

Adept Cobra™ s350

Robot Specifications

Reach	350 mm
Footprint	150 mm x 150 mm
Payload	5.5 kg (max)
Joint 4 inertia	450 kg-cm ² (max)
Downward Push Force	10 kgf
Joint Range	
Joint 1	±155°
Joint 2	±145°
Joint 3	200 mm
Joint 4	±360°
Joint Speeds	
X/Y	7,200 mm/sec
Z	2,000 mm/sec
Theta	2,400 °/sec
Repeatability	
XY	±0.015 mm
Z	±0.01 mm
Theta	±0.005°
Pass-Through User Connections	
Electrical	19 conductor
Pneumatic	6 mm (x2), 4 mm (x2)
Weight	20 kg

The Adept Cobra s350 features a small motion envelope while maintaining high speeds and payloads. It can be used in mechanical assembly, material handling, packaging, machine tending, screwdriving, and many other operations requiring fast and precise automation. The Adept Cobra s350 series robot has a 350 mm reach.



Performance

- Absolute encoders make for easy calibration
- High-resolution encoders provide high-precision and superior slow-speed following
- High-efficiency motors deliver high performance with more torque per amp
- Low-inertia harmonic drives provide maximum acceleration
- 8 kHz servo update rate for improved path following and control
- Complete interchangeability between robots and controllers

Reliability and Maintenance

- Serviced worldwide by Adept Technology
- Proven design offers high reliability and low MTTR
- Diagnostics display enables faster troubleshooting

System Includes

The Adept Cobra s350 system includes the following:

- Adept Cobra s350 Robot
- Adept SmartController CX (with software installed)
- MotionBlox-40R servo controller and amplifiers
- Front Panel with E-Stop
- 4-Meter Robot Cable
- AdeptWindows Software
- Network File Server (NFS) software
- Ethernet TCP/IP capability
- User Documentation

User Supplied Items

The user must supply the following items:

- Power to the SmartController CX and MotionBlox-40R (see power requirements on page 2)
- Cell-based emergency stop wiring
- Windows™-based PC (not required at run-time)

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Adept SmartController CX Specifications

SmartServo ports	2
IEEE 1394 (FireWire) ports	2
Ethernet ports (100 baseT)	1
DeviceNet ports	1
RS-232 ports	3
RS-422/485 ports	1
Digital I/O	
Inputs	12 (4 fast)
Outputs	8
Expansion available	(see optional peripherals)
Encoder Latching	8 edges (rise/fall)
Conveyor Tracking Support	Requires V+ Extension License
Belt Encoder ports	2

Adept MotionBlox-40

- Servo Controller and Amplifiers for Cobra s350
- Digital I/O Channels
 - 12 inputs, 8 outputs (included on MotionBlox-40R)
 - Expansion available (see optional peripherals)
- External 26-pin I/O connector
- 14-Segment status display with bicolor LED

Environmental Requirements

Ambient temperature	5°C to 40°C
Humidity range (non-conducting)	5 to 90%
Altitude	Up to 2,000 m

See user's documentation for controller enclosure recommendations.

Power Requirements for SmartController

24VDC (+/- 10%), 120W (5A), User-Supplied

Power Requirements for MotionBlox-40R

24VDC (+/- 10%), 150W (6A), User-Supplied
 200V to 240V AC, 1-phase, 50/60Hz (10A), User-Supplied

Optional Peripherals

- T1 Pendant
- IO Blox (8 digital input & 8 digital output channels) connects to MotionBlox-40R
- sDIO (32 digital input & 32 digital output channels) connects to SmartController CX

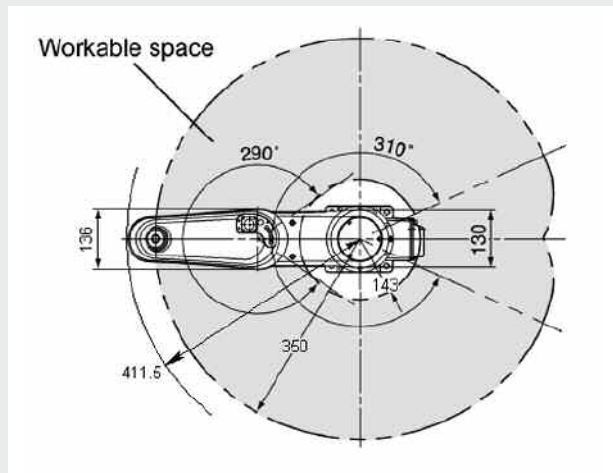
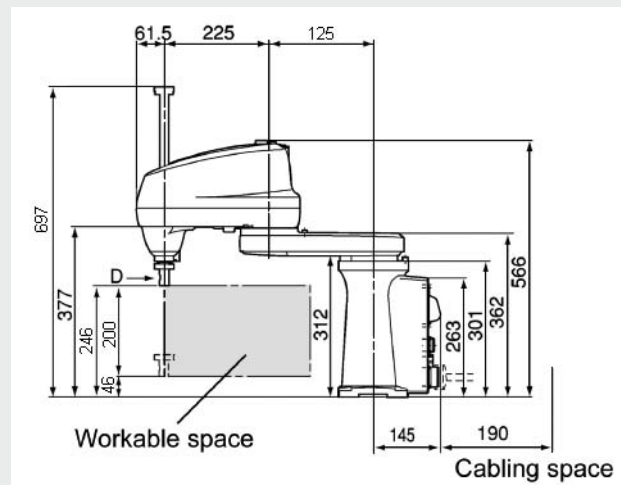
For More Information

Call (763) 682-9548 or (800) 226-6385. The Adept Cobra s350 robot is available by ordering part number 90580-000.

MOTIONBLOX 40R



ADEPT SMARTCONTROLLER



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Specifications subject to change without notice.

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