# Adept Viper™ s1700



The Adept Viper 6-axis robot family is a high-performance line of robots designed for a wide variety of applications. The speed and precision of the Adept Viper robots make them ideal for assembly, material handling, packaging, machine tending and many other operations and applications that require fast and precise automation. The Adept Viper s1700 six-axis robot is an extended-reach and higher payload robot that complement the Viper product family.

### **Specifications**

эрсспісанонз	
Reach	1717 mm
Payload (max)	20 kg
Joint Range	
Joint 1	± 180°
Joint 2	-200°, +65°
Joint 3	+35°, +190°
Joint 4	± 200°
Joint 5	± 140°
Joint 6	± 360°
Inertia Moment (max)	
Joint 4	0.7 kgm <sup>2</sup>
Joint 5	0.7 kgm²
Joint 6	0.2 kgm <sup>2</sup>
Composite Speed (max)	8,200 mm/sec
Joint Speeds	
Joint 1	170°/sec
Joint 2	170°/sec
Joint 3	175°/sec
Joint 4	335°/sec
Joint 5	345°/sec
Joint 6	525°/sec
Repeatability (XYZ)	± 0.060 mm
Pass-Through User Connections	
(routed from robot base to outer link)	
Electrical	16
Pneumatic	1
Brakes	All Axes
Internal Solenoids	None
	(User supplied)
Ingress Protection	IP54
Mounting	Floor/Ceiling
Weight	280 kg
Power Requirements for SmartController	
24VDC (+/- 10%), 120W (5A),	
Weight Power Requirements for S	SmartController
24VDC (+/- 10%), 120W (5A),	

**User-Supplied** 

#### **Product Features**

- Extended reach with 20 kg payload
- V+ real-time multitasking operating system
- Programming software AdeptWindows or Adept DeskTop
- SmartServo<sup>™</sup> controls ensure superior path following and control
- AdeptVision<sup>™</sup> provides added flexibility and lowers integration costs
- Adept SmartController CX high-performance robot and integrated vision controller
- · Absolute encoders make for easy calibration
- High-resolution encoders provide high-precision and superior slow-speed performance
- High-efficiency motors deliver high performance with more torque per amp

- Complete interchangeability between robots and controllers
- Integrated diagnostics display for fast troubleshooting on sDAI
- · Control of external auxiliary axes
- · Dual configuration

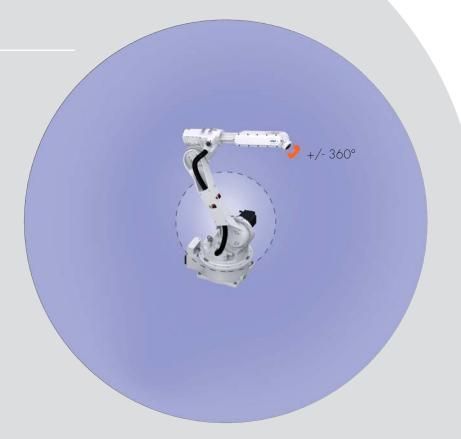
#### **Benefits**

- Ensures system reliability and high production uptime
- · Increases productivity
- · Enables higher product mix and changeover
- Reduces integration costs
- · Accelerates time to market
- Provides increased flexibility and accuracy through integrated vision guidance

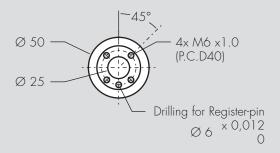
## Adept Viper™ s1700

Dimensions Adept Viper s1700 (mm)

- □ Work Envelope: Radius 1717 mm
- □ Inner Limit: Radius 404 mm



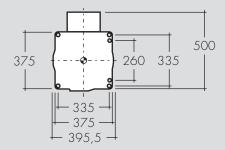
### **Dimensions Flange (mm)**



### The Adept Viper s1700 system includes the following:

- Adept Viper s1700 Robot
- Adept SmartController CX (with software installed)
- PA-4 Chassis with servo controller and amplifiers
- Front Panel with E-Stop
- 7-Meter Robot Cable
- Adept DeskTop Software
- Network File Server (NFS) software
- Ethernet TCP/IP capability
- User Documentation

### Dimensions foot plate (mm)



### The user must supply the following items:

- Power to SmartController and PA-4 Amplifier Chassis (see power requirements)
- · Cell-based emergency stop wiring
- Windows<sup>TM</sup>-based PC (not required at run-time)



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Specifications subject to change without notice.

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