

Linear axis for collaborative robots SLIDEKIT

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 SKF Motion Technologies linear module, it is possible to easily automate this handling process, increasing its productivity and reliability.

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

Operating range extension

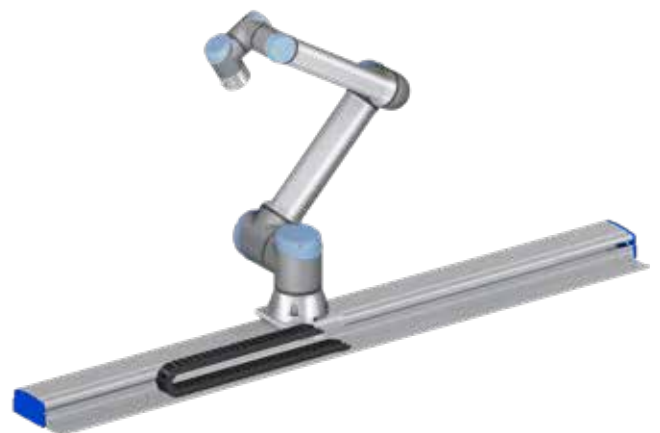
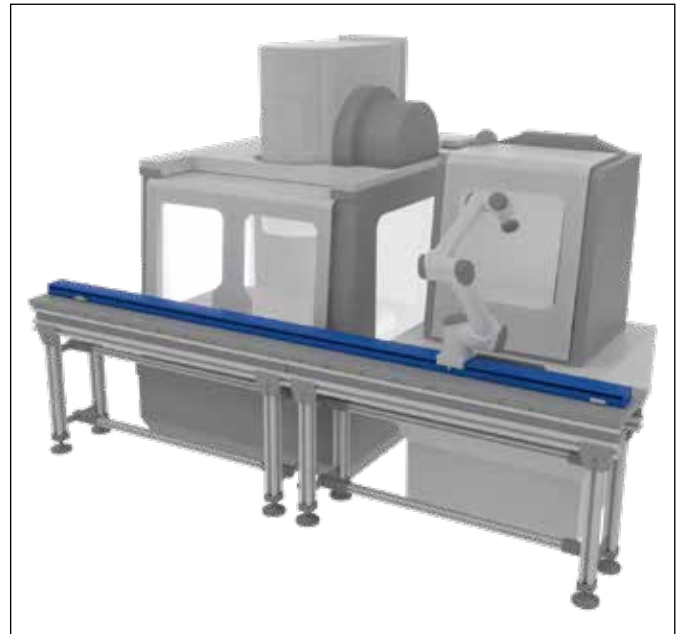
By adding a linear module as a dynamic base for the robot, it is possible to extend the handling operating area of the robot, increasing the productivity of a series of machines working in the same production flow.

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.



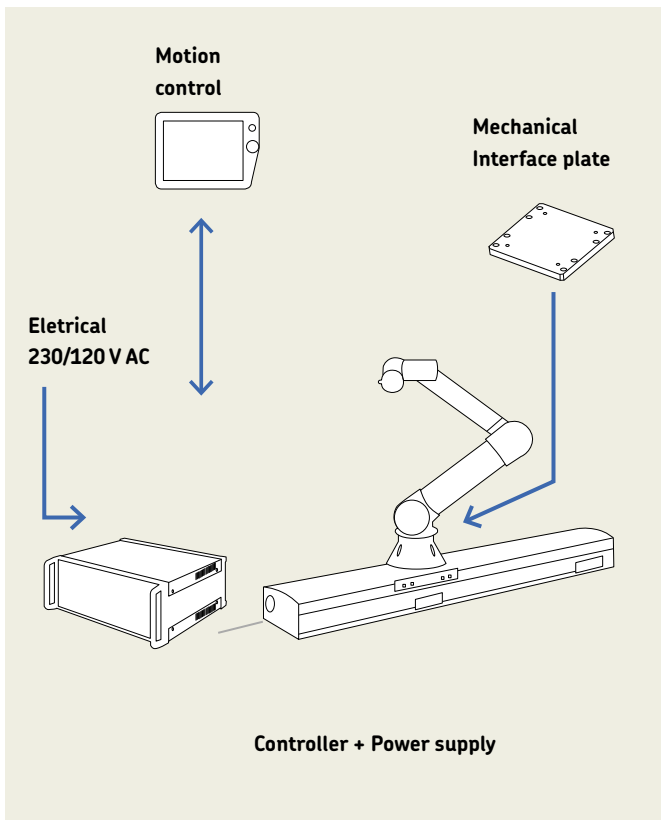
Technical data

	Unit	SLIDEKIT-UR
Performance data		
Max. dynamic load	N	21 000
Max. dynamic moments	Nm	2 400
Stroke	mm	100...1 800
Max. speed	mm/s	1 200
Duty cycle	%	100
Screw lead	mm	05 or 10 or 20
Repeatability	mm	0,01
Ambient temperature	°C	0 to +50
Max. humidity	%	95
Electrical data		
Power input	V AC / A	120 to 240 / 6,5 to 3,3
Software functionality		
Programmable positions	-	4
Access to position via UR Caps	-	yes
Speed adjustable	-	yes
Universal Robots controller compatibility	-	CB 3.1 / Polyscope 3.6 or higher

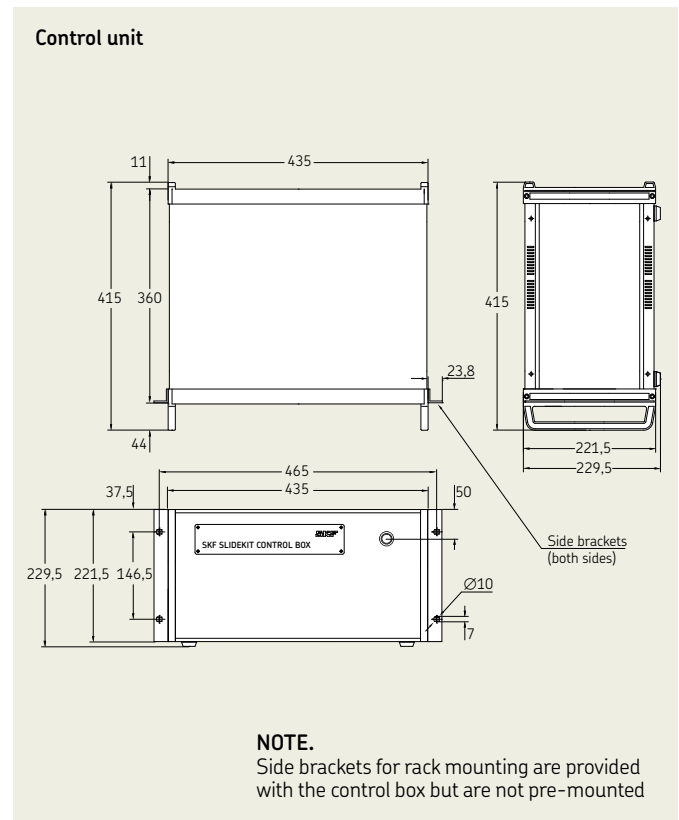
SLIDEKIT contains



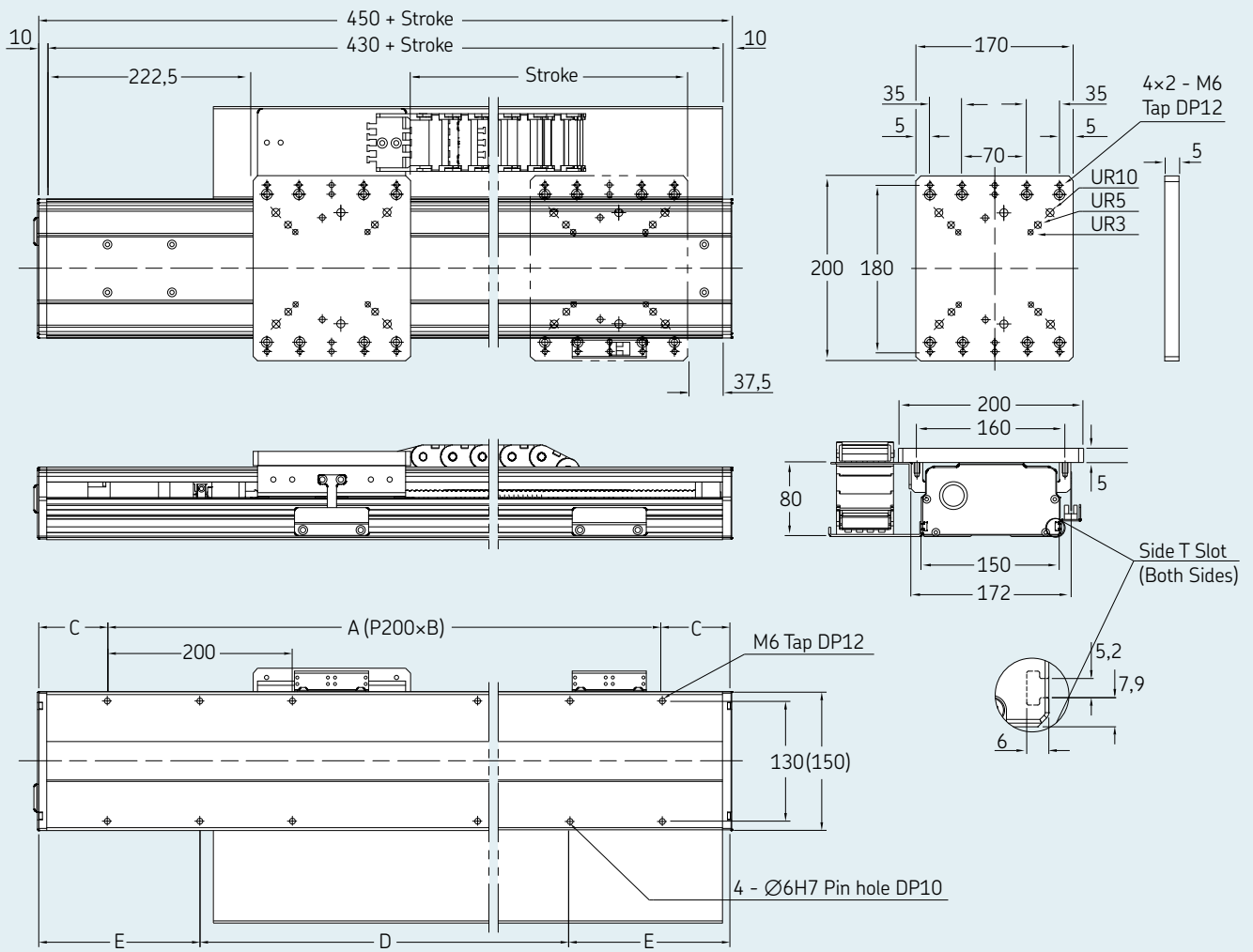
Connection diagram



Dimension drawing



Dimensional drawing



	Stroke	A	B	C	D	E
	mm					
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	1000	5	25	800	125
7	700	1000	5	75	800	175
8	800	1200	6	25	1000	125
9	900	1200	6	75	1000	175
10	1000	1400	7	25	1200	125
11	1100	1400	7	75	1200	175
12	1200	1600	8	25	1400	125
13	1300	1600	8	75	1400	175
14	1400	1800	9	25	1600	125
15	1500	1800	9	75	1600	175
16	1600	2000	10	25	1800	125
17	1700	2000	10	75	1800	175
18	1800	2200	11	25	2000	125

Software functionality

The URcaps software for the SLIDEKIT allows easy positioning access directly within the UR Polscope 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

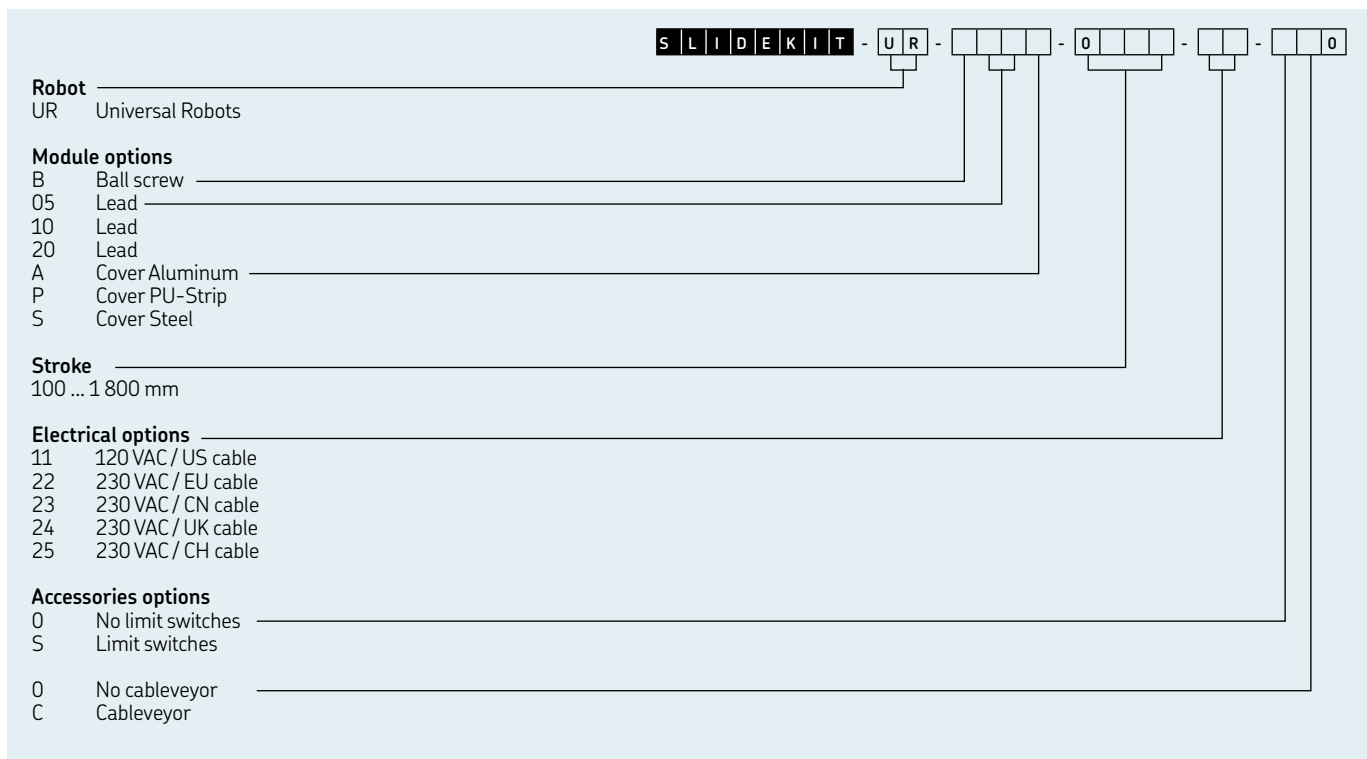
The SLIDEKIT has a range of safety elements built in to allow its integration into a robot application.

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



skfmotiontechnologies.com

© SKF is registered trademark of the SKF Group.

Universal Robots is a registered trademark of Universal Robots A/S.

© SKF Group 2019

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB MT/P8 17997/2 EN · March 2019