



LINEAR MOTION KIT

ABOUT COBOTRACKS

Cobotracks is located at the technology park “Thor Park” in Genk Belgium. It offers solutions to companies who would like to extend the reach of their cobot. The cobot can move across a linear track and for example stack multiple pallets.

For Universal robots Cobotracks developed the “Linear Motion Kit”. This kit has compatible software for the Universal robot which guarantees a plug & play solution. For other cobot brands other solutions are available such as the “Linear Motion Plug & Play” and the “Linear Motion Mate” to extend their range. Cobotracks uses the “Linear Motion Kit” as the base to offer customized solutions for each Universal Robot application.

COBOTRACKS STANDS FOR:



EXPERTISE



CUSTOMIZED



QUALITY



**SHORT
COMMUNICATION
LINES**



FEATURES

- /// Steel or aluminium
- /// Different drive types
- /// Robust industrial design with SEW Servo Drive
- /// High accuracy
- /// 100% cycle time with 100% load on robot
- /// Customized solutions
- /// Length up to 50m
- /// Collision detection



- /// UR Caps Software
 - » Very easy to install and program
 - » Infinite programming points
 - » Adjustable speed
 - » Movement robot during movement LMK

EXAMPLES

OF CUSTOMIZED SOLUTIONS

- /// Folding bellows
- /// Long lengths based on rack and pinion
- /// 90° carriage
- /// Additional support structure
- /// High speed variant
- /// 200V power supply

APPLICATIONS

EXTEND THE REACH OF YOUR COBOT



**MULTIPLE MACHINE
TENDERING**



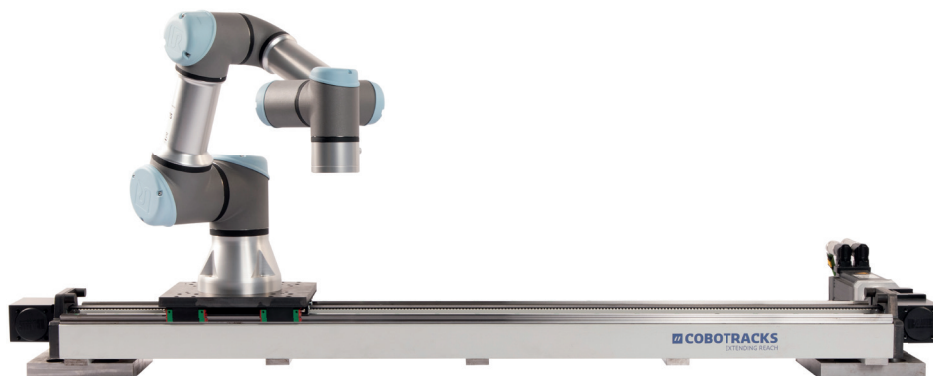
**MULTIPLE PALLET
PALLETISING**

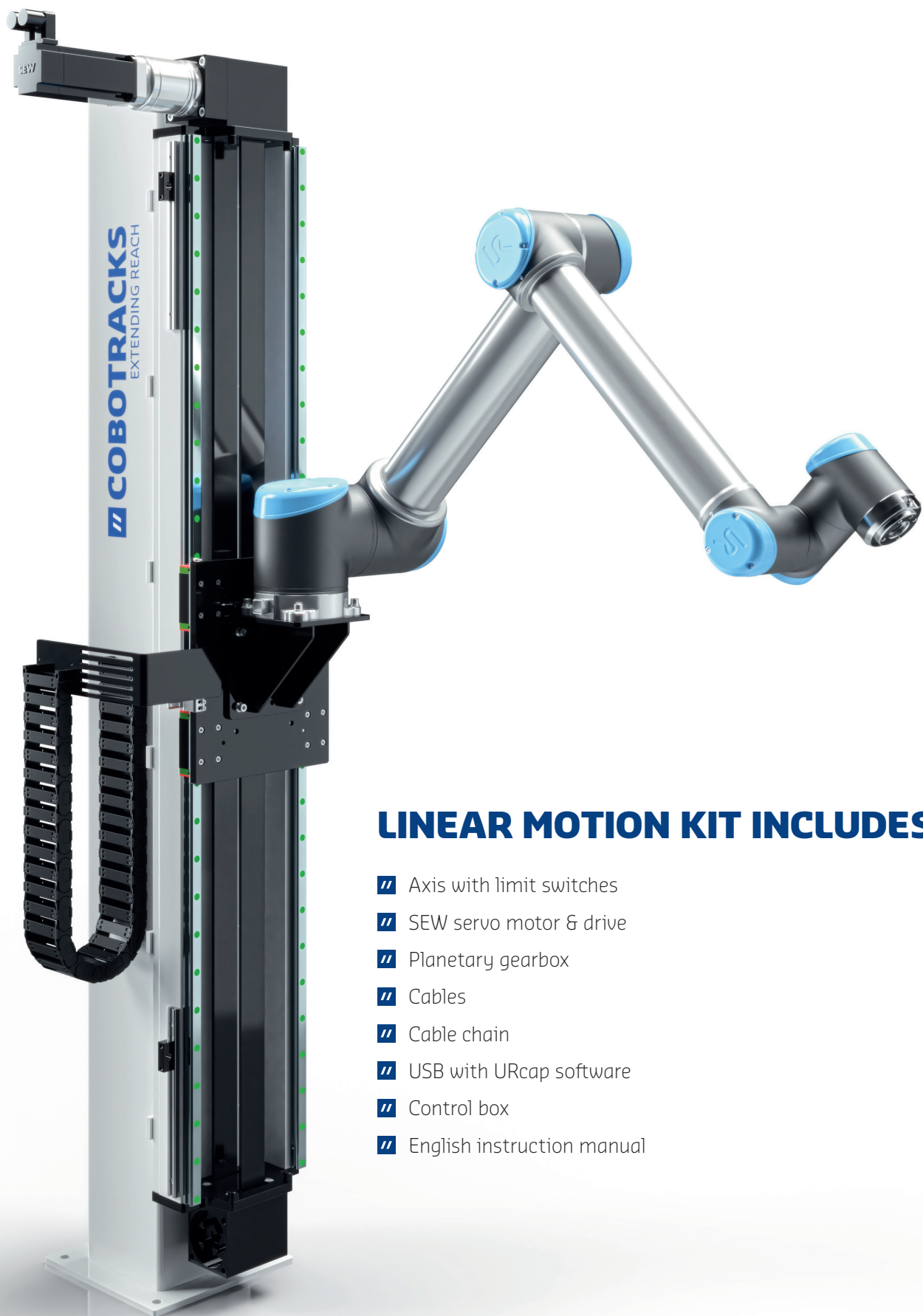


**WELDING
BIG PARTS**



**POLISHING &
GLUING BIG PARTS**





LINEAR MOTION KIT INCLUDES

- // Axis with limit switches
- // SEW servo motor & drive
- // Planetary gearbox
- // Cables
- // Cable chain
- // USB with URcap software
- // Control box
- // English instruction manual



UR CAPS SOFTWARE

Setup

- ” The installation can be done in less than 30 min.
- ” Automatic IP search function
- ” Properties track to set: Track length and maximum speed
- ” Set Collision detection threshold

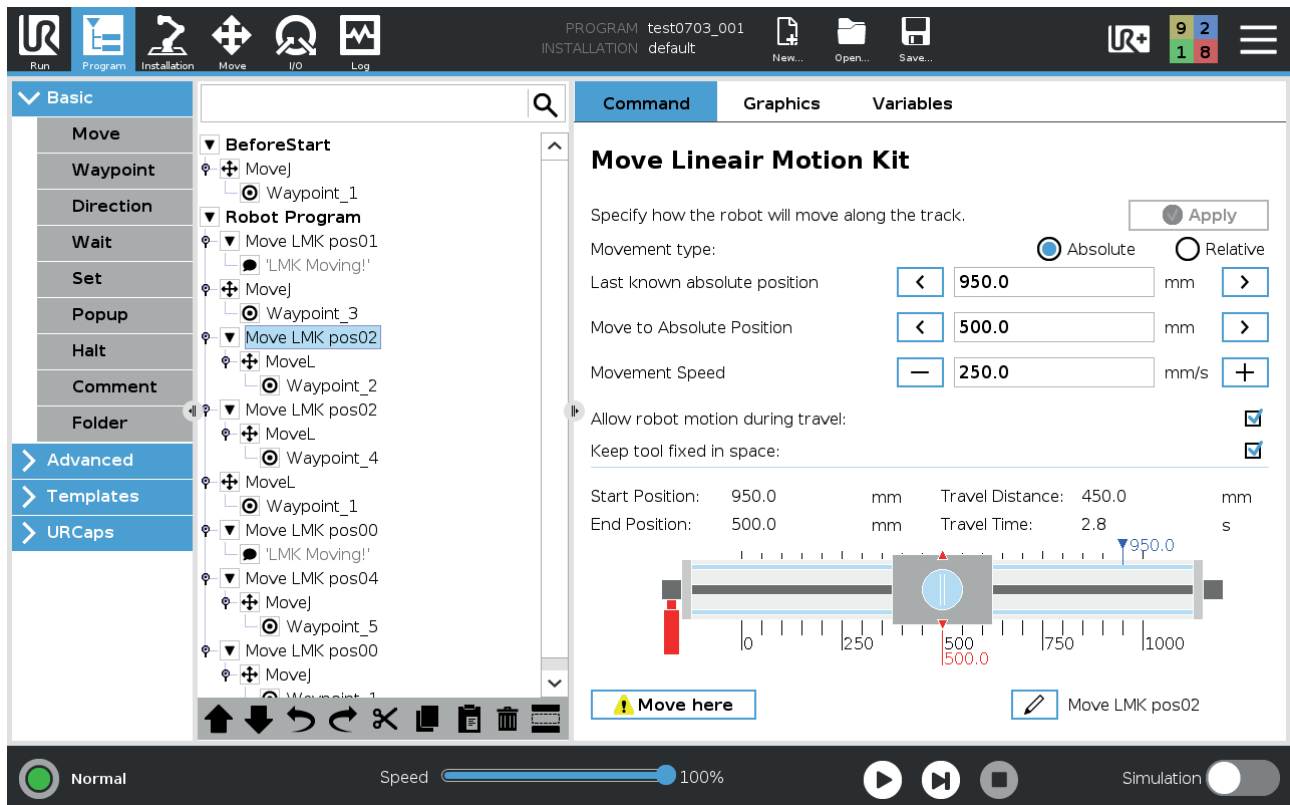
Programming

- ” The LMK can be integrated with the UR Caps module
- ” Programmable with absolute or relative values
- ” Adjustable speed during program
- ” Robot motion during travel on Linear Motion Kit
- ” Option to keep tool fixed in space during travel on Linear Motion Kit

Configuration

Due to the integration of the UR Caps Software, the Linear Motion Kit is very easy to install and to program. Within the software, all settings and parameters are displayed in such a clear manner that the configuration of the LMK is done in no time.

UR CAPS SOFTWARE



The screenshot shows the UR CAPS Software interface with the 'Move Linear Motion Kit' configuration window open. The left sidebar shows the 'Basic' tab selected, with a tree view of the robot program. The main window displays the configuration for the 'Move LMK pos02' command. The 'Movement type' is set to 'Absolute'. The 'Last known absolute position' is 950.0 mm. The 'Move to Absolute Position' is 500.0 mm. The 'Movement Speed' is 250.0 mm/s. The 'Allow robot motion during travel' and 'Keep tool fixed in space' checkboxes are both checked. A graphical representation of the track shows the current position at 950.0 mm and the target position at 500.0 mm. The bottom status bar shows 'Normal' mode, 'Speed' at 100%, and 'Simulation' mode.

Command **Graphics** **Variables**

Move Linear Motion Kit

Specify how the robot will move along the track.

Movement type: ☒ Absolute ☐ Relative

Last known absolute position: mm

Move to Absolute Position: mm

Movement Speed: mm/s

Allow robot motion during travel: ☒

Keep tool fixed in space: ☒

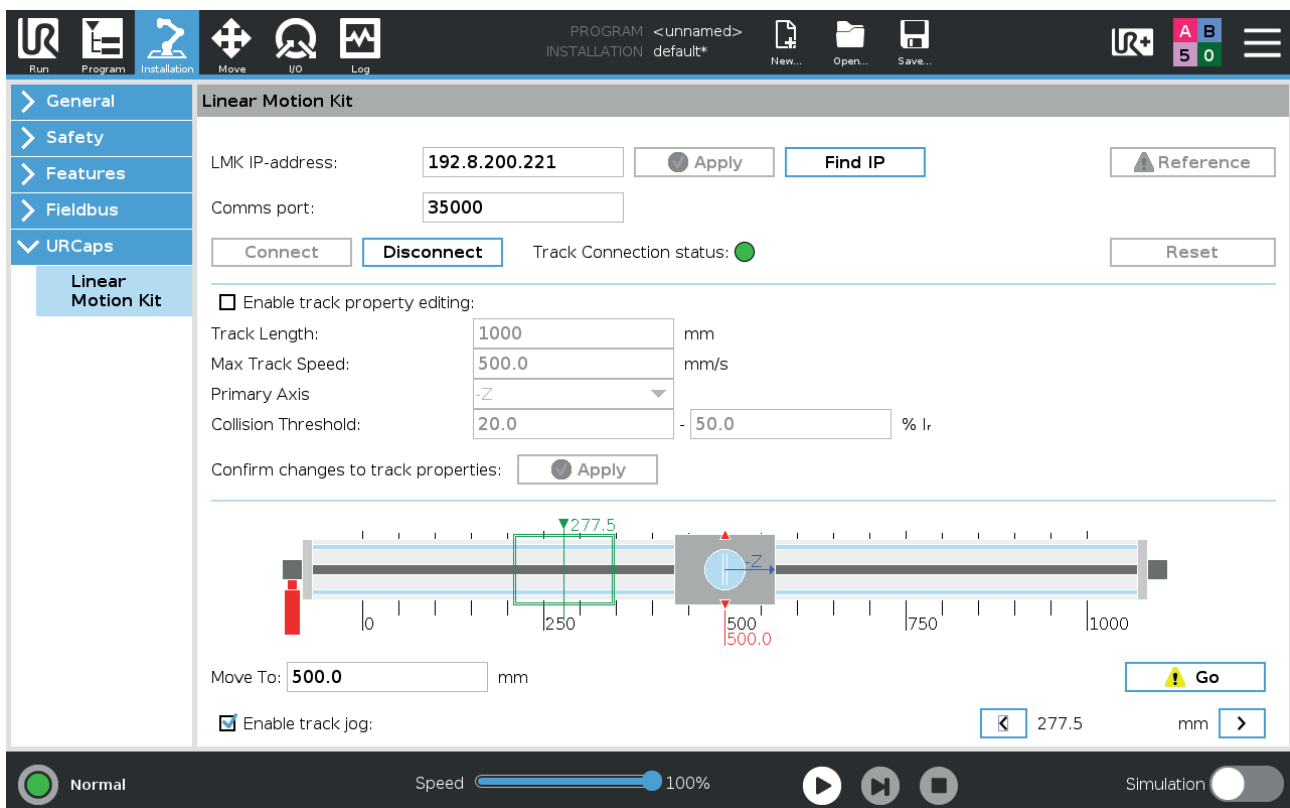
Start Position: 950.0 mm Travel Distance: 450.0 mm

End Position: 500.0 mm Travel Time: 2.8 s

Move here

Move LMK pos02

Normal Speed: 100% Simulation



The screenshot shows the UR CAPS Software interface with the 'Linear Motion Kit' configuration window open. The left sidebar shows the 'General' tab selected, with a tree view of the robot program. The main window displays the configuration for the 'Linear Motion Kit'. The 'LMK IP-address' is 192.8.200.221. The 'Comms port' is 35000. The 'Track Length' is 1000 mm. The 'Max Track Speed' is 500.0 mm/s. The 'Primary Axis' is -Z. The 'Collision Threshold' is 20.0. The 'Confirm changes to track properties' button is 'Apply'. A graphical representation of the track shows the current position at 500.0 mm and the target position at 500.0 mm. The bottom status bar shows 'Normal' mode, 'Speed' at 100%, and 'Simulation' mode.

General **Safety** **Features** **Fieldbus** **URCaps**

Linear Motion Kit

LMK IP-address:

Comms port:

Track Connection status: ●

☐ Enable track property editing:

Track Length: mm

Max Track Speed: mm/s

Primary Axis:

Collision Threshold: - % Ir

Confirm changes to track properties: ☒ Apply

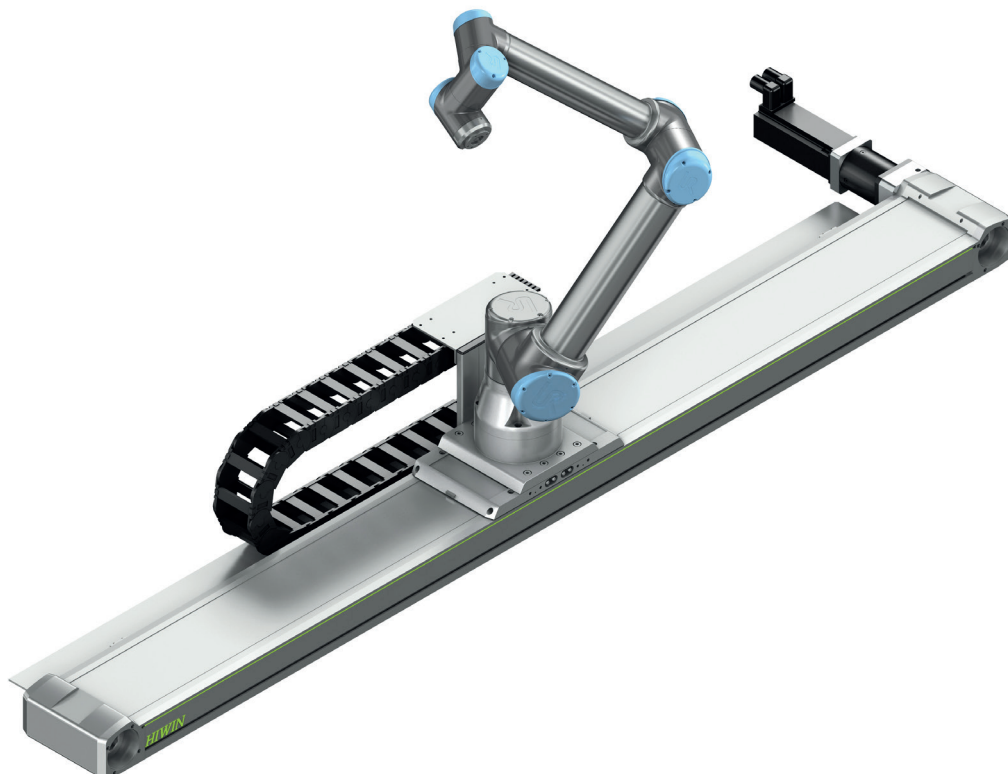
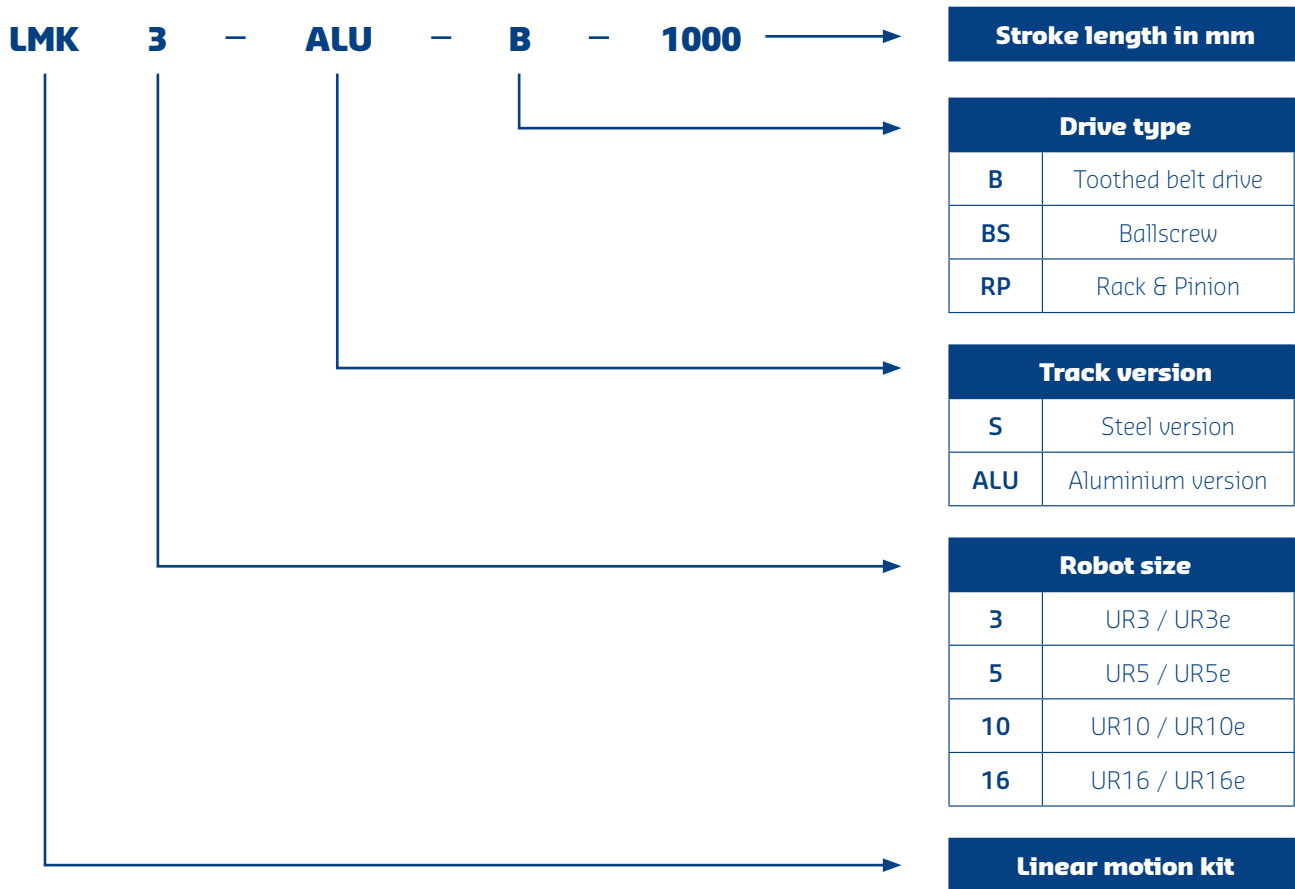
Move To: mm

☒ Enable track jog: mm

Normal Speed: 100% Simulation

ORDERING KEY

OF OUR COBOTRACKS

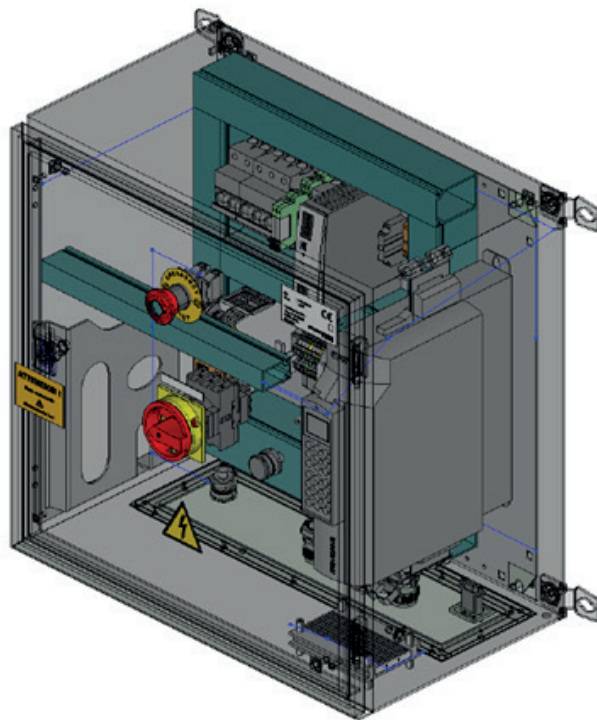


GENERAL SPECIFICATIONS

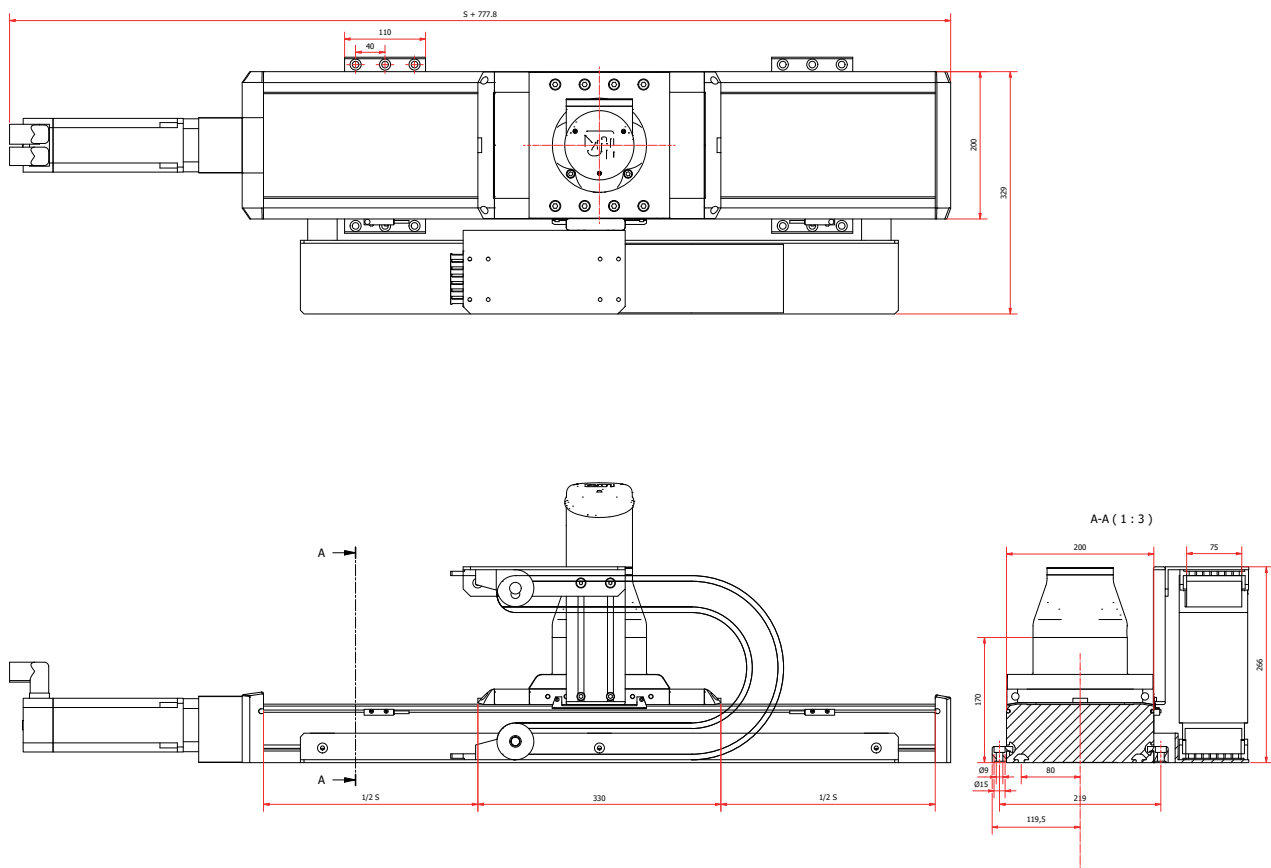
OF OUR COBOTRACKS

Specifications	Toothed belt drive	Ballscrew	Rack & pinion
Max. stroke [mm]	7000	2500	50 000
Max. speed [mm/sec]	250	250	250
Duty cycle [%]	100	100	100
Repeatability [mm]	± 0.1mm	± 0.05mm	± 0.1mm
Ambient temperature [°C]	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Electrical input	380V	380V	380V

Rack and pinion drawings on request.

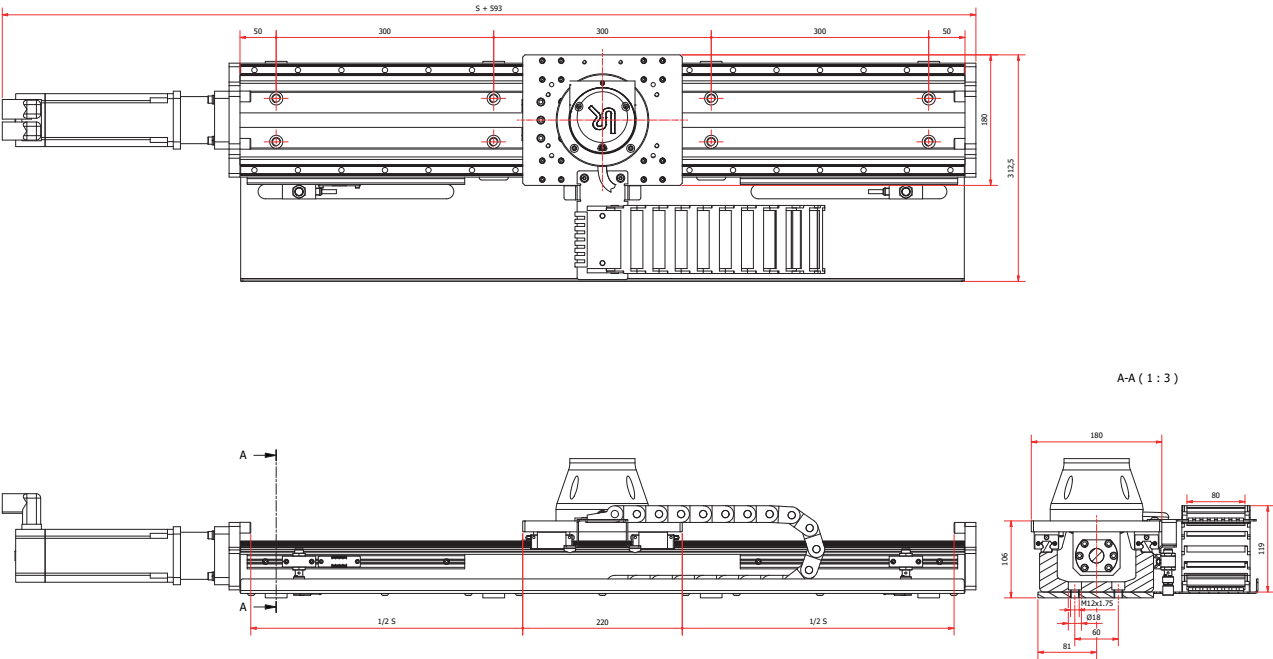


LMK3 - ALU - BS



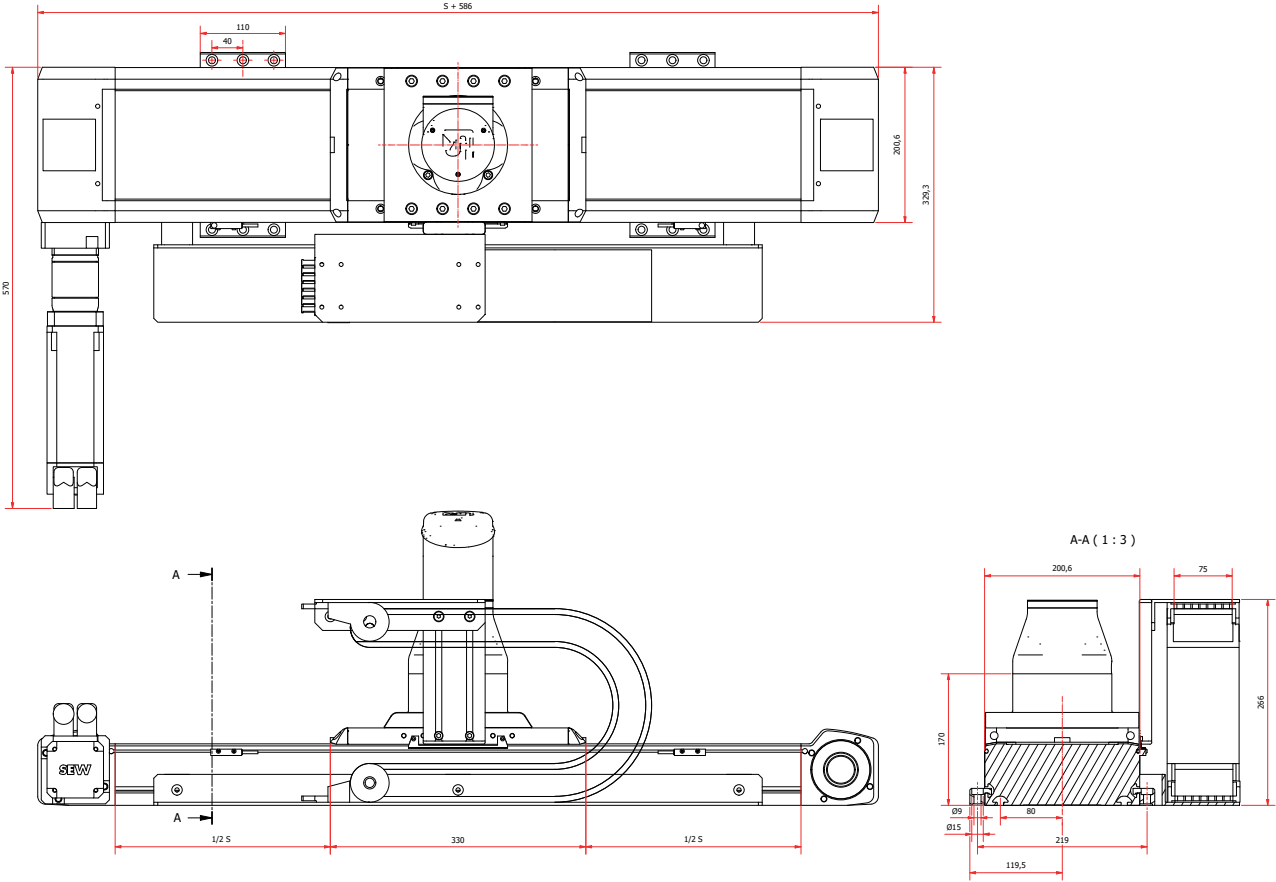
LMK3 - ALU - BS	
Base Weight	19.4 kg
Weight per 100mm stroke	2.1 kg

LMK3 - S - BS



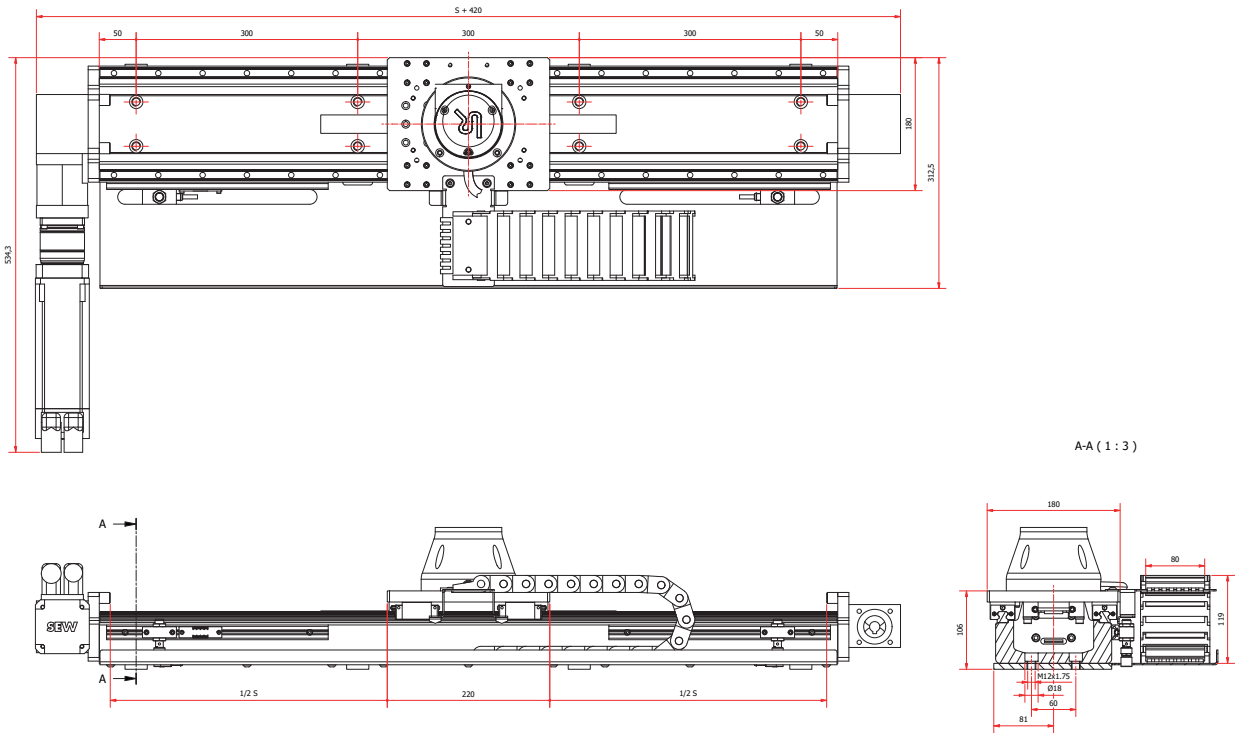
LMK3 - S - BS	
Base Weight	20 kg
Weight per 100mm stroke	4.1 kg

LMK3 - ALU - B



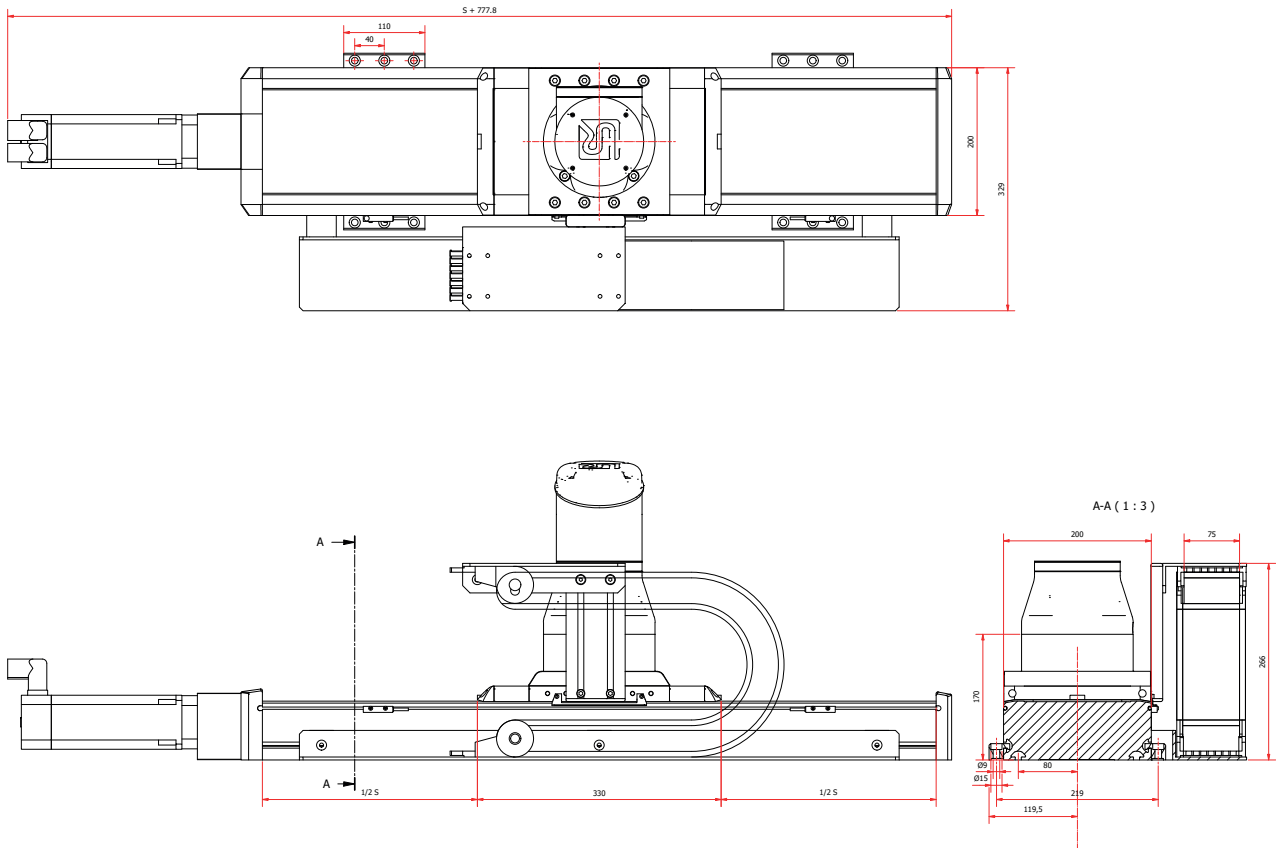
LMK3 - ALU - B	
Base Weight	21.9 kg
Weight per 100mm stroke	1.8 kg

LMK3 - S - B



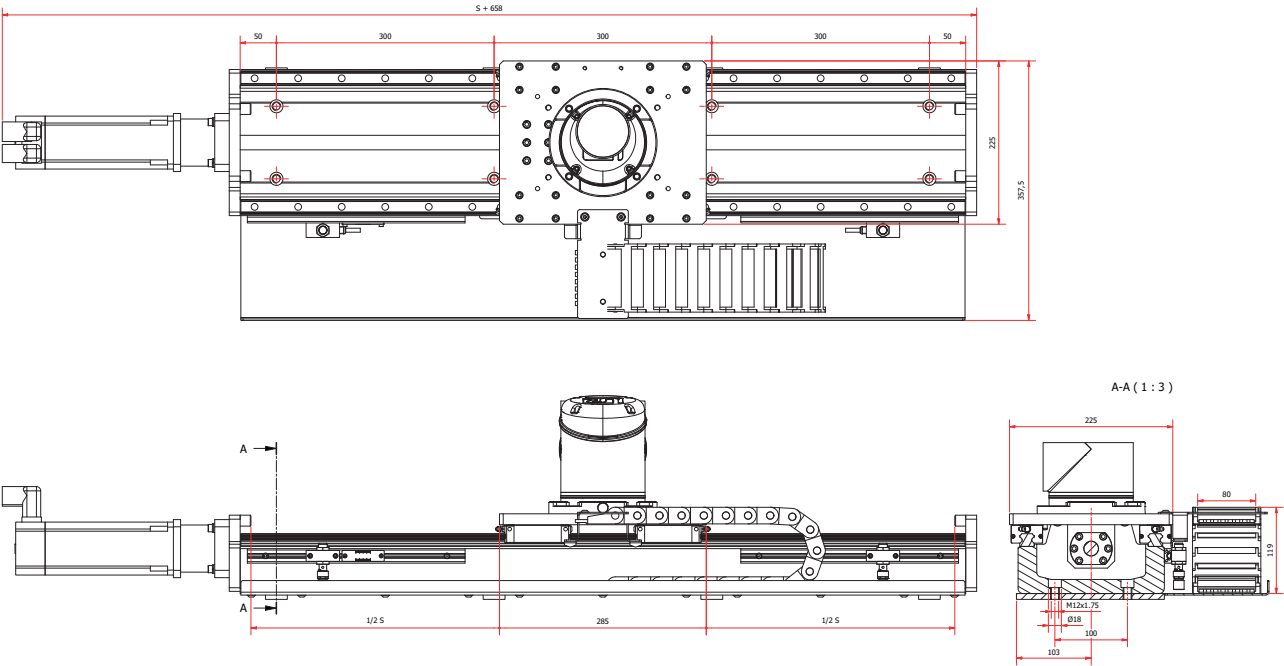
LMK3 - S - B	
Base Weight	21 kg
Weight per 100mm stroke	4 kg

LMK5 - ALU - BS



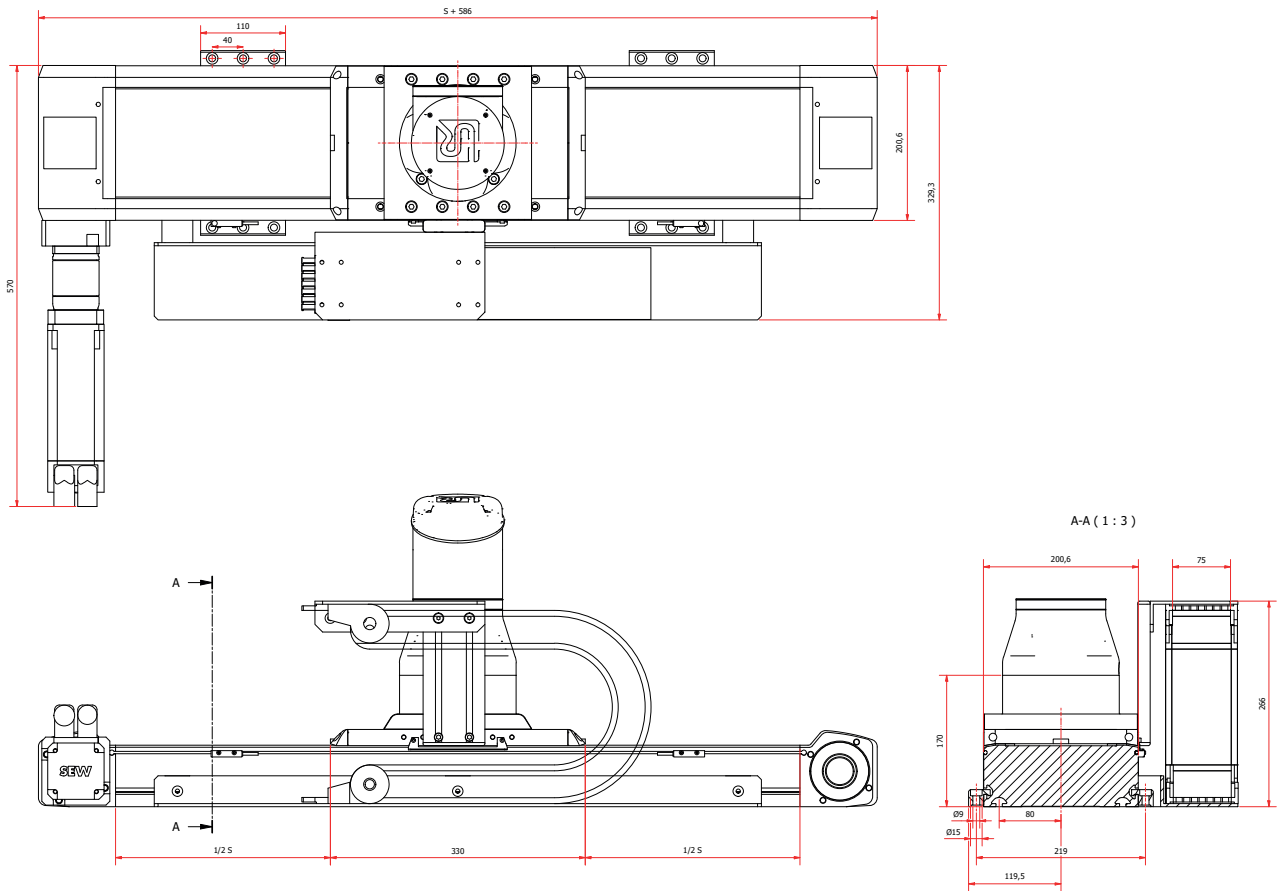
LMK5 - ALU - BS	
Base Weight	19.4 kg
Weight per 100mm stroke	2.1 kg

LMK5 - S - BS



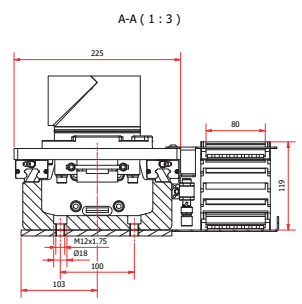
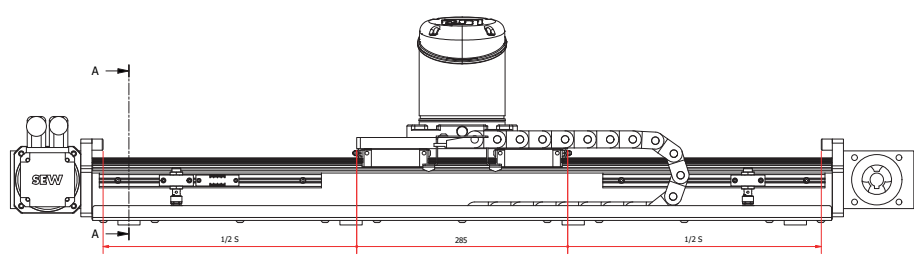
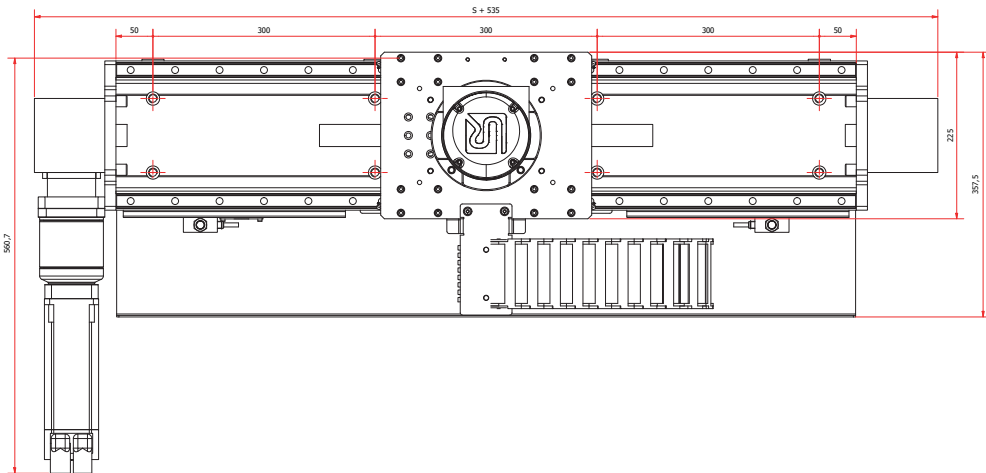
LMK5 - S - BS	
Base Weight	35 kg
Weight per 100mm stroke	6 kg

LMK5 - ALU - B



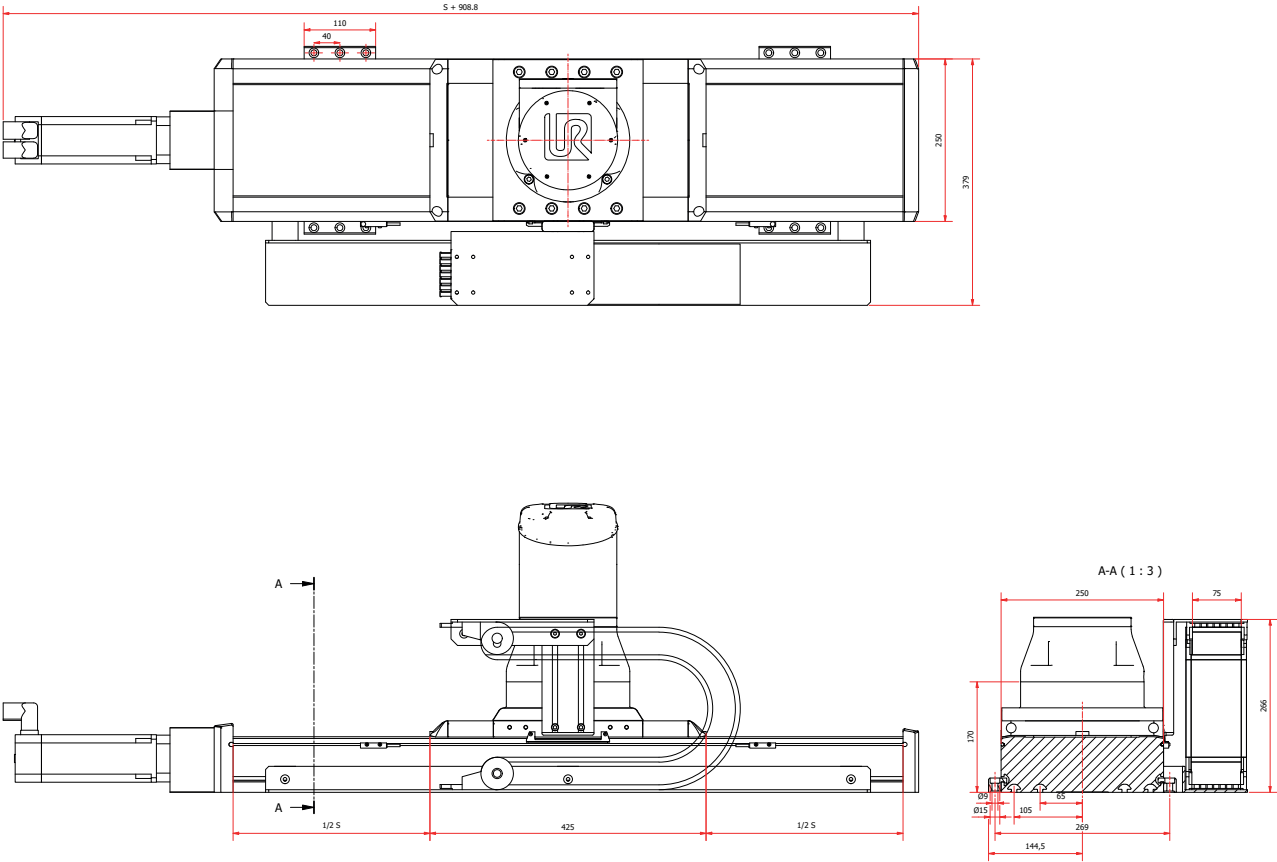
LMK5 - ALU - B	
Base Weight	21.9 kg
Weight per 100mm stroke	1.8 kg

LMK5 - S - B



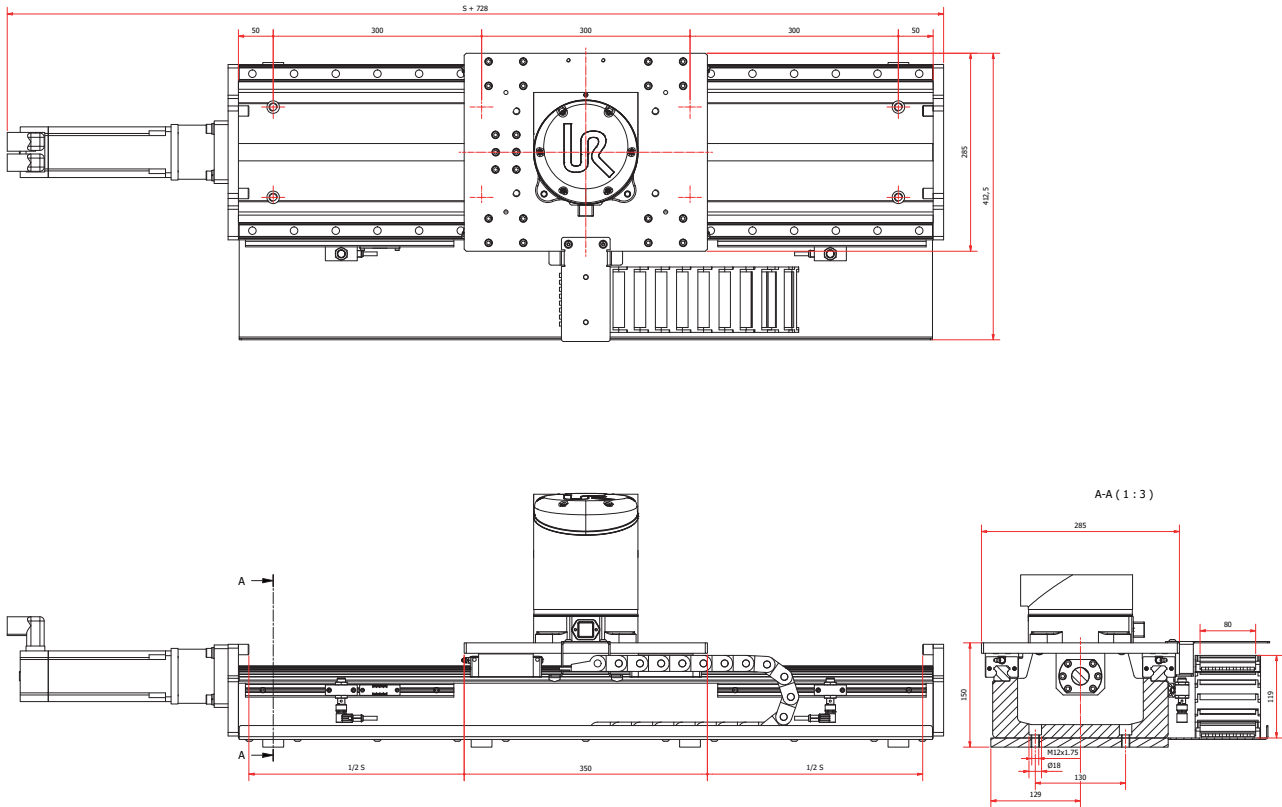
LMK5 - S - B	
Base Weight	37 kg
Weight per 100mm stroke	5.8 kg

LMK10 - ALU - BS



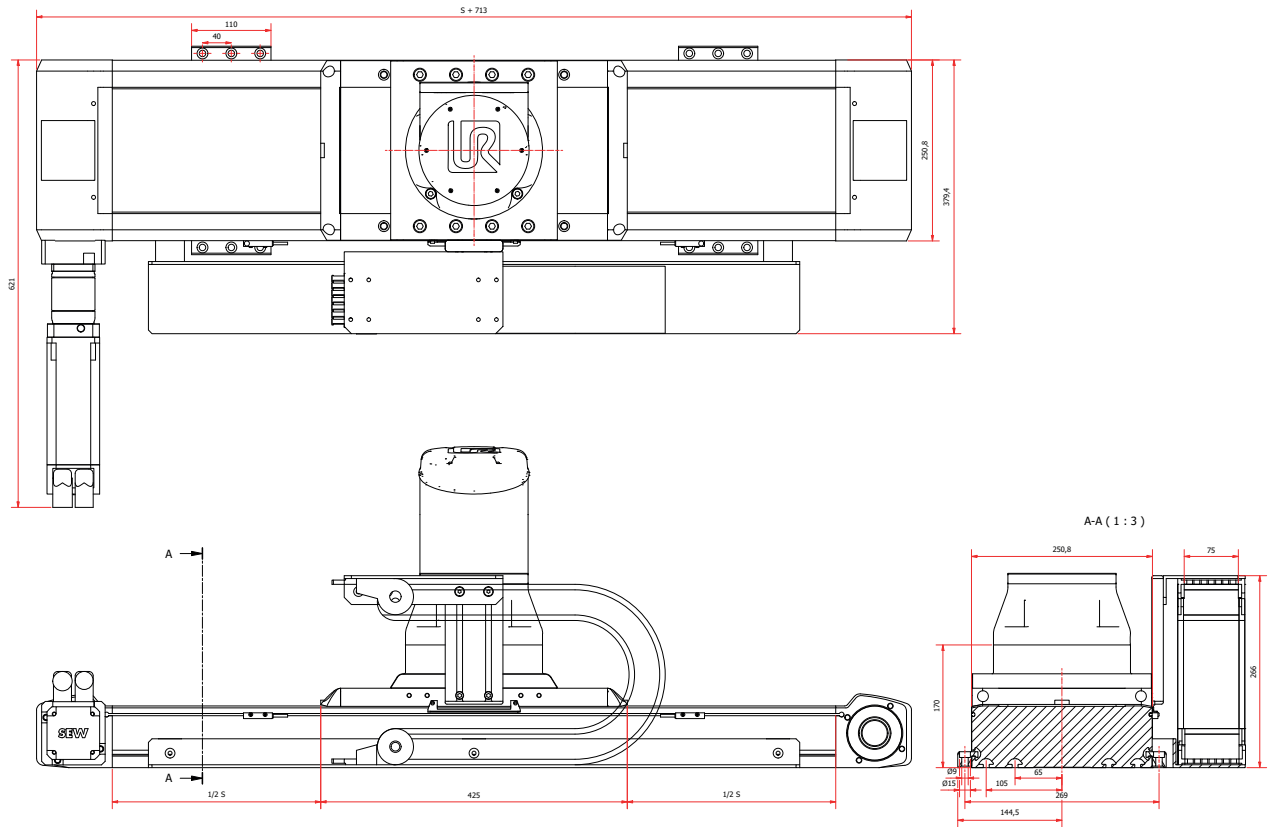
LMK10 - ALU - BS	
Base Weight	34.5 kg
Weight per 100mm stroke	2.8 kg

LMK10 - S - BS



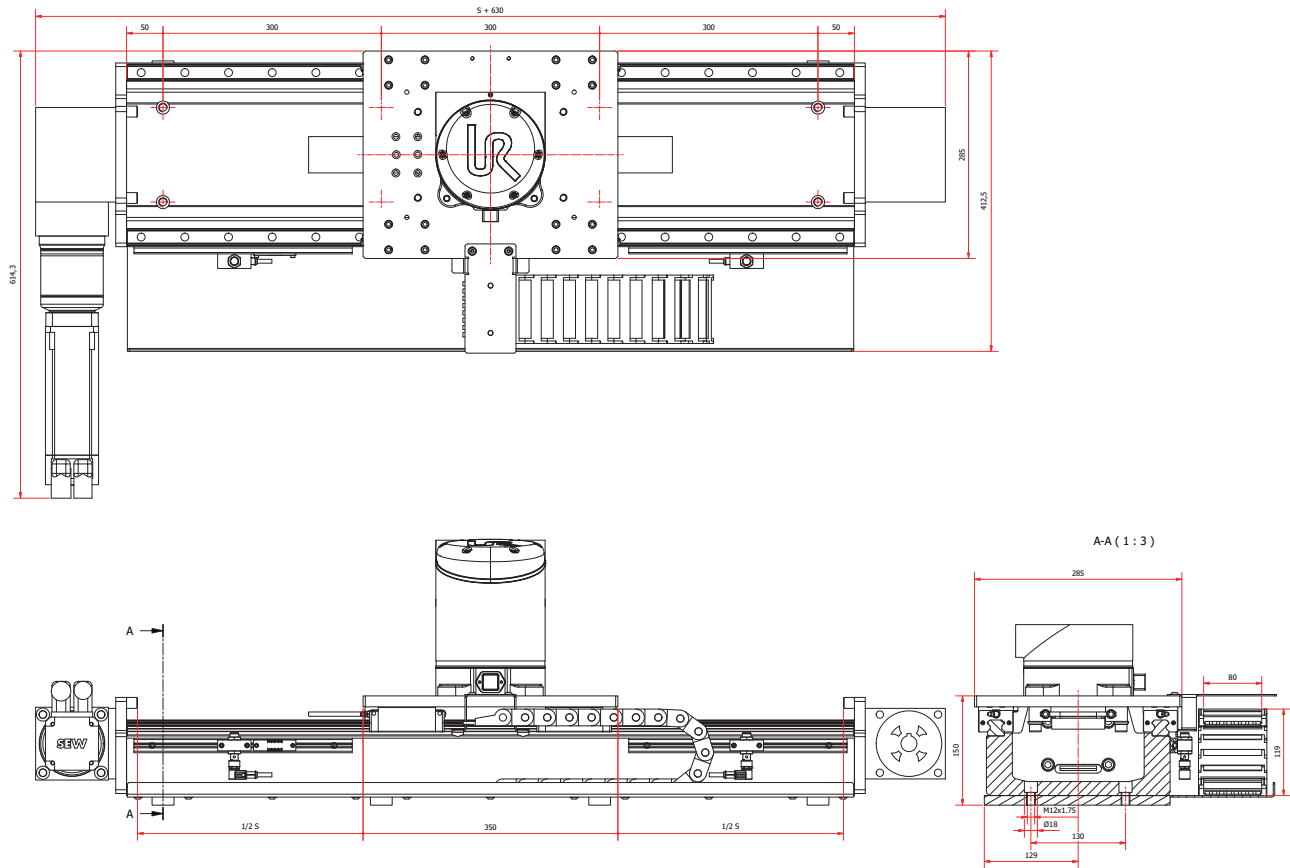
LMK10 - S - BS	
Base Weight	61 kg
Weight per 100mm stroke	9.1 kg

LMK10 - ALU - B



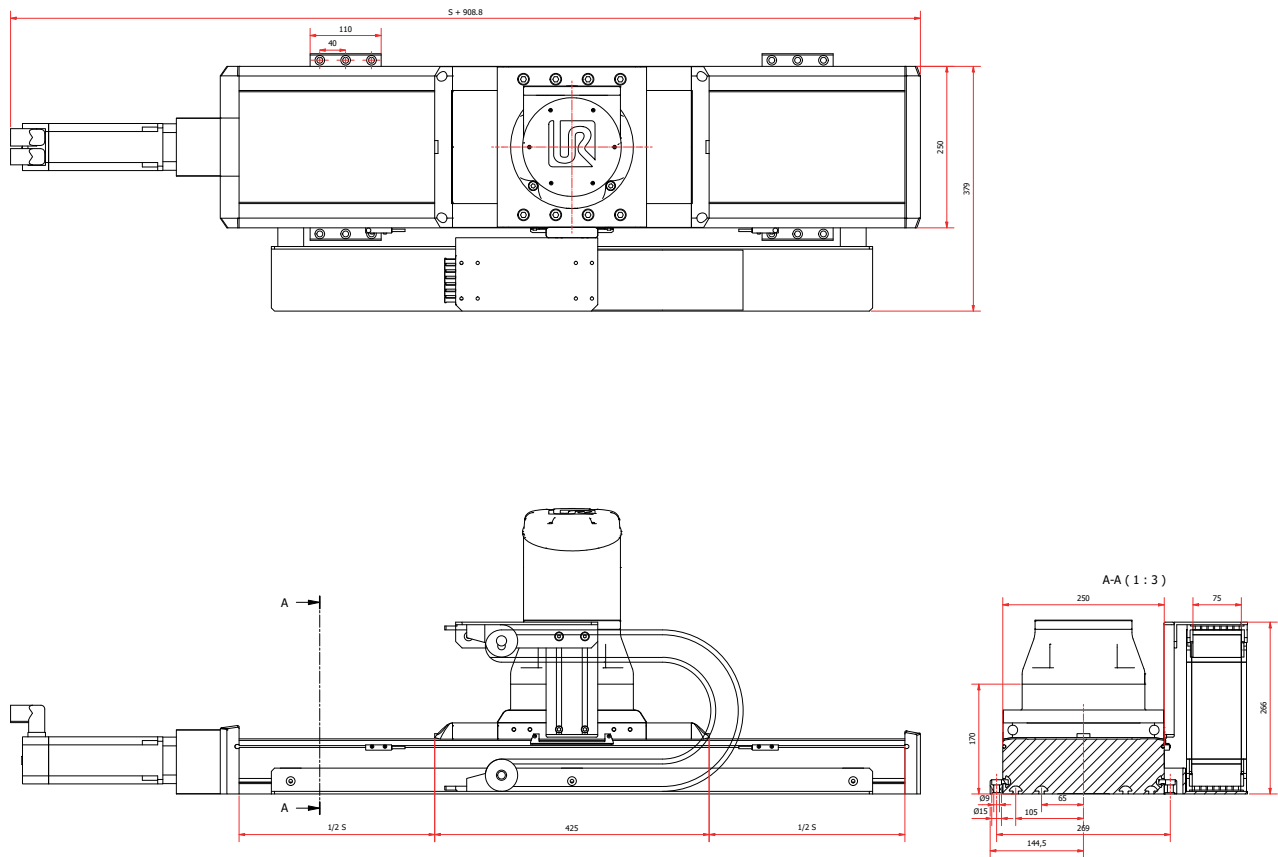
LMK10 - ALU - B	
Base Weight	38.1 kg
Weight per 100mm stroke	2.3 kg

LMK10 - S - B



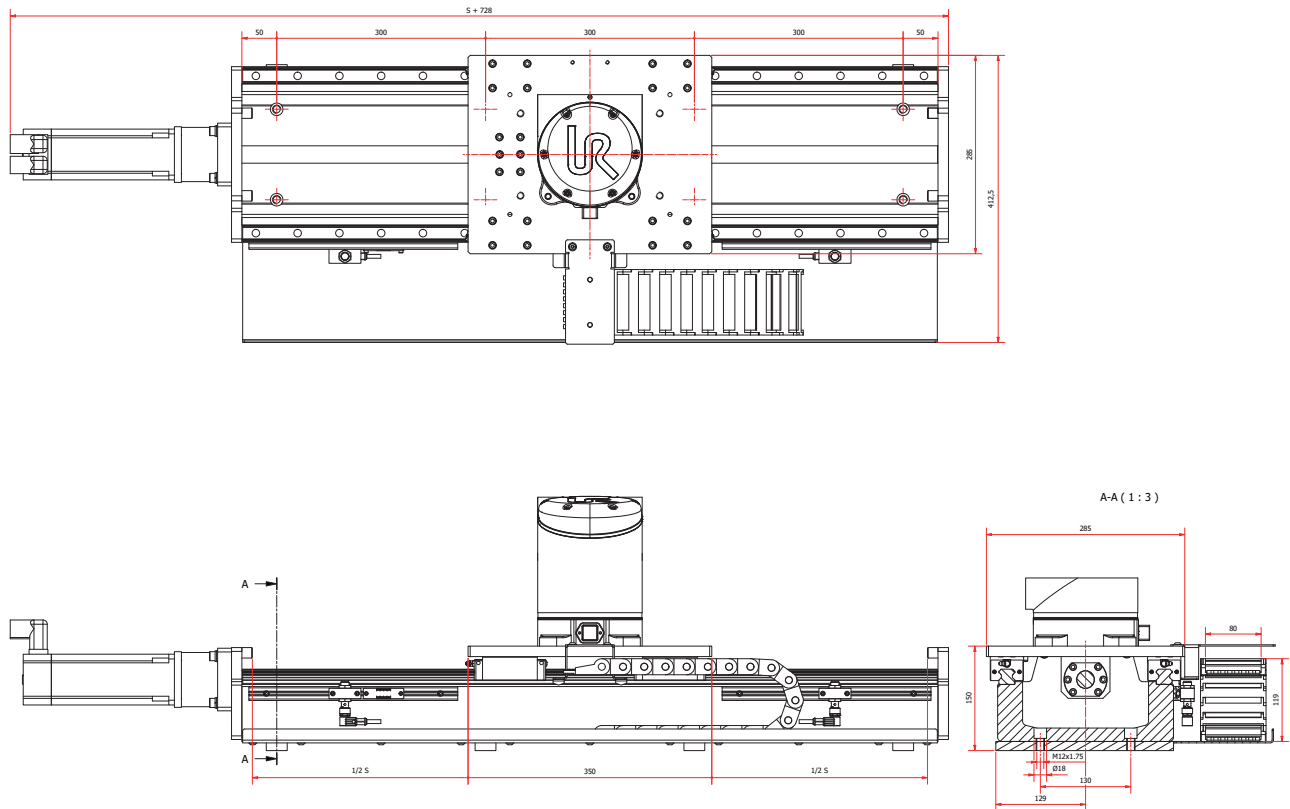
LMK10 - S - B	
Base Weight	65 kg
Weight per 100mm stroke	8.7 kg

LMK16 - ALU - BS



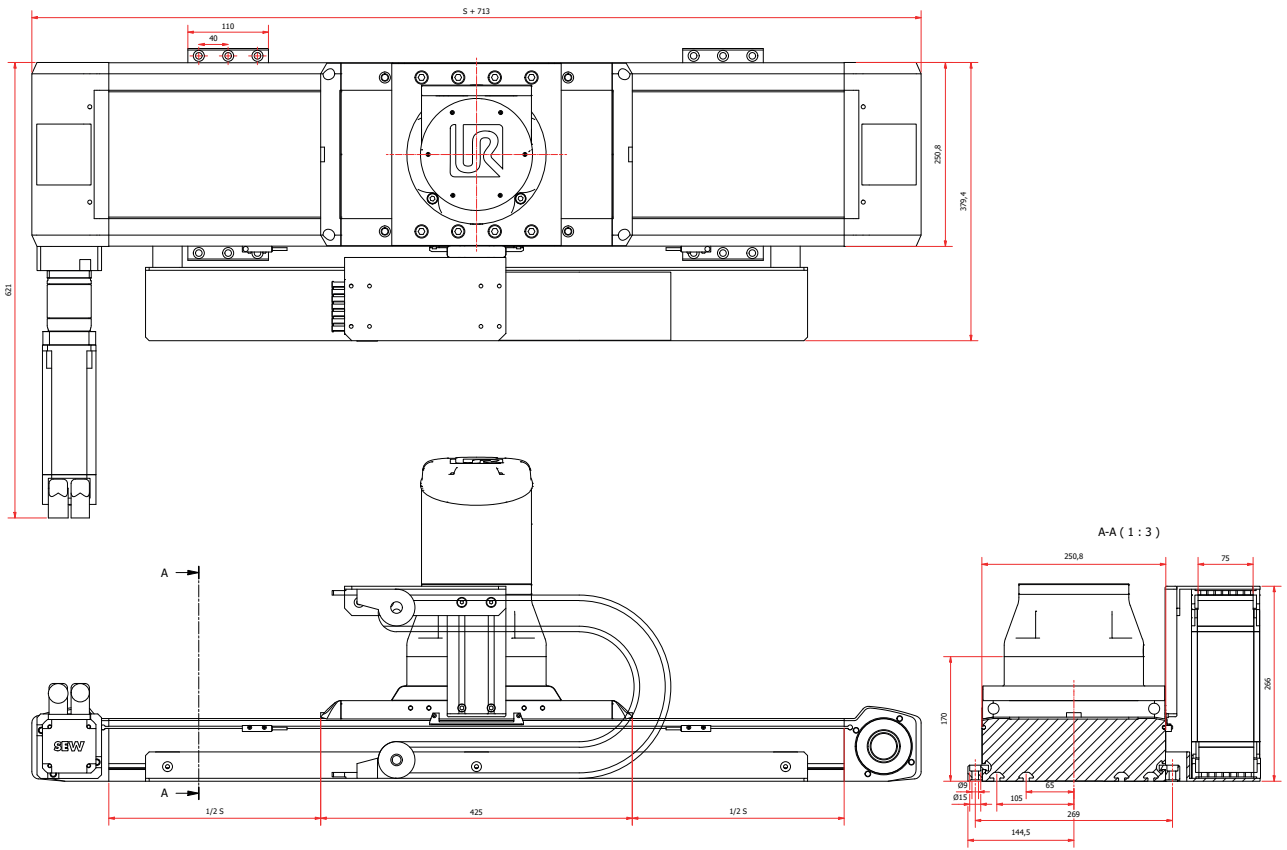
LMK16 - ALU - BS	
Base Weight	34.5 kg
Weight per 100mm stroke	2.8 kg

LMK16 - S - BS



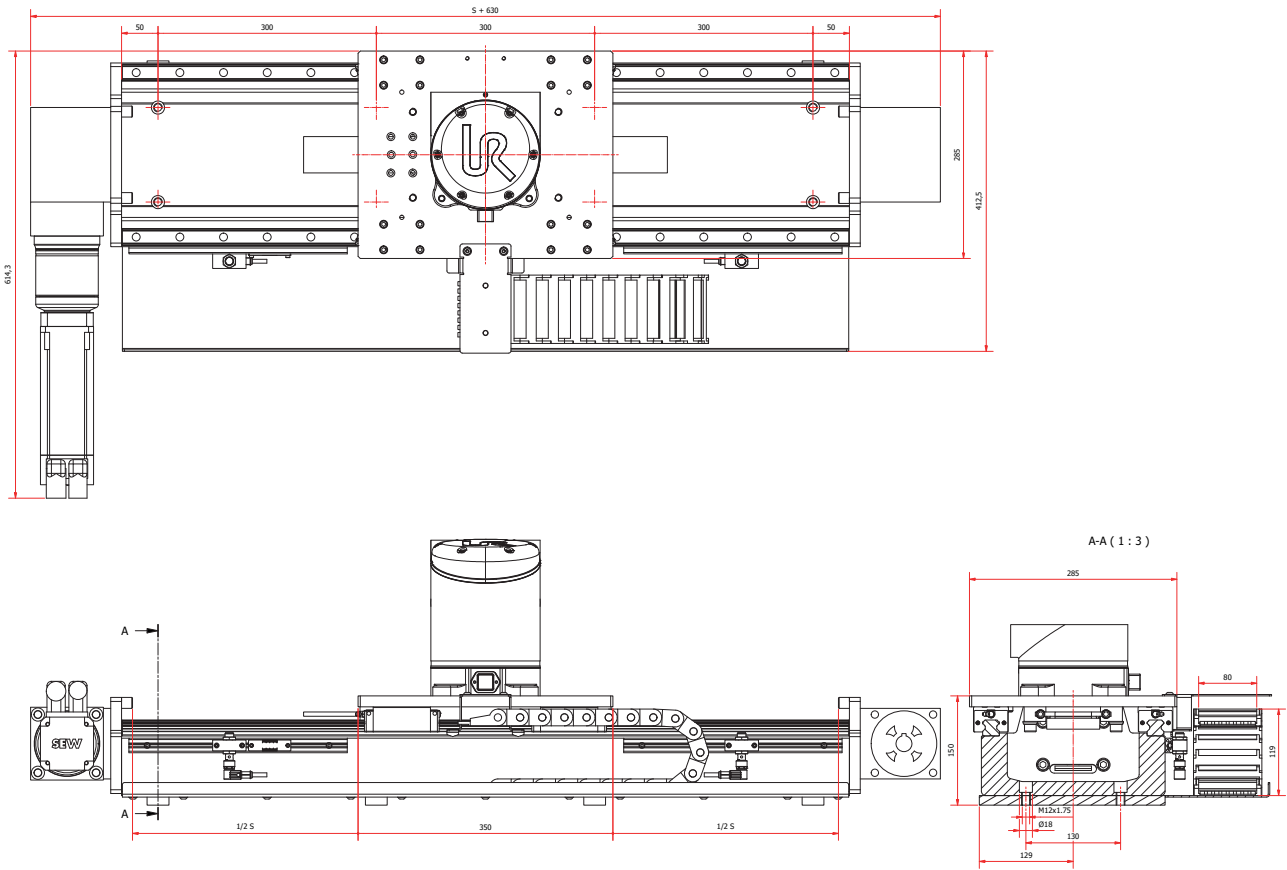
LMK16 - S - BS	
Base Weight	61 kg
Weight per 100mm stroke	9.1 kg

LMK16 - ALU - B



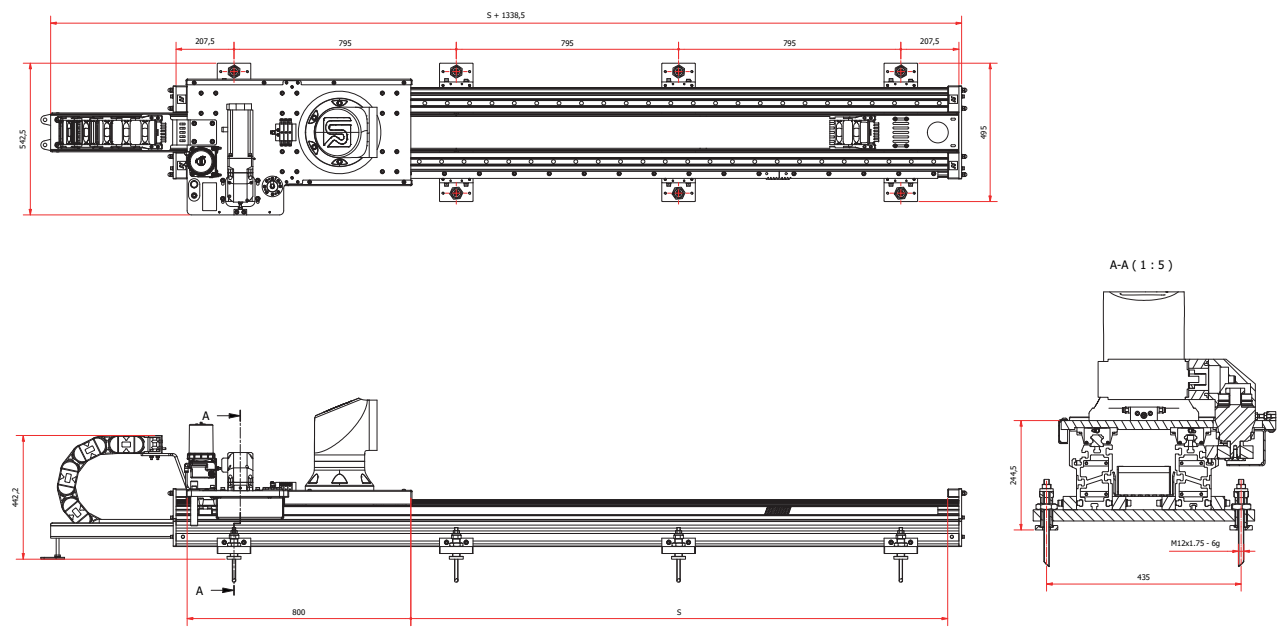
LMK16 - ALU - B	
Base Weight	38.1 kg
Weight per 100mm stroke	2.3 kg

LMK16 - S - B



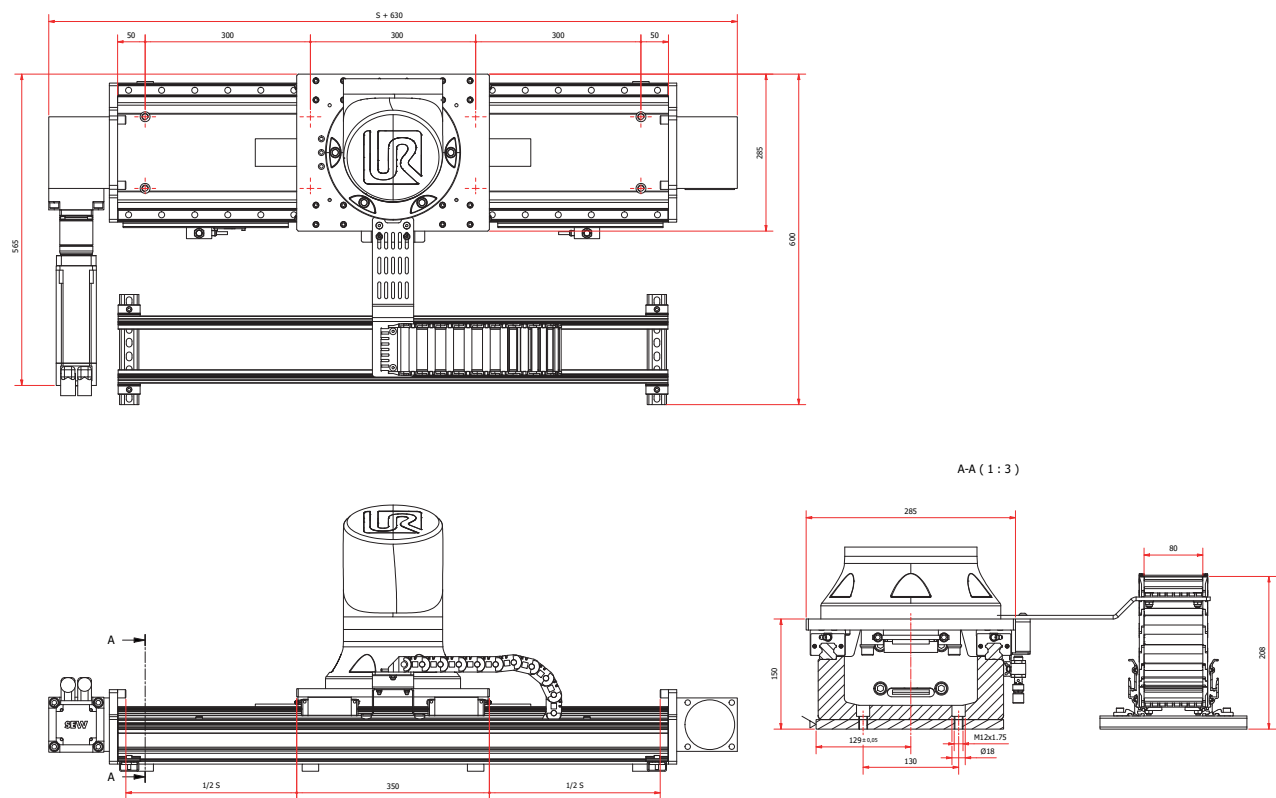
LMK16 - S - B	
Base Weight	65 kg
Weight per 100mm stroke	8.7 kg

LMK20 - ALU - RP



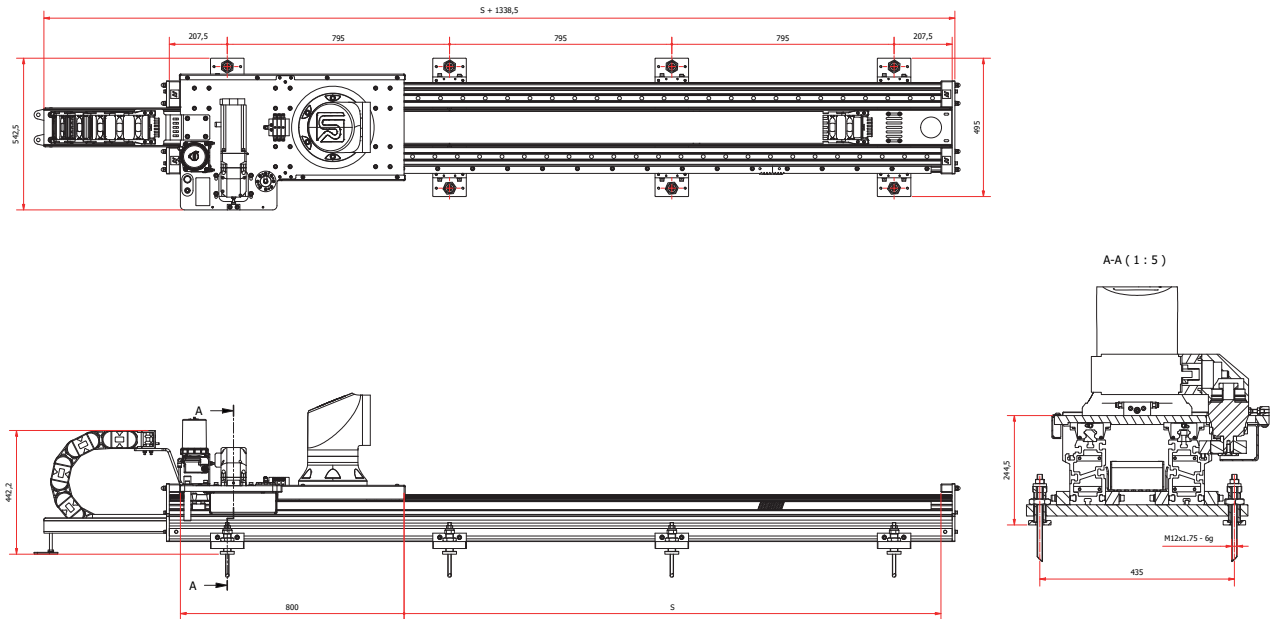
LMK20 - ALU - RP	
Base Weight	135 kg
Weight per 100mm stroke	8 kg

LMK20 - S - B



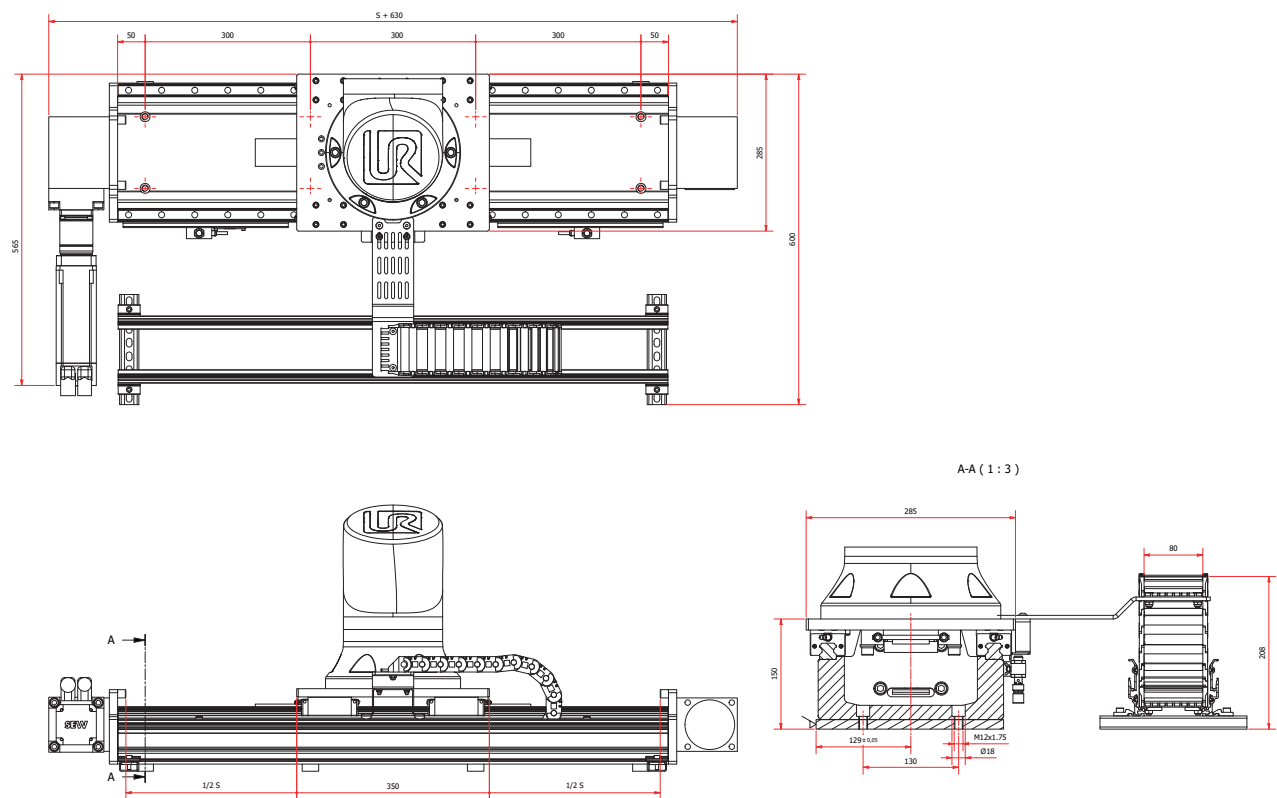
LMK20 - S - B	
Base Weight	65 kg
Weight per 100mm stroke	8.7 kg

LMK30 - ALU - RP

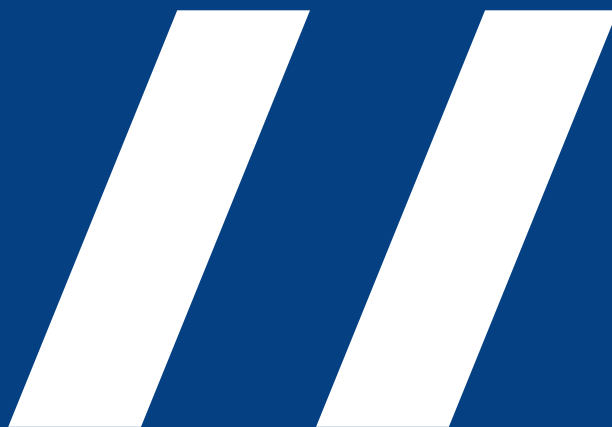


LMK30 - ALU - RP	
Base Weight	135 kg
Weight per 100mm stroke	8 kg

LMK30 - S - B



LMK30 - S - B	
Base Weight	65 kg
Weight per 100mm stroke	8.7 kg



CONTACT

THOR PARK 8300
3600 GENK (B)

M +32(0)474 81 18 73
E INFO@COBOTRACKS.COM

VAT BE0727.999.648