

# P-145

## Basic Description

FANUC Robotics' P-145 robot is engineered to provide a high-quality, reliable and affordable solution for a variety of industrial goods, including appliances, automotive components and watercraft. The P-145 is easy to maintain and offers fast acceleration and high speed operation, which results in minimized cycle times and reduced production costs.

The six-axis, electric servo-driven robot's rugged design is based on the success of six generations of paint robots and is supported by our extensive service and parts network.

## P-145, the Solution for:

- Automotive components
- Fascia
- Fiberglass chop/gel coating
- Automotive top coat

## Features and Benefits

- Six axes of motion, a large envelope and payload capacity enable a wide range of painting applications.
- Advanced motion software provides constant tip speeds, improving the uniformity and appearance of the paint finish.
- High acceleration decreases the robot repositioning time, increasing the amount of available process cycle time.
- Patented purge system approved for operation in hazardous environments including FM Class I, II, and III, Div. I, II, Groups C,D,E,F,G.



- Integral drive component design with sealed lubrication lowers the number of parts and reduces maintenance frequency.
- Hollow wrist and through arm hose routing provide a clean application environment.
- PaintTool software has a common user interface to all FANUC Robotics' paint robots, increasing operation efficiency.
- FM, CSA and CE Mark approved.
- Integrated micro valve color changer (for short color change time and waste reduction)
- Brakes on axes 4 and 5
- Integral paint delivery pumps and control for 2K variable ratio system
- I/O subsystems including Allen Bradley RIO, DeviceNet, Profibus-DP

## Options

### Hardware:

- Extended outer arm (+1450 mm)

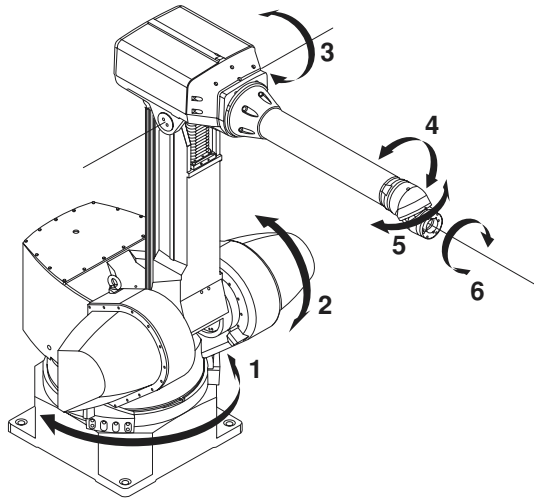
### Software:

- Line tracking
- Automatic color change
- Analog parameter control
- Accuflow
- Integral 2K variable ratio Pump Control

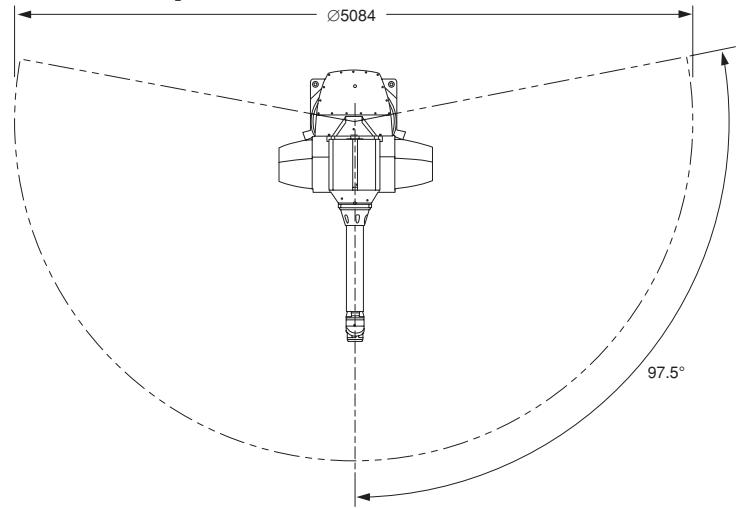
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# P-145 Dimensions

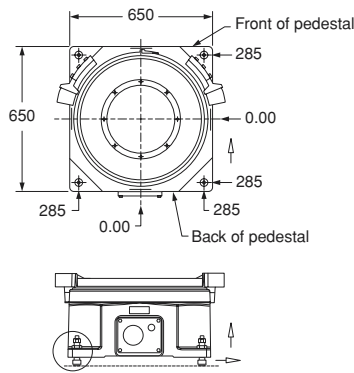
## Isometric



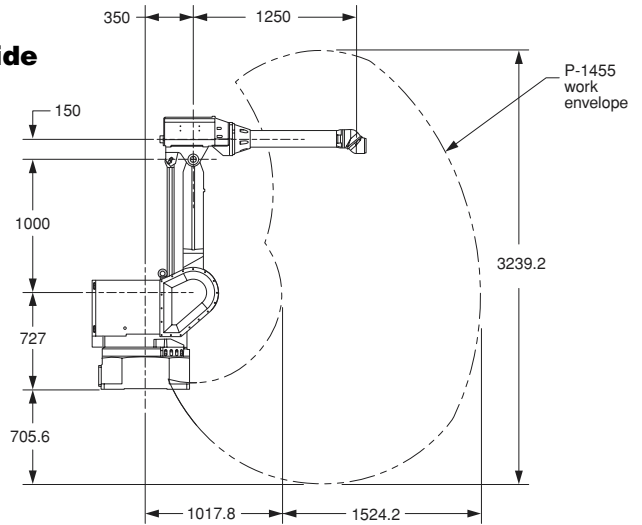
## Top



## Pedestal Interface



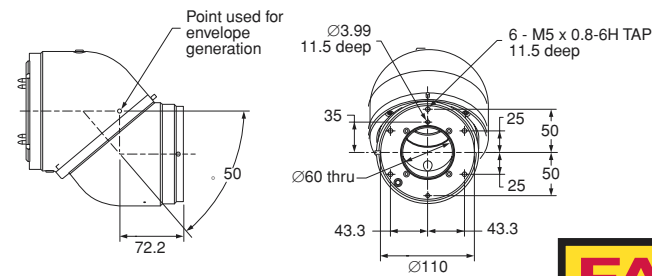
## Side



# P-145 Specifications

Items		
Configuration	6-axis vertically articulated	
Axes	6	
Payload - wrist (kg)	7.5 (at 300 mm offset)	
Outer Arm Payload (kg)	10 mounted on back of FRP	
Reach (mm)	1524	
Static repeatability (mm)	±0.5	
Motion range (degrees)	J1	195
	J2	140
	J3	120
	J4	±540
	J5	±540
	J6	±540
Motion speed (degrees/sec.)	J1	103
	J2	140
	J3	125
	J4	395
	J5	545
	J6	666
Painting speed (mm/sec.)	1500	
Drive Type	Electric AC servo motor	
Position Encoders	Absolute pulse coders	
Mechanical brakes	Axes 2, 3, (4 & 5 optional)	
Mechanical weight (kg)	500 (robot arm only)	
Mounting method	Upright	
Installation environment		
Ambient temperature °C	0 to 45	
Humidity	20-95% RH No condensation	
Vibration (m/s <sup>2</sup> )	Less than 0.5 G	
Certification	FM Class I, II, III/Div I, II Group C, D, E, F, G	

## Wrist Dimensions and Interfaces



Note: Dimensions shown in millimeters

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