

A Phoenix Mecano Company



RKPowerlift telescope

Two-stage lifting column

The RKPowerlift with optimised installation height/stroke ratio



RKPowerlift telescope:

- Push forces 800 N / 1,600 N Pull force 800 N
- Lifting speed 15 mm/s, 30 mm/s

Features:

- Withstands high bending moments in both static and dynamic range
- Integrated motor
- Adjustable stroke length
- Choice of internal or external control
- Four fixing slots in external profile

Options:

- Special stroke lengths available on request
- Quadro control enables synchronisation of up to 32 columns



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General information/operating conditions

Design	Rectangular lifting column in compact design
Guide	Multiple roller/slide bearings
Installation position	Any position/ suspended with drop protection provided by the customer
Push force	Choice of 800/1,600 N
Pull force	Max. 800 N
Voltage	36 V DC
Power input	180 W/210 W
Protection class	IP 30
Self-locking	Yes
Ambient temperature	+5°C to +40°C
Max. displacement with synchronous operation	0-2 mm/0-1.5 mm
Duty cycle	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.

Load data



Support torque 200 Nm (static)



RKPowerlift telescope 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 telescope 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 148) 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.1.5 mm for the 15 mm/s version and max. 2 mm for the 30 mm/s version. A memory function is also available.

RKPowerlift telescope - Versions







RKPowerlift telescope - Versions

RKPowerlift telescope mono



1-2 single or parallel operation

Code No.	Туре	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)							
QPT30BC420650	RKPowerlift telescope 30	800	800	30	650	560	~18
QPT15BE420650	RKPowerlift telescope 15	1,600	800	15	650	560	~18
With internal control/memory (9 positions can be stored)							
QPT30BC460650	RKPowerlift telescope 30	800	800	30	650	560	~18
QPT15BE460650	RKPowerlift telescope 15	1,600	800	15	650	560	~18

Code No.	Туре	Push force [N]	Pull force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installation height [mm]	Weight [kg]
For external control							
QPT30EC480650	RKPowerlift telescope 30	800	800	30	650	560	~17
QPT15EE480650	RKPowerlift telescope 15	1,600	800	15	650	560	~17

MultiControl mono



Code No.	External control for telescopic screw drive	
QSTACCA1AA000	MultiControl mono connection C, up to max. I= 12 A current output, 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 telescope synchro



2-4 in synchronous operation

Code No.	Туре	Push force [N]	Pull force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installa- tion height [mm]	Weight [kg]
With internal control/synchro memory (9 positions can be stored)							
QPT30BC470650	RKPowerlift telescope 30	800	800	30	650	560	~18
QPT15BE470650	RKPowerlift telescope 15	1,600	800	15	650	560	~18

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

Code No.	Туре	Push force [N]	Pull force [N]	Lifting speed [mm/s]	Stroke length [mm]	Installa- tion height [mm]	Weight [kg]
For external control							
QPT30EC480650	RKPowerlift telescope 30	800	800	30	650	560	~17
QPT15EE480650	RKPowerlift telescope 15	1,600	800	15	650	560	~17



Code No.	External control for telescopic screw drive	
QST43C02AA000	MultiControl duo connection C, up to max. I = 12 A current output	for synchronous control of 1-2 drives
QST43C04AA000	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 telescope – Fixing

Frame/fixing plate for table top



Our universal fixing plate and

Material: steel,

Code No.	Туре
QZD100085	Frame for RKPowerlift telescope, incl. fastenings
QZD100313	Fixing plate
QZD100338	Fixing set for fixing plate RKPowerlift telescope, M8 x 16 DIN 7984

RKPowerlift telescope - Fixing



Base plate

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

Scope of delivery: complete with fastenings

Order information:

Base plate only in combination with "Type 0" possible (see page 75)





			[mm]
Code No.	Туре	Α	В
QZD100257	Base plate for RKPowerlift telescope	93	180

RKPowerlift telescope – 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.

B E / 0

The horizontal compensation in the Z-axis enables the freedom of movement required when moving the lifting columns.



							[mm]
Code No.	Туре	А	В	С	D	E	F	
QZD100453	RKPowerlift telescope	200	250	36	180	230	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.	Туре	Α	В	С	D	E	F	G
Without pressure plate								
QZD100447	RKPowerlift telescope	200	250	-	180	230	10-15	M 10
With pressure plate								
QZD100464	RKPowerlift telescope	200	250	15-20	180	230	10-15	M 10

Hand switches/accessories

(internal control RKPowerlift telescope mono)



Note: For further hand switch versions, please refer to the chapter "Controls" on page 148.

Code No.	Version	Fig.			
QZB00A00BC011	Membrane keyboard with 1 m spiral cable – 2 function keys	12			
QZB02C01AE114GS	Foot switch – 2 function keys	13			
QZB11G07AB041	Hand switch with 1 m spiral cable – 2 function keys	7			
Accessories for hand switches					
QZD000074	Drawer for hand switch Abb. 7 + 8	9			
QZD070750	Adapter DIN 5pol to Molex 6pol	10			

*When using the manual switch with 2 function keys QZB11G07AB041 on the MultiControl I or version with internal control (Standard (Start and stop)) the adapter DIN 5pin to Molex 6pin QZD070750 is required.

Hand switches/accessories

(external control RKPowerlift telescope synchro)



Code No. Version						
Hand switch for RKPowerlift telescope synchro						
QZB00D04AD041	Hand switch with 1 m spiral cable – 6 function keys	8				

We say what we do - and do what we say! We also say what we can't do - and don't do it!



Connecting and positioning systems

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