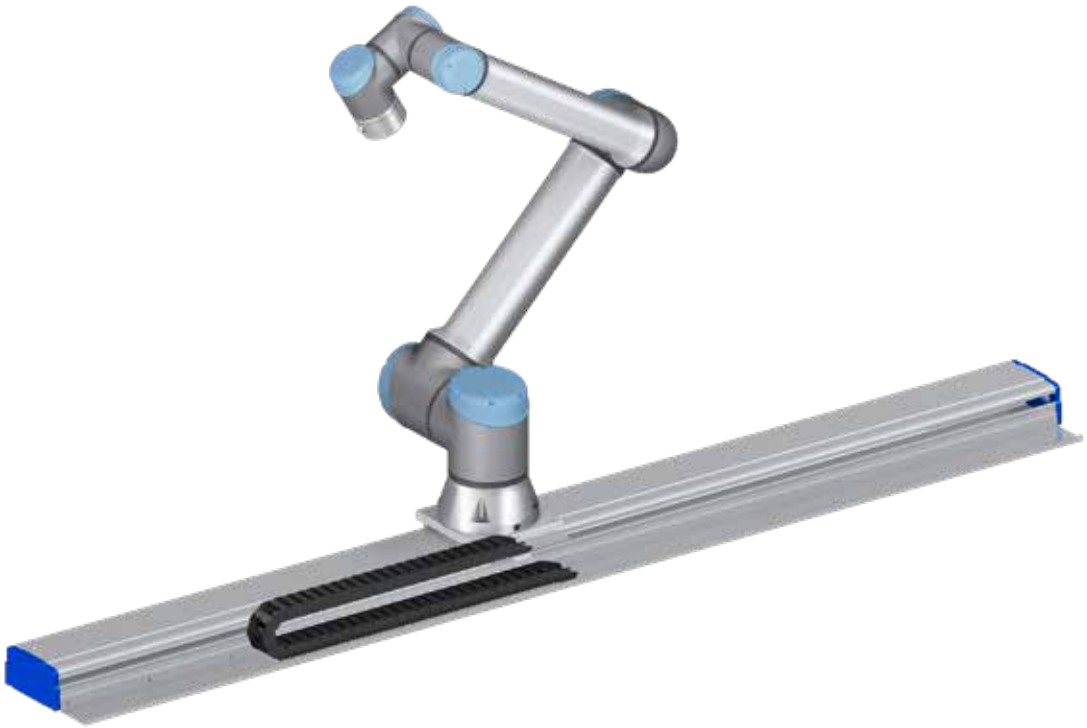
EWELLIX

MAKERS IN MOTION

Linear axis for collaborative robots SLIDEKIT



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.

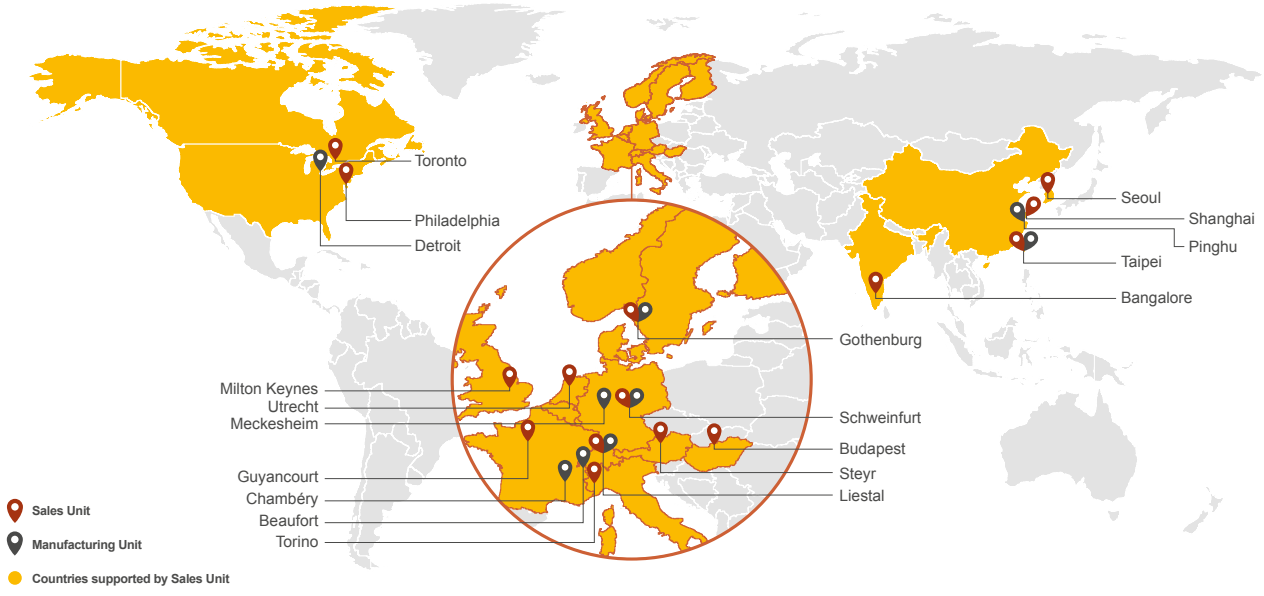
Global presence and local support

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

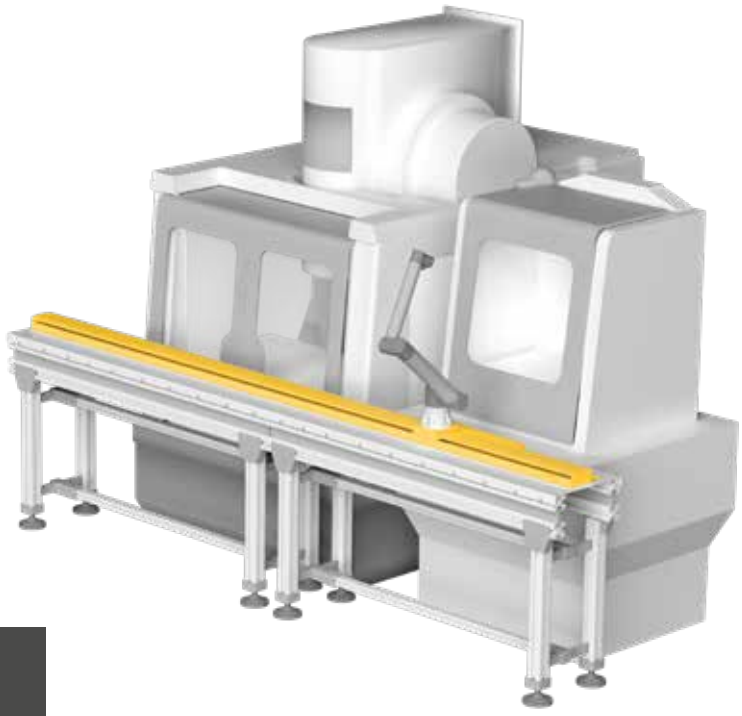
16 sales units

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 efectively position the robot along a horizontal axis.

Linear axis for collaborative robots SLIDEKIT

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.

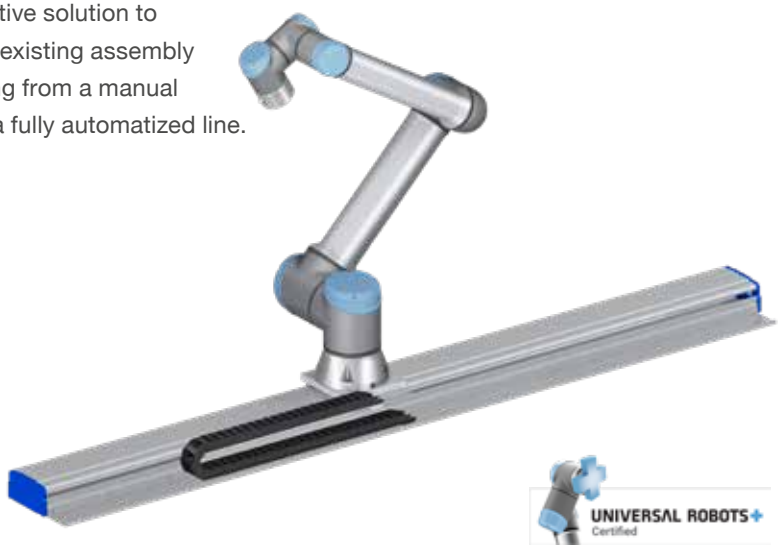
Plug-and-play solution

The SLIDEKIT 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

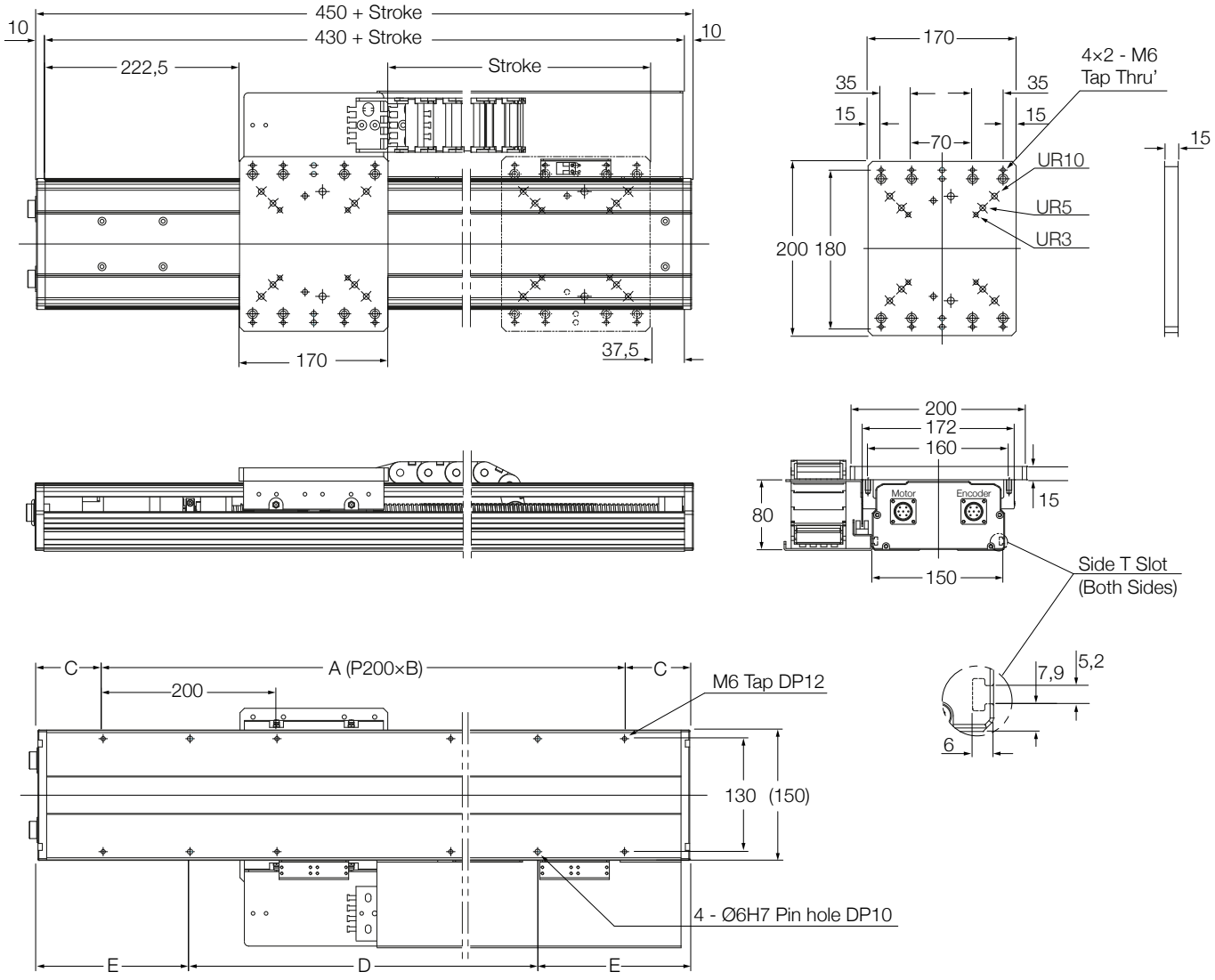
UR cobots combined with the SLIDEKIT linear module provide a cost-effective solution to upgrade an existing assembly shop, moving from a manual handled to a fully automatized line.



Technical data

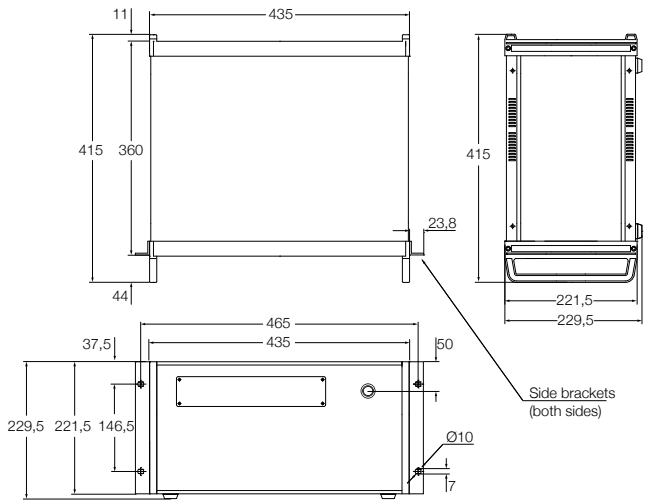
Designation	Symbol	Unit	SLIDEKIT-UR
Performance Data			
Max. dynamic load capacity	C_{max}	N	21.000
Max. static load capacity	C_{0max}	N	49.100
Max. dynamic moments Mx	Mxc_{max}	Nm	2.400
Max. dynamic moments Mz	Mzc_{max}	Nm	1.800
Max. input torque	T_{max}	Nm	10
Max. linear speed	V_{max}	mm/s	Reference of Graph
Max. rotational speed	n_{max}	1/min	3.000
Max. acceleration	a_{max}	m/s^2	10
Duty cycle	D_{unit}	%	100
Mechanical Data			
Profile rail guide	-	-	Size 20
Screw type	-	-	Ball screw
Screw diameter	d_{screw}	mm	20
Screw lead	P_{screw}	mm	05 or 10 or 20
Lead accuracy	-	-	G7
Stroke	s	mm	50...1,800
Repeatability(same direction and load)	-	mm	± 0.01
Weight @ 0 mm stroke	m_{lu}	kg	10
Δ weight per 100mm stroke	Δm	kg	1,4
Base option	-	-	Aluminum profile
Cover option	-	-	Aluminum profile
Environment			
Ambient temperature	$T_{ambient}$	°C	0 to +50
Max. humidity	ϕ	%	95

Dimensional drawing



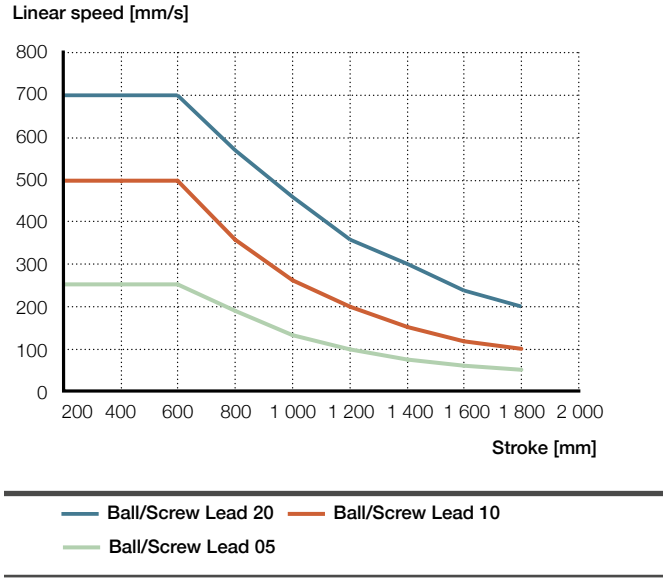
	Stroke mm	A	B	C	D	E
1	100	400	2	75	200	175
2	200	600	3	25	400	125
3	300	600	3	75	400	175
4	400	800	4	25	600	125
5	500	800	4	75	600	175
6	600	1 000	5	25	800	125
7	700	1 000	5	75	800	175
8	800	1 200	6	25	1 000	125
9	900	1 200	6	75	1 000	175
10	1 000	1 400	7	25	1 200	125
11	1 100	1 400	7	75	1 200	175
12	1 200	1 600	8	25	1 400	125
13	1 300	1 600	8	75	1 400	175
14	1 400	1 800	9	25	1 600	125
15	1 500	1 800	9	75	1 600	175
16	1 600	2 000	10	25	1 800	125
17	1 700	2 000	10	75	1 800	175
18	1 800	2 200	11	25	2 000	125

Control unit

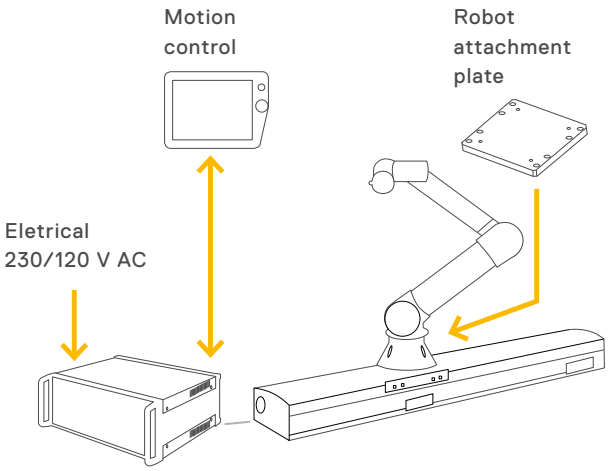


NOTE:
Side brackets for rack mounting are provided with the control box but are not pre-mounted

Performance diagram

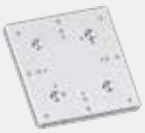


Connection diagram



SLIDEKIT contains

*Teach pendant not included



Robot attachment plate

Cableveyor

UR software plugin

CLSM Linear module

Control unit

Servomotor

Cables

Software functionality

The URCaps software for the SLIDEKIT 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

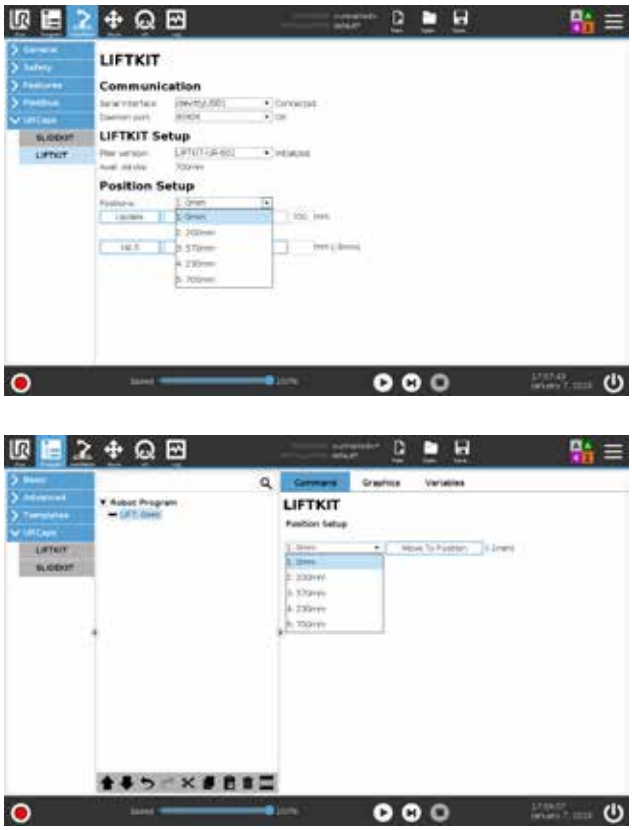
Within the UR motion program, the SLIDEKIT axis is easily integrated through a URCaps command module. Simply insert this element from the structure tab at the desired position of the program. Additionally, reading and setting positions is possible through a script function.

Safety elements

The SLIDEKIT 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 ewellix.com/support/library/software updates.



SLIDEKIT software functionality

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

Ordering key

SLIDEKIT - UR - [ ][ ][ ][ ] - 0[ ][ ][ ] - [ ][ ] - [ ][ ]0

Robot
UR Universal Robots

Module options
B Ball screw

05 Lead
10 Lead
20 Lead

A Cover Aluminum
P Cover PU-Strip
S Cover Steel

Stroke
100 ... 1 800 mm

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
0 No limit switches
S Limit switches

0 No cableveyor
C Cableveyor

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