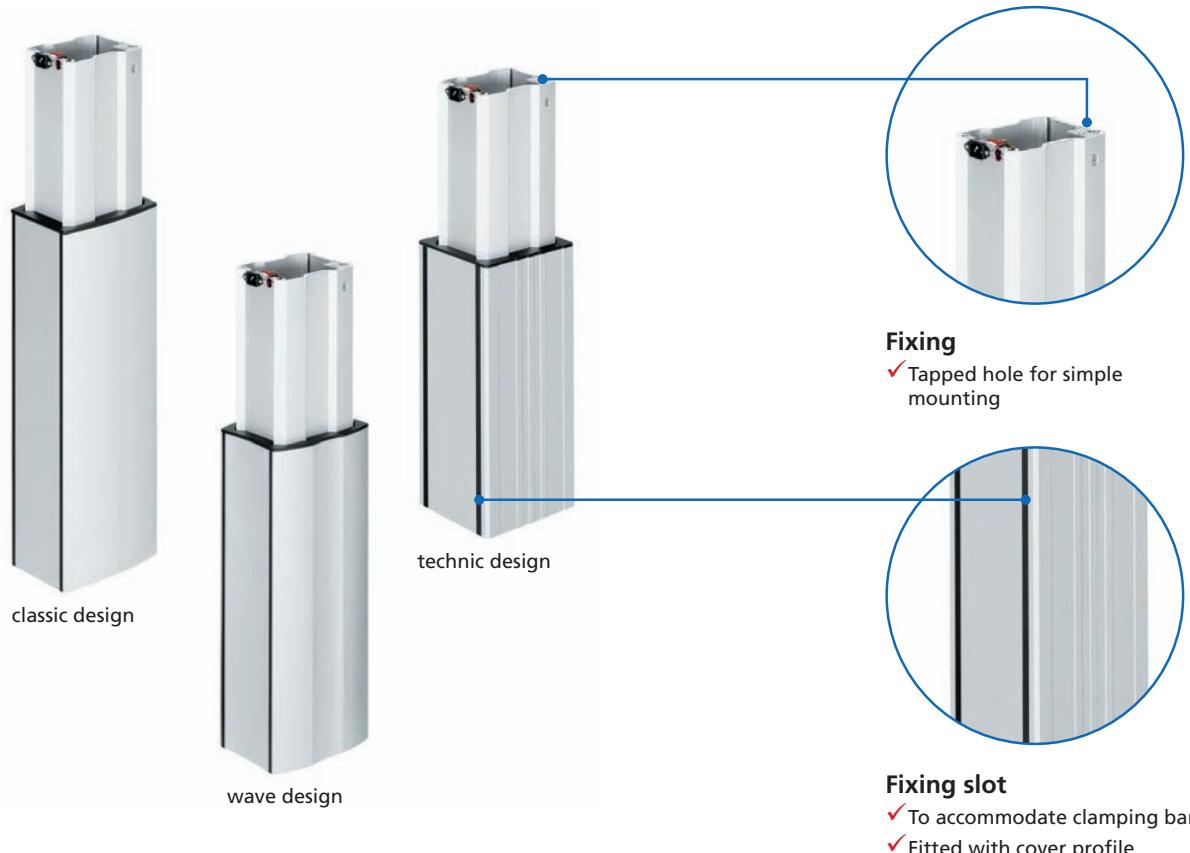


Two-stage lifting column - *RKPowerlift*

The power pack for high bending moments



RKPowerlift version Z:

- For push loads
- High moment capacity
- High lifting speed

RKPowerlift version S:

- For push/pull forces
- Medium moment capacity
- Medium lifting speed

Features:

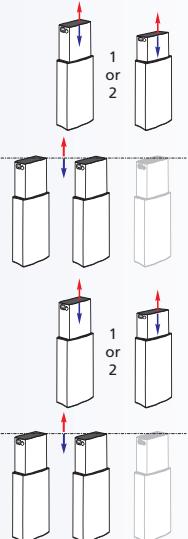
- Three design versions available
- Withstands high torsional and bending moments
- Integrated motor
- Choice of internal or external control

- Four fixing slots in external profile
- Adjustable stroke length
- Optimum installation height/stroke length ratio
- Extremely quiet operation

Options:

- Special stroke lengths (screw drive)
- Quadro control enables synchronisation of up to 32 columns

RKPowerlift - Table of contents

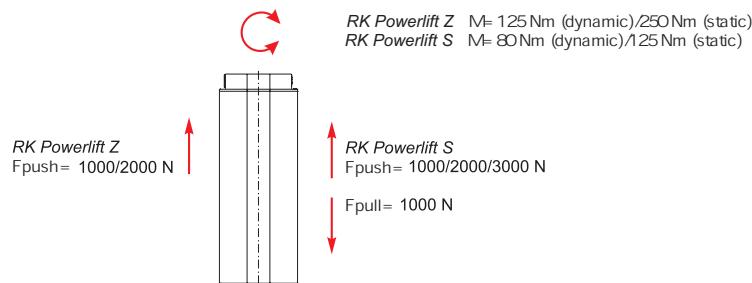
<p>Properties/Technical data</p>	<ul style="list-style-type: none"> ■ General information/operating conditions ... 374 ■ Power diagram..... 374 ■ Load data..... 374 ■ Parallel and synchronous operation 375 	<p>Versions (Dimensions, order numbers)</p> 	<ul style="list-style-type: none"> ■ RKPowerlift 376 - 377 ■ <i>RKPowerlift Z mono</i> 378 ■ <i>RKPowerlift Z synchro</i> 379 ■ <i>RKPowerlift S mono</i>..... 380 ■ <i>RKPowerlift S synchro</i>..... 381 	<p>Accessories</p>	<ul style="list-style-type: none"> ■ Clamping bar..... 382 ■ Frame/fixing plate 382 ■ Base plate 383 ■ RK SyncFlex..... 384 	<p>Fixing</p>	<ul style="list-style-type: none"> ■ Controls 385 ■ PLC/PC data interface..... 385 ■ Hand switch..... 385 	<p>Position determination</p>							
<p>Appendix</p>		<p>Modules</p>		<p>Motors/ Controls</p>		<p>Control-Tec</p>		<p>Place-Tec</p>		<p>Move-Tec</p>		<p>Selection aid</p>		<p>Introduction</p>	

RKPowerlift – Technical data

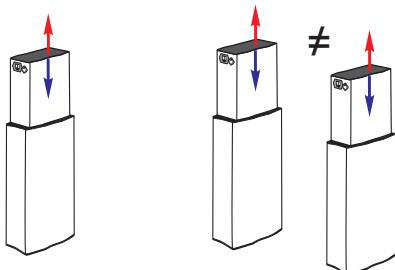
General information/operating conditions

Design	Rectangular lifting column in compact design
Guide	Multiple roller/slide bearings
Installation position	Defined (any screw drive)
Push force	Choice of 1000 N, 2000 N, 3000 N
Pull force (screw drive only)	Max. 1000 N
Voltage	36 V DC
Power input	120 W/210 W
Protection class	IP 30
Self-locking	Yes
Ambient temperature	+5°C to +40°C
Max. displacement with synchronous operation	0-3 mm rack drive/0-1.5 mm screw drive
Duty cycle	At nominal load, 15% (max. 1.5 mins operating time, 10 mins rest time)

Load data



RKPowerlift Mono

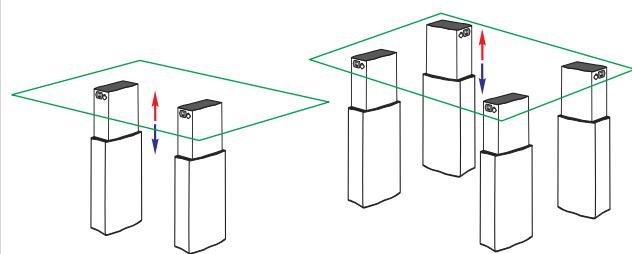


1-2 **RKPowerlifts** in single or parallel operation

Parallel operation

The standard version also supports parallel operation of two **RKPowerlifts** (no synchronisation). This may produce different lifting positions during operation, which can be levelled out by moving to the end positions.

RKPowerlift Synchro



2-4 **RKPowerlifts** in synchronous operation

Synchronous operation

Synchronous operation of two or more columns. In conjunction with the integrated sensors, the control (see page 640) ensures synchronisation, and thus constant alignment of all the columns in both directions of travel, even if subject to different loads. The synchronous operation tolerance depends on the lifting speed and is max. 3 mm for the version with rack drive or max. 1.5 mm for the version with screw drive. A memory function is also available.



Conveyer adjustment

RKPowerlift - Versions

RKPowerlift Z
(for compressive load)

■ with internal control



RKPowerlift S
(for compressive and tensile loads)

■ with internal control

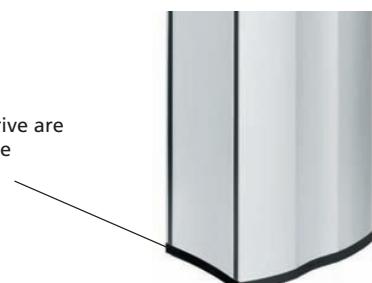
■ with external control

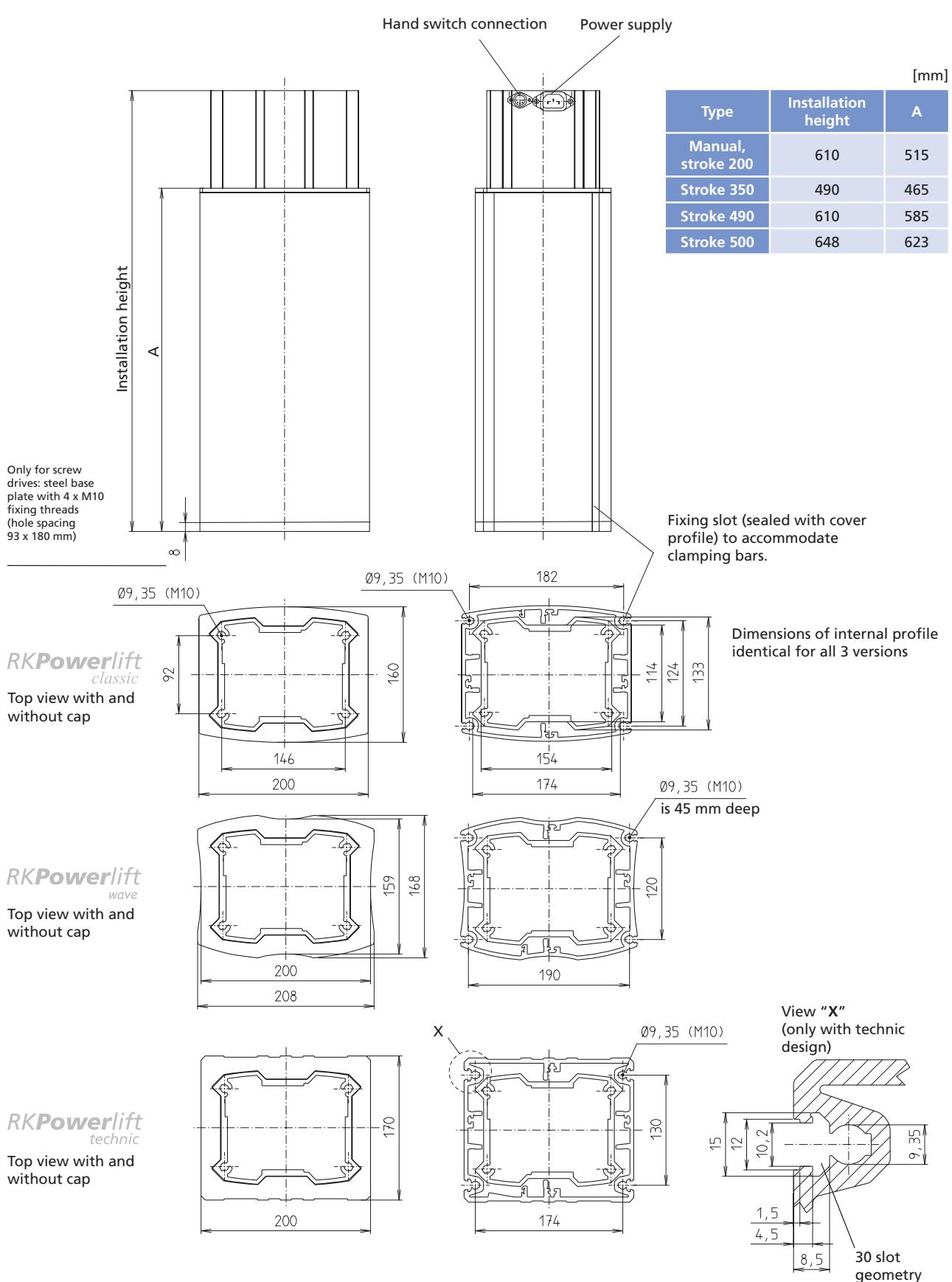


Connecting cable
(8-pin, 1.8 m)
for external control



Versions with screw drive are
fitted with a base plate
(steel 8 mm).





For order table, see next page

RKPowerlift - Versions

RKPowerlift Z (for push load)



RKPowerlift mono

Code No.	Type	Push force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
With internal control/standard (start and stop)						
QPL35BA_20350	RKPowerlift 35	1000	35	350	490	~18
QPL35BA_20490	RKPowerlift 35	1000	35	490	610	~21
With internal control/soft-control (soft start and braking)						
QPL28BB_40490	RKPowerlift 28	2000	28	490	610	~21
QPL35BA_40350	RKPowerlift 35	1000	35	350	490	~18
QPL35BA_40490	RKPowerlift 35	1000	35	490	610	~21
QPL50BA_40350	RKPowerlift 50	1000	50	350	490	~18
QPL50BA_40490	RKPowerlift 50	1000	50	490	610	~21
With internal control/memory (9 positions can be stored)						
QPL28BB_60490	RKPowerlift 28	2000	28	490	610	~21
QPL50BA_60350	RKPowerlift 50	1000	50	350	490	~18
QPL50BA_60490	RKPowerlift 50	1000	50	490	610	~21

Design:
3 = classic
4 = wave
5 = technic



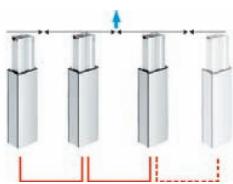
Polishing machine



Lasted shoe bottom roughing and scouring machine

RKPowerlift Z

(for push load)


RKPowerlift synchro

Code No.	Type	Push force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
With internal control/memory (9 positions can be stored)						
QPL28BB_30490	<i>RKPowerlift</i> 28	2000	28	490	610	~21
QPL50BA_30350	<i>RKPowerlift</i> 50	1000	50	350	490	~18
QPL50BA_30490	<i>RKPowerlift</i> 50	1000	50	490	610	~21

Design:
 3 = classic
 4 = wave
 5 = technic

Code No.	Connecting cable (bus cable)
QZD100093	For synchronisation up to 8 <i>RKPowerlifts</i> , 6 m

RKPowerlift
internal control


RKPowerlift - Versions

RKPowerlift S (for push and pull loads)



RKPowerlift mono

Code No.	Type	Push force [N]	Pull force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
With internal control/standard (start and stop)							
QPL25BA_S0500	RKPowerlift 25	1000	1000	25	500	648	~19
QPL18BB_S0500	RKPowerlift 18	2000	1000	18	500	648	~19
QPL10BC_S0500	RKPowerlift 10	3000	1000	10	500	648	~19
With internal control/memory (9 positions can be stored)							
QPL25BA_T0500	RKPowerlift 25	1000	1000	25	500	648	~19
QPL18BB_T0500	RKPowerlift 18	2000	1000	18	500	648	~19
QPL10BC_T0500	RKPowerlift 10	3000	1000	10	500	648	~19

Design:
3 = classic
4 = wave
5 = technic

Code No.	Type	Compressive force [N]	Tensile force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
For external control							
QPL25EA_V0500	RKPowerlift 25	1000	1000	25	500	648	~17
QPL18EB_V0500	RKPowerlift 18	2000	1000	18	500	648	~17
QPL10EC_V0500	RKPowerlift 10	3000	1000	10	500	648	~17

Design:
3 = classic
4 = wave
5 = technic

Transformer control 120 VA



approx. 24 V DC

MultiControl mono



approx. 36 V DC

Code No.	External control
QZA09C13BH031	Transformer control 120 VA connection C, up to 1,000 N total lifting force, controls 1 drive
QSTACCA1AA000	MultiControl mono connection C, up to max. I= 12 A current consumption, 36 V DC, controls up to 2 drives
Accessories	
QZD0702844000*	Straight connecting cable (4 m) with 5-pin connector and open cable end
QZD070526	Extension cable 2,5 m drive for connector C/8-pin DIN socket

*for the connection of a parallel hand switch or an external potentiometer (in the case of the MultiControl mono)

RKPowerlift S

(for push and pull loads)


RKPowerlift Synchro

Code No.	Type	Pushe force [N]	Pull force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
With internal control/memory (9 positions can be stored)							
QPL25BA_U0500	<i>RKPowerlift 25</i>	1000	1000	25	500	648	~19
QPL18BB_U0500	<i>RKPowerlift 18</i>	2000	1000	18	500	648	~19
QPL10BC_U0500	<i>RKPowerlift 10</i>	3000	1000	10	500	648	~19

Design:
3 = classic
4 = wave
5 = technic

Code No.	Connecting cable (bus cable)
QZD100093	6 m bus cable for the networking of up to 8 synchronous controls

Code No.	Type	Compressive force [N]	Tensile force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
For external control							
QPL25EA_V0500	<i>RKPowerlift 25</i>	1000	1000	25	500	648	~17
QPL18EB_V0500	<i>RKPowerlift 18</i>	2000	1000	18	500	648	~17
QPL10EC_V0500	<i>RKPowerlift 10</i>	3000	1000	10	500	648	~17

Design:
3 = classic
4 = wave
5 = technic

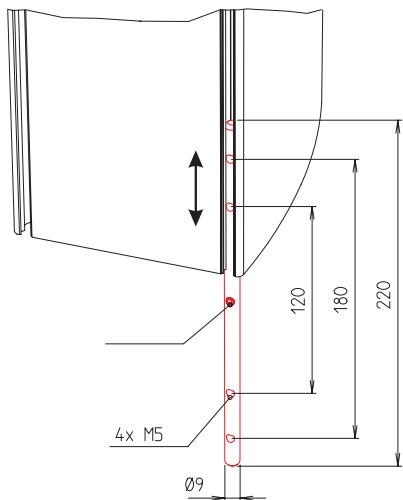
MultiControl duo
approx. 36 V DC

MultiControl quadro
approx. 36 V DC


Code No.	External control
QST42C02AA000	MultiControl duo connection C, up to max. I= 12 A current output, for synchronous control of 1-2 drives
QST42C04AA000	MultiControl quadro connection C, up to max. I= 12 A current output, for synchronous control of 1-4 drives
Accessories	
QZD070526	Extension cable 2,5 m drive for connector C/8-pin DIN socket

RKPowerlift – Fixing

Clamping bar



- The clamping bar enables the fitting of attachments to the RKPowerlift. The bar is inserted in the fixing slot and fixed by means of a clamping screw. The tapped holes enable the screw connection of attachments.

- In the case of the "technic" design version, attachments can also be secured using accessories (slot stones, etc.) from the catalogue "BLOCAN Profile Systems".

- **Material:** St37-2 k, galvanised

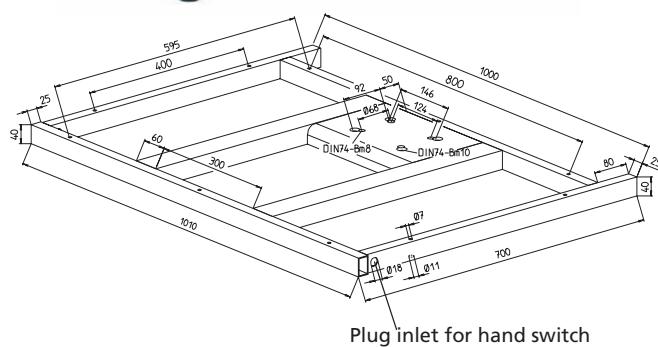
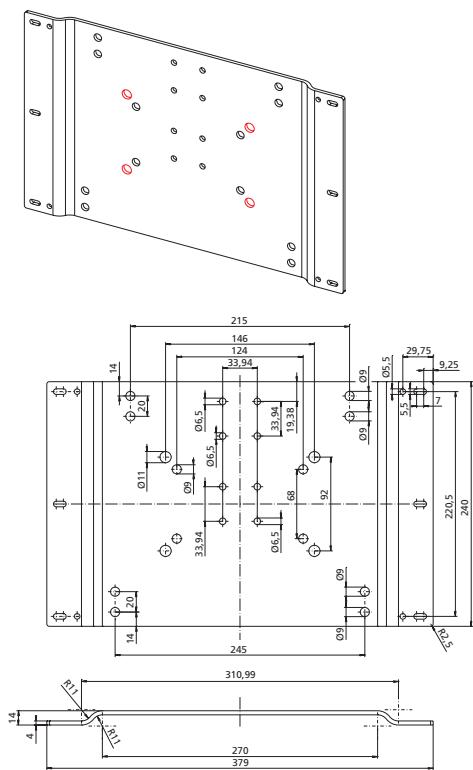


Code No.	Type
QZD000075	Clamping bar

Frame/fixing plate for table top

- Our universal fixing plate and table frame provide two standard solutions for the attachment of table tops, brackets etc. to the lifting column without the need for any further modifications.

Material: steel, matt, black powder-coated (RAL 9005)
Galvanised fastenings

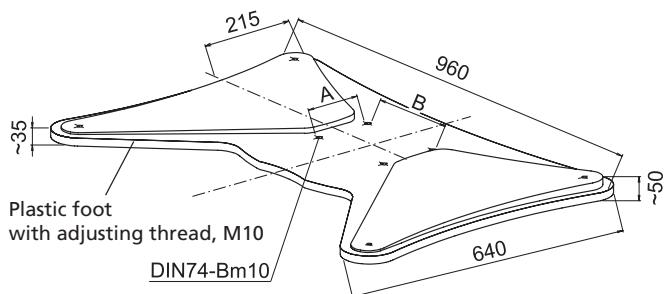


Code No.	Type
QZD100085	Frame for <i>RKPowerlift</i> , incl. fastenings
QZD100313	Fixing plate
QZD100337	Fixing set for fixing plate <i>RKPowerlift</i> , M10 x 30 DIN 7984

Base plate

Material: steel, matt, black
Orange RAL 9005,
Galvanised fastenings

Scope of delivery: complete with
fastenings



Code No.	Type	A	B
For RKPowerlift Z			
QZD100092	Base plate for RKPowerlift classic	124	182
QZD100084	Base plate for RKPowerlift wave	120	190
QZD100090	Base plate for RKPowerlift technic	130	174
For RKPowerlift S			
QZD100257	Base plate for RKPowerlift	93	180

RKPowerlift – Fixing

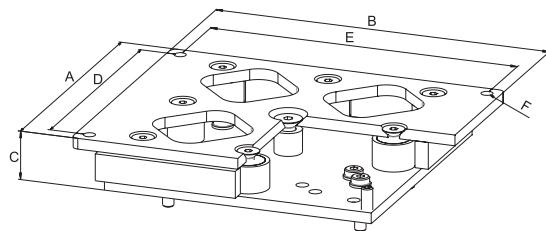
RK SyncFlex H

Scope of delivery:

Adjuster plate, incl. fixing material

Horizontal alignment

- To prevent locked-up stress in mechanically overdefined bearing systems (more than one fixed bearing) around the horizontal axis. With RK SyncFlex H defined loose bearings supplement the application.
- The horizontal compensation in the Z-axis enables the freedom of movement required when moving the lifting columns.



[mm]

Code No.	Type	A	B	C	D	E	F
QZD100455	Powerlift S / Z	200	250	36	230	180	M 10

RK SyncFlex V

Scope of delivery:

Adjuster plate, incl. fixing material

Option:

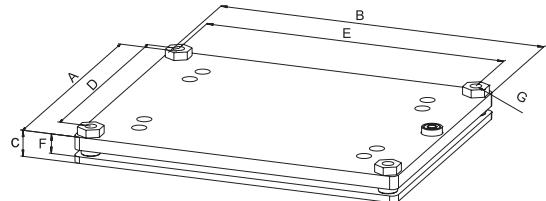
Optionally available with or without pressure plate (see table)

Vertical alignment

- If the lifting columns are not parallel, the distance between the two upper fixing points will change during the movement. However, a rigid connection keeps this distance constant, and this means that the lifting columns are subject to very strong forces.

RK SyncFlex V enables the compensation of unevenness in the mounting environment.

- The lifting columns can be aligned via the vertical adjustment around the X-Y axes.



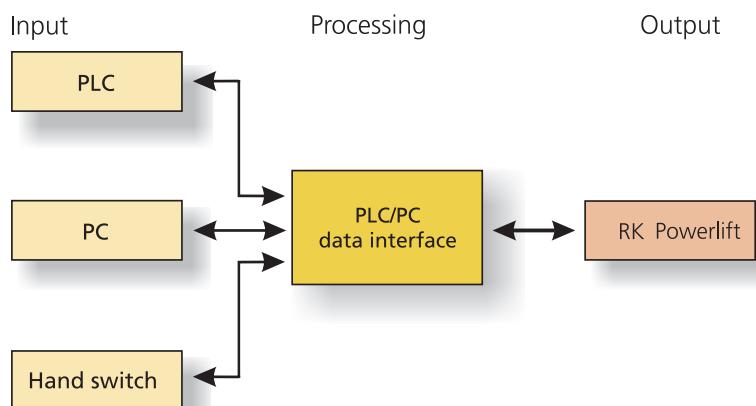
[mm]

Code No.	Type	A	B	C	D	E	F	G
Without pressure plate								
QZD100447	Powerlift S	200	250	-	180	230	10-15	M 10
QZD100449	Powerlift Z-classic	200	250	-	180	230	10-15	M 10
QZD100450	Powerlift Z-wave	200	250	-	180	230	10-15	M 10
With pressure plate								
QZD100464	Powerlift S	200	250	15-20	180	230	10-15	M 10
QZD100465	Powerlift Z-classic	200	250	15-20	180	230	10-15	M 10
QZD100466	Powerlift Z-wave	200	250	15-20	180	230	10-15	M 10

PLC/PCdata interface

- This interface enables actuation of the synchronous control system via different input devices (PLC, PC and hand switch)

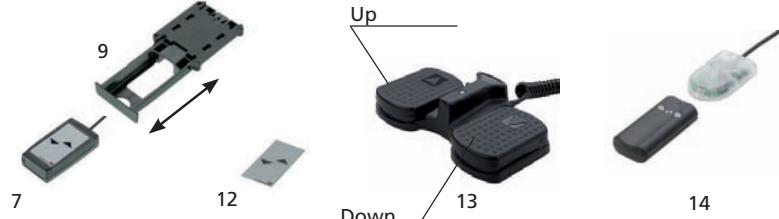
You will find further product information on page 658



Code No.	Type
QZD100108	PLC/PC data interface
QZD100110	Wall strap for mounting in a control cabinet

Hand switches/accessories

RKPowerlift mono



Code No.	Version	Fig.
Hand switch for <i>RKPowerlift mono</i>		
QZB00A00BC011	Membrane keyboard with 1 m spiral cable – 2 function keys	12
QZB02C01AE114GS	Foot switch – 2 function keys	13
QZB00D04AB041	Hand switch with 1 m spiral cable – 2 function keys	7
Hand switch for <i>RKPowerlift Standard (Start and Stop)</i>		
QZB00D07BK141	Wireless hand switch – 2 function keys	14
Accessories for hand switches		
QZD000074	Hand switch drawer: Fig. 7 + 8	9

RKPowerlift synchro



8

Code No.	Version	Fig.
Hand switch for <i>RKPowerlift synchro</i>		
QZB00D04AD041	Hand switch with 1 m spiral cable – 6 function keys	8