

# Adept Cobra ePLC800



Allen-Bradley PLC



Siemens PLC

The Adept Cobra™ ePLC800 robot is a compact, high-performance, 4-axis, SCARA robot. Adept's ePLC robots natively run Adept ePLC Connect™ software, which allows them to communicate directly with an existing Programmable Logic Controller (PLC) without the use of a separate external controller. This ePLC configuration allows users to install, program, operate and support our high-performance robots using the familiar interface of their existing PLC. Adept ePLC robots are designed to provide significant cost and time savings for users with new or existing PLC automation systems.

## Product Benefits

- Lower system cost due to controller-less operation
- Rapid deployment using familiar ladder logic programming languages of existing PLC (IEC 61131-3)
- Maximum facility utilization with the most compact system footprint in the industry
- Increased facility safety and lower cost with minimal power and signal cabling requirements

## Product Features

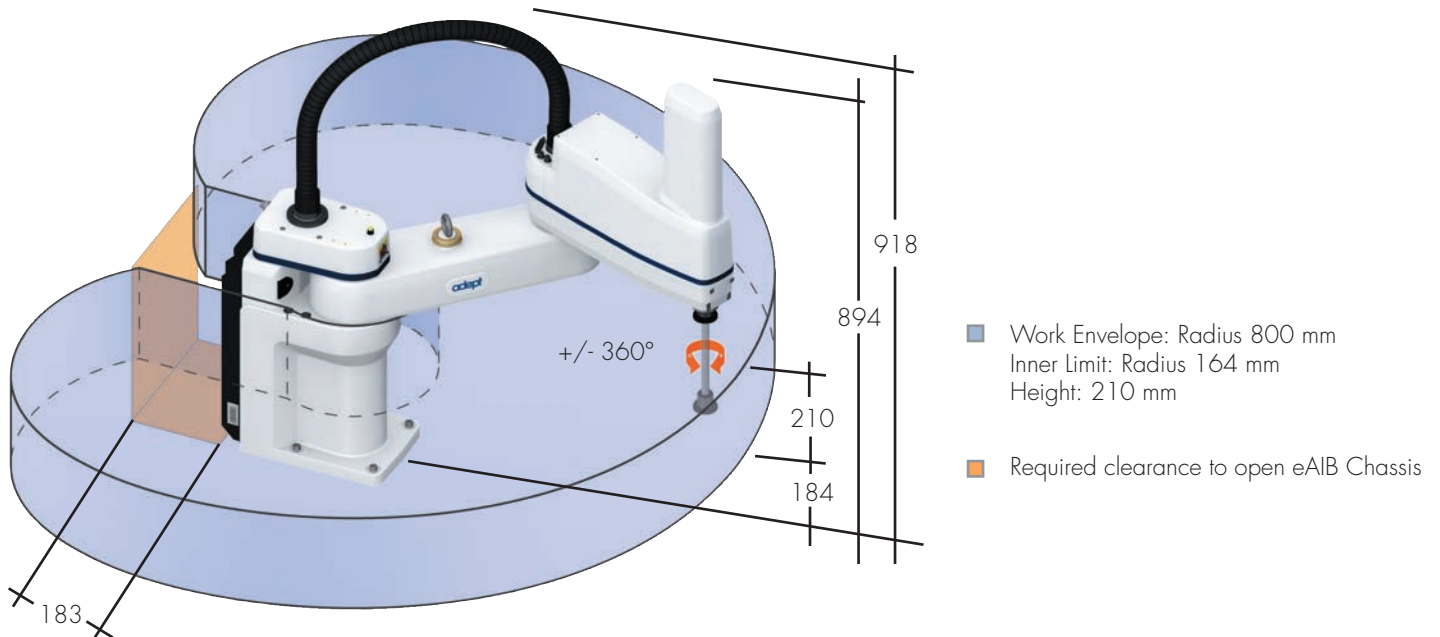
- Compatible with 1756 ControlLogix® or CompactLogix™ (by Allen-Bradley) and S7-300 SIMATIC (by Siemens) PLCs
- High-resolution, absolute encoders to provide high accuracy, superior slow-speed following, and easy calibration
- High-efficiency, low-inertia Harmonic Drives™ and a lightweight arm to deliver maximum acceleration
- 8 kHz servo update rate to improve path following and control
- Integrated 10/100 Base-T Ethernet for EtherNet/IP™ communication

## Specifications

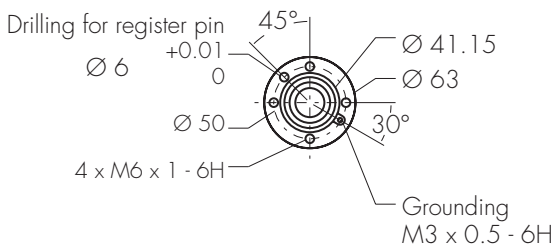
Reach	800 mm
Payload	
Rated	2 kg
Max.	5.5 kg
Adept Cycle (in mm 25/305/25)	
Burst Mode	0.54 sec
Sustained (20°C)	0.54 sec
Downward Push Force (No Load)	30 kgf – maximum
Moment of Inertia	
Joint 4 (max)	450 kg-cm <sup>2</sup> (150 lb-in <sup>2</sup> )
Joint Ranges	
Joint 1	± 105°
Joint 2	± 157.5°
Joint 3	210 mm
Joint 4	± 360°
Joint Speeds	
Joint 1	386°/sec
Joint 2	720°/sec
Joint 3	1100 mm/sec
Joint 4	1200°/sec
Robot Brakes	
Joints 1, 2, and 4	Dynamic
Joint 3	Electric
Repeatability	
XY	± 0.017 mm
Z	± 0.003 mm
Theta	± 0.019°
Pass-Through Connections	
Electrical	24 (12 twisted pairs)
Pneumatic	6 mm (x2) 4 mm (x3)
DeviceNet	1
Digital I/O Channels	
eAIB:	12 inputs, 8 outputs
Optional Solenoid	4 outputs
Weight	43 kg
Environmental Requirements	
Ambient Temperature	5 - 40 °C
Humidity Range	5 - 90 % (non-condensing)
Power Requirements	
24 VDC	: 6 A
200 - 240 VAC	: 10 A, single-phase
CE Compliant	

# ADEPT COBRA ePLC800

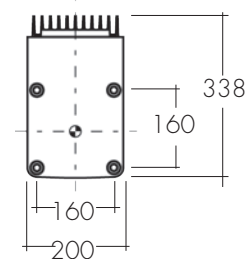
## Dimensions: Adept Cobra ePLC800 (mm)



## Dimensions: Flange (mm)



## Dimensions: Footprint (mm)



## The Adept Cobra ePLC800 system includes the following:

- Adept Cobra ePLC800 robot with eAIB (Amplifiers in Base)
- Front panel with E-Stop
- Adept ACE™ software
- Cables to connect to E-Stop and other peripherals
- User documentation

## Options and Peripherals:

- AdeptSight™ vision guidance and inspection system
- T20 manual control pendant
- Solenoid valve kit
- Cleanroom ISO4 (class 10) option
- Adjustable hardstop kit
- IP65 Option
- Extended quill (Increases to 260 mm)

## Downloads:

Download CAD files for the Cobra ePLC from

<http://www.adept.com/support/downloads/file-search>

## Optional T20 Manual Control Pendant:



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Specifications subject to change without notice.

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