

Adept Viper s850



The Adept Viper™ s850 robot is part of a high-performance line of 6-axis robots designed for applications such as assembly, material handling, packaging, machine tending, and operations that require fast and precise automation. The Adept Viper s850 6-axis robot is available in standard and Cleanroom versions.

Product Features and Benefits

- Adept ACE™ software to deploy your applications through a user-friendly interface
- 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
- 4 kHz servo update rate to improve path following and control
- Diagnostics display enables faster trouble shooting
- Ethernet TCP/IP capability to control the robot through a PC, PLC, or controller
- Complete interchangeability between robots and controllers



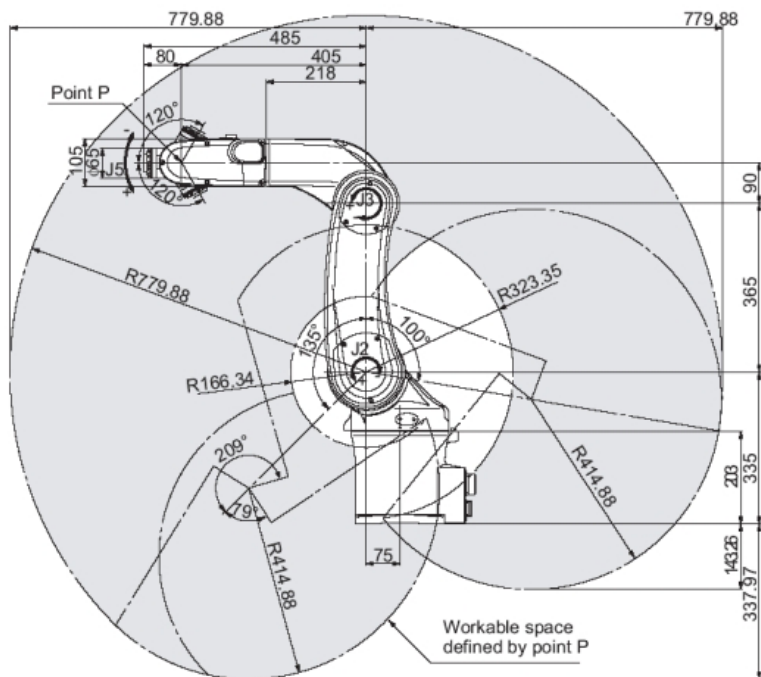
The Adept Viper s850 robot comes with the high-performance Adept SmartController™ motion controller, which is based on the Adept SmartServo architecture. It has a small footprint of 329w x 187d x 86h mm.

Specifications

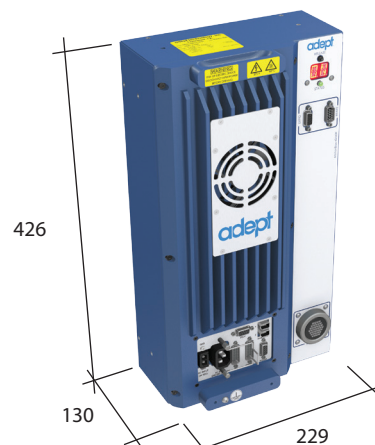
Reach	855 mm
Payload	Rated 2.5 kg Max. 5 kg
Joint Ranges	
Joint 1	± 170°
Joint 2	- 190° , +45°
Joint 3	- 29° , +259°
Joint 4	± 190°
Joint 5	± 120°
Joint 6	± 360°
Inertia Moment (max.)	
Joint 4	0.295 kgm²
Joint 5	0.295 kgm²
Joint 6	0.045 kgm²
Joint Speeds	
Joint 1	250°/sec
Joint 2	250°/sec
Joint 3	250°/sec
Joint 4	375°/sec
Joint 5	375°/sec
Joint 6	600°/sec
Repeatability	
XYZ	± 0.03 mm
Pass-Through Connections (routed from robot base to link four)	
Electrical	10
Pneumatic	6 mm (x1) 4 mm (x6)
Brakes	Joints 2 - 6
Mounting	Floor, Table, & Ceiling
Weight	29 kg
Environmental Requirements	
Ambient Temperature	5 - 40 °C
Humidity Range	5 - 90 % (non-condensing)
Power Requirements for SmartController	
24 VDC : 5 A	
Power Requirements for eMotionBlox-60R	
24 VDC : 6 A	
200 - 240 VAC : 10 A, single-phase	
CE Compliant	

ADEPT VIPER s850

Dimensions: Adept Viper s850 (mm)



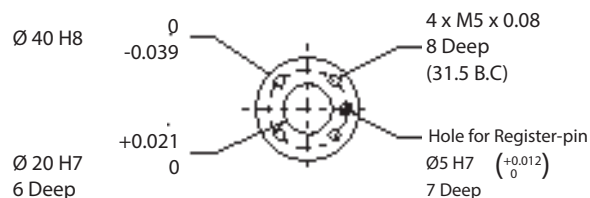
Dimensions: eMotionBlox-60R (mm)



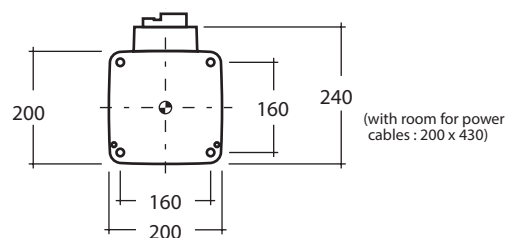
Dimensions: Flange (mm)

The Adept Viper s850 system includes the following:

- Adept Viper s850 robot
- Adept SmartController™ motion controller
- eMotionBlox-60R servo controller
- Front panel with E-Stop
- Adept ACE™ software
- User documentation



Dimensions: Footprint (mm)



Options and Peripherals:

- AdeptSight™ vision guidance and inspection system
(requires a PC—Adept recommends using the Adept SmartVision™ MX)
- T20 manual control pendant
- Dual robot configuration option
- Conveyor-tracking option
- sMI6 SmartMotion™ interface
- sDIO I/O expansion (32 digital input and 32 digital output channels)
- Cleanroom ISO4 (class 10) option
- Brake Box

Downloads:

Download CAD files for the Adept Viper s850 robot from <http://www.adept.com/>



Omron Adept Technologies, Inc.

Tel: 925-245-3400 Fax: 925-960-0452 Email: info@adept.com

omron247.com adept.com

Specifications subject to change without notice.

©2015 Adept Technology, Inc. ALL RIGHTS RESERVED. The information provided in this communication or document is the property of Adept Technology, Inc. and is protected by copyright and other intellectual property laws. In addition, any references to any Adept Technology, Inc. products are the marks and property of Adept Technology, Inc. [and may be registered trademarks]. All other trademarks or tradenames are the property of their respective holders.