

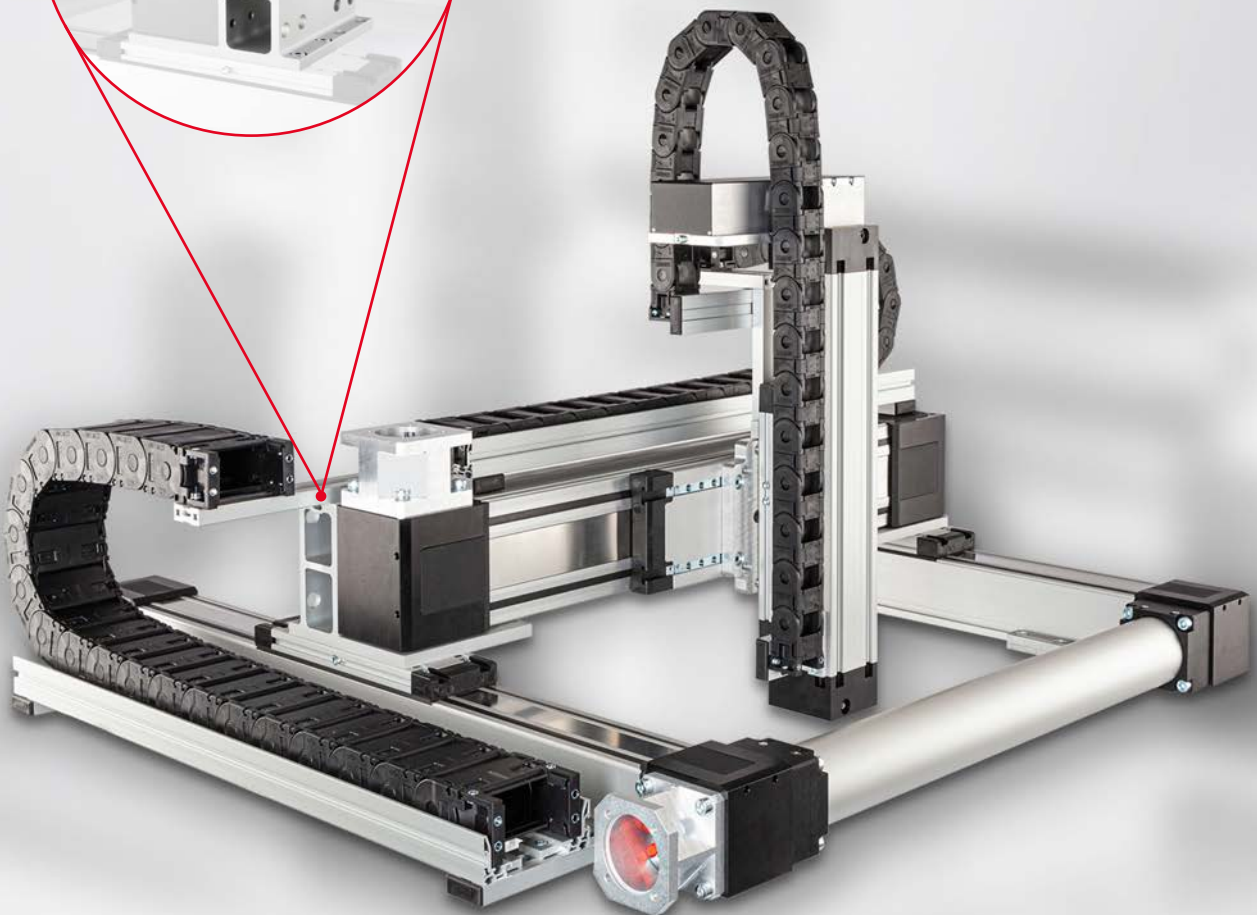


RK ROSE+KRIEGER

A Phoenix Mecano Company

RK multi-axis modular system

Perfectly tailored to each other,
selected quickly and easily



RK multi-axis modular system

Application example empty goods sorting system

Multi-axis systems are an economic alternative to robots in many applications, such as handling solutions.



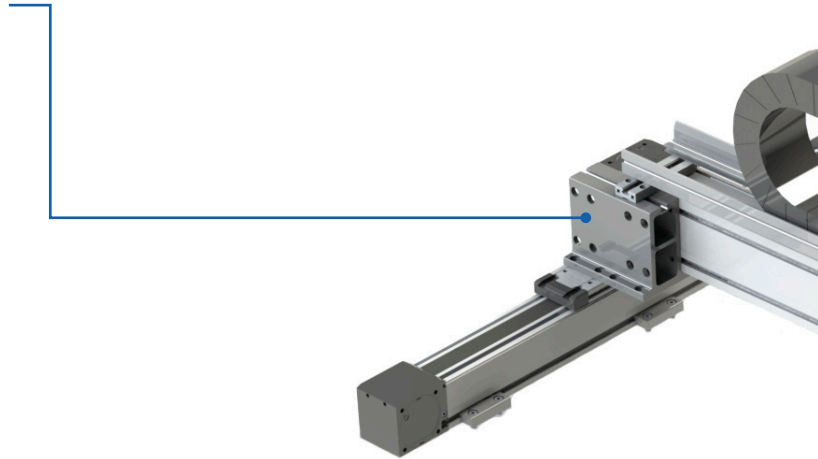
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Features

Everything from a single source, perfectly tailored to each other – selected quickly and easily.

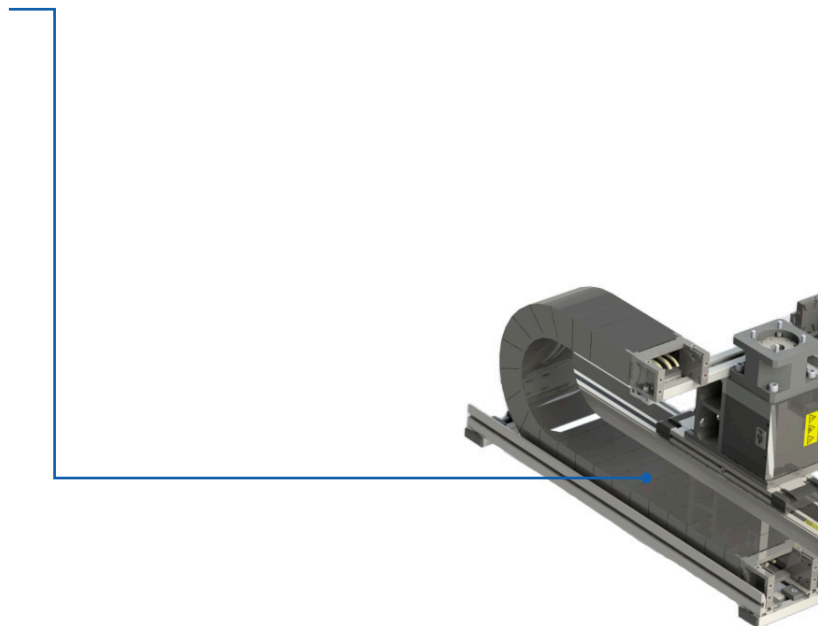
System angle bracket, system plates and clamping bars

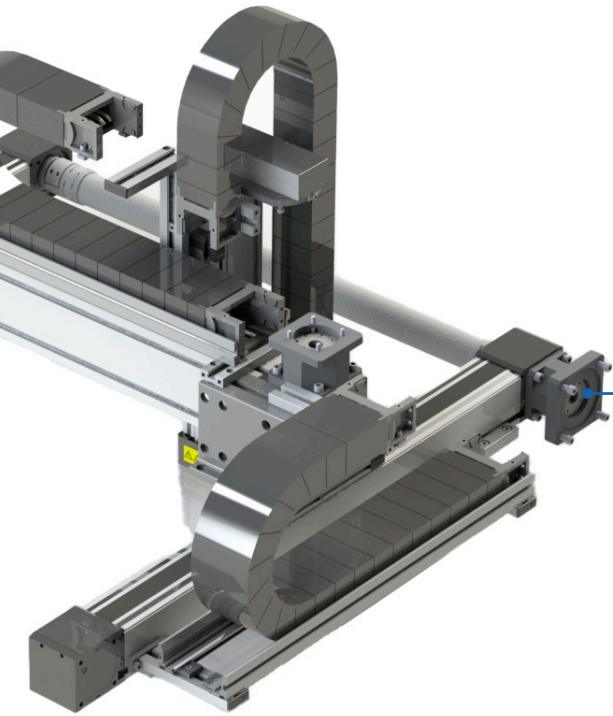
- Enable the quick and easy connection of linear actuators
- Reduced assembly work through the integrated installation aids
- Prepared as standard for attaching drag chains
- Scope of delivery complete with the required fastenings



Cable management

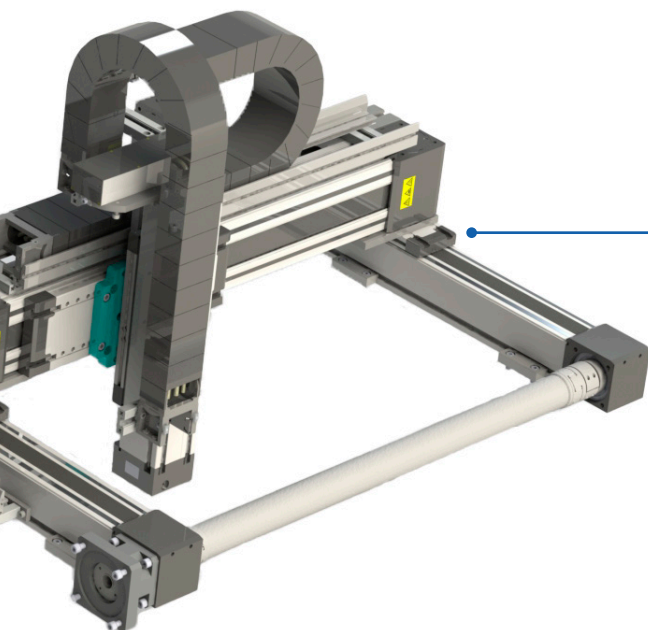
- Multi-axis systems are optionally available with matching holders and support surface profiles
- The support surface profiles are suitable for the use of drag chains from different manufacturers





Motor adaption

- Standard motor adapter kits available for a variety of motor and gear unit manufacturers
- Motor adapter, servo coupling with zero backlash and assembly material as a complete set
- Complete motor adapter kits manufactured to your specifications on request



Delivery options

- Assembly by the customer according to instructions
- Assembly by RK Rose+Krieger completely or segmentally

RK multi-axis modular system

Tried-and-tested RK linear technology as the basis for the RK multi-axis modular system

With the new modular system, linear, planar and three-dimensional gantries can be set up quickly and simply using the RK DuoLine and RK MonoLine series as the basis.

RK MonoLine Z



The RK MonoLine Z is a high-performance roller guide that impresses with its very good value for money.



PDF brochure

RK MonoLine MT



Linear unit with Omega drive. A typical application is use as a moving axis.

RK DuoLine S



Optimum performance, precision and features for dynamic adjustments.



PDF brochure

RK DuoLine Z



















All-round talent with encapsulated guide system.











Combination options
















Crossing system

Type of adaptation	x - y	x - z	z - x	Component	Number
System angle bracket Guide profile on guide carriage		or 	or 	 Page 10	1x
System plate Guide carriage on guide carriage		or 	or 	 Page 13	1x
System angle bracket Guide carriage on guide carriage		or 	or 	 Page 14	1x
Clamping bar Guide profile on guide carriage		or 	or 	 Page 12	1x

2-axis system

Type of adaptation	x - y	x - z	z - x	Component	Number
Clamping bar Guide profile on guide carriage		or 	or 	 Page 12	2x
System angle bracket Guide profile on guide carriage		or 	or 	 Page 10	2x

3-axis system

Type of adaptation	x - y - z	x - y	y - z	Component	Number
System angle bracket Guide profile on guide carriage + System plate Guide carriage on guide carriage				 Page 10 +  Page 13	1x 1x
System angle bracket Guide profile on guide carriage + System plate Guide carriage on guide carriage				 Page 10 +  Page 13	2x 1x
Clamping bar Guide profile on guide carriage + System angle bracket Guide carriage on guide carriage				 Page 12 +  Page 14	2x 1x

Components

Order information:

- Other size combinations on request

Material:

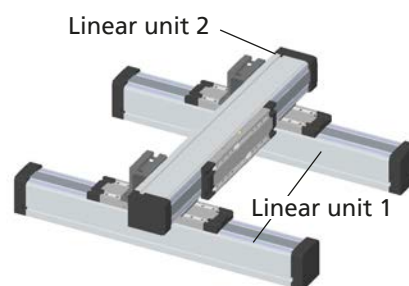
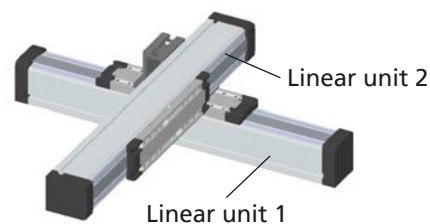
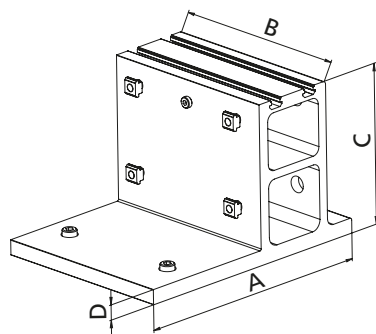
Aluminium clear anodised,
galvanised fastenings

Scope of delivery:

1x system angle bracket with fastenings

System angle bracket

Guide profile on guide carriage –
non-flush termination of the upper axis (linear unit 2)



Combination options – RK MonoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870002	RK MonoLine R/Z	40	RK MonoLine R/Z	40	115	97	71	8	0,56
9870005	RK MonoLine R/Z	40	RK MonoLine R/Z	60	132	97	92	10	0,79
9870006	RK MonoLine R/Z	60	RK MonoLine R/Z	60	132	140	92	10	1,13
9870007	RK MonoLine R/Z	60	RK MonoLine R/Z/MT	80/80x120/80x160	171	140	110	12	1,79
9870008	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z/MT	80/80x120/80x160	171	175	110	12	2,2
9870013	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z	120	239	175	148	14	3,45
9870014	MonoLine R/Z	120	RK MonoLine R/Z	120	239	280	148	14	5,52

Combination options – RK DuoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870001	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	60	115	60	71	8	0,38
9870003	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	80	132	60	92	10	0,52
9870004	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	80	132	80	92	10	1,67
9870009	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	120	178	80	135	12	1,14
9870010	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	120	178	120	135	12	1,67
9870011	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	160	208	120	178	14	2,44
9870012	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	160	208	160	178	14	3,23

Order information:

- Other size combinations on request

Material:

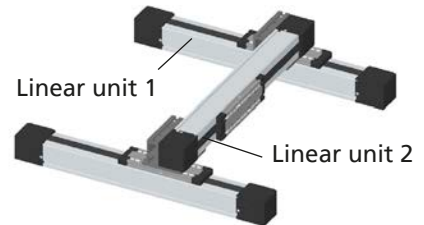
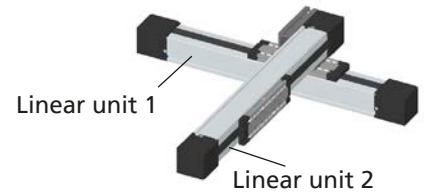
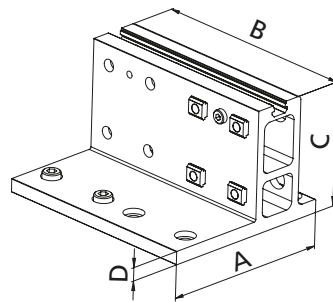
Aluminium clear anodised,
galvanised fastenings

Scope of delivery:

1x system angle bracket with
fastenings

System angle bracket

Guide profile on guide carriage –
flush termination of the upper axis



Combination options – RK MonoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870029	RK MonoLine R/Z	40	RK MonoLine R/Z	40	115	120	71	8	0,66
9870032	RK MonoLine R/Z	40	RK MonoLine R/Z	60	132	164	92	10	1,27
9870033	RK MonoLine R/Z	60	RK MonoLine R/Z	60	132	180	92	10	1,41
9870034	RK MonoLine R/Z	60	RK MonoLine R/Z/MT	80/80x120/80x160	171	180	110	12	2,22
9870035	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z/MT	80/80x120/80x160	171	200	110	12	2,46
9870040	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z	120	239	230	148	14	4,46
9870014	MonoLine R/Z	120	RK MonoLine R/Z	120	239	280	148	14	5,52

Combination options – RK DuoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870028	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	60	115	120	71	8	0,66
9870030	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	80	132	140	92	10	1,08
9870031	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	80	132	160	92	10	1,22
9870036	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	120	178	160	135	12	2,15
9870037	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	120	178	200	135	12	2,69
9870038	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	160	208	200	178	14	3,97
9870039	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	160	208	240	178	14	4,75

Components

Order information:

- Other size combinations on request

Material:

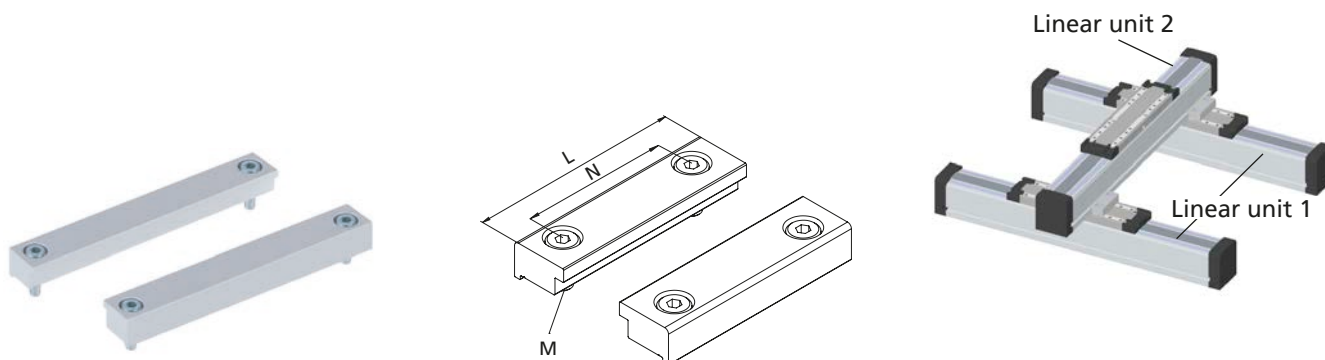
Vibration finished aluminium, galvanised fastenings

Scope of delivery:

2x clamping bars with fastenings

Clamping bar

Guide profile on guide carriage



Combination options – RK MonoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	L	M	N	Mass [kg]
91842	RK MonoLine R/Z	40	RK MonoLine R/Z	40	97	M6	67	0,1
91827	RK MonoLine R/Z	40	RK MonoLine R/Z	60	95	M8	67	0,19
91820	RK MonoLine R/Z	60	RK MonoLine R/Z	60	130	M8	100	0,32
91829	RK MonoLine R/Z	60	RK MonoLine R/Z/MT	80/80x120/80x160	136	M8	100	0,34
91813	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z/MT	80/80x120/80x160	156	M8	120	0,39
	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z	120				

Combination options – RK DuoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	L	M	N	Mass [kg]
91818	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	60	57	M6	40	0,09
91822	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	80	57	M8	40	0,12
91886	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	80	76	M8	50	0,2
91823	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	120	78	M8	50	0,21
91812	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	120	116	M8	80	0,3
	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	160				
91802	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	120	156	M8	120	0,39
	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	160				

Order information:

- Other size combinations on request

Material:

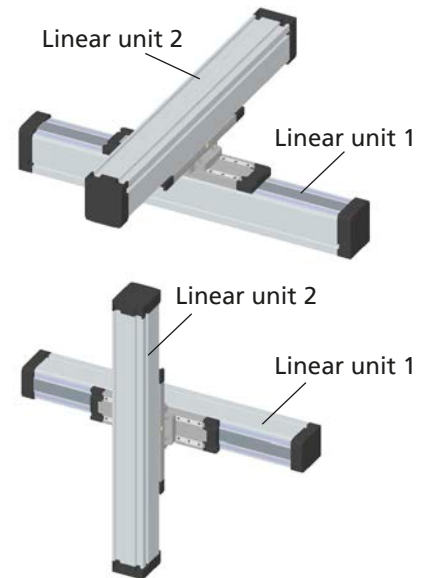
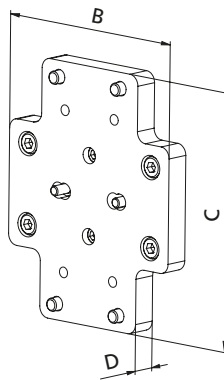
Vibration finished aluminium, galvanised fastenings

Scope of delivery:

1x System plate with fastenings

System plate

Guide carriage on guide carriage


Combination options – RK MonoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	B	C	D	Mass [kg]
9890008	RK MonoLine R/Z	40	RK MonoLine R/Z	60	160	160	16	1,05
9890009	RK MonoLine R/Z	60	RK MonoLine R/Z/MT	80/80x120/80x160	200	200	20	2,17
9890010	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z/MT	80/80x120/80x160	210	226	20	2,62
	RK MonoLine R/Z/MT	80/80x120/80x160	RK MonoLine R/Z	120				

Combination options – RK DuoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	B	C	D	Mass [kg]
9890001	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	60	90	90	12	0,27
9890002	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	80	130	160	15	0,69
9890003	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	80	130	160	15	0,72
9890004	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	120	160	160	16	1,02
9890005	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	120	160	160	16	1,04
9890007	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	160	200	200	20	2,08
	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	160				
9890006	RK DuoLine R/Z/S	120	RK MonoLine MT	80/80x120/80x160	200	200	20	2,12
	RK DuoLine R/Z/S	160	RK MonoLine MT	80/80x120/80x160				

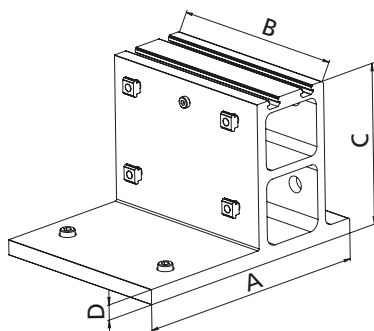
Components

Order information:

- Other size combinations on request

System angle bracket

Guide carriage on guide carriage

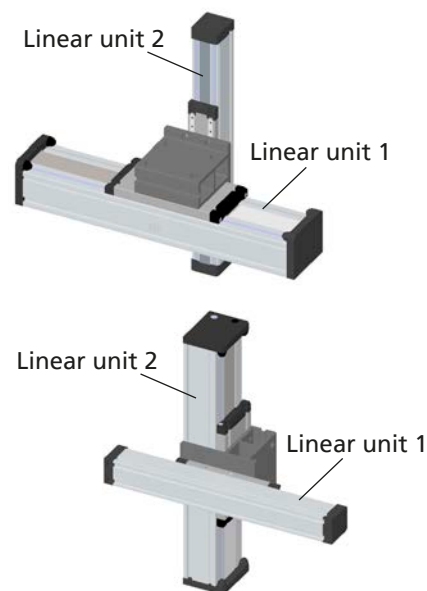


Material:

Aluminium clear anodised, galvanised fastenings

Scope of delivery:

1x system angle bracket with fastenings



Combination options – RK MonoLine

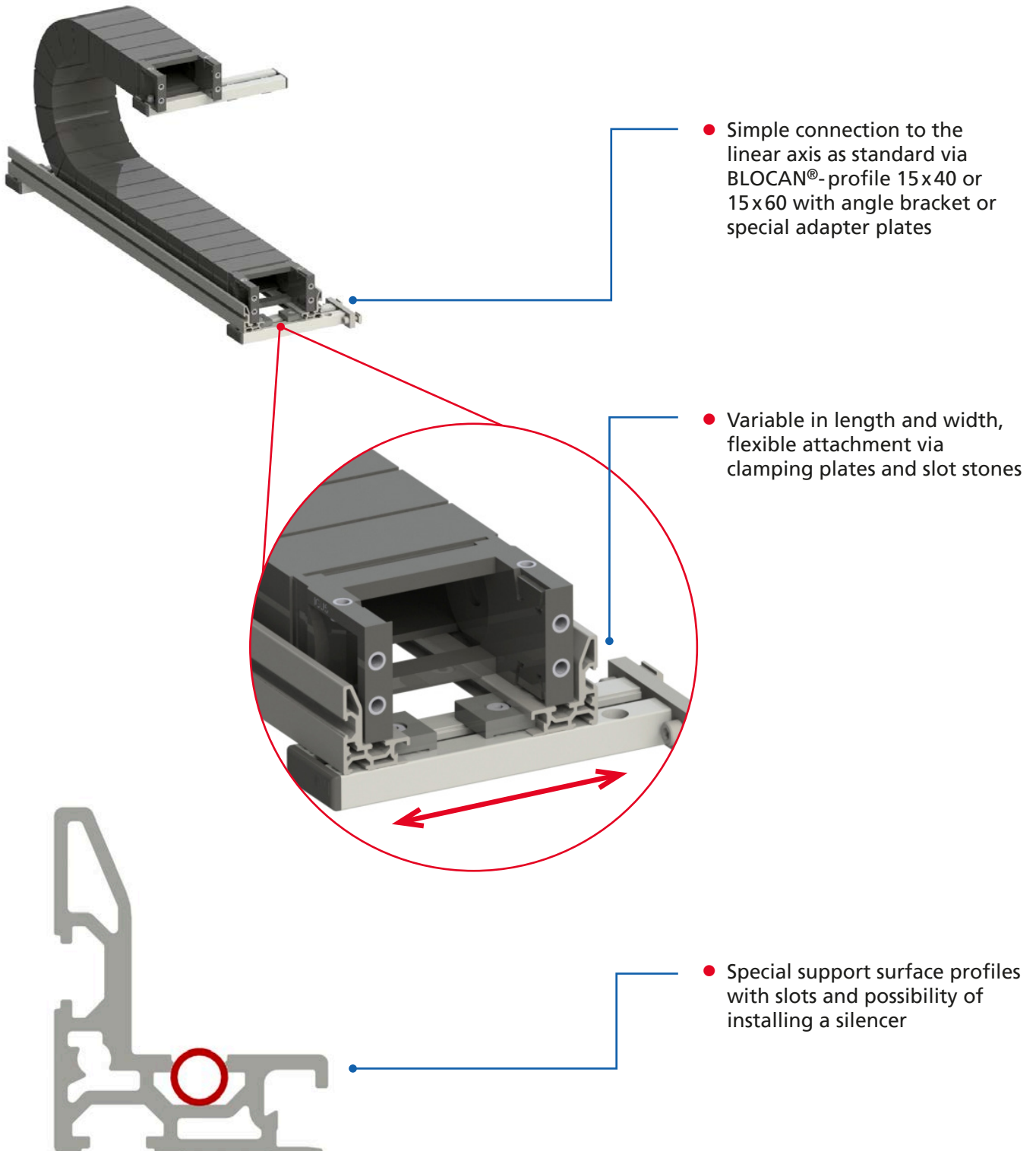
Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870015	RK MonoLine R/Z	40	RK MonoLine R/Z	40	121	97	110	12	1,06
9870025	RK MonoLine R/Z	40	RK MonoLine R/Z	60	132	97	148	14	1,49
9870026	RK MonoLine R/Z	60	RK MonoLine R/Z	60	174	140	148	14	2,35
9870023	RK MonoLine R/Z	60	RK MonoLine R/Z/MT	80/80x120/80x160	174	140	178	14	2,65
9870024	RK MonoLine R/Z	80/80x120/80x160	RK MonoLine R/Z	80/80x120/80x160	208	175	178	14	3,51
9870022	RK MonoLine R/Z	80/80x120/80x160	RK MonoLine MT	80/80x120/80x160	208	220	178	14	3,74

Combination options – RK DuoLine

Code No.	Linear unit 1	Size	Linear unit 2	Size	A	B	C	D	Mass [kg]
9870027	RK DuoLine R/Z/S	60	RK DuoLine R/Z/S	80	132	120	92	10	0,92
9870016	RK DuoLine R/Z/S	80	RK DuoLine R/Z/S	120	178	140	135	12	1,88
9870017	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	120	178	160	135	12	2,16
9870019	RK DuoLine R/Z/S	120	RK DuoLine R/Z/S	160	208	160	178	14	3,18
9870020	RK DuoLine R/Z/S	160	RK DuoLine R/Z/S	160	208	180	178	14	3,59
9870018	RK DuoLine R/Z/S	120	RK MonoLine MT	80/80x120/80x160	178	175	135	12	2,2
9870021	RK DuoLine R/Z/S	160	RK MonoLine MT	80/80x120/80x160	208	175	178	14	3,28

Drag chains

Due to the large range of versions, not all connections for drag chains can be represented as order numbers. Details and order numbers are available on request.



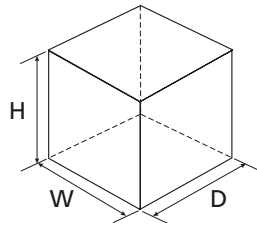
Enquiry form for multi-axis systems

RK Rose+Krieger GmbH
 Potsdamer Strasse 9
 32423 Minden/Germany
 Telephone: +49 (0)571 9335-0
 Fax: +49 (0)571 9335-119
 E-mail: anfrage.vertrieb@rk-online.de
 Date:.....

Customer number:
 Company:.....
 Project:.....
 Telephone:.....
 E-mail:.....
 Contact:.....
 Department:.....

Technical data:
 (max. installation space)

H: mm
 W: mm
 D: mm



Accessories:

- Fastening
- Limit switch
- Motor adaptor
- Drag chain
-

Drive:

- No
- Yes
 (See enquiry form
 "Controllers")

Process forces [N]:

- No
- Yes (please include sketch)

Substructure:

- No
- Yes (please include sketch)

Positioning accuracy:mm

Repeatability:mm

Base duty cycle 1h:

Shift operation:

Mass:kg
 Centre of mass ↓ in:xyz mm
 (See page 17)
 Number of cycles / h
 Travel speed in x: m/s
 Acceleration in x: m/s²
 Stroke length in x:mm

Number of cycles / h
 Travel speed in y: m/s
 Acceleration in y: m/s²
 Stroke length in y:mm

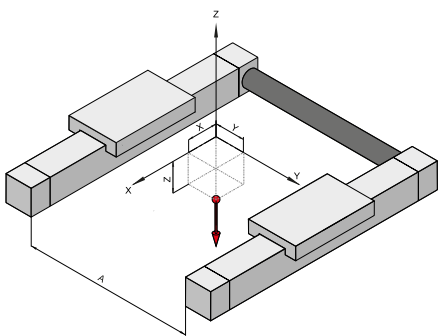
Number of cycles / h
 Travel speed in z: m/s
 Acceleration in z: m/s²
 Stroke length in z:mm

Ambient conditions:
 Humidity: %
 Operating temperature °C

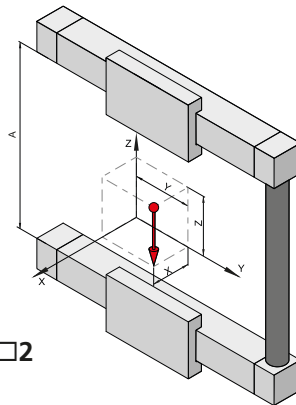
Sketches & commentaries:																						



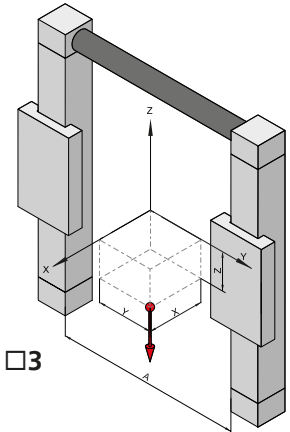
Application examples: □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 □11 □12



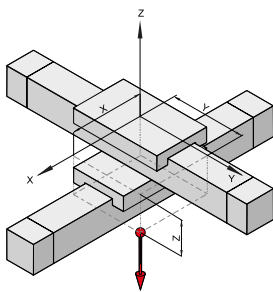
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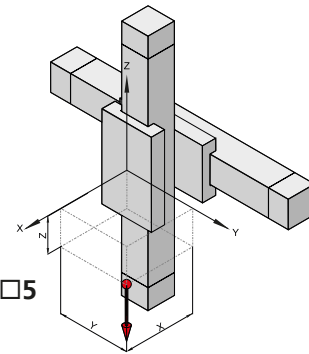
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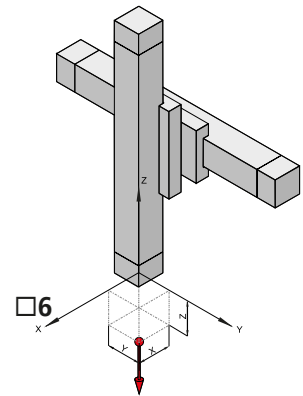
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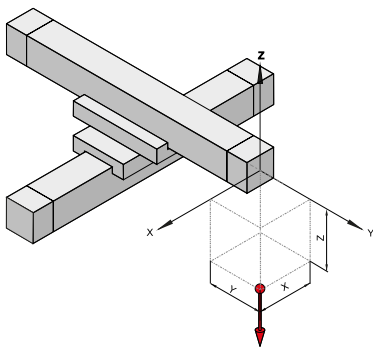
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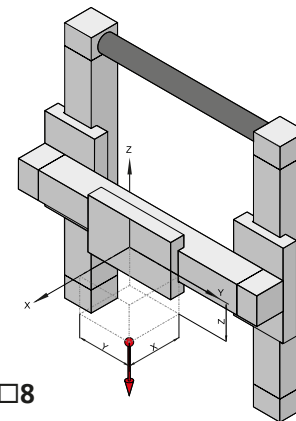
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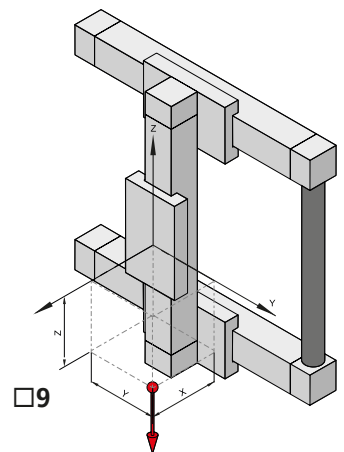
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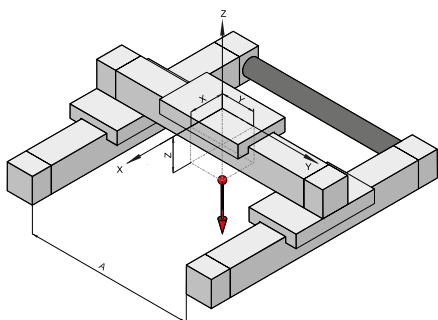
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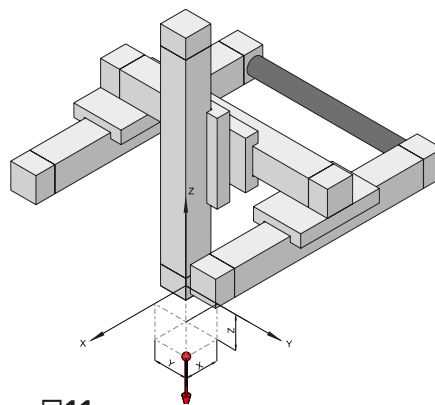
□8



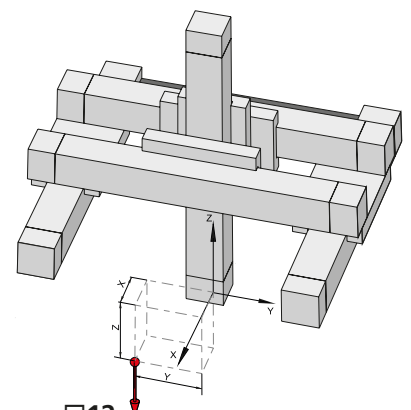
□9



□10



□11



□12

Enquiry form motors and controllers for multi-axis systems

RK Rose+Krieger GmbH

Potsdamer Strasse 9

32423 Minden/Germany

Telephone: +49 (0)571 9335-0

Fax: +49 (0)571 9335-119

E-mail: anfrage.vertrieb@rk-online.de

Date:.....

Customer number:

Company:.....

Project:.....

Telephone:.....

E-mail:.....

Contact:.....

Department:

Motor type:

DC motor

EHL electronic handwheel: Yes No

Speed controller: Yes No

LZ drive: Yes No

Three-phase drive

Worm gear motor: Yes No Motor temperature monitoring: Yes No

Spur gear motor: Yes No Required IP protection for motor/gear motor:.....

Spiroplan gear motor: Yes No With brake: Yes No

Motor voltage range:V Voltage for brake control: 24V/DC 230V/AC

Motor frequency:Hz Motor encoder:.....
(e.g. incremental encoder, resolver, absolute encoder)

Stepper motor driver with integrated control and power electronics (24-48VDC)

Motor connection cable length: 5m 7.5m 10m

Switching power supplies which are required for operation of the motor: Yes No

Programming cable: Yes No

Servo drive

Operating voltage from servo drive: 230V/AC

400V/AC

Required IP protection for servo drive/ servo gear motor:.....

With brake: Yes No

Motor encoder: Absolute encoder Resolver

Positioning with set table max. 31 motion sets: Yes No

Servo controller with function Positioning with function blocks: Yes No

Cable length between system and control cabinet:

2.5m 5m 7.5m 10m 12.5m 15m 20m

Positioning with master control system using field bus interface:

(e.g. Profibus, Profinet, CanOpen, EtherCAT)

Operating temperature (0-40°):.....°

Other ambient conditions which differ from a normal hall climate (0 to 40°C):



RK ROSE+KRIEGER

A Phoenix Mecano Company

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PDF brochure
for download

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