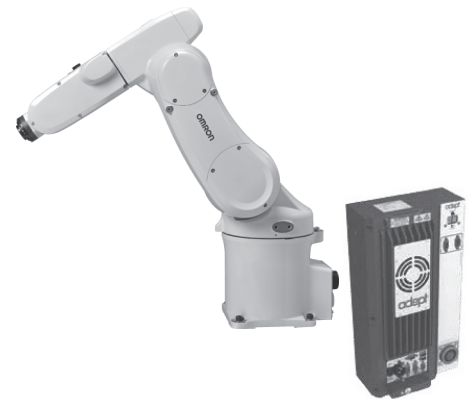


Articulated Robots

Viper 650

Articulated robot for machining, assembly, and material handling

- Programmable through ACE software and eV+ language, or through the familiar IEC 61131-3 when using ePLC Connect.
- Diagnostics display enables faster trouble shooting
- 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
- Reach 653 mm
- Maximum payload 5 kg
- Weight 34 kg



Specifications

| Product name | | Viper | | |
|-----------------------|---------|------------------------|---------------|---------------|
| | | 650 | | |
| Size | | Standard | Cleanroom | IP54/65 |
| Cleanroom/IP | | | | |
| Part Number | | 1720[]-36000 | 1720[]-36020 | 1720[]-36010 |
| Mounting | | Table/Floor/Inverted | | |
| Number of axes | | 6 | | |
| Reach | | 653 mm | | |
| Maximum Payload | | 5 kg | | |
| Repeatability | XYZ | ±0.02 mm | | |
| 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 | | |
| Joint Speeds | Joint 1 | 328°/s | | |
| | Joint 2 | 300°/s | | |
| | Joint 3 | 375°/s | | |
| | Joint 4 | 375°/s | | |
| | Joint 5 | 375°/s | | |
| | Joint 6 | 600°/s | | |

| Product name | | Viper | | |
|---------------------------|------------------------------------|---|-----------|---------|
| | | 650 | | |
| Size | | Standard | Cleanroom | IP54/65 |
| Cleanroom/IP | | | | |
| Power Requirements | | 24 VDC: 6 A 200 to 240 VAC: 10 A, single-phase | | |
| Protection | Base | IP40 | IP40 | IP54 |
| | Robot Joints (J4, J5, J6) | IP40 | IP40 | IP65 |
| Clean Class | | --- | Class10 | --- |
| Environment Requirements | Ambient Temperature | 5 to 40°C | | |
| | Humidity Range | 5 to 90% (non-condensing) | | |
| Weight | | 34 kg | | |
| cULus Compliant | | (Yes) *1 | | |
| Basic configuration | Controller | eMotionBlox-60R | | |
| | On-board I/O (Input/Output) | 12/8 | | |
| | Conveyor tracking input | 2 | | |
| | RS-232C serial communications port | 1 | | |
| | Programming environment | ACE, ePLC | | |
| | ACE Sight | Yes | | |
| | ePLC Connect | Yes | | |
| | ePLC I/O | Yes | | |
| Connectable controller *2 | | eMotionBlox-60R, SmartController EX, NJ/NX/NY Series *3 | | |

*1. cULus option

*2. Choose a controller to suit your application.

*3. The robot version 2.3.C or later is required to connect with the NJ/NX/NY Series.

