

Adept Viper ePLC650



Allen-Bradley PLC



Siemens PLC

The Adept Viper™ ePLC650 robot is a compact, high-performance, 6-axis robot. Adept's ePLC robots natively run Adept ePLC Connect™ software, which allows them to communicate directly with an existing Programmable Logic Controller (PLC). 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

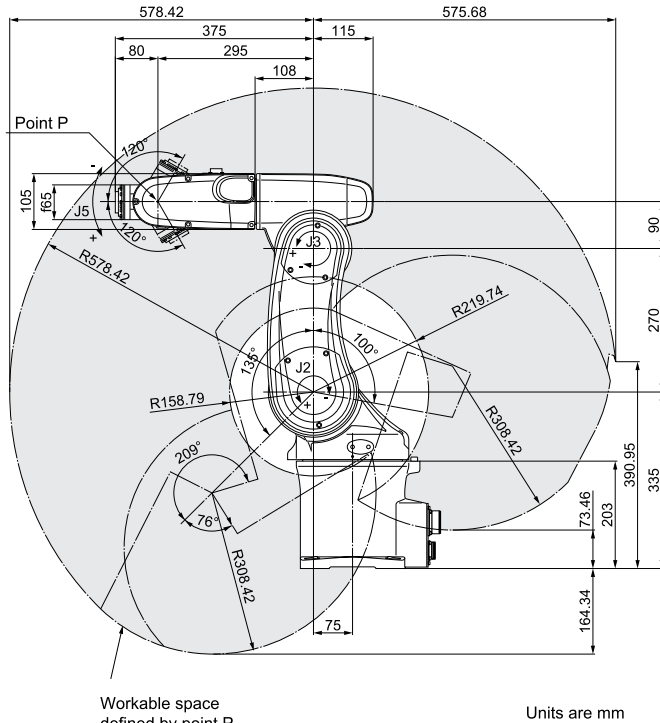
- Compatible with 1756 ControlLogix® or CompactLogix™ (by Allen-Bradley) and S7-300 SIMATIC (by Siemens) PLCs
- High-resolution, absolute encoders to provide high accuracy, superior slow-speed following, and easy calibration
- High-efficiency, low-inertia Harmonic Drives™ and a lightweight arm to deliver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

Specifications

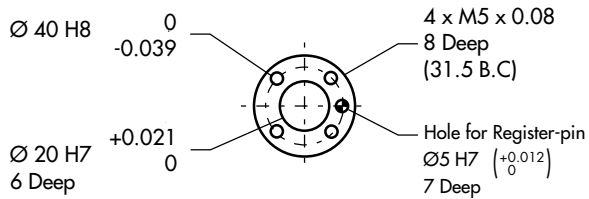
Reach	653 mm
Payload	
Rated	2.5 kg
Max.	5 kg
Adept Cycle (in mm 25/305/25)	
Burst Mode	0.69 sec
Sustained (20°C)	0.80 sec
Joint Ranges	
Joint 1	± 170°
Joint 2	- 190°, +45°
Joint 3	- 29°, +256°
Joint 4	± 190°
Joint 5	± 120°
Joint 6	± 360°
Inertia Moment (max.)	
Joint 4	0.295 kgm ²
Joint 5	0.295 kgm ²
Joint 6	0.045 kgm ²
Joint Speeds	
Joint 1	328°/sec
Joint 2	300°/sec
Joint 3	375°/sec
Joint 4	375°/sec
Joint 5	375°/sec
Joint 6	600°/sec
Repeatability	
XYZ	± 0.02 mm
Pass-Through Connections	
Internal Integrated Solenoids	
(routed from robot base to link four)	
Electrical	10
Pneumatic	6 mm (x1) 4 mm (x6)
Digital I/O Channels	
eMB-60R:	12 inputs, 8 outputs
Brakes	Joints 2 - 6 Joint 1 Optional
Mounting	Floor, Table, & Ceiling
Weight	28 kg
Environmental Requirements	
Ambient Temperature	5 - 40 °C
Humidity Range	5 - 90 % (non-condensing)
Power Requirements for eMotionBlox-60R	
24 VDC	: 6 A
200 - 240 VAC	: 10 A, single-phase
CE Compliant	

ADEPT VIPER ePLC650

Dimensions: Adept Viper ePLC650 (mm)



Dimensions: Flange (mm)



The Adept Viper ePLC650 system includes the following:

- Adept Viper ePLC650 robot
- eMotionBlox-60R servo controller and amplifier
- Front panel with E-Stop
- Adept ACE™ software
- User documentation
- Cables to connect E-Stop and other peripherals

Options and Peripherals:

- AdeptSight™ vision guidance and inspection system
- T20 manual control pendant
- Cleanroom ISO4 (class 10) option
- IP 54/65 (includes Joint 1 brake)
- Brake box

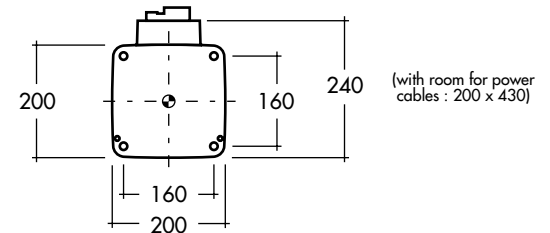
Downloads:

Download CAD files for the Adept Viper ePLC650 robot from <http://www.adept.com/support/downloads/file-search>

Dimensions: eMotionBlox-60R (mm)



Dimensions: Footprint (mm)



Optional T20 Manual Control Pendant:



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www.adept.com

Specifications subject to change without notice.

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