecano Company

Automated Format Adjustment

...reliable and precise



in cooperation with

**LENORD
+BAUER**
... automates motion.

Automated Format Adjustment

RK Rose+Krieger and **LENORD+BAUER**

benefit from the synergies that arise from the sensible combination of their product ranges

RK Rose+Krieger GmbH and Lenord, Bauer & Co. GmbH from Oberhausen

both work together to meet customer demands for fully automated infeed axes.

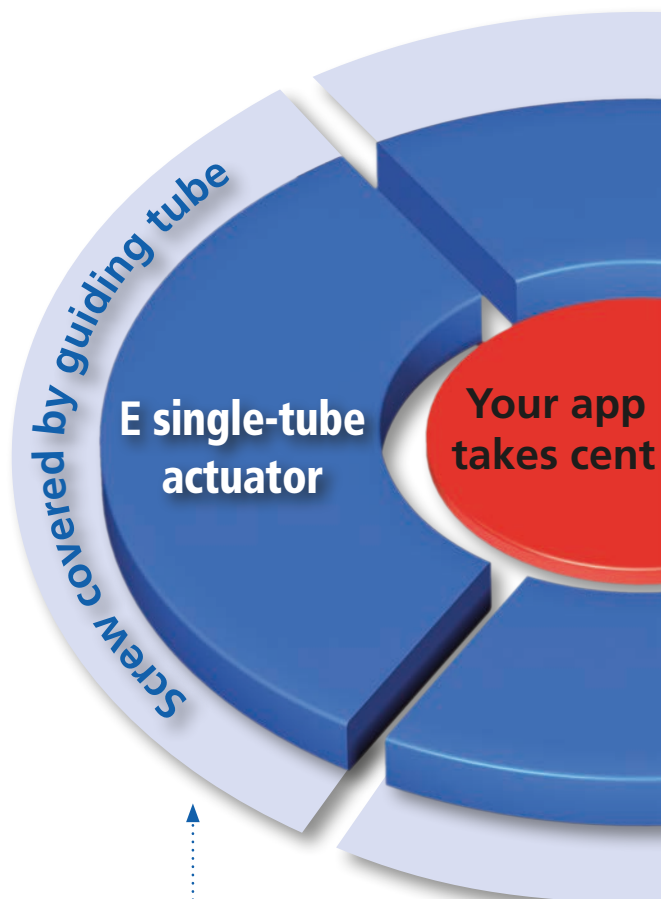
The linear units and actuators complement each other to create a practical complete package.

The package features **E** single-tube actuators, **EP/EPX** twin-tube actuators and **quad® EV** profile actuators from the Move-Tec range. There is also the option of a short or long actuator with either an aluminium or stainless steel housing. The devices provide a rated torque of 3.5 Nm or 5 Nm.

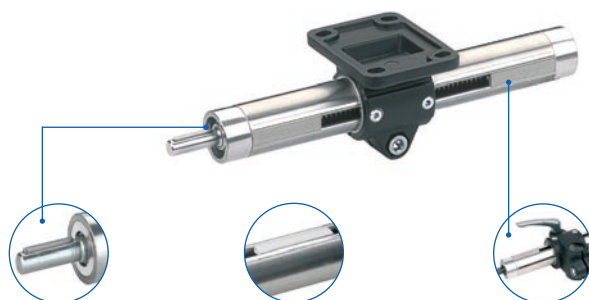
Lenord+Bauer offers the torque supports necessary in fitting the PowerDRIVEs to the corresponding linear actuators. Once the torque support has been fitted, the actuator is simply placed onto the axis and pushed into position. A clamping ring fixes the drive firmly onto the drive shaft of the linear unit. In addition to the positive shaft connection, a flexible motor support also forms the necessary floating bearing on the torque support.

The actuators can be used either as stand-alone components or as a modular overall system, and can be plugged directly into the machine control system using the integrated fieldbus interface. The only things then needed to commission the linear actuator with automatic adjustment are a 24 V power supply and connection to the bus communication.

The two companies also work in close collaboration to fit even complex machines with multiple linear units and a local communication unit. In these cases, actuators with hybrid cables and PowerDRIVE boxes are used, along with a compact PLC control system with operator terminal. Both of these are supplied by **Lenord+Bauer** on request, in the form of a connection-ready module with operator software included. Integration into an existing control environment is really simple, as the PowerDRIVE system supports standard interfaces such as PROFIBUS and PROFINET.



E single-tube actuators – versatile all-rounders with a simply unbeatable price-performance ratio



Bearing cover

- ✓ Dust/spray protection on Type 30-60
- ✓ Option of screw with slide bearing (resistant to fine dust/abrasion)

Cover clips

- ✓ Slot cover as dust protection or stroke limitation

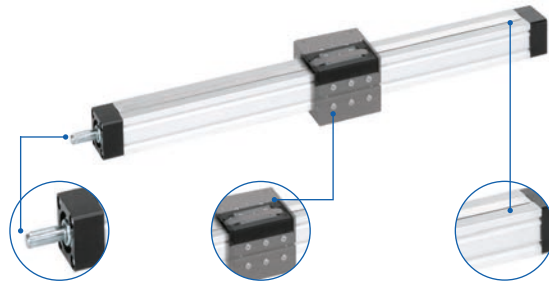
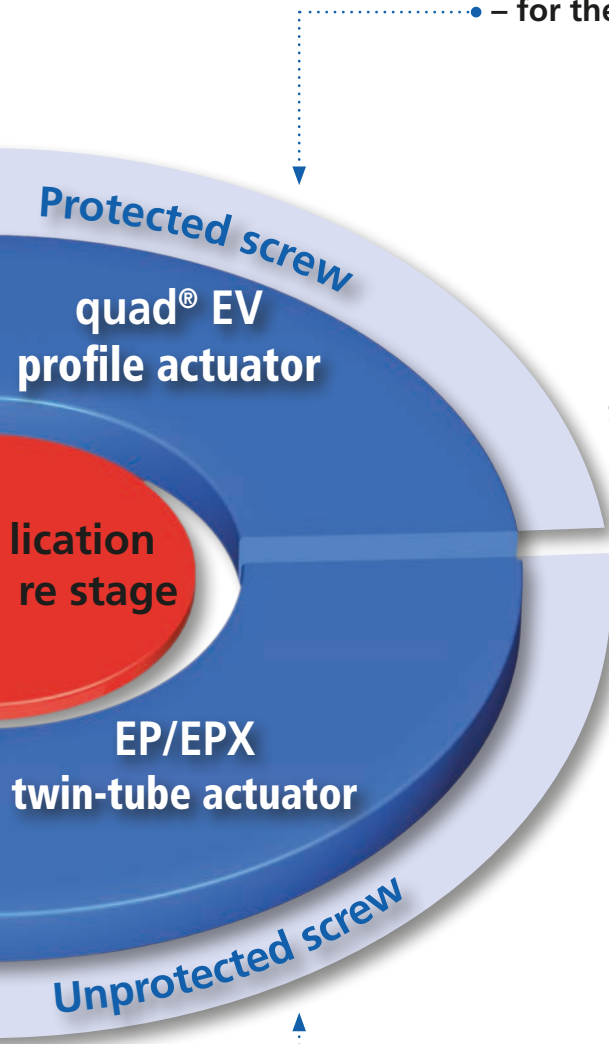
Carriages/fixing elements

- ✓ Wide range of models facilitates connection to your set-up

- ✓ Option of carriage with slide bushing (lower input torque, wear minimised)

48 h
ready for delivery

Compact and versatile quad® EV profile actuator
– for the medium load range



Shafts

- ✓ Choice of 1 or 2 ball-bearing shafts

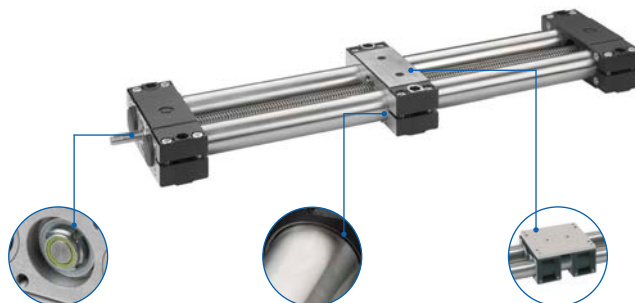
Choice of carriages/fixing elements

- ✓ Wide range of models for optimal integration into existing structures
- ✓ Adjustable slide guide

Cover strip

- ✓ The drive screw is protected against contamination

The EP/EPX twin-tube actuator generation
– compensates for high bending moments



Screw with choice of slide bearing or ball bearing

- ✓ Ideal for use in environments with fine dust/abraded particles thanks to slide bearings

Carriages available with optional slide bushing

- ✓ Lower input torque
- ✓ Wear minimised on carriage

Large fixing plate

- ✓ The EPX version is equipped with two carriages that are connected via a large fixing plate
- ✓ High torque capacity

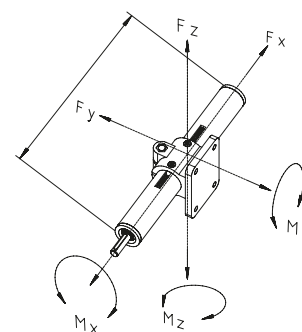
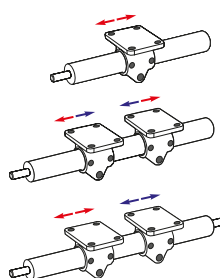
E units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F _x [N]	F _y * [N]	F _z * [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]	
E 30	+/- 0.2/300 mm	5000	800	500	500	6	15	15	✓ Screw covered by guiding tube
E 40	+/- 0.2/300 mm	5000	1000	2100	1900	14	40	40	
E 50	+/- 0.2/300 mm	5000	1700	3000	3000	30	65	65	✓ Large selection of carriages and fixing options
E 60	+/- 0.2/300 mm	5000	2500	4500	4500	45	120	120	✓ Stainless steel guide profile

*in relation to an overall length of 500 mm

Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw



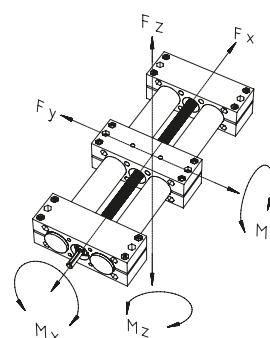
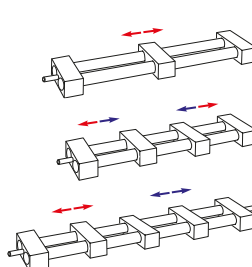
EP/EPX units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F _x [N]	F _y * [N]	F _z * [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]	
EP 30	+/- 0.2/300 mm	5000	800	1000	550	60	60	75	✓ Open screw
EP 40	+/- 0.2/300 mm	5000	1000	3500	2000	120	130	150	
EP 50	+/- 0.2/300 mm	5000	1700	3800	3000	160	200	260	✓ Twin tube linear unit
EP 60	+/- 0.2/300 mm	5000	2500	6600	6000	300	340	480	
EPX 30	+/- 0.2/300 mm	5000	800	1400	650	80	110	140	✓ Possibility of high torque load
EPX 40	+/- 0.2/300 mm	5000	1000	6000	2200	160	190	240	
EPX 50	+/- 0.2/300 mm	5000	1700	7700	3300	240	345	510	
EPX 60	+/- 0.2/300 mm	5000	2500	11000	7000	520	610	910	

*in relation to an overall length of 500 mm

Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw



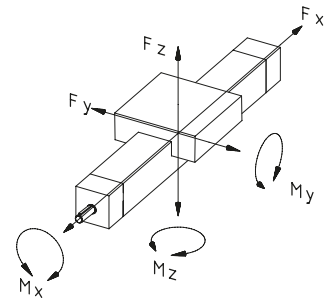
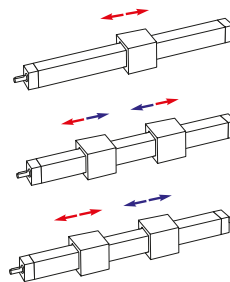
quad® EV units – General information

Type	Lead accuracy	Operational performance (m)	Permitted forces/torques						Features
			F _x [N]	F _y * [N]	F _z * [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]	
EV 30	+/- 0.15/300 mm	6000	800	600	600	6	11	8	✓ Protected screw
EV 40	+/- 0.15/300 mm	6000	1200	1500	1480	25	45	30	✓ Large selection of carriages and fixing options
EV 50	+/- 0.15/300 mm	6000	1800	2220	2300	55	74	50	✓ High operational performance
EV 60	+/- 0.15/300 mm	6000	2100	4070	4090	65	100	60	

*in relation to an overall length of 500 mm

Versions

- Right- or left-hand threaded screw
- Right- and left-hand threaded screw
- Split screw

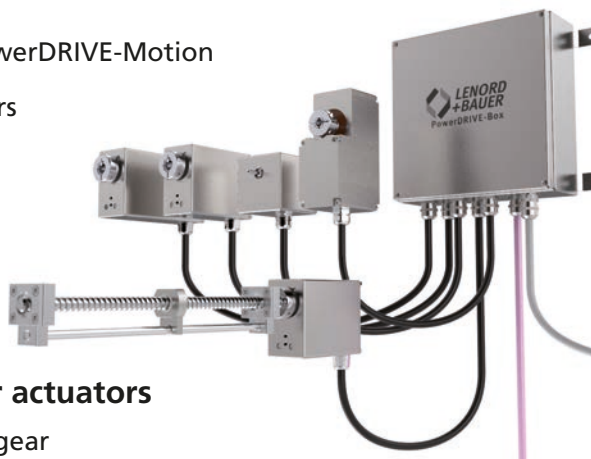


Fully automated drive solution

The PowerDRIVE reduces the setup times for format adjustment

Lenord + Bauer offers a modular application for the automation of linear actuators, consisting of:

- Fully automated actuators PowerDRIVE-Positioning and PowerDRIVE-Motion
- Electronic control unit PowerDRIVE-Box for up to 5 actuators
- Pre-packaged software modules PowerDRIVE-Lib
- Single-cable wiring (hybrid cable) PowerDRIVE-Connect
- Complete retrofit set PowerDRIVE-TouchBox



PowerDRIVE – actuators for RK Rose+Krieger linear actuators

- Non-wearing, brush-free 24 V DC motor and compact spur gear
- Sturdy housing in aluminium or stainless steel
- Magnetic multiturn sensor for precise positioning
- Integrated joystick for setup without PLC programming
- Wide temperature range from -10°C to +60°C
- Available interfaces:



Technical data – PowerDRIVES for RK Rose+Krieger linear units

PowerDRIVE-Positioning	GEL 6110 – compact design				GEL 6110 – short design		
Dimensions (W × H × D)	60 × 100 × 163 mm				60 × 100 × 125 mm		
Degree of protection	IP 67				IP 67		
Housing material	Aluminium (AlMgSi); stainless steel (1.4301)				Aluminium (AlMgSi); stainless steel (1.4301)		
Rated torque	2 Nm	5 Nm	10 Nm	15 Nm	1.4 Nm	3.5 Nm	7 Nm
Torque	230 rpm	100 rpm	40 rpm	30 rpm	230 rpm	100 rpm	40 rpm
Position sensor	Magnetic, multiturn				Magnetic, multiturn		
Sensor accuracy	± 1.8°				± 1.8°		
Sensor detection range	342 revolutions (output side)				342 revolutions (output side)		
Operating temperature range	-10°C to +60°C				-10°C to +60°C		
Connections	M12, M23 connector; hybrid cable; hybrid connector				M12, M23 connector; hybrid cable; hybrid connector		

For further information, please refer to our "PowerDRIVE system" brochure on our website www.lenord.com

We will gladly support you in implementing your automation requirements with the PowerDRIVE system

Depending on customer requirements and the technical circumstances, the PowerDRIVE system is either integrated into the existing control-system architecture or constructed as a cost-effective parallel system. And if you wish, we can also integrate the system into your machine control system for you. We are on hand with expert advice at every stage of your project.

Does your application require a customised actuator, and are you looking for a quick quotation for your project? Our effective support team will help you develop the perfect solution for your requirements. They will give detailed answers to any questions you may have in relation to the PowerDRIVE system, and will provide you with a quotation on the spot. Simply send us your enquiry!

Technical support **+49 (0) 208 9963 215**
support@lenord.de



Do you have any technical questions on the PowerDRIVE system or its integration into your machine control system, or do you need help with commissioning? Our competent support staff will be happy to provide you with advice and assistance!

Technical support **+49 (0) 208 9963 215**
support@lenord.de



Do you want to gain an overview of our PowerDRIVE system and need to access the necessary information? Are you looking for a competent contact partner or the right person within our company to help with your particular issue? Our telephone operators look forward to helping you!

Switchboard **+49 (0) 208 9963 - 0**
info@lenord.de



Take advantage of our expert knowledge and benefit from our comprehensive range of consultancy and support services!

E tubular linear unit



Features:

- Units for light to heavy moving applications
- Different sizes can be combined
- Comprehensive range of accessories

EP/EPX tubular linear unit



Features:


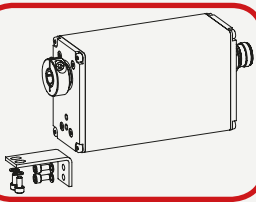
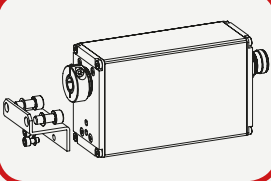
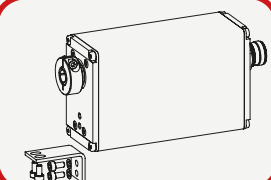
- High torque capacity
- Version available with large fixing plate

quad® EV linear unit



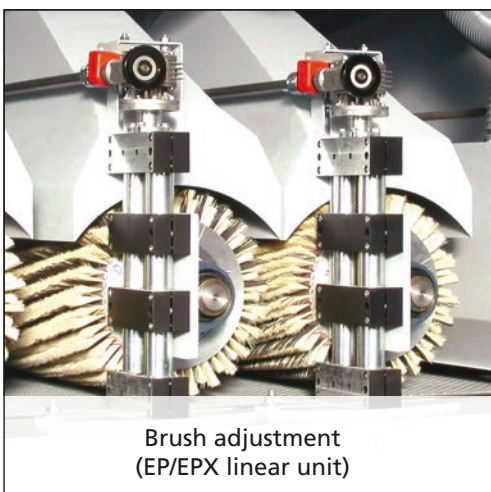
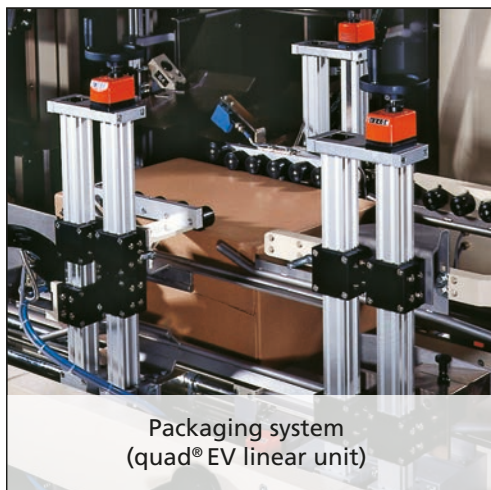
Features:

- Screw covered by steel band
- Wide range of available carriages and fixing elements
- Comprehensive range of accessories

RK Rose+Krieger				Size	 ... automates motion.
Freely selectable stroke/simple ordering process					
E tubular linear unit see catalogue page: 44	Choice of carriage models see catalogue page: 54	Choice of axis fixation see catalogue page: 60	Attachment of RH torque support *see catalogue page: 155	E 30 E 40 E 50 E 60	
EP/EPX tubular linear unit see catalogue page: 84				EP/EPX 30 EP/EPX 40 EP/EPX 50 EP/EPX 60	
quad® EV linear unit see catalogue page: 204	Choice of carriage models see catalogue page: 214	Choice of axis fixation see catalogue page: 218	Attachment of VH torque support *see catalogue page: 156	EV 30 EV 40 EV 50 EV 60	

For further information, please refer to our "Linear Technology" catalogue and "Connecting Technology" *catalogue, on our website www.rk-rose-krieger.com and at www.lenord.com

Possible applications

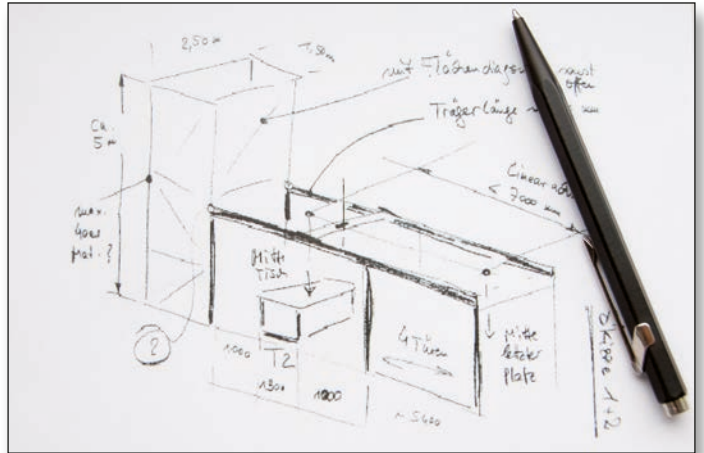


Our service

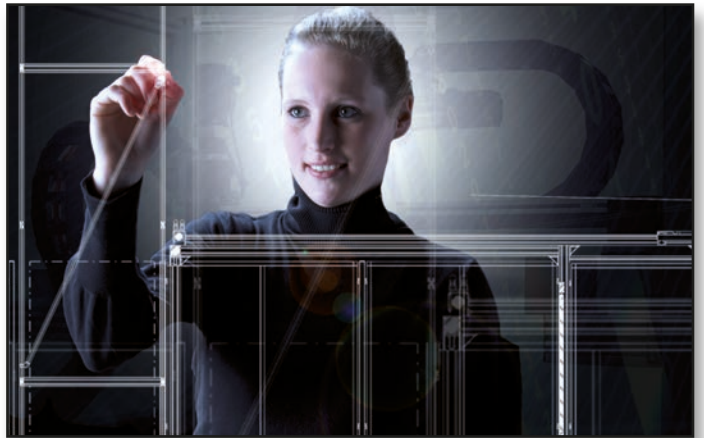
If you want to focus your resources on other tasks and are looking for an expert partner you can rely on, our specialists will work closely with you to develop tailor-made solutions. If you wish, we can also assemble and commission the units on site.

Product Consultancy **+49 (0) 571 9335 - 0**
anfrage.vertrieb@rk-online.de

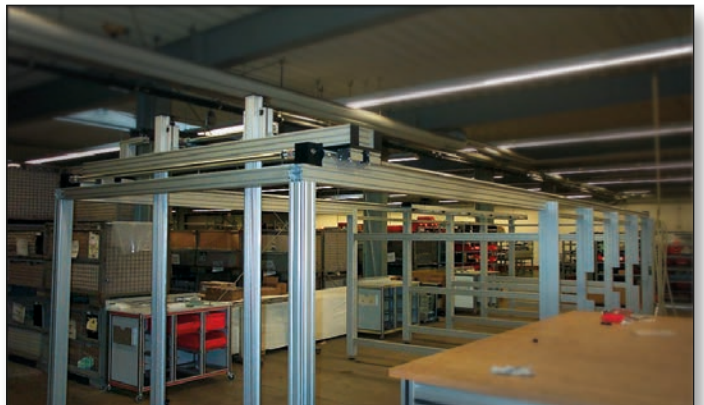
- Just make a sketch of your requirements



- Our product specialists will devise a solution for you



- We can deliver your turnkey solution or assemble and commission it for you on site





LINEAR TECHNOLOGY

- ✓ Manual adjustment units
- ✓ Electric cylinders
- ✓ Lifting columns
- ✓ Linear axes
- ✓ We can move loads for you of up to 3 t and 12 m dynamically, reliably and with great precision



PROFILE TECHNOLOGY

- ✓ The tried and tested BLOCAN® aluminium assembly system
- ✓ Sections from 20 mm to 320 mm for all applications
- ✓ Connecting technology with an unsurpassed combination of flexibility and reliability



CONNECTING TECHNOLOGY

- ✓ Fittings for the secure clamp connection of round and square tubes
- ✓ Elements made of aluminium, stainless steel and plastic
- ✓ Sizes from 8 mm to 80 mm



MODULE TECHNOLOGY

- ✓ Machine frames
- ✓ Workstations
- ✓ Machine guards
- ✓ Multidimensional linear axis modules
- ✓ Complete drive solutions

R RENOWNED
KNOW-HOW



RK ROSE+KRIEGER

A Phoenix Mecano Company

**LINEAR-
PROFILE-
CONNECTING-
MODULE-
TECHNOLOGY**



FAX reply form

☒ Yes, I would like to know more about
RK linear technology, please:

☐ send me details of your product range
in PDF format on a CD-ROM

☐ send me the Linear Technology catalogue

☐ contact me

Company: _____

Contact: _____

Department: _____

Address: _____

Tel. + Fax: _____

E-mail: _____



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A Phoenix Mecano Company

Connecting and positioning systems

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