ALPHTIC Series | Heavy-Duty Robot
Model: SF500 - C3100

The ALPHTIC is the most powerful and technologically advanced heavy-duty robot,ideal for large, high-load applications, and its construction makes the ALPHTIC the perfect combination of power and technology.

The ALPHTIC is CHAIFU's heavy-duty robot perfectly matched to any application due to its ultra-high craftsmanship and rugged structural design. The powerful motors and gearboxes are designed to perform a wide range of heavy-duty tasks. The long working stroke of 3273.6 mm allows it to fit comfortably in small work cells.

The three core components of the CHAIFU convince with their low cost, high efficiency, and low maintenance, even in heavy-duty applications.

All ALPHTIC series are equipped with LIKEPRECISION technology and the highest precision joint part reducer, RV Reducer, which enables the robot to take full advantage of its advantages even in high-speed operation.
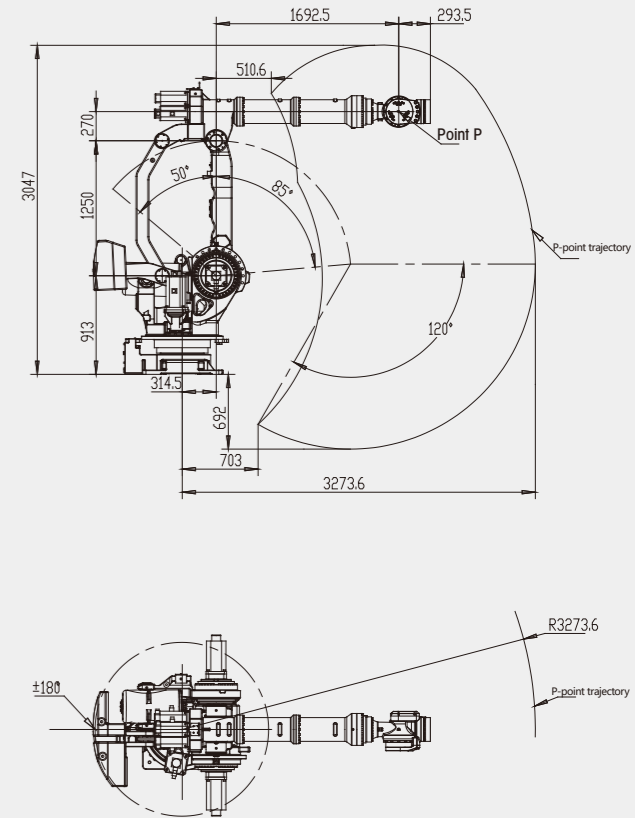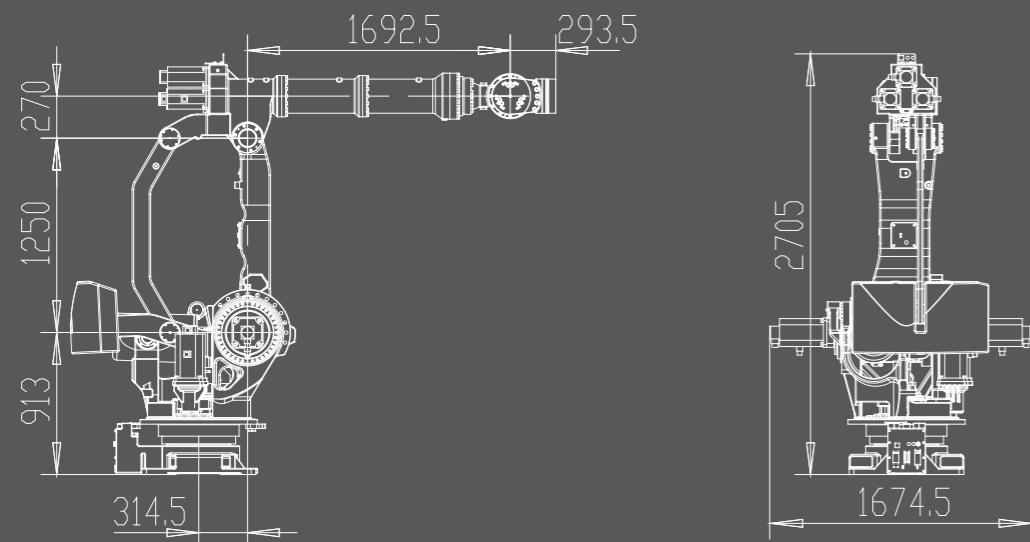
Applications

Handling	Machine Loading/Unloading	Distribution	Assembly/Subassembly	Palletizing
Sanding	Spraying	Glazing	Gluing	Picking/Packing	Stamping

SF500-C3100 Data Overview

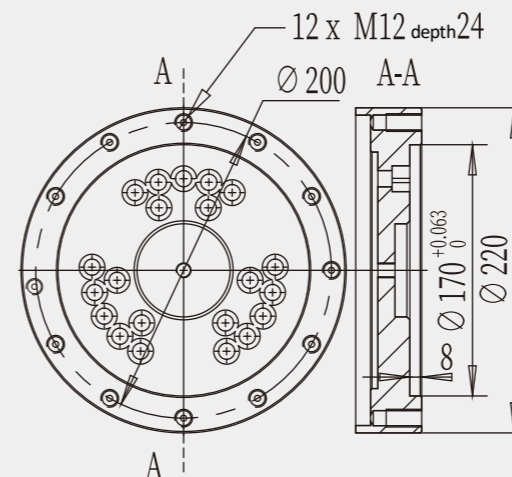| Model		SF500-C3100
Structure		Vertically Articulated
Number of Axis		6
Radius		3273.6mm
Payload		500kg
Repeatability		±0.3mm
Drive Mode		AC Servo Motor
Maximum Speed	J1	100°/s
	J2	85°/s
	J3	85°/s
	J4	80°/s
	J5	80°/s
	J6	160°/s
Range of Motion	J1	±180°
	J2	+50°/-85°
	J3	+25°/-120°
	J4	±360°
	J5	±115°
	J6	±360°
Allowable Moment	J4	1980N·m
	J5	1980N·m
	J6	865N·m
Allowable Inertia	J4	152kg·m²
	J5	152kg·m²
	J6	122kg·m²
Protection Rating		IP 65, Wrist IP 67
Operating Conditions	Temp.	0-45°C
	Humidity	Below 95%RH
	Vibration	Below 4.9m/s²
	Other	Eliminate Signal Noise
Base Size		910*739mm
Height		2695mm
Weight		2780KG
Mounting Positions		Floor
Power Consumption		8.5kVA

SF500-C3100 Range of Motion

SF500-C3100 External & Installation Dimensions

A-Way Diagram (End Flange Mounting Dimensions)

B-Way Diagram (Base Mounting Dimensions)