

Adept Viper™ s650

Specifications

Reach	653 mm
Payload (max)	2.5 kg (rated) 5 kg (max)
Joint Range	
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
Composite Speed (max)	8,200 mm/sec
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)	± 0.020 mm
Pass-Through User Connections (routed from robot base to outer link)	
Electrical	10
Pneumatic	1
Brakes	Joints 2 - 6
Internal Solenoids	Three 2-position solenoids (connected to controller by user)
Ingress Protection	IP40 (IP54/65 optional)
Mounting	Floor/Table and Ceiling
Weight (approx)	28 kg
Environmental Requirements	
Ambient temperature	5 - 40 °C
Humidity range	5 - 90 % (non condensing)
Power Requirements for SmartController	
24VDC (± 10%), 120W (5A), User-Supplied	
Power Requirements for MotionBlox-6OR	
24VDC (+/- 10%), 150W (6A) 200V to 240V AC, 1-phase, 50/60Hz, User-Supplied	



The Adept Viper 6-axis robot family is a high-performance line of robots designed specifically for a multitude of applications. The speed and precision of the Adept Viper robots make them ideal for assembly, material handling, packaging, machine tending, medical, pharmaceutical and many other operations requiring fast and precise automation. The Adept Viper product family is available in standard, clean-room and IP65 versions for both the Adept Viper s650 and Adept Viper s850 robots.

Product Features and Benefits

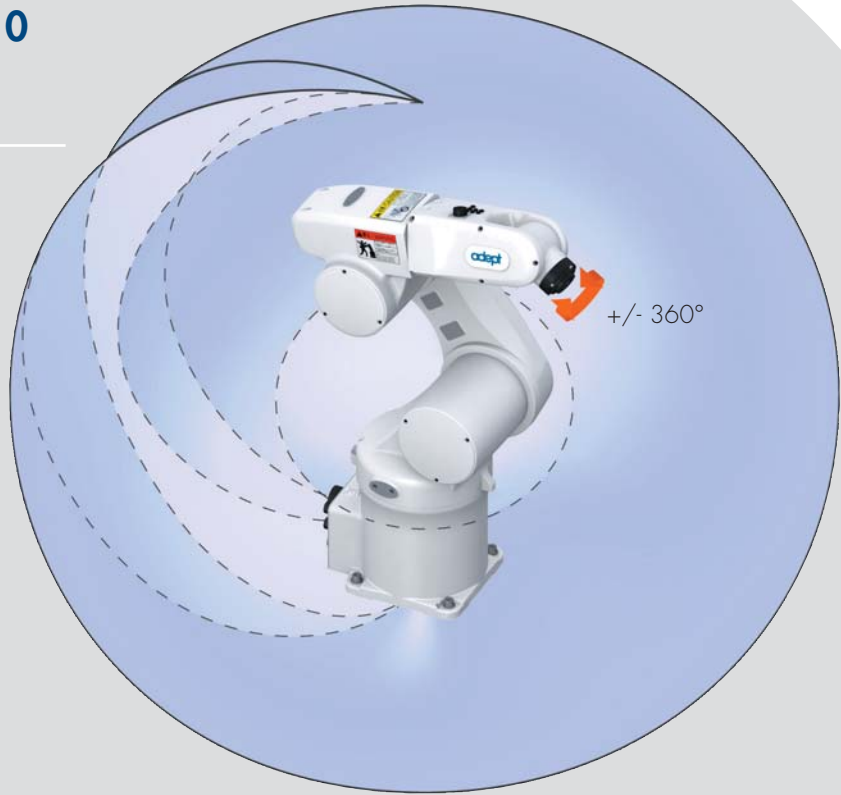
- Absolute encoders make for easy calibration
- Complete interchangeability between robots and controllers
- High-resolution encoders provide high-precision and superior slow-speed following
- High-efficiency motors deliver high performance with more torque per amp
- 8 kHz servo update rate for improved path following and control
- Proven design offers high reliability and low MTTR
- Diagnostics display enables faster troubleshooting

Other Options:

- Adept DeskTop
- Adept Vision (AdeptSight or sAVI)
- Dual configuration
- T1 Pendant
- sMI6
- sDIO
- Clean-room (class 1) versions
- IP65 versions
- UL Listed versions

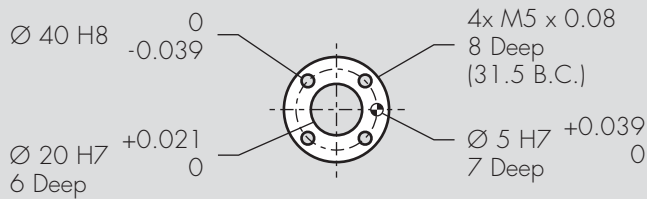
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Dimensions Adept Viper s650 (mm)



- Work Envelope: Radius 650 mm
- Inner Limit: Radius 159 mm

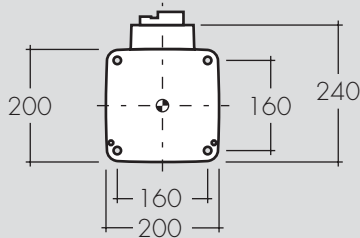
Dimensions Flange (mm)



Dimensions MotionBlox-60R (mm)



Dimensions foot plate (mm)



The Adept Viper s650 system includes the following:

- Adept Viper 650 Robot
- Adept SmartController CX (with software installed)
- MotionBlox-60R servo controller
- Front Panel with E-Stop
- 4 Meter Robot Cable
- AdeptWindows Software
- Network File Server (NFS) software
- Ethernet TCP/IP capability
- User Documentation



Adept Technology, Inc. 3011 Triad Drive, Livermore, CA 94551

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

www.adept.com

Specifications subject to change without notice.

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