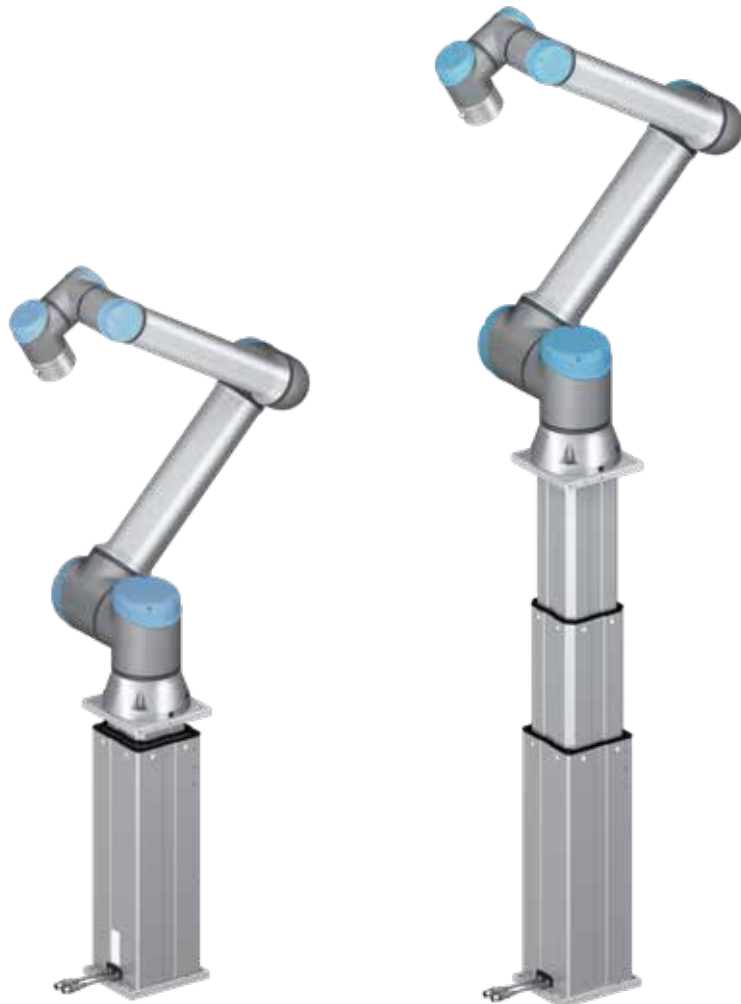


Linear axis for collaborative robots LIFTKIT



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.



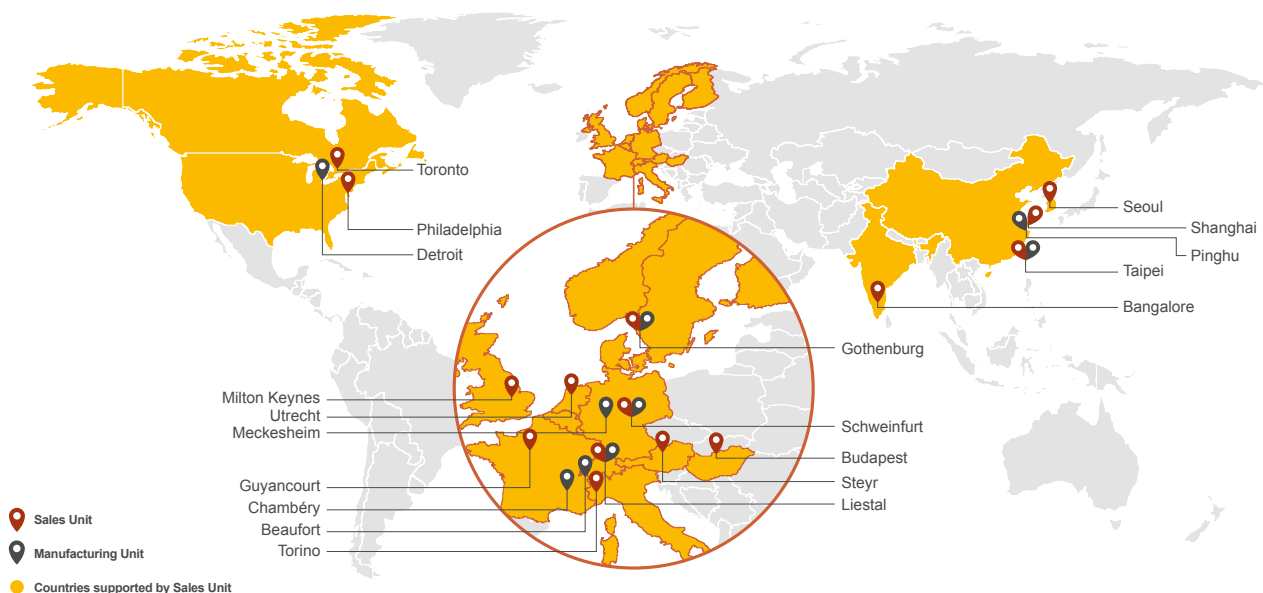
1 400 employees



16 sales units



9 factories



Benefits for handling

Fully automated pick and place solutions are becoming a new standard with packaging stations.



The main challenge for packaging system manufacturers is to design multi-axis systems in a simple and cost effective way.

A typical application that benefits from an added linear axis is palletizing of boxes. Stacking on pallets can start at floor level, but the stack can be up to 2 m high. A standard collaborative robot does not have such a large vertical working range.

Ewellix provides effective solutions to complete vertical adjustment in a smart way, providing a ready to mount additional linear axis to the robot. While stacking a pallet, the base of the robot can be lifted or lowered to work at a more optimal position.

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Operating range extension

- Vertical lifting of the cobot by up to 900 mm (1.400 mm on request) with compact retracted height
- Robust pillar design for industrial use, vibration free motion and virtually maintenance free

Cost savings and higher productivity

Cobots combined with Ewellix LIFTKIT provide a cost-effective solution to upgrade an existing assembly shop, moving from a manual handled to a fully automatized line.



Plug-and-play solution

- Hardware interface compatible with UR3, UR5, UR10 and UR16 robots
- Universal Robots+ certified product
- Software control integrated with UR controller (URCaps) for easy motion programming
- Basic control option with digital I/O for all cobot manufacturers

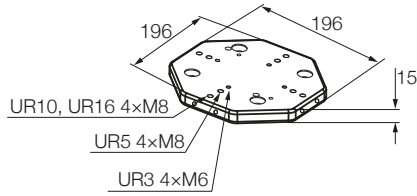
Technical data

	Unit	LIFTKIT-UR-601	LIFTKIT-00-601
Pillar type	-	TLT	TLT
Mechanical			
Push load	N	1 500	1 500
Pull load	N	0	0
Speed	mm/s	80	80
Stroke	mm	500 – 900	500 – 900
Retracted length (software controlled)	mm	Stroke/2 + 275	Stroke/2 + 275
Height of attachment plates	mm	2x15	1x15
Cross section	mm	163x163	163x163
Type of protection	IP	40	40
Ambient temperature	°C	+10 to +40	+10 to +40
Robots compatibility	-	UR3, UR5, UR10, UR16, e-Series	Any robot
Cable management	-	Threads on pillar and interface plate to attach cable management	Threads on pillar to attach cable management
Electrical			
Voltage/Current	V/A	120 AC / 6.5 A 230 AC / 3,3 A 24 DC / 10 A	120 AC / 6.5 A 230 AC / 3,3 A 24 DC / 10 A
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, RS232 interface for external software control (no software provided)
Positioning, repeatability	mm	± 1	± 1
Accessible positions	-	any	2 memory positions programmable
Feedback	-	Position feedback via URCaps	Position feedback for memory positions via output signal
Soft start and stop	-	Implemented for smooth operation	Implemented for smooth operation
Software control	-	URcap	RS232 interface for external software control (no control software provided)

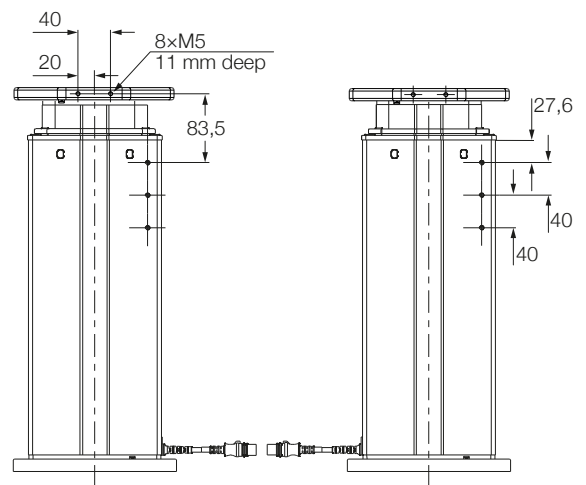
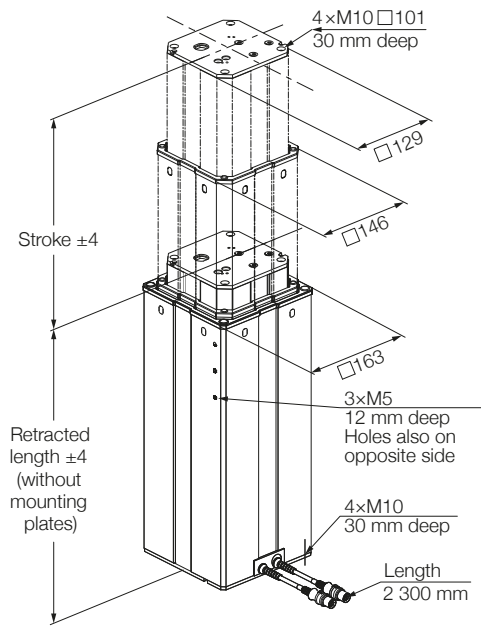
Dimensional drawing

TLT telescopic pillar

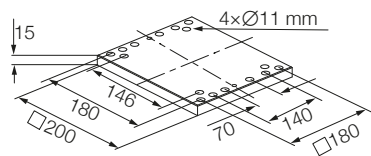
Robot attachment plate



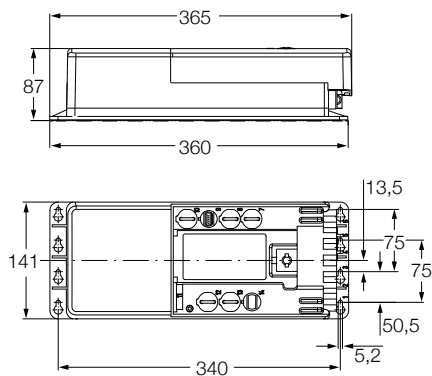
TLT Pillar



Bottom fixation plate

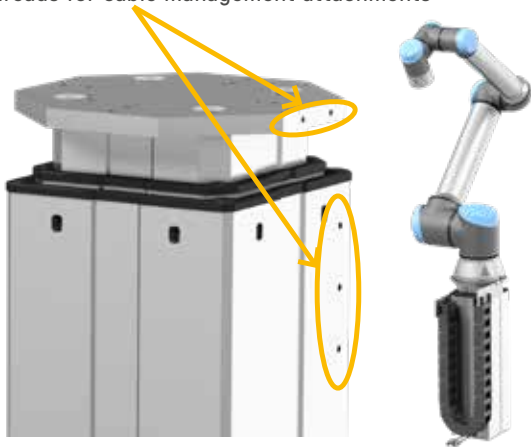


Control unit

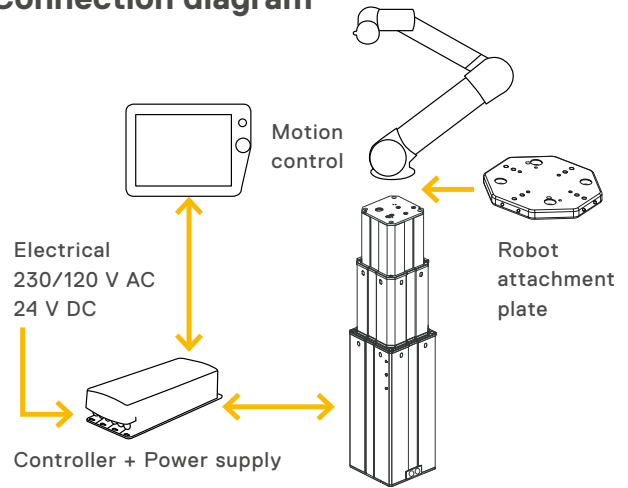


Cable management

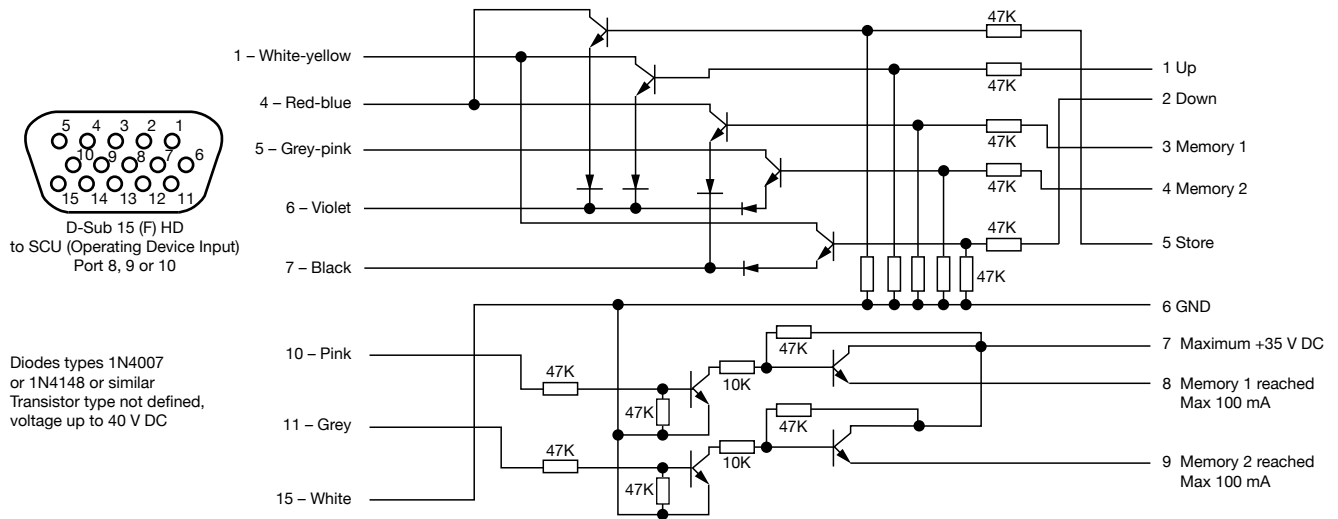
Threads for cable management attachments



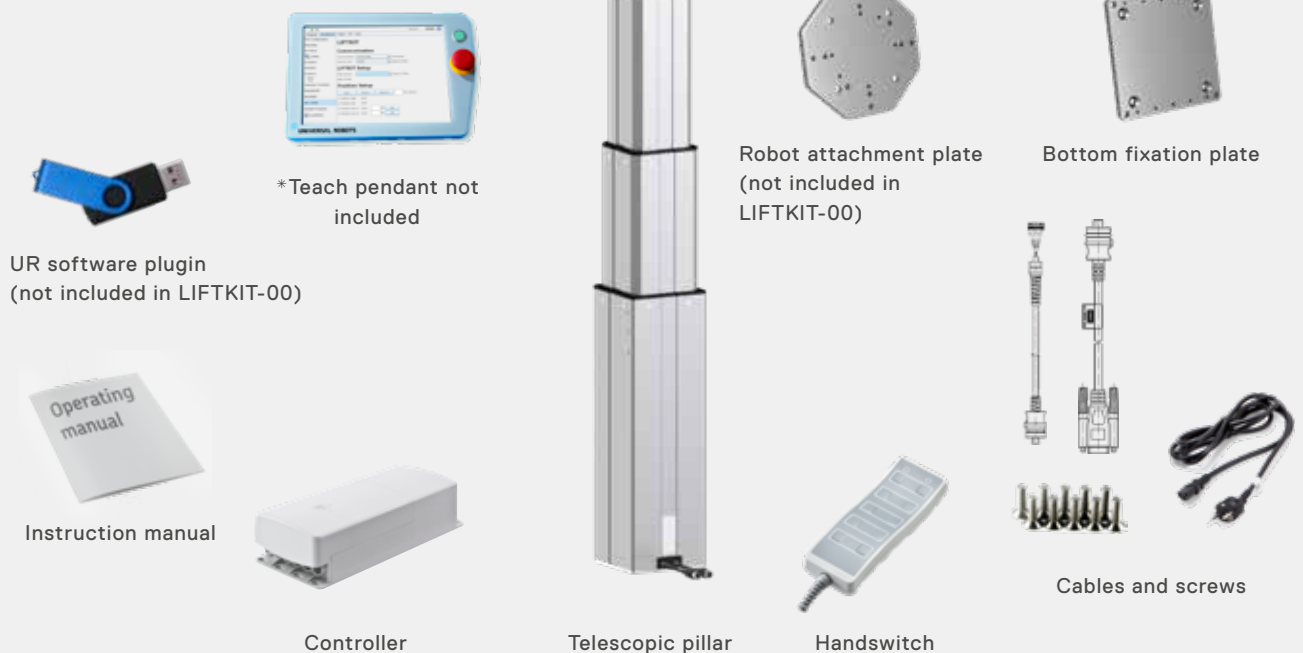
Connection diagram



Example of LIFTKIT-00 interface board to robot PLC (not included)



LIFTKIT contains



Software functionality

The URCaps software for the LIFTKIT 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 LIFTKIT 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 LIFTKIT 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.

NOTE:

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



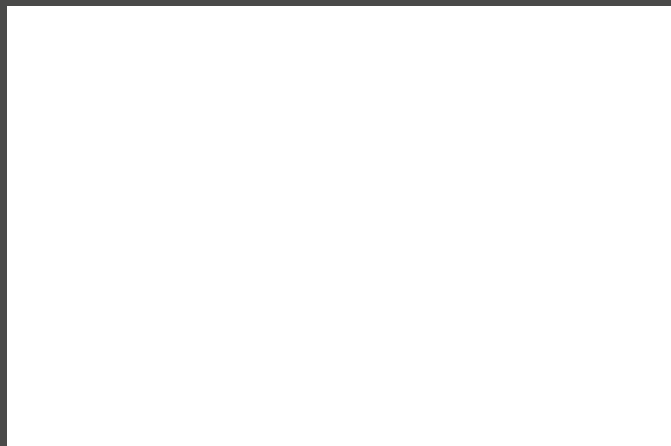
LIFTKIT software functionality

Ordering key



Robot	_____
00	Any robot (no software, no robot interface plate)
UR	Universal Robots
Stroke*	_____
500	mm
600	mm
700	mm
800	mm
900	mm
Electrical options	_____
00	24 V DC
11	120 V AC / US cable
22	230 V AC / EU cable
23	230 V AC / CN cable
24	230 V AC / UK cable
25	230 V AC / CH cable
Pillar type	_____
601	TLT

* longer stroke up to 1 400 mm available on request



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