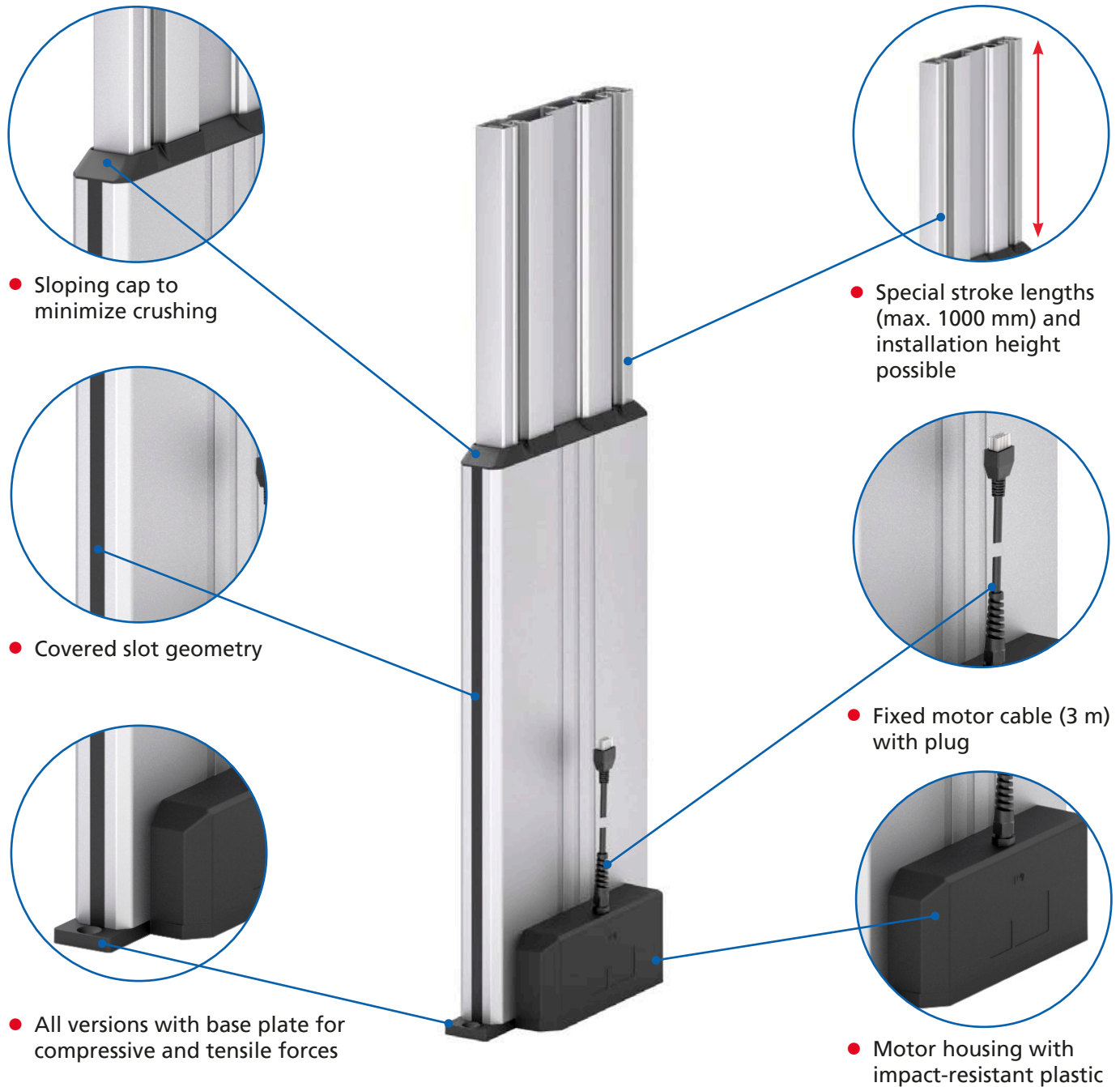




Slimline design makes for great versatility



Highlights / Features:

- Integrated limit switches
- Self-locking, even at max. load
- Lateral fixing slot in external profile
- Position feedback by hall sensor

Options:

- Special stroke lengths and installation height available on request
- With synchronous control:
 - Cascading of several columns
- Customised solutions on request
- Tested to:
 - IEC 60601-1:2005
 - IEC 60601-1:2005/AMD1:2012
- With milled slot on request
- Can also be used cable free for mobile adjustment tasks with MultiControl II duo accu

Table of contents

Versions	Lifting columns	Multilift II Page 58
		Multilift II ESD Page 60
		Multilift II impact Page 62
		Multilift II safety Page 64
		Multilift II clean Page 66
Accessories	Fixing	RK SyncFlex Page 68
		Assembly plates Page 69
		Support struts Page 69
		Foot versions Page 72

Technical data

General information/operating conditions

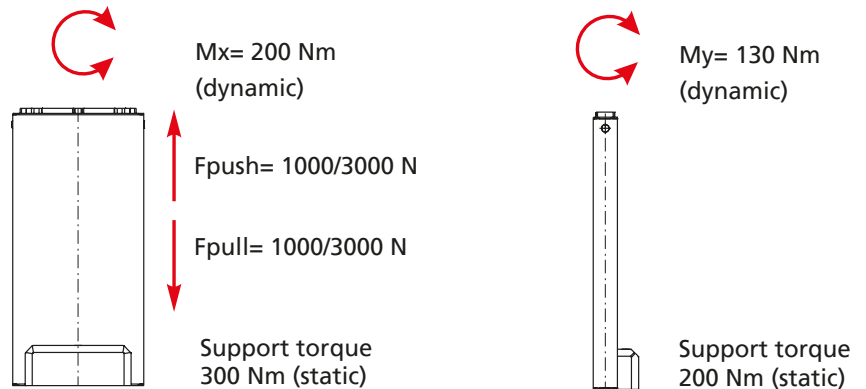
Type	Multilift II	Multilift II ESD	Multilift II clean	Multilift II impact	Multilift II safety	Custom
Design	Slim lifting column					
Guide	POM slide bearings					
Installation position	Any position / hanging only with drop protection provided by the customer				hanging	
Push force	3000 N or 1000 N			3000 N	–	
Pull force	3000 N or 1000 N			3000 N	600 N	
Self-locking	Yes					
Max. travel speed	8 mm/s or 16 mm/s			8 mm/s	16 mm/s	
Max. Stroke	500 mm					1000 mm
Installation dimension	Stroke + 203 mm			Stroke + 212 mm	Stroke + 203 mm	
Voltage	28 V DC					
Current output	4 A					
Protection class	IP 20 (in connection with the assembly plate)					
Ambient temperature	+5°C to +40°C					
Displacement during synchronous operation	0 to 2 mm				Synchronous operation not possible	
Duty cycle (Operation mode S3)	At nominal load, 10% (2 min operating time, 18 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 500 N and, in the case of the version with a travel speed of 8 mm/s, the maximum push force of 2500 N must not be exceeded.

Load data Multilift II



Drive	Push force [N]	Travel speed [mm/s]	Number of assigned motor channels			
			1	2	3	4
Multilift II	1000	16	✓	✓	✓	each 750 N
Multilift II	3000	8	✓	✓	each 2200 N	each 1500 N
Multilift II safety	600	16	✓	–	–	–

Note:

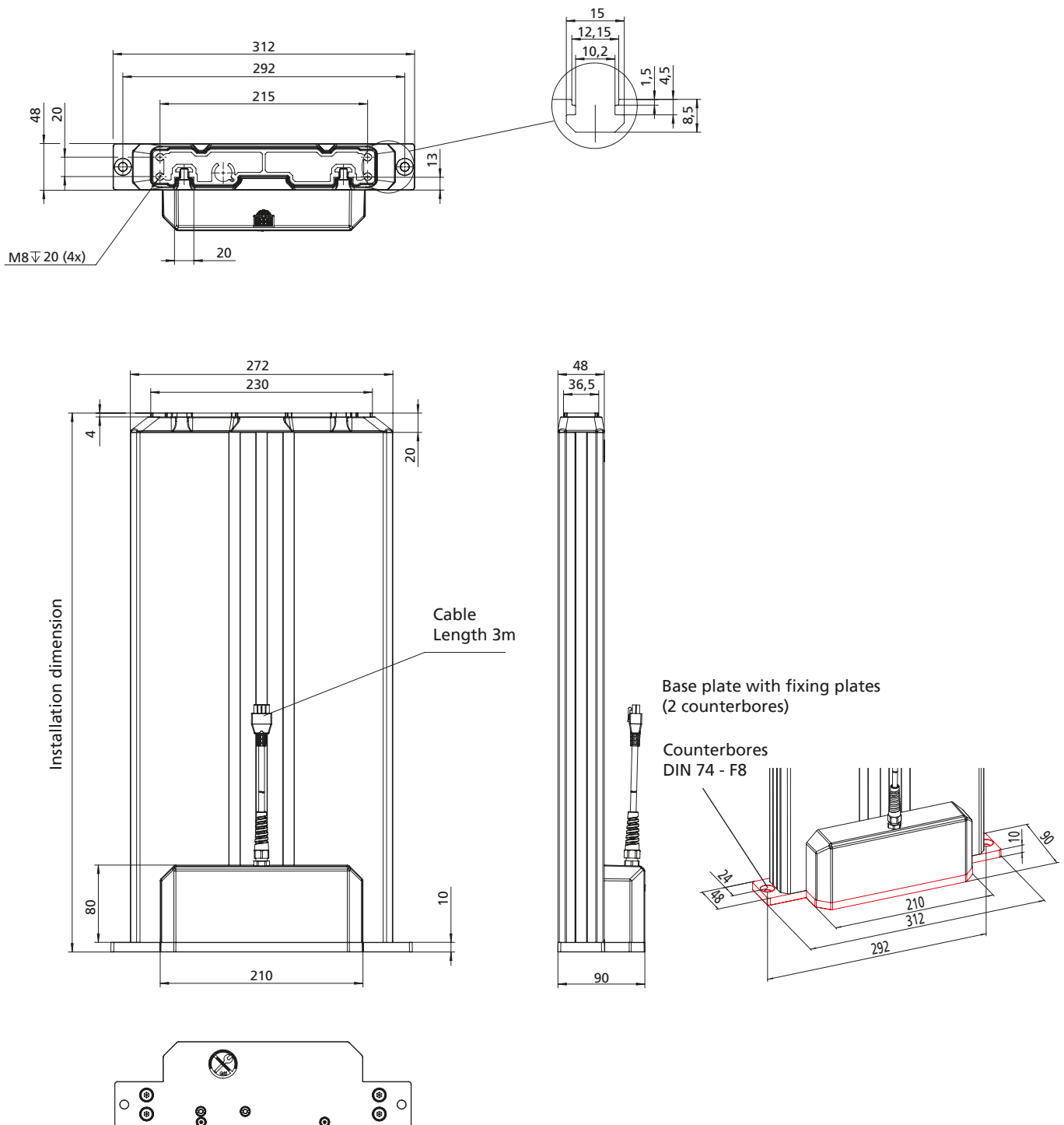
If more than 2 drives are to be operated synchronously at nominal load, BUS communication between two or more MultiControl II duo controllers is required.

The necessary accessories can be found on page 172.

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



Multilift II



The fixing slots on the side allow an easy attachment of accessories. For example, a screen, CPU bracket or system reinforcements can be fixed to the lifting columns by using slot stones. The 30 slot geometry is also compatible with the RK BLOCAN® aluminium profile system.

Versions

Multilift II – maximum versatility

Customer feedback formed the basis for a number of improvements to the design of the Multilift II. Our latest new feature is an assembly slot on both sides of the external profile of the electric lifting column, which is compatible with the RK Rose+Krieger aluminium profile system and can take corresponding slot stones. They allow additional attachments such as reinforcements, screening and so on to be mounted without any problems.



Special features:

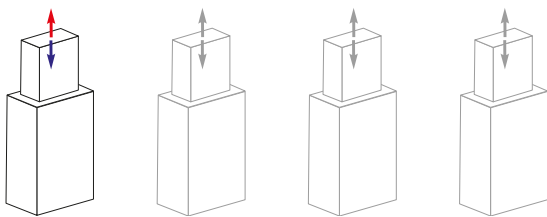
- Lateral fixing slots
- Captive plug connections
- Suitable for both tensile and compressive loads

Ideal area of application:

- Workplace ergonomics
- Industrial technology
- Media technology

Lifting column and control as individual components:

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

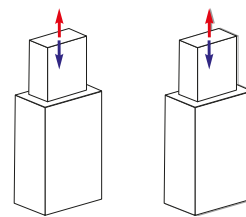


Features:

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

Lifting column and control as pre-assembled set:

Multilift II can be used exclusively in combination with Compact-e-3-EU (see page 200)



Features:

- Exclusively for a 2-column table system
- System is factory-initialised (Plug & Play)

Individual components:

Lifting column Multilift II



Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TM22B1C3C22CA0355	Multilift II	3000 / 2500 (med.)	3000 / 500 (med.)	8	355	558	10.5
TM22B1C3C22CA0400					400	603	11.5
TM22B1C3C22CA0450					452	658	12.0
TM22B1C3C22CA0500					497	703	13.0
TM22B1C2C22CA0355	Multilift II	1000 / 1000 (med.)	1000 / 500 (med.)	16	355	558	10.5
TM22B1C2C22CA0400					400	603	11.5
TM22B1C2C22CA0450					452	658	12.0
TM22B1C2C22CA0500					497	703	13.0

System components

Code No.	Accessories	
Controls		
QST11H12AA000	MultiControl II duo - Basic	Multilift II
QST11H12AA022	MultiControl II duo - Premium	
QST11H14AA000	MultiControl II quadro - Basic	Multilift II
QST11H14AA022	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

Set:

Multilift II in combination with
Compact-e-3-EU control

Scope of delivery:

2 Multilifts II, 1 Controller box
Compact-e-3-EU, 4 Cover profiles,
4 Slot stones

Order instruction:

Please select mains cable and
hand switch separately
(see page 201)

Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TS22B1C3C22CA0355	Multilift II Set 230V AC	3000	3000	8	355	558	21.5
TS22B1C3C22CA0400					400	603	23.5
TS22B1C3C22CA0450					452	658	24.5
TS22B1C3C22CA0500					497	703	26.5
TS22B1C2C22CA0355	Multilift II Set 230V AC	1000	1000	16	355	558	21.5
TS22B1C2C22CA0400					400	603	23.5
TS22B1C2C22CA0450					452	658	24.5
TS22B1C2C22CA0500					497	703	26.5

Note: The load value information is referring to the individual lifting column. For combined applications a safety factor of up to 0,6 has to be considered.

Versions

Multilift II ESD – discharging voltages via the lifting column

In the electronics and semiconductor manufacturing industry, electrostatic discharges can impair the function of components being assembled, or even destroy them.

With the Multilift II ESD, RK Rose+Krieger has developed a patented electric height adjustment system that is able to dissipate voltages.



Special feature:

- Outer and inner profile electrically connected to each other

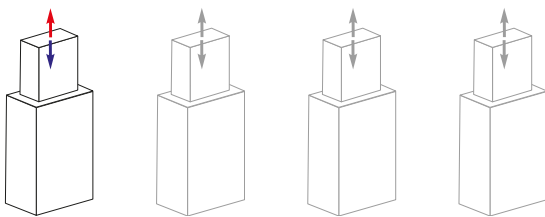
Ideal area of application:

- Assembly workstations for the manufacture of electronic components



Lifting column and control as individual components:

Multilift II ESD 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

Individual components:

Lifting column Multilift II ESD



Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TM22B1C3C22CC0355	Multilift II ESD	3000 / 2500 (med.)	3000 / 500 (med.)	8	355	558	10.5
TM22B1C3C22CC0400					400	603	11.5
TM22B1C3C22CC0450					452	658	12.0
TM22B1C3C22CC0500					497	703	13.0
TM22B1C2C22CC0355	Multilift II ESD	1000 / 1000 (med.)	1000 / 500 (med.)	16	355	558	10.5
TM22B1C2C22CC0400					400	603	11.5
TM22B1C2C22CC0450					452	658	12.0
TM22B1C2C22CC0500					497	703	13.0

System components

Code No.	Accessories	
Controls		
QST11H12AA000	MultiControl II duo - Basic	Multilift II ESD
QST11H12AA022	MultiControl II duo - Premium	
QST11H14AA000	MultiControl II quadro - Basic	Multilift II ESD
QST11H14AA022	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.

Multilift II impact

Versions

Multilift II impact – integrated damping absorbs high impact forces

The slim electric height adjustment system has an integrated damping system that is able to absorb high impact forces, such as those that occur when unloading a workpiece.



Special feature:

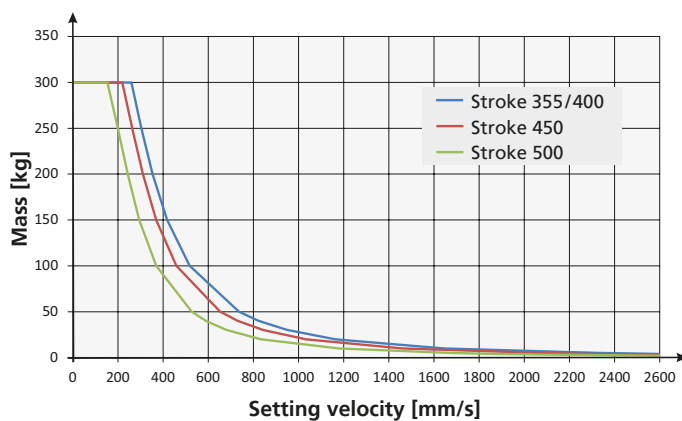
- Allows impact forces due to an internal damping system

Ideal area of application:

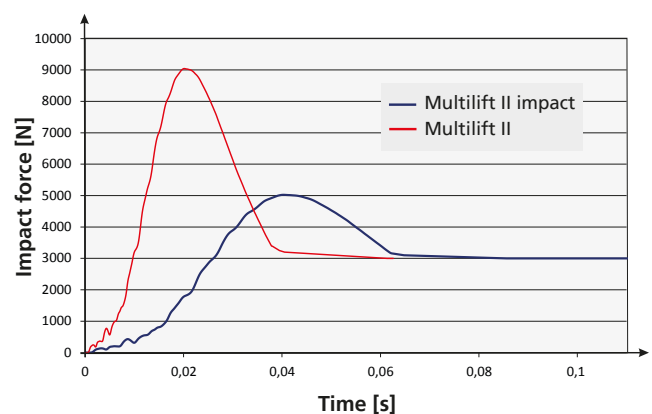
- Workplace ergonomics
- Industrial technology

Performance diagram Multilift II impact

Possible setting velocity in relation to the weight of the workpiece in consideration of the different stroke lengths



Exemplary force progression at an impact of a workpiece with $v = 260$ [mm/s] and $m = 300$ [Kg]



Individual components:

Lifting column Multilift II impact



Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TM22B1C3C22CB0355	Multilift II impact	3000 / 2500 (med.)	3,000 / 500 (med.)	8	355	567	10.5
TM22B1C3C22CB0400					400	612	11.5
TM22B1C3C22CB0450					452	667	12.0
TM22B1C3C22CB0500					497	712	13.0

System components

Code No.	Accessories	
Controls		
QST13H12AA000	MultiControl II duo - Basic	Multilift II impact
QST13H12AA022	MultiControl II duo - Premium	
QST13H14AA000	MultiControl II quadro - Basic	Multilift II impact
QST13H14AA022	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

Versions

Multilift II safety – turning things on their head

RK Rose+Krieger has developed this column specially for overhead applications in media technology. Its uses include the correct positioning of projectors and monitors, whereby the lifting column is mounted upside down on the ceiling.



Special feature:

- Integrated fall protection

Ideal area of application:

- Media technology

The Multilift II safety is only designed for centric load.



In cases of eccentric load
please contact RK Rose+Krieger.

<https://www.rk-rose-krieger.com/english/contact/>

Individual components:

Lifting column Multilift II safety

Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TM22B1C2C22CD0355	Multilift II safety	–	600	16	355	558	11.5
TM22B1C2C22CD0400					400	603	12.0
TM22B1C2C22CD0450					452	658	13.0
TM22B1C2C22CD0500					497	703	13.5

Note: The Multilift II safety is not designed for synchronous applications.
This drive must only be used in stand-alone applications.

System components

Code No.	Accessories	
Controls		
QST11H12AA000	MultiControl II duo - Basic	Multilift II safety
QST11H12AA022	MultiControl II duo - 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:

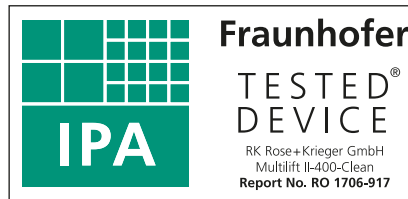
Further accessories (hand switches, connecting cables etc.) can be found in the chapter „Controls and accessories“ starting on page 152

Multilift II clean

Versions

Multilift II clean – ideally suited to use in the clean room

The Multilift II clean has now been added to the range. It has been deliberately developed for use in the clean room. A special shroud for the DC motor with brushes of the lifting column means discharge of particles is kept to a minimum. To verify its suitability for use in clean rooms, the Fraunhofer Institute for Manufacturing Engineering and Automation IPA carried out a particle emissions test as per DIN EN ISO 14644-1 and certified the lifting column for use in clean rooms up to a globally valid class 4.



Special feature:

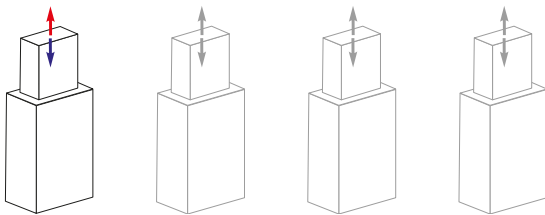
- Suitability according to EN ISO 14644 -1 for clean rooms

Ideal area of application:

- Assembly workstations for the use in clean rooms up to class 4

Lifting column and control as individual components:

Multilift II clean 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

Individual components:

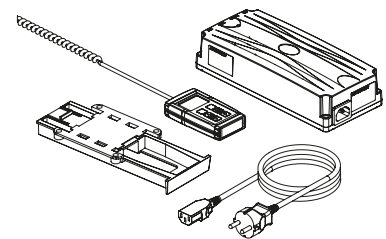
Lifting column Multilift II clean

Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension [mm]	Weight [kg]
TM22B1C3C22CE0355	Multilift II clean	3000	3000	8	355	558	10.5
TM22B1C3C22CE0400					400	603	11.5
TM22B1C3C22CE0450					452	658	12.0
TM22B1C3C22CE0500					497	703	13.0
TM22B1C2C22CE0355	Multilift II clean	1000	1000	16	355	558	10.5
TM22B1C2C22CE0400					400	603	11.5
TM22B1C2C22CE0450					452	658	12.0
TM22B1C2C22CE0500					497	703	13.0

Speziell gereinigtes Zubehör für Multilift II Clean

Code No.	Description
QST11H12AK000	MultiControl II Duo, basic, Clean Set
QST11H12AK022	MultiControl II Duo, premium, Clean Set
QST11H14AK000	MultiControl II quadro, basic, Clean Set
QST11H14AK022	MultiControl II quadro, premium, Clean Set

Note:
Other IEC plugs available on request



Note:
The accessories consist of the specially cleaned and double-welded control unit, the cleaned six-button handset, the cleaned handset drawer and the IEC cable.

System components

Code No.	Accessories	
Controls		
QST11H12AA000	MultiControl II duo - Basic	Multilift II clean
QST11H12AA022	MultiControl II duo - Premium	
QST11H14AA000	MultiControl II quadro - Basic	Multilift II clean
QST11H14AA022	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

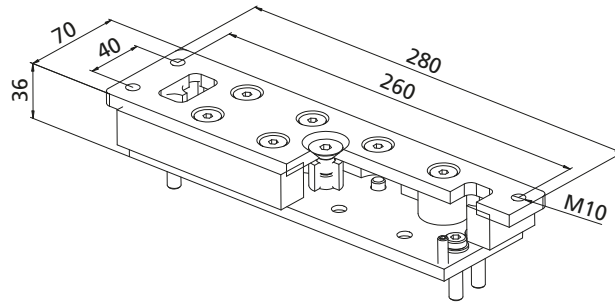
Accessories

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 floating bearings supplement the application.
- The horizontal compensation in the Z-axis enables the mobility required when moving the lifting columns.



[mm]

Code No.	Type	Max. load	Multilift II	
			Internal profile	External profile
QZD020471	Multilift II product line	3000 N	•	

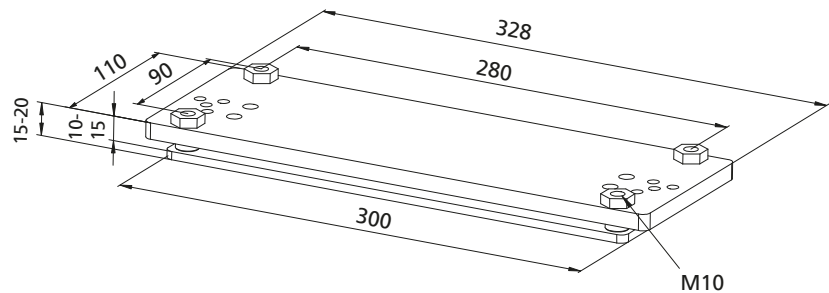
RK SyncFlex V

Scope of delivery:
Adjuster plate, incl. fixing material

Option:
Pressure plate (see table) can be ordered separately

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, which 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	Max. load	Multilift II	
			Internal profile	External profile
RK SyncFlex V Adjusting plate				
QZD020620	Multilift II product line	3000 N	● *	●
Pressure Plate				
QZD020621	Multilift II product line	3000 N		

•* = in connection with the assembly plate Type 2 (page 69)

Assembly plates

Type 2

- The assembly plates are for easy assembling in customer applications.

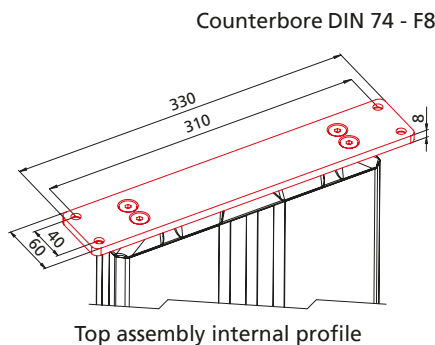
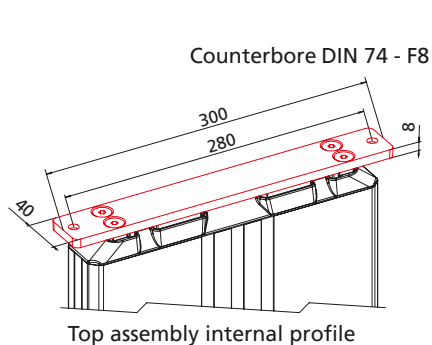
Type 3

Material:

Option of black-powdered die cast zinc or black-powdered steel, zinc plated fixing set

Scope of delivery:

Plate with fixing set



Code No.	Type	for drive	Material
QZD020549	2	Multilift II/ clean	Zinc die cast
QZD020671	2	Multilift II ESD	Zinc die cast
QZD020552	3	Multilift II/impact/safety/clean / ESD	Steel

Support struts

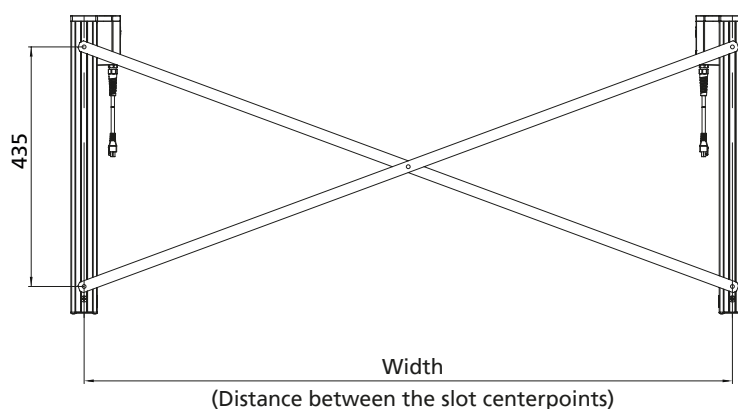
- For stabilisation of column structures.
- Available for all Multilift II / Multilift II telescope variants.

Material:

Aluminium not anodized

Scope of delivery:

Two support struts including fastenings



Code No.	Type	Width (min.)	Width (max.)	Multilift II	
				Internal profile	External profile
QZD020734	Support struts Multilift II product line	750 mm	2000 mm		•



Distance between the slot centerpoints [mm]

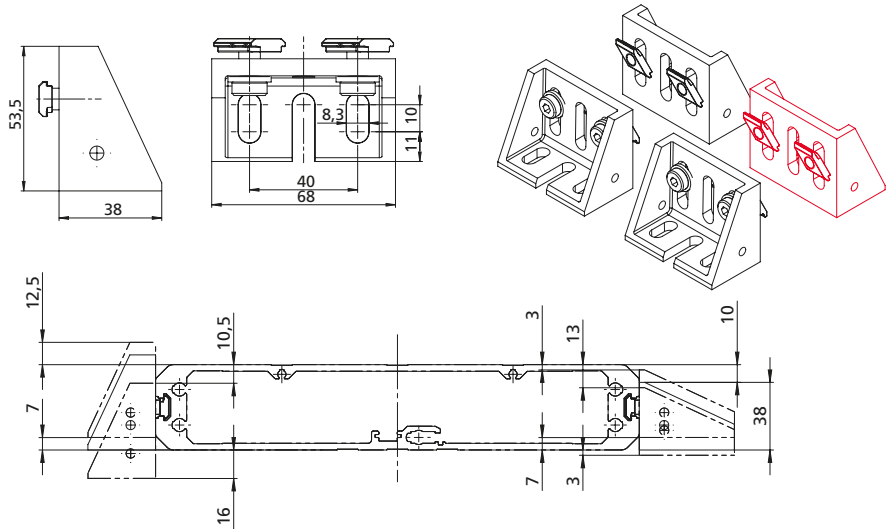
Accessories

Mounting bracket
for Multilift II



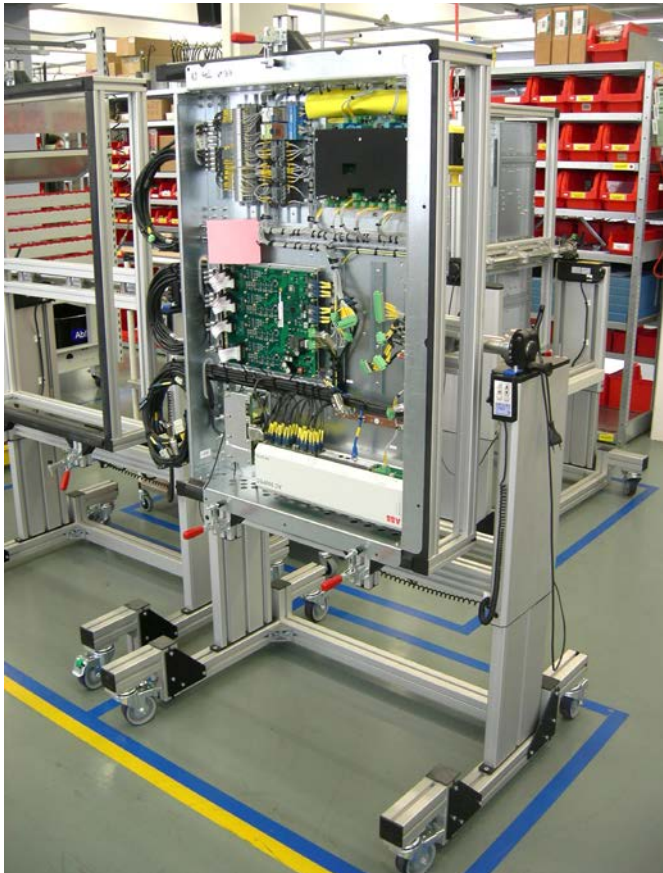
- The mounting brackets are used to to fix the lifting column horizontally or vertically horizontally or vertically by means of the fixing slots on the outer profile of the Multilift II. Also suitable for ESD applications.

Material:
Aluminium die cast
Scope of delivery:
One mounting bracket including mounting material



[mm]

Code No.	Type	max. load	Multilift II	
			Internal profile	External profile
QZD020745	Multilift II mounting bracket	3000 N		●



Ergonomic control cabinet installation
Height adjustment implemented via lifting columns, and
inclination adjustment via electric cylinder.

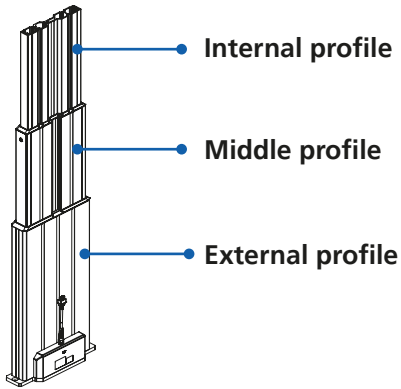
NEW: The MultiControl II quadro features drive group management (DGM), which enables both drives (lifting columns and electric cylinders) to be actuated individually, in parallel or synchronously using a single control unit (see page 170).



Mobile examination table with battery solution

Accessories

Foot versions



- Different foot versions for the Multilift
- No modifications of the Multilift required
- Other lengths available upon request

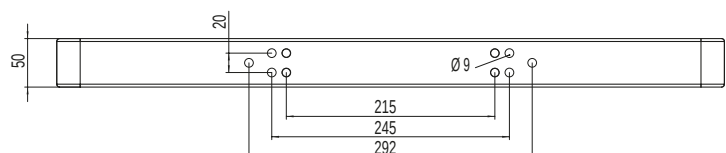
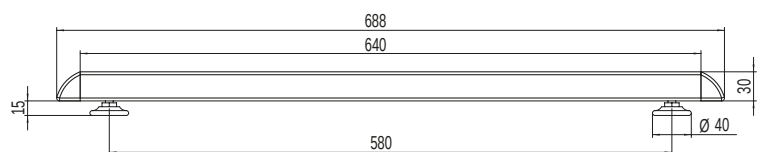
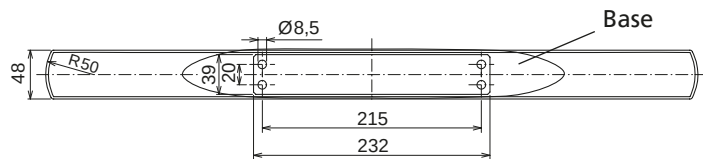
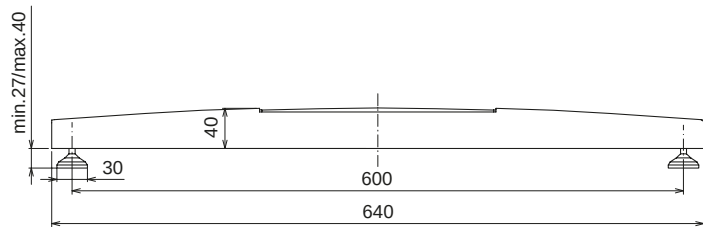
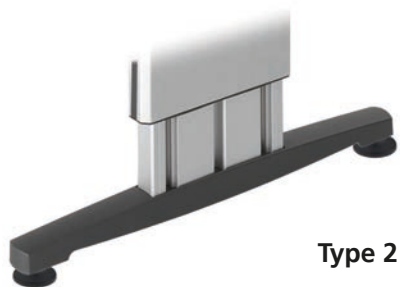
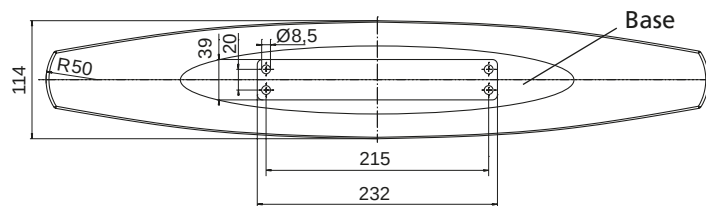
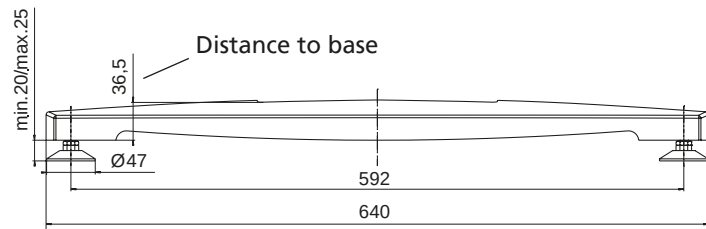
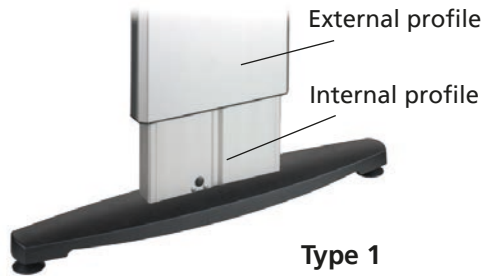
Material:

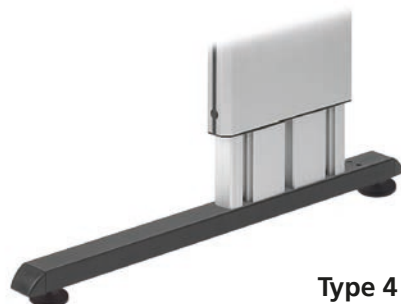
Type 1/2 GK-ALSi12/3.2583.02, black powder-coated

Type 3/4 steel tube, ends capped black powder-coated

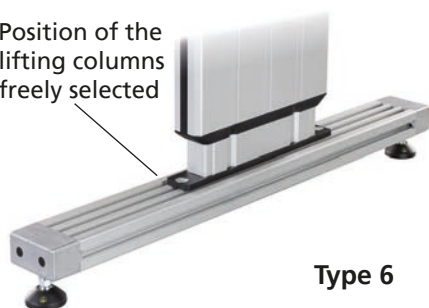
Scope of delivery:

one foot with fixing set

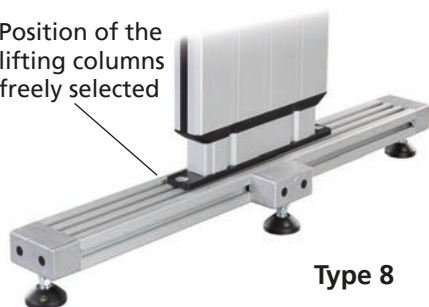
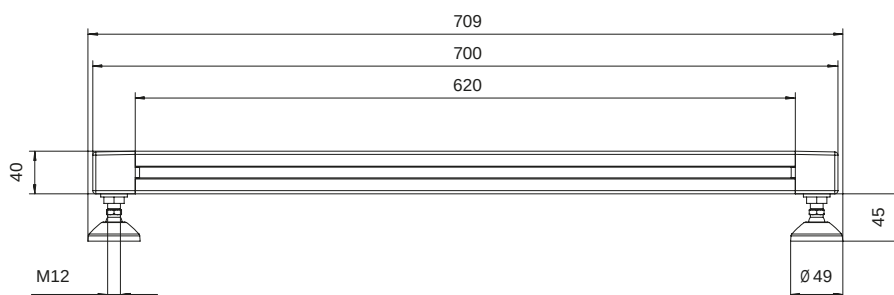
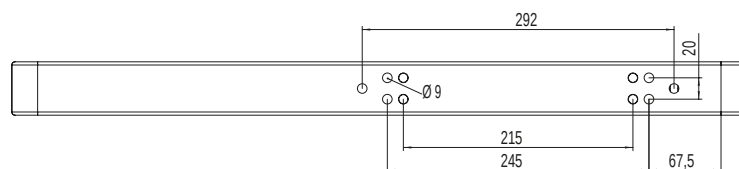
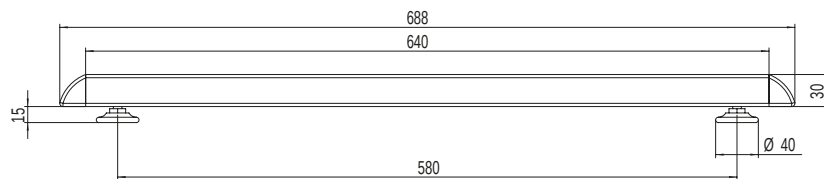



Type 4

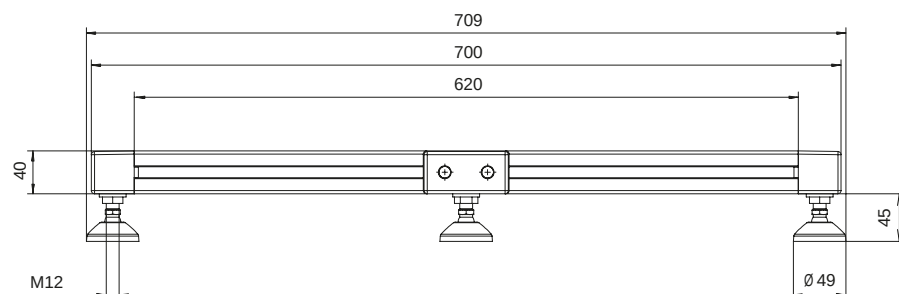
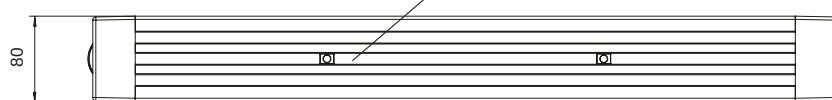
Position of the
lifting columns
freely selected


Type 6

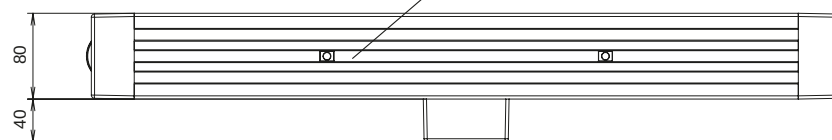
Position of the
lifting columns
freely selected


Type 8


Slot geometry 40



Slot geometry 40



*** Order instruction:** The application example shown – internal profile mounted on Type 6, 7, 8 – is only in combination with an assembly plate possible (see page 69)

Code No.	Type	Max. load	Multilift II / Multilift II clean		Multilift II ESD		Multilift II impact	
			Internal profile	External profile	Internal profile	External profile	Internal profile	External profile
QZD020252	1	1000 N	●					
QZD020253	2	1000 N	●					
QZD020254	3	1000 N	●	●				
QZD020255	4	1000 N	●	●				
QZD0207950700	6	3000 N	●*	●	●	●		
QZD0207940700	8	3000 N			●	●	●*	●