

# Adept Cobra s800 Inverted



## Specifications

|                                    |  |
|------------------------------------|--|
| Reach                              | 800 mm   |
| Payload                            |  |
| Rated                              | 2 kg   |
| Max.                               | 5.5 kg   |
| Adept Cycle                        |  |
| Sustained (20°C)                   | 0.54 sec   |
| Burst Mode                         | 0.54 sec   |
| Joint Range                        |  |
| Joint 1                            | ± 123.5°   |
| Joint 2                            | ± 156.5°   |
| Joint 3                            | 210 mm   |
| Joint 4                            | ± 360°   |
| Joint Speeds                       |  |
| Joint 1                            | 386°/sec   |
| Joint 2                            | 720°/sec   |
| Joint 3                            | 1100 mm/sec  |
| Joint 4                            | 1200°/sec  |
| Repeatability                      |  |
| XY                                 | ± 0.017 mm   |
| Z                                  | ± 0.003 mm   |
| Theta                              | ± 0.019°   |
| Pass-Through Connections           |  |
| Electrical                         | 24<br>(12 twisted pairs)                           |
| Pneumatic                          | 6 mm (x2)<br>4 mm (x3)                             |
| DeviceNet                          | 1  |
| Digital I/O Channels               |  |
| AIB:                               | 12 inputs, 8 outputs                               |
| Controller:                        | 12 inputs, 8 outputs                               |
| Optional solenoid:                 | 4 outputs  |
| Weight                             | 51 kg  |
| Environmental Requirements         |  |
| Ambient Temperature                | 5 - 40 °C  |
| Humidity Range                     | 5 - 90 %<br>(non-condensing)                       |
| Power Requirements SmartController | 24 VDC : 5 A                                       |
| Power Requirements for AIB         | 24 VDC : 6 A<br>200 - 240 VAC : 10 A, single-phase |
| CE and cULus Compliant             |  |

The Adept Cobra™ s800 Inverted robot is an affordable, high-performance overhead mounting SCARA robot system for mechanical assembly, material handling, packaging, machine tending, and screw driving. It is ideal for mounting above a conveyor belt, increasing the footprint efficiency. Adept Cobra s-Series robots include the Adept SmartController™ motion controller, which provides performance capabilities unmatched in the industry.

## 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
- 8 kHz servo update rate to improve path following and control
- Diagnostics display enables faster troubleshooting
- Ethernet TCP/IP capability to control the robot through a PC, PLC, or controller
- Complete interchangeability between robots and controllers



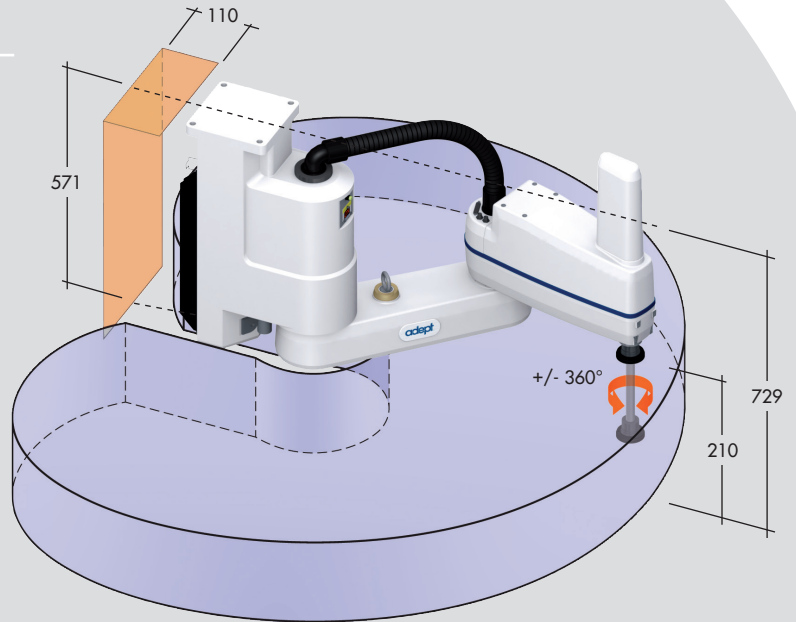
The Adept Cobra s800 Inverted robot comes with the high-performance Adept SmartController motion controller, which is based on the Adept SmartServo architecture. It has a small footprint of 329w x 187d x 86h mm.

# Adept Cobra s800 Inverted

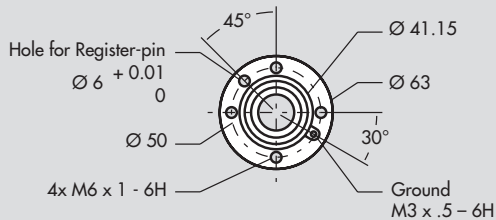
## Dimensions: Adept Cobra s800 Inverted (mm)

- Work Envelope: Radius 800 mm  
Inner Limit: Radius 167 mm  
Height: 210 mm

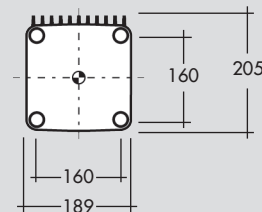
- Required clearance to access the AIB



## Dimensions: Flange (mm)



## Dimensions: Footprint (mm)



## The Adept Cobra s800 Inverted system includes the following:

- Adept Cobra s800 Inverted robot with AIB (Amplifiers In Base)
- Adept SmartController motion controller
- Front panel with E-Stop
- Adept ACE software
- User documentation

## Options and Peripherals:

- AdeptSight™ vision guidance and inspection system (requires a PC—Adept recommends using the Adept SmartVision™ EX)
- T2 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)
- IO Blox I/O module (8 digital input and output channels each)
- High-resolution Joint 4 option
- Solenoid valve kit
- Cleanroom ISO4 (class 10) option
- IP-65 option
- Adjustable Hardstop Kit

## Downloads:

- Download CAD files for the Adept Cobra s800 Inverted robot from <http://www.adept.com/support/downloads/file-search> using the following download ID: 500508



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