

FlexLifter IRL 100 and IRL 190

Flexible lifting



The FlexLifter is a vertical lifter used to accurately raise or lower a workpiece. Alternatively, it can be added to the FlexTrack to form a Lift-and-Carry transfer system used to transfer a part down a production line. This provides the lifting and rotational function required by many material handling applications.

Robotic vertical lifting systems

High capacity, compact design, simple service and low maintenance cost – the FlexLifter can replace custom made machinery with a modulated, flexible, and standardize product!

The module design allows the lifter to be combined with a rotation unit or mounted on the FlexTrack to provide a complete range of solutions for any industry.

Typical application areas

- Material handling
- Machine tending
- Spot welding
- Arc welding
- General industry

Complete protection

The FlexLifter has an enclosed drive chain making it suitable for harsh industrial environments.

Easier installation & maintenance

The FlexLifter has been carefully engineered with installation and maintenance in mind. It includes easy access to the motor and minimal maintenance parts.

High performance

The FlexLifter has the same performance characteristics as other ABB robots with a high repeatability, ensuring the reliable positioning of even the heaviest load.

Robot based technology

The FlexLifter uses the same IRC5 robot based technology as other ABB Robots. This means that no special software or training is required. Robot programmers and maintenance personal can immediately begin to use the product with the same interface they are used to.

This also allows the lifter speed, acceleration, and stopping positions of the top plate to be programmed. This makes the lifting system smart and re-useable.

Options

The FlexLifter is a modular design and comes with several variants of different payload. There is also the possibility to add a rotation unit integrated inside the lifter to rotate the work-piece for better accessibility. The complete Lifter units can be mounted on the floor as a stand-alone unit or added on top of the FlexTrack.

Unit information			
Robot version	Lift stroke	Maximum payload	Unit weight
IRL 100	100 mm	1000 kg	310 kg
IRL 100 w/ rotation	100 mm	1000 kg	341 kg
IRL 190	190 mm	500 kg	301 kg
IRL 190 w/ rotation	190 mm	500 kg	332 kg
Rotation unit	-	500 kg	220 kg

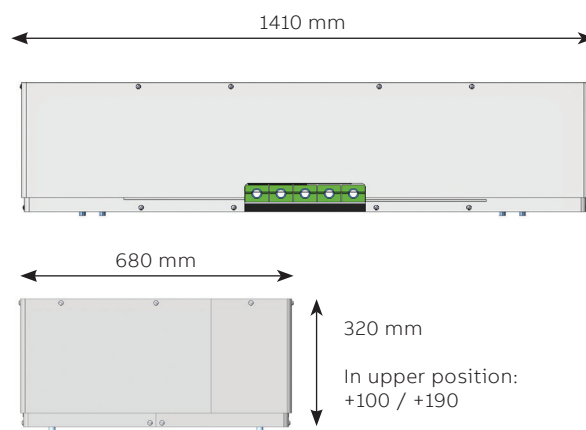
Specifications			
Robot version	Rotation degrees	Up/down time	Number of axes
IRL 100	-	5.0 sec	1
IRL 100 w/ rotation	90°	5.0 sec	2
IRL 190	-	5.0 sec	1
IRL 190 w/ rotation	90°	5.0 sec	2
Rotation unit	90°	-	1

Characteristics	
Protection	IP54
Repeatability	± 1 mm
Assembly	Floor mounted or FlexTrack carrier

Environment	
During production	+5°C to +50°C
During storage	-25°C to +55°C
Humidity	Max. 95%
Conditions	Automotive bodyshops (dust, fumes, spatters)

* Data and dimensions may be changed without notice

Technical specifications



IRL 100

