

Linear axis for collaborative robots SLIDEKIT 2.0



Heritage of innovation for technology leadership

Ewellix is a global innovator and manufacturer of linear motion and actuation solutions. Today, our state-of-the-art linear solutions are designed to increase machine performance, maximise uptime, reduce maintenance, improve safety and save energy.

Technology leadership

Our journey began **over 50 years** ago as part of the SKF Group, and our history with SKF provided us with the **expertise to continuously develop new technologies** and use them to create cutting edge products that offer our customers a competitive advantage.

In 2019, we became independent from SKF and changed our name to Ewellix. **We are proud of our heritage.** This gives us a unique foundation on which to build an agile business with engineering excellence and innovation as our core strengths.

Global presence and local support

With our **global presence**, we are uniquely positioned to deliver **standard components and custom-engineered solutions**, with full technical and applications support around the world. The long lasting relationships with our distributor partners allow us to support customers in a variety of different industries. At Ewellix, we don't just provide products; **we engineer integrated solutions** that help customers realise their ambitions.



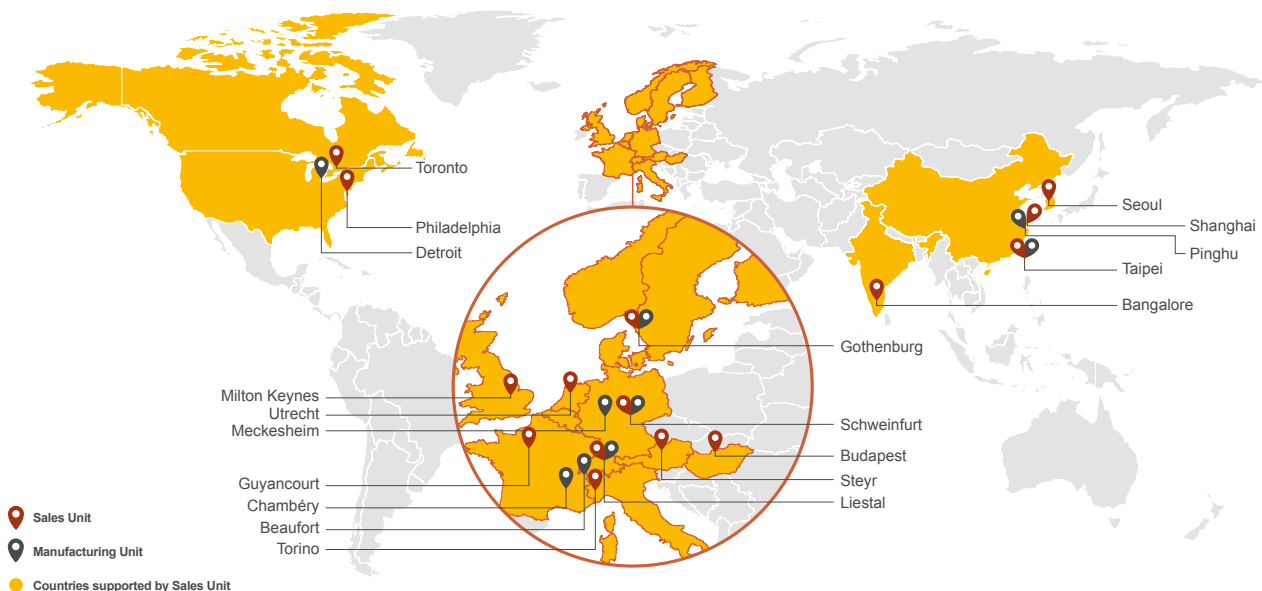
1 400 employees



16 sales units

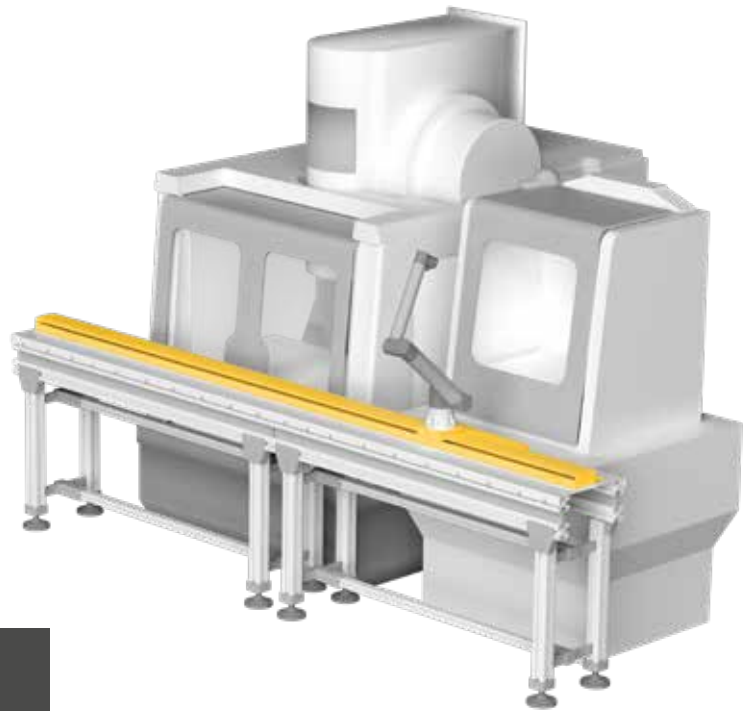


9 factories



Benefits for handling

Concerning handling applications, it's often required to cover long distances between machines, like machined parts loading and unloading on CNC centers.



This repetitive operation, usually done manually, is time consuming and with low added value for the operators.

By using a cobot on the Ewellix linear module, it is possible to easily automate this handling process, increasing its productivity and reliability.

Linear modules from Ewellix provide fast and precise movements to effectively position the robot along a horizontal axis.

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Operating range extension

By adding a linear module as a dynamic base for the robot, it is possible to extend the handling operating area of the robot, increasing the productivity of a series of machines working in the same production flow.

Plug-and-play solution

The SLIDEKIT 2.0 provides quick and fast installation, by having a standardized mechanical, electrical and software

interface with Universal Robots. In few steps, the system is ready to be used and simply programmed in operation.

Cost savings and higher productivity

UR cobots combined with the SLIDEKIT 2.0 linear module provide a cost-effective solution to upgrade an existing assembly shop, moving from a manual handled to a fully automatized line.

Improved performances

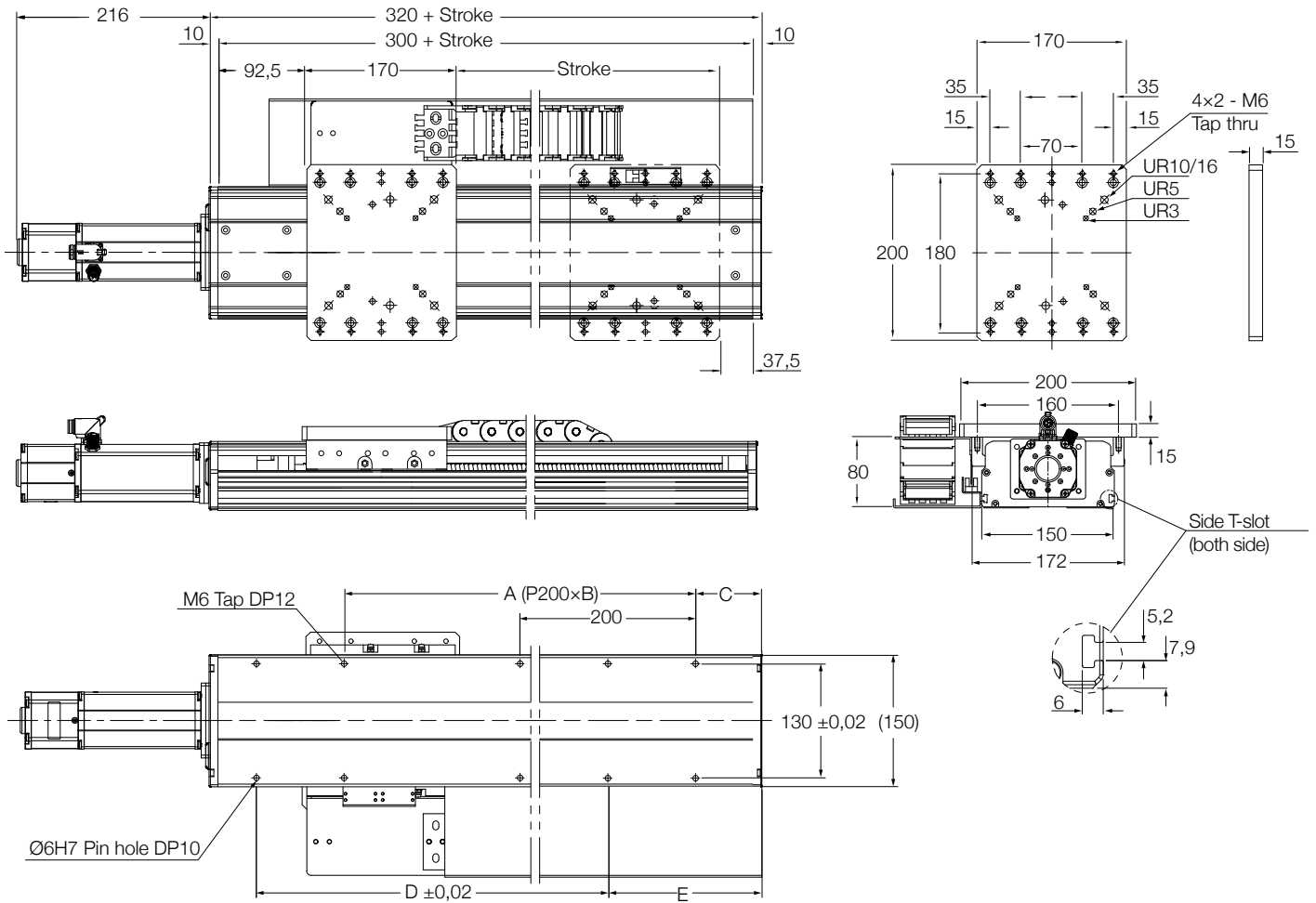
The 2.0 release of the SLIDEKIT delivers several improvements compared to the former version, like higher system reactivity and stability, lower noise in operation and optimized design for limit switches and re-lubrication points



Technical data

Designation	Unit	SLIDEKIT-UR	SLIDEKIT-00
Linear module type	-	CLSM-150	CLSM-150
Performance Data			
Max. dynamic payload	N	10 900	10 900
Max. static load capacity	N	12 100	12 100
Max. dynamic moments Mx	Nm	2 400	2 400
Max. dynamic moments Mz	Nm	1 800	1 800
Max. linear speed	mm/s	See graph page 6	See graph page 6
Duty cycle	%	100	100
Mechanical Data			
Screw type	-	Ball screw	Ball screw
Stroke range	mm	100 - 1 800	100 - 1 800
Repeatability (same direction and load)	mm	± 0.01	± 0.01
Weight @ 0 mm stroke	Kg	10	10
Δ weight per 100mm stroke	Kg	1,4	1,4
Robots compatibility	-	UR3, UR5, UR10, UR16, e-Series	Any robot
Cable management	-	Cableveyor	Cableveyor
Electrical			
Voltage/Current	V/A	115 VAC / 4.8 A 230 VAC / 2.4 A 24 DC / 20A	115 VAC / 4.8 A 230 VAC / 2.4 A 24 DC / 20A
Emergency stop	-	Connection to UR safety I/O	Connection to Robot safety I/O
Communication			
Control interface	-	URCaps plugin compatible with CB3.1 / Polyscope 3.6 or higher	Digital I/O control, CAN interface for external software control (no software provided)
Positioning, repeatability	mm	± 0.1	± 0.1
Accessible positions	-	any	14 memory positions programmable
Feedback	-	Position feedback via URCaps	Position feedback via output signal
Soft start and stop	-	Implemented for smooth operation	Implemented for smooth operation
Software control	-	URcap	CAN interface for external software control (no software provided / The software can be downloaded from the Dunker motor website)
Environment			
Type of protection	IP	Controll box = IP64 SlideKit =N/A	Controll box = IP64 SlideKit =N/A
Ambient temperature	°C	0 to +50	0 to +50
Max. humidity	%	95	95

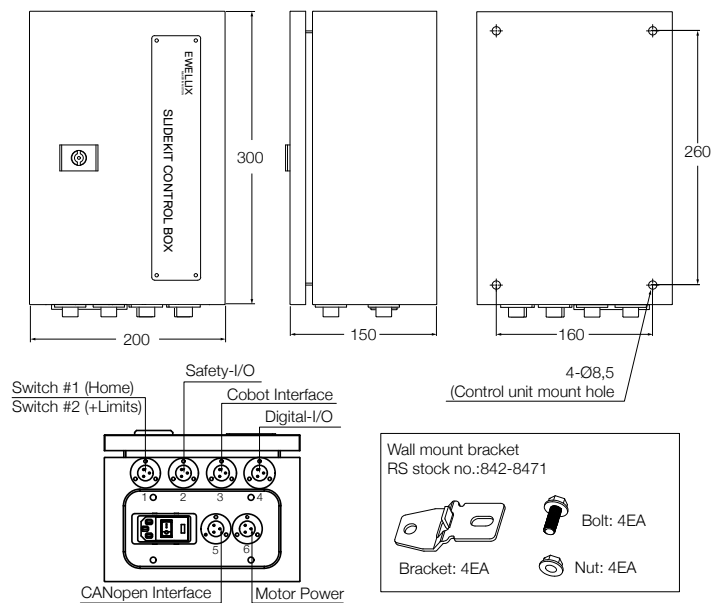
Dimensional drawing



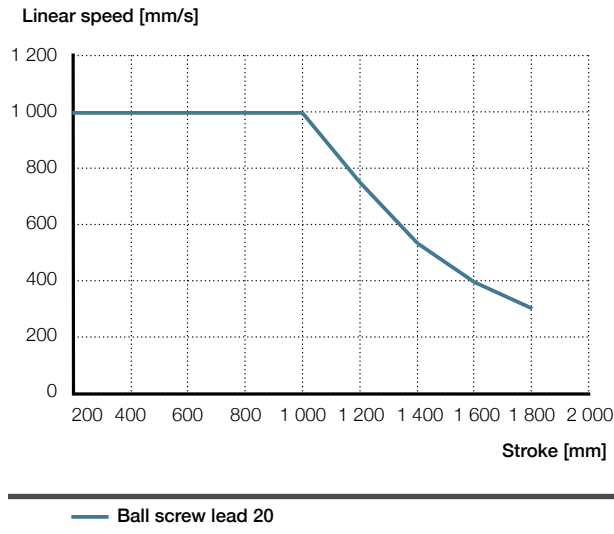
Stroke	A	B	C	D	E
mm					
1	100	200	1	75	200
2	200	400	2	25	200
3	300	400	2	75	400
4	400	600	3	25	400
5	500	600	3	75	600
6	600	800	4	25	600
7	700	800	4	75	800
8	800	1 000	5	25	800
9	900	1 000	5	75	1 000
10	1 000	1 200	6	25	1 200
11	1 100	1 200	6	75	1 200
12	1 200	1 400	7	25	1 400
13	1 300	1 400	7	75	1 400
14	1 400	1 600	8	25	1 600
15	1 500	1 600	8	75	1 600
16	1 600	1 800	9	25	1 800
17	1 700	1 800	9	75	1 800
18	1 800	2 000	10	25	1 800

 Standard stroke

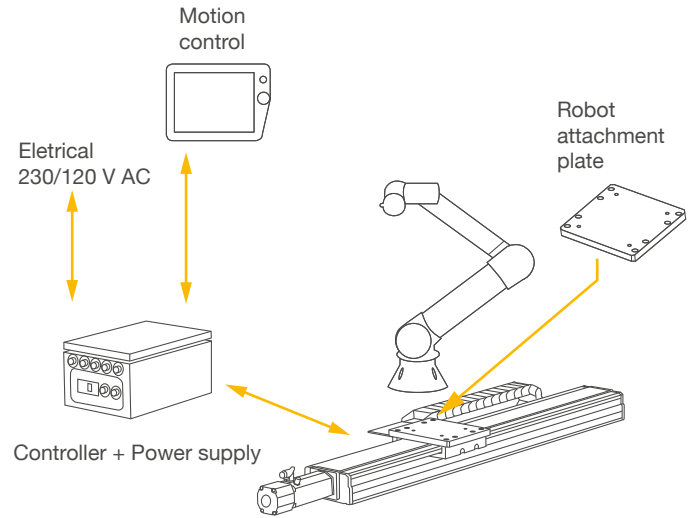
Control unit



Performance diagram



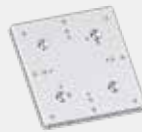
Connection diagram



SLIDEKIT 2.0 contains



**Teach pendant not included*



*Robot attachment plate
(not included in SLIDEKIT-00)*



Cableveyor



*UR software plugin
(not included in SLIDEKIT-00)*



CLSM Linear module



Control unit



CAN



D-SUB 9Pin



Digital IO



Motor Power



Proximity Switch

Software functionality

The URcaps software for the SLIDEKIT 2.0 allows easy positioning access directly within the UR Polyscope environment.

Setup

In the installation tab, the user can manually move the linear axis in both directions and define multiple user specific positions, that are accessible in programming mode.

Motion programming

Within the UR motion program, the SLIDEKIT 2.0 axis is easily integrated through a URcaps command module. Simply insert this element from the structure tab at the desired position of the program. Additionally, reading and setting positions is possible through a script function.

Safety elements

The SLIDEKIT 2.0 has a range of safety elements built in to allow its integration into a robot application.

Software updates

To download the latest software update please check on ewelix.com/support/library/software_updates.



SLIDEKIT 2.0 software functionality

NOTE:

The SLIDEKIT 2.0 is not a functional safety system compliant with EN ISO 13489-1 or IEC 62061. To integrate the SLIDEKIT 2.0 into a functional safety chain, external safety devices have to be integrated into the overall system.

Ordering key

SLIDEKIT - [] - B20E - [] - [] - [] - SCM - 000

Robot
 00 Any robot (no software, no robot interface plate)
 UR Universal Robot

Module options

B Ball screw
 20 Lead
 E Cover Alumium and External motor attachment

Stroke
 100 ... 1 800 mm
 1 000 Preferred range
 1 800 Preferred range

Electrical options
 11 120 VAC / US cable
 22 230 VAC / EU cable
 23 230 VAC / CN cable
 24 230 VAC / UK cable
 25 230 VAC / CH cable

Accessories options
 S Sensor
 C Cableveyor
 M Standard hole patten

Customized options
 - Option 1
 - Option 2
 - Option 3



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