



### The mini version of the RK Powerlift – the RK Powerlift M



#### Fixing slot

- To accommodate clamping bars
- Fitted with cover profile

- Fixed motor cable (3 m) with plug

#### Highlights / Features:

- Withstands high torsional and bending moments
- Integrated motor
- Extremely quiet operation
- External control
- Four fixing slots in external profile
- Tested to:  
IEC 60601-1 (ed.3)  
EN 60601-1:2006/A1:2013

#### Options:

- Special stroke lengths and installations height available on request
- With synchronous control:  
– Cascading of several columns
- Specific solutions on request
- Can also be used cable free for mobile adjustment tasks with MultiControl II duo accu
- Power receptacle at top or bottom, as preferred

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# Technical data

## General information/operating conditions

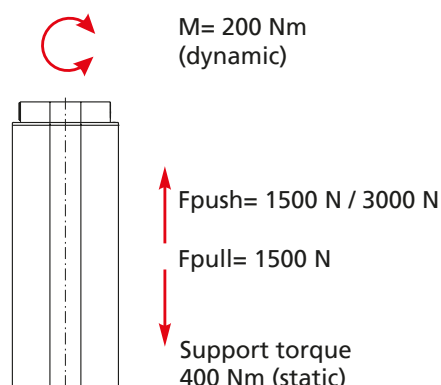
Type	RK Powerlift M
Design	Rectangular lifting column in compact design
Guide	16 POM slide bearings
Installation position	Any position/suspended with drop protection provided by the customer
Push force	3000 N or 1500 N
Pull force	1500 N
Self-locking	Yes
Max. travel speed	7 mm/s or 10 mm/s
Max. Stroke	500 mm
Installation dimension	Stroke + 210 mm
Voltage	24 V DC
Current output	3,5 A or 4,5 A
Protection class	IP 30 (in connection with the assembly plate)
Ambient temperature	+5°C to +40°C
Displacement during synchronous operation	0 to 2 mm
Duty cycle (Operation mode S 3)	At nominal load, 15% (max. 1.5 mins operating time, 8.5 mins rest time)

**\*Note:**

All information refers to the standard sizes. All data of push/pull forces are referring to the individual lifting column, for combined applications a safety factor of up to 0,6 has to be considered.

In medical applications, the maximum pull force of 750 N must not be exceeded.

## Load data RK Powerlift M



Drive	Push force [N]	Travel speed [mm/s]	Number of assigned motor channels			
			1	2	3	4
Powerlift M	1500	10	✓	✓	each 1300 N	each 500 N
Powerlift M	3000	7	✓	✓	each 1600 N	each 1000 N
			MultiControl II duo		MultiControl II quadro	

**Note:**

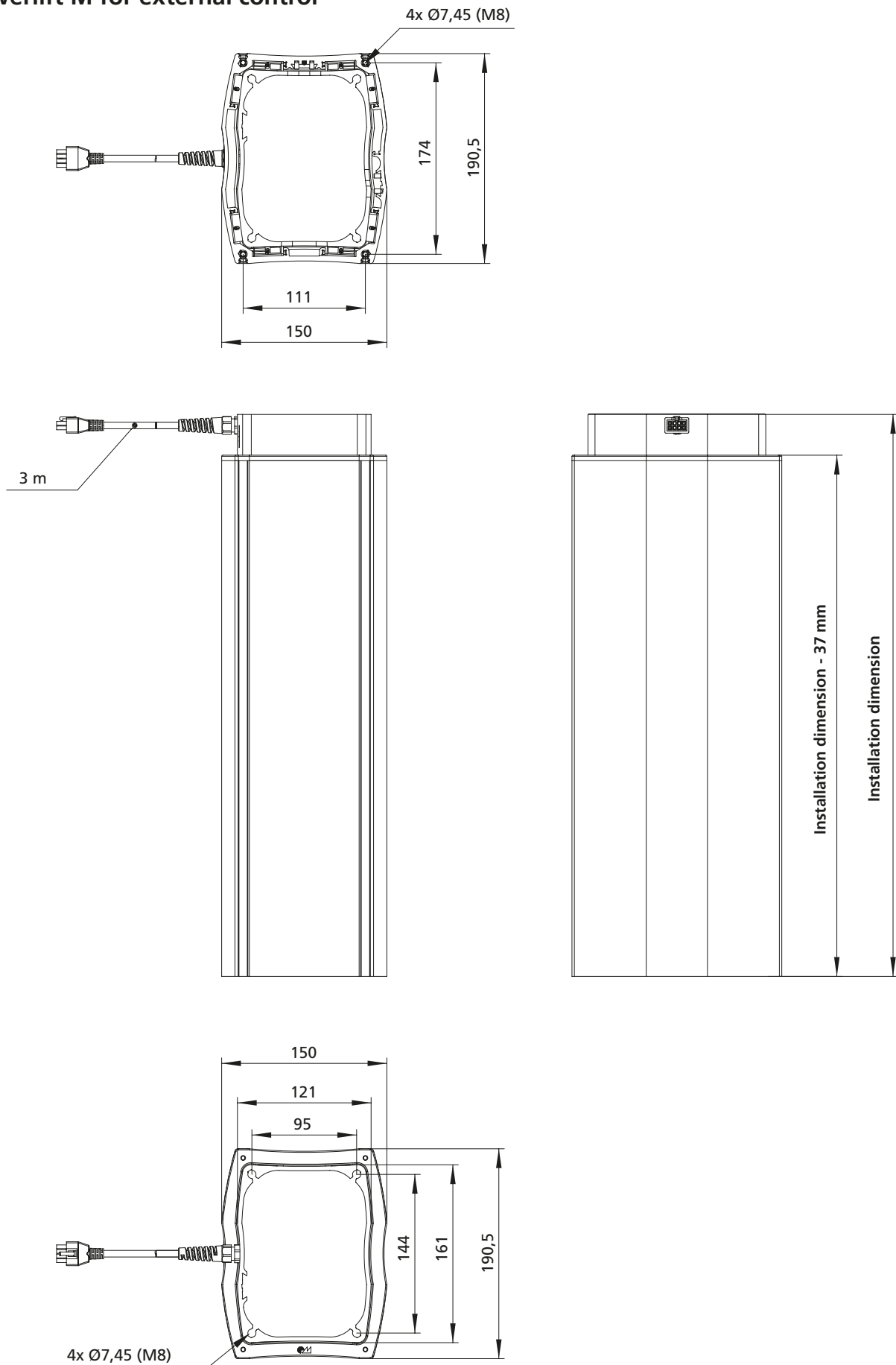
If more than 2 drives are to be operated synchronously at nominal load, BUS communication between two or more MultiControl II duo controllers is required.

The necessary accessories can be found on page 172

The procedure for setting up BUS communication is described in detail in the operating manual.



## RK Powerlift M for external control



# Versions

### RK Powerlift M for external control

The design of the **RK Powerlift M** is impressive, with its high torque support and its compact form. As a result, this lifting column is often used as a mono column. In addition to the existing 1500 N version, the range has been extended to include the RK Powerlift M for compressive forces of 3000 N. The combination of high compressive force and torque support makes the RK Powerlift M a powerful lifting column with many different applications.



#### Special features:

- Withstands high torsional and bending moments
- Compact form

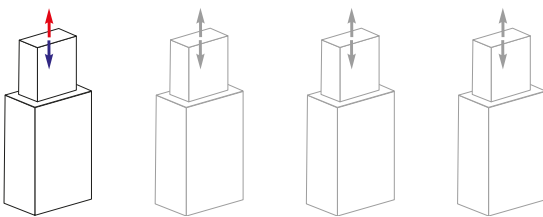
#### Ideal area of application:

- Workplace ergonomics
- Industrial technology
- Media technology
- Medical technology



### Lifting column and control as individual components:


RK Powerlift M can be used exclusively in combination with MultiControl II duo (see page 156) and MultiControl II quadro (see page 164).



#### Features:

- Supports configuration of systems with up to 32 drives
- Wide-range input
- High duty cycle
- Simple connection to master control system
- Intuitive operation

## RK Powerlift M

Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
For external control							
QPM08EE490300	RK Powerlift M 	3000 / 3000 (med.)	1500 / 750 (med.)	7	300	510	~12,0
QPM08EE490400					400	610	~13,5
QPM13EC490300		1500 / 1500 (med.)	1500 / 750 (med.)	10	300	510	~12,0
QPM13EC490400					400	610	~13,5
QPM13EC490500					500	710	~15,0

## System components

Code No.	Accessories	
Controls		
QST44H12AA000	MultiControl II duo - Basic	RK Powerlift M
QST44H12AA022	MultiControl II duo - Premium	
QST44H14AA000	MultiControl II quadro - Basic	RK Powerlift M
QST44H14AA022	MultiControl II quadro - Premium	
Hand switches		
QZB11G07AV041	Hand switch with 6 function keys and display – 1 m cable lenth	
QZB11G07AB041	Hand switch with 2 function keys – 1 m cable lenth	
QZD000074	Hand switch drawer for hand switch with 6 and 2 function keys	
IEC connector		
QZD070618	IEC cable (Europe version, earthed plug)	

### Note:

Further accessories (hand switches, connecting cables etc.) can be found in the chapter „Controls and accessories“ starting on page 152

# Accessories

## RK SyncFlex H

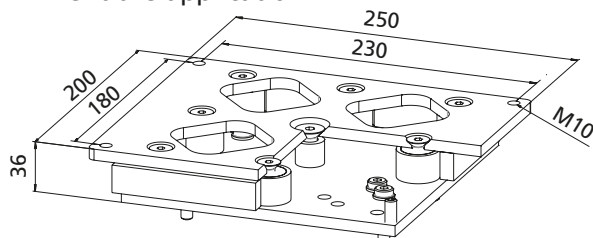
### Scope of delivery:

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	Max. load	Powerlift M	
			Internal profile	External profile
QZD100453	RK Powerlift M	3000 N	•	

## RK SyncFlex V

### Scope of delivery:

Adjuster plate,  
incl. fixing material

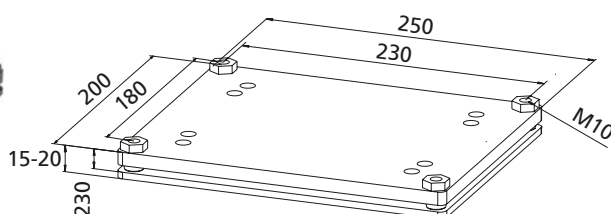
### Option:

Optionally available with or without pressure plate (see table)



### Vertikale 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.



Code No.	Type	Max. load	Powerlift M	
			Internal profile	External profile
RK SyncFlex V Adjusting plate				
QZD100446	RK Powerlift M	3000 N		●
Pressure Plate				
QZD100463	RK Powerlift M	3000 N		

## Square nut



- For connecting accessories to the external profile

Code No.	lot sizes	Type
QZD1003261	10, 20, 30... pcs	Square nut M4, DIN 562

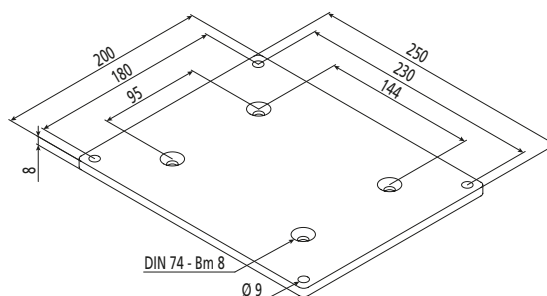
## Assembly plates

- These mounting plates are fitted using the mounting kits supplied and fixed directly into the screw channels in the **RK Powerlift M**.

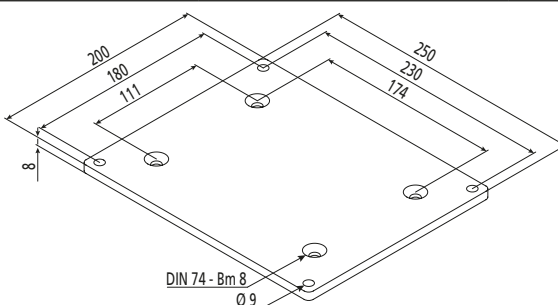
A further 4 holes, in the mounting plate, allow easy connection, to brackets or corresponding fixture assembly work etc.

**Material:** S 235 JR, black powder-coated, zinc plated fixing set

**Scope of delivery:**  
Plate, incl. fixing set



Code No.	Type	Powerlift M	
		Internal profile	External profile
QZD100541	Top assembly plate	●	

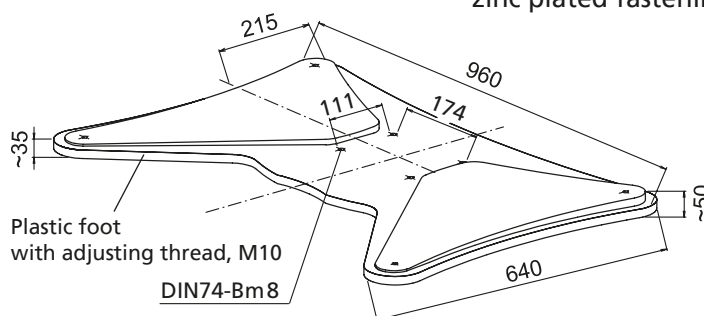
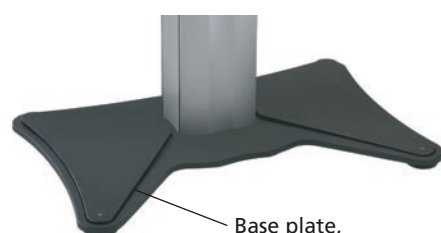


Code No.	Type	Powerlift M	
		Internal profile	External profile
QZD100542	Bottom assembly plate		●

## Base plate

**Scope of delivery:**  
complete with fastenings

**Material**  
steel, black powder-coated (RAL 9005),  
zinc plated fastenings



Code No.	Type	Powerlift M	
		Internal profile	External profile
QZD100546	Base plate for RK Powerlift M		●