

# **plate::handler™ Robotic Arms**Industrial Solutions for Microtiter Plate Handling

The plate::handler™ robotic arms are

state-of-the-art plate handling solutions designed to increase productivity by automating life science applications. With flexible gripping technology they can virtually process any microtiter plates and tip boxes. The plate::handler robotic arms are controlled by plate::works™ software, an event-driven scheduling and control solution. The plate::handler robotic arms have a broad range of device drivers allowing them to automate stand-alone instruments, like plate readers or liquid handlers, or move microplates through a series of instruments and systems, automating entire workflows. With the plate::handler robotic arms, PerkinElmer provides turnkey automation solutions supporting our detection and liquid handling technologies.

PerkinElmer offers a variety of different plate handling solutions for different applications. To optimize your process workflow, PerkinElmer's experts can help you determine which plate::handler robotic arm offers the best combination of speed, precision, reach, and random access or plate stacking options for your application. The three solutions available are the plate::handler industrial arm series, the plate::handler Flex collaborative arm series and the Twister III plate loader.

### **FEATURES:**

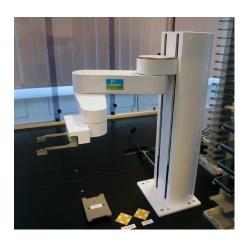
- Precision plate handling robotics improves reliability
- Advanced instrument control with a single user interface
- Fully scalable to integrate with one or multiple devices
- Robust scheduler optimizes processes





## plate::handler Industrial Robotic Arm Series

- Four different sizes with reach diameters of 1-1,6 m
- Fast with a max speed of 3900 10000 mm/s and cycle time (pick and place max.) of 2-3 sec
- High precision with a position repeatability of 0,02mm
- Offers random access making it ideal for applications such as taking kinetic measurements or ones that require plate reuse
- Payload: 3-7 kg
- Includes interlock shielding for safety
- Random access side gripper



### plate::handler Flex Collaborative Arm Series

- Portrait or landscape gripping available
- Two reach and three z-axis options allow for different size workstations and stacking options
- Max speed of 500 mm/s
- Cycle time (pick and place max.) of 4-5 sec
- Position repeatability of 0,2 mm
- Offers random access making it ideal for applications such as taking kinetic measurements or ones that require plate reuse
- Reach: diameter 1,2/1,4m
- Z-axis reach: 400/750/1240 mm

## Twister™ III Robotic Arm

PerkinElmer also offers the Twister™ Robotic Arm which allows the ability to stack up to 240 plates. The Twister Robotic Arm is a solution for smaller, benchtop workstations. It uses stackers to store a larger number of plates.

- Speed: ~ 100 mm/s
- Cycle time (pick and place): 20-30 sec (for stacking approach)
- Reach: 572 mm
- Z-axis: 552 mm
- 60 plates SBS standard with lid (3 stacks)/150 plates (6 stacks)/240 plates (9 stacks)
- Standard stacking cassettes
- Top gripper, limited random access

PerkinElmer, Inc. 940 Winter Street Waltham, MA 02451 USA P: (800) 762-4000 or (+1) 203-925-4602 www.perkinelmer.com

