Multilift

Slimline design and and an unbeatable price/performance ratio

Longitudinal slots
- Simple connection

Milled slot in the external profile (version B)
- This enables the bracing of two parallel Multilifts

High-performance DC motor

Version A,
without milled slot

Version B,
with milled slot in the
external profile
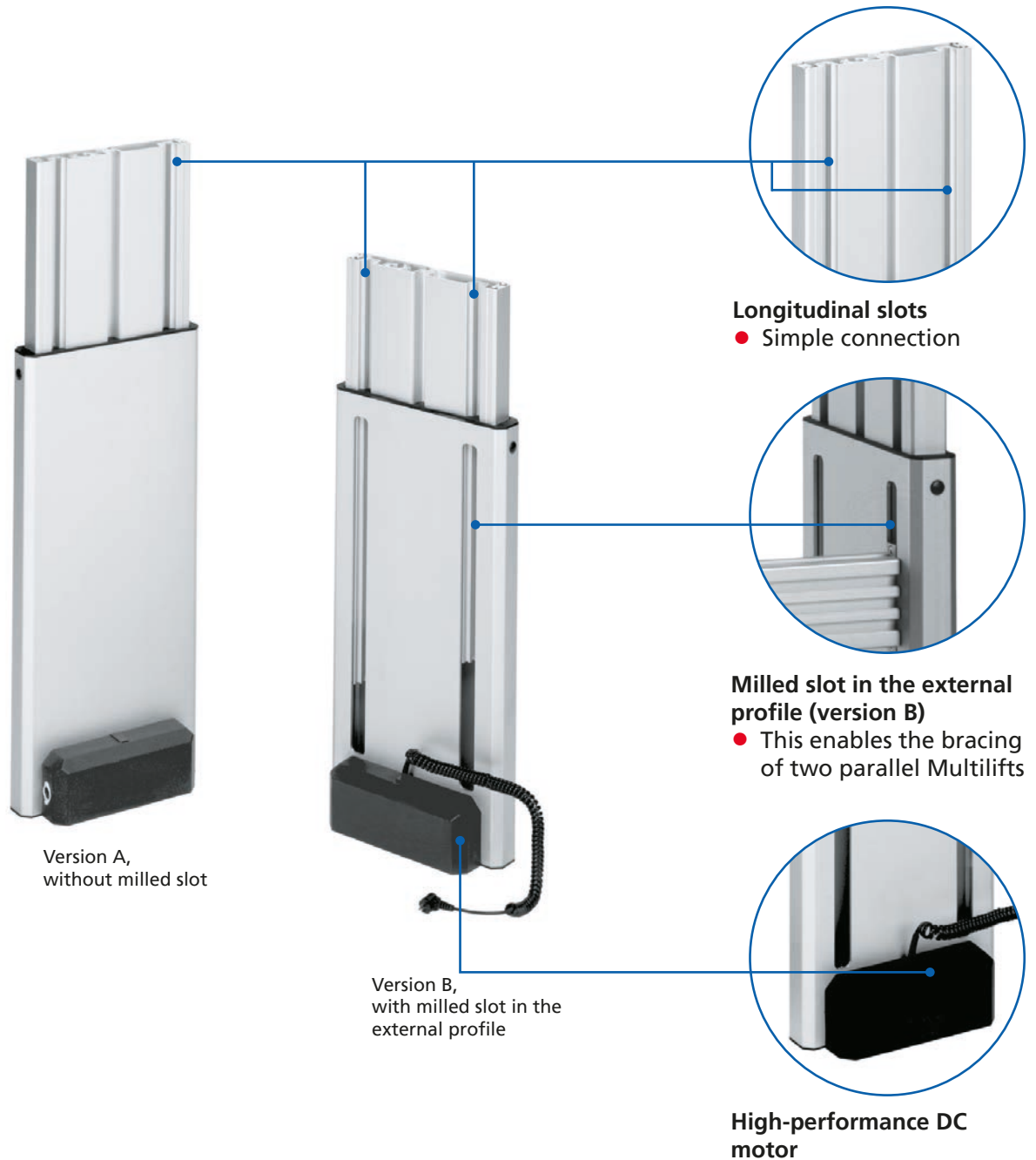
Highlights / Features:

- Quadruple bearings with POM slide bearing shells
- High-performance DC motor
- Integrated limit switches
- Self-locking, even under max. load

Options:

- Special stroke lengths
- Quadro control enables control of up to 32 columns synchron
- Tested to EN 60601-1 (3E)

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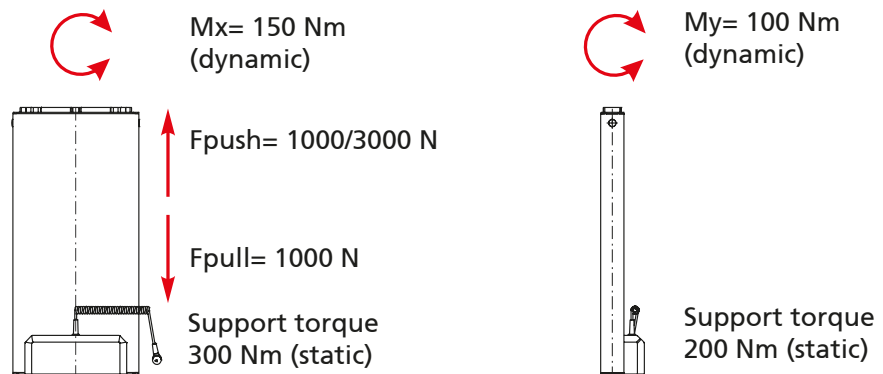
Technical data

General information/operating conditions

Type	Multilift	Custom
Design	Slim lifting column	
Guide	POM slide bearings	
Installation position	Any position / suspended with drop protection provided by the customer	
Push force*	3000 N or 1000 N	
Pull force*	1000 N (only in conjunction with factory-mounted base plate)	
Self-locking	Yes	
Max. travel speed	6 mm/s or 13 mm/s	
Max. stroke	498 mm	1200 mm
Installation dimension	Stroke + 206 mm (incl. base plate)	1600 mm
Voltage	24 V DC	
Current output	3 A or 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 4 mm	
Duty cycle	At nominal load, 10% (max. 2 mins 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 2000 N must not be exceeded.

Load data

M_x = 150 Nm (dynamic)

F_{push} = 1000/3000 N

F_{pull} = 1000 N

Support torque 300 Nm (static)

M_y = 100 Nm (dynamic)

Support torque 200 Nm (static)

Drive	Push force [N]	Travel speed [mm/s]	Number of assigned motor channels			
			1	2	3	4
Multilift	1000	13	✓	✓	✓	je 750 N
Multilift	3000	6	✓	✓	each 2200 N	each 1500 N

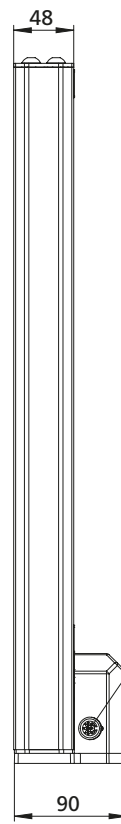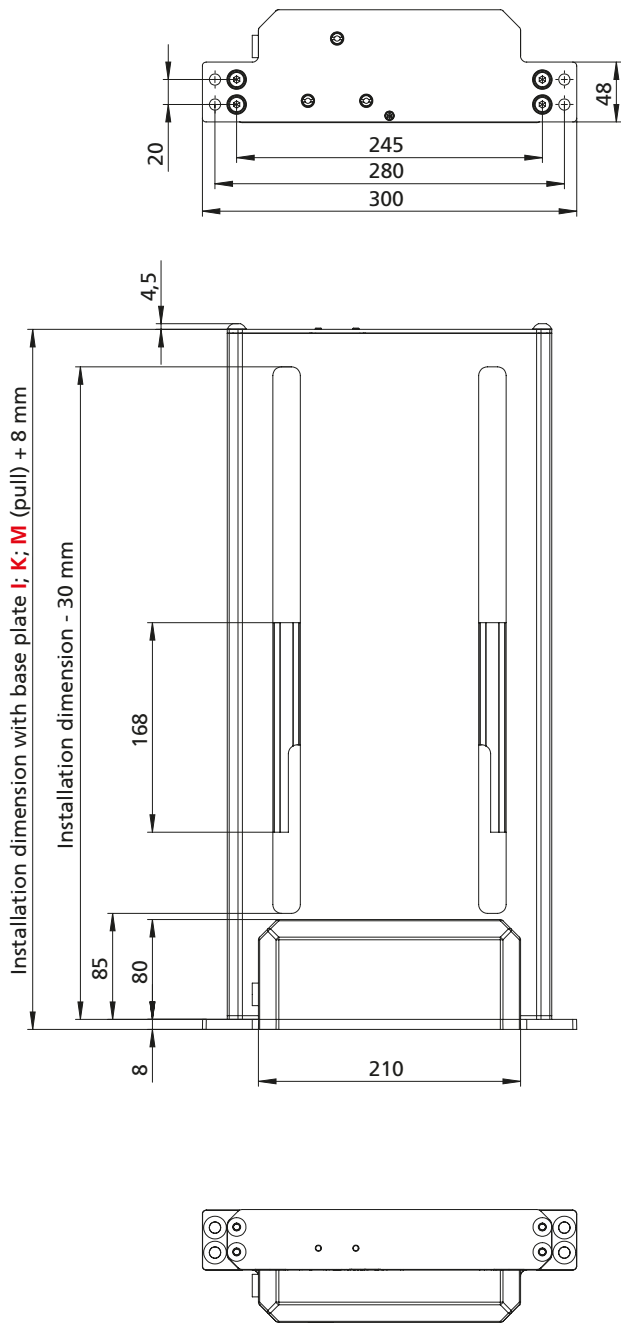| MultiControl II duo	MultiControl II quadro

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.

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245
280
300
48
20

4,5

Installation dimension with base plate **I**; **K**; **M** (pull) + 8 mm

Installation dimension - 30 mm

168

85
80
8

210

48

Connector 8-pin EN 60130-9

90

Versions

Multilift

The Multilift is used for continuously variable height adjustment of tables, assembly workstations and equipment etc. The lifting column can be operated individually or in synchronously as a pair. With lifting forces of up to 3000 N and a maximum stroke of 498 mm in the standard range, this lifting column is suitable for a wide range of applications. A version of the Multilift with milled slots in the inner profile is also available. They can be used, for instance, for connecting accessories and for stabilising table attachments.

Special features:
- High-performance DC motor
- Integrated limit switches
- Self-locking, even under max. load
- Special stroke lengths available on request

Ideal areas of application:
- Workplace ergonomics
- Industrial technology
- Media technology

Multilift Synchro
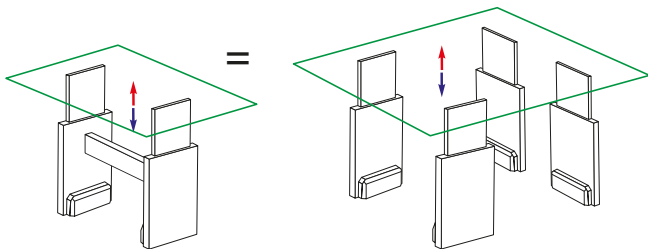
2-4 Multilifts in synchronous operation

Synchronous operation

Synchronous operation of two or more columns. In conjunction with the integrated sensors, the control (see page 156) 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 2 mm on the 6 mm/s version and max 4 mm on the 13 mm/s version.
A memory function is also available.

Version A
without milled slot in the external profile

Version B
with milled slot in the external profile

Universal Table Ironing Machine

Versions

Multilift Synchro

RK ROSE+KRIEGER

Note:
A separate adapter cable is required to use the Multilift on the MultiControl II. This can be found on 173

Code No.	Type	max. push force [N]	max. pull force [N]	max. lifting speed [mm/s]	Total travel [mm]	Installation dimension incl. base plate [mm]	Weight [kg]
QAB13_G0_0355	Multilift 350	3000 / 2000 (med.)	1000 / 500 (med.)	6	355	558	10.1
QAB13_G0_0400	Multilift 400				400	603	11.0
QAB13_G0_0450	Multilift 450				452	658	11.8
QAB13_G0_0500	Multilift 500				498	703	12.5
QAB26_G0_0355	Multilift 350 s	1000 / 1000 (med.)	1000 / 500 (med.)	13	355	558	10.1
QAB26_G0_0400	Multilift 400 s				400	603	11.0
QAB26_G0_0450	Multilift 450 s				452	658	11.8
QAB26_G0_0500	Multilift 500 s				498	703	12.5

Version:
3 = B (with milled slot in the external profile)
4 = A (without milled slot in the external profile)
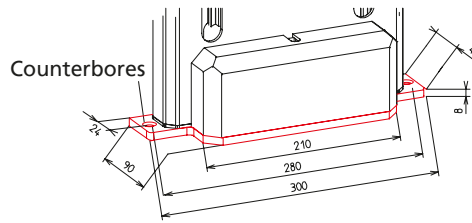
Base plate (For dimensions, see below):
I = with external fixing plates 4 counterbores
K = with external fixing plates 2 counterbores
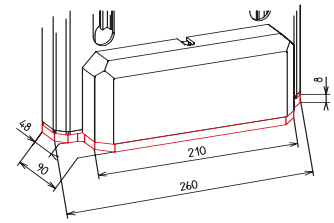**M** = base plate flush

Dimension base plate

Base plate **(I)** with fixing plates (4 counterbores)
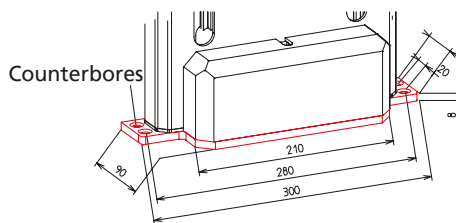
Counterbores

Base plate **(K)** with fixing plates (2 counterbores)

Counterbores

Base plate **(M)** flush

System components

Code No.	Accessories	
Controls		
QST10H12AA000	MultiControl II duo - Basic	Multilift
QST10H14AA000	MultiControl II quadro - Basic	
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)	

Code No.	Length [mm]	Adapter cable
QZD020722	200	Adapter cabel Multilitft I on MultiControl II 0,2 m
QZD020711	2500	Connecting cable Multilitft I on MultiControl II 2,5 m

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

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Accessories

Adaptor bar

● Cross struts from the BLOCAN®
Profile Assembly System are
used to increase the stability of
two version B Multilifts
(see page 34).
The adaptor bar is suitable for
F profile 40 x 80 L and F 30x60.

Material: AlMgSi 0.5
Fixing set, zinc plated

Scope of delivery:
2x adaptor bars, fixing set

Slot stones, -L- M6
4046204

BLOCAN®-Profile F 30x60
as cross strut   Adaptor bar
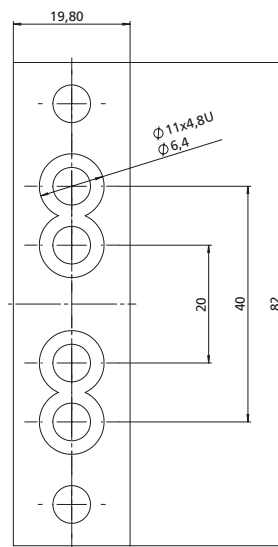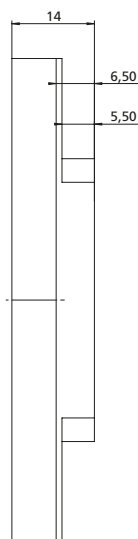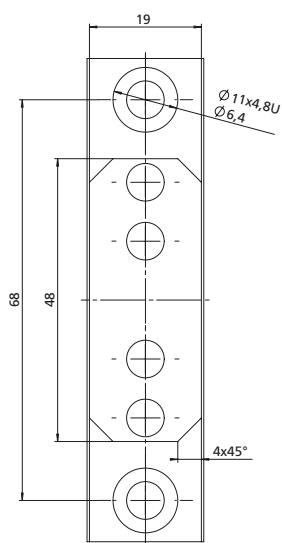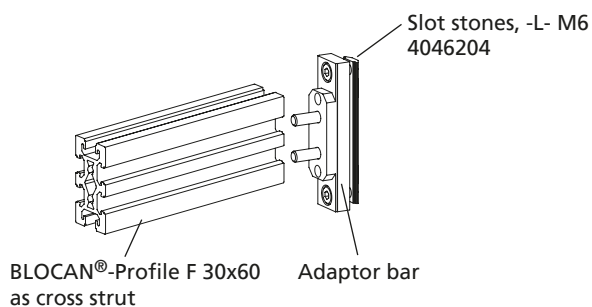
Code No.	Version
QZD020020	Adaptor bar for BLOCAN® profiles
4285000	Profile* F-40 x 80-L, can be cut to specification

Length (clear width between the Multilifts -2 mm)

* For dimensions of the profiles,
please refer to the catalogue
BLOCAN PROFILE TECHNOLOGY

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Multilift

Fixing

Multilift assembly plates / compression plate

Material: Die-cast, black powder-coated zinc plated fixing set

Scope of delivery: 1x assembly or thrust compression plate fixing set

Note:

The "top" assembly plates listed here and the thrust compression plate are only suitable for push loads.

For applications involving pull force and in synchronised groups, a base plate – factory-mounted on the Multilift – must be used.

You will find further information in the operating manual
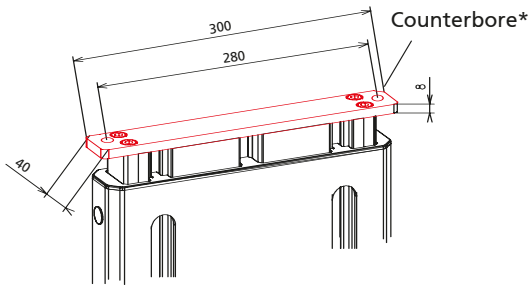
Top assembly plate   *DIN 74 - F8

Code No.	Version	Multilift	
		Internal profile	External profile
QZD020549	Top assembly plate	●	

Fixing plate

● This universal plate can be bolted directly into the screw channel of the lifting column using a fixing set. The numerous pre-drilled holes in the metal make it easy to attach table tops, brackets, etc.

Material: steel,
black powder-coated (RAL 9005),
zinc plated fastenings
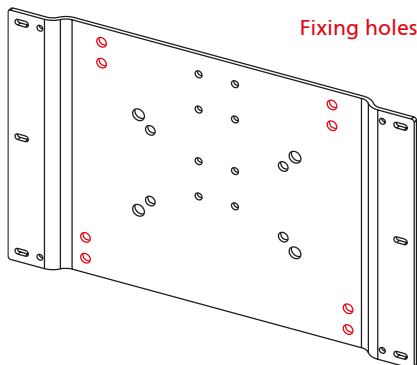
Fixing holes
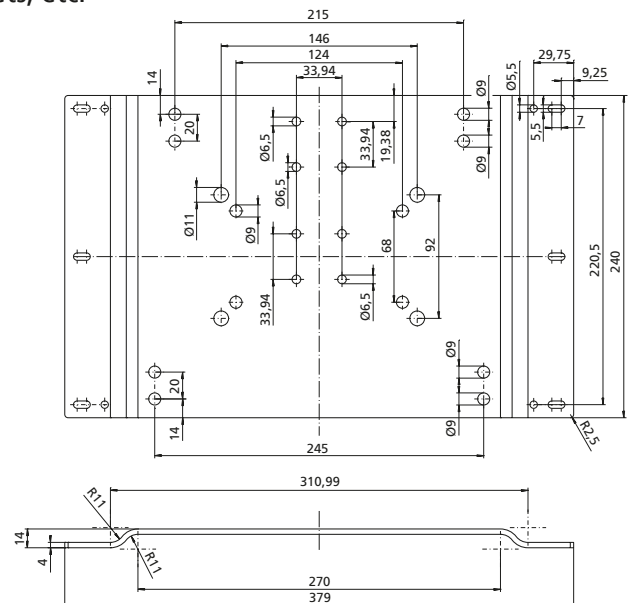
Code No.	Version	Multilift	
		Internal profile	External profile
QZD100313	Fixing plate	●	
QZD120336	Fixing set, 4x M6 x 14, DIN 7984		

42

Multilift
Fixing

RK ROSE+KRIEGER

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]
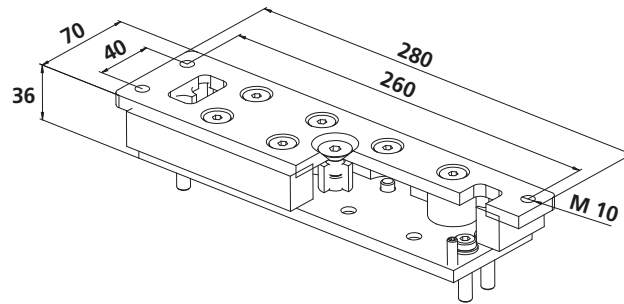
| Code No. | Type | Max. load | Multilift | |
			Internal profile	External profile
QZD020471	Multilift	3000 N	●	

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.

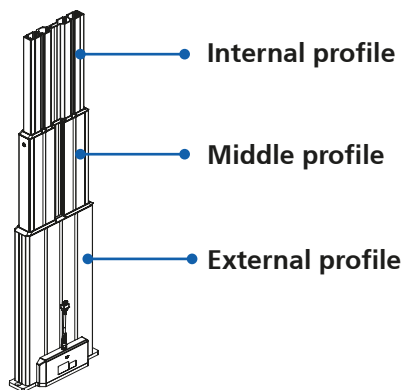- The lifting columns can be aligned via the vertical adjustment around the X-Y axes.

[mm]
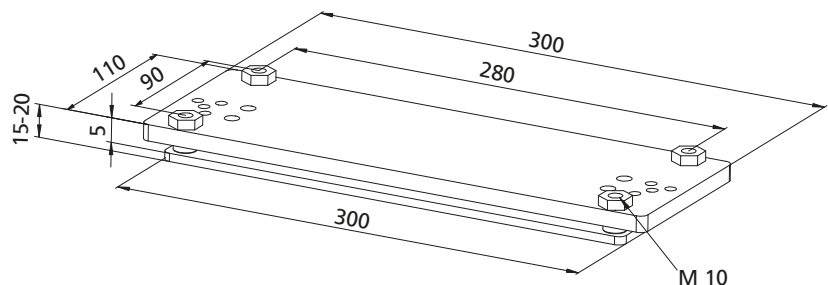
| Code No. | Type | Max. load | Multilift | |
			Internal profile	External profile
Without pressure plate				
QZD020472	Multilift	3000 N	●*	●
With pressure plate				
QZD020462	Multilift	3000 N		

●* = in connection with the assembly plate (page 42)

RK ROSE+KRIEGER

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RK ROSE+KRIEGER** Linear Technology - Lifting columns **43

Accessories

Foot

- Internal profile
- Middle profile
- External profile

- Different foot versions for the Multilift
- No modifications to the Multilift required

Material:

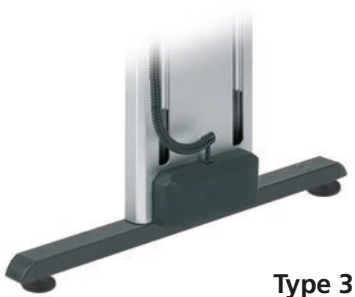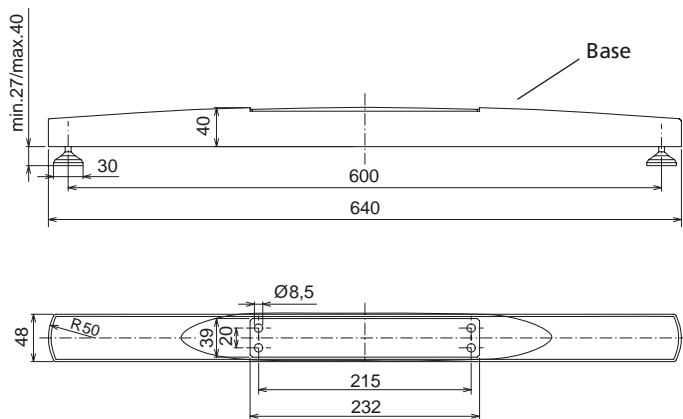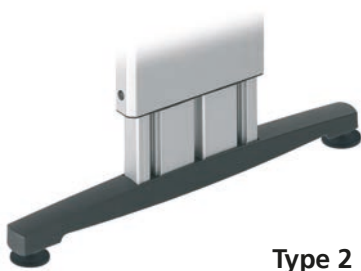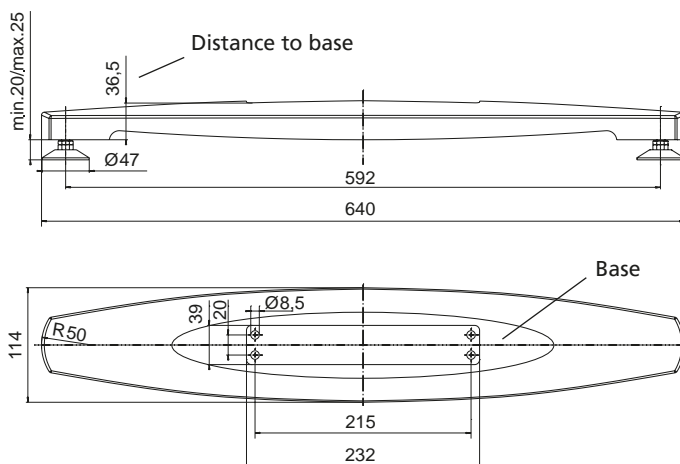Type 1/2/5 GK-AlSi12/3.2583.02, black powder-coating

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

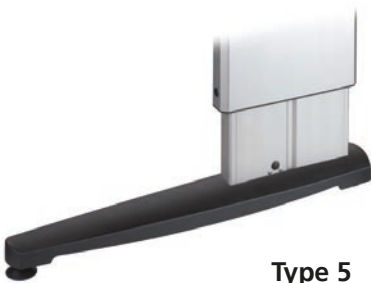**Scope of delivery:**

one foot with fixing set

Type 1

Distance to base

min.20/max.25

36,5

Ø47

592

640

114

R50

39

20

Ø8,5

Base

215

232

Type 2

min.27/max.40

40

Base

30

600
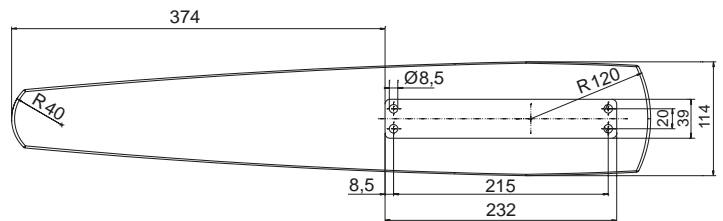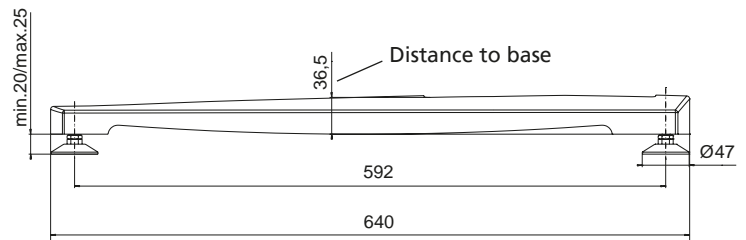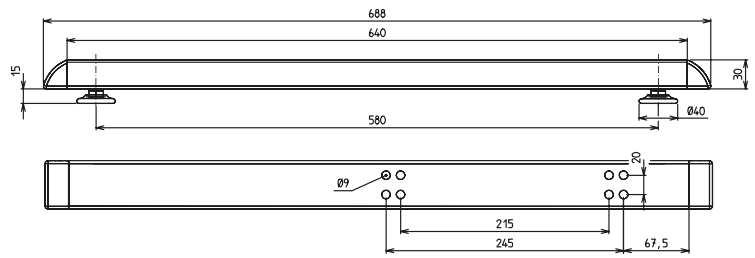
640

48

R50

39

20

Ø8,5

215

232

Type 3
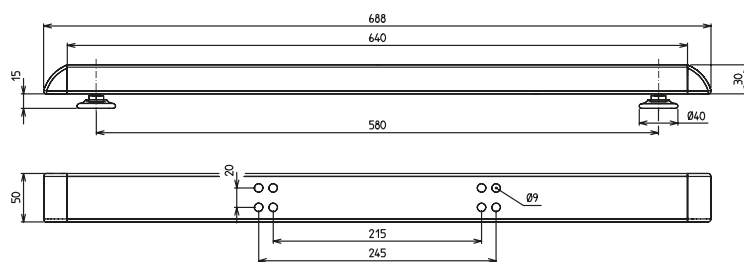
Multilift centrally mounted (choice of internal or external profile)

688

640

15

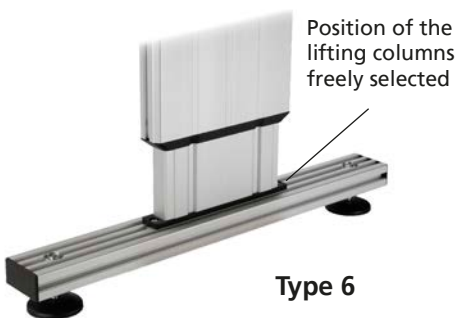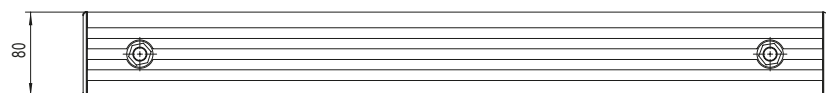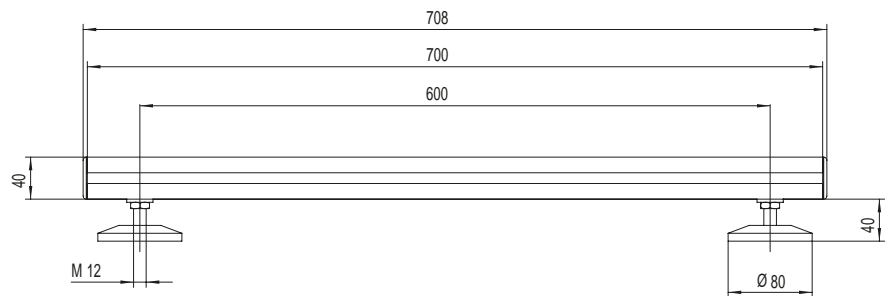30

580

Ø40

50

20

Ø9

215

245

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RK ROSE+KRIEGER

Type 4

Multilift mounted off-centre
(choice of internal or external
profile)

Type 5

Distance to base

Type 6

Position of the
lifting columns
freely selected

Code No.	Type	max. load	Multilift	
			Internal profile	External profile
QZD020252	1	1000 N	●	
QZD020253	2	1000 N	●	
QZD020254	3	1000 N	●	●
QZD020255	4	1000 N	●	●
QZD020343	5	1000 N	●	
QZD020256	6	3000 N	●	●