



**SF ALPHTIC Series | Heavy Duty Robot**  
**Model: SF1600-C4600**

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

The SF 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 4600 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 SF 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.

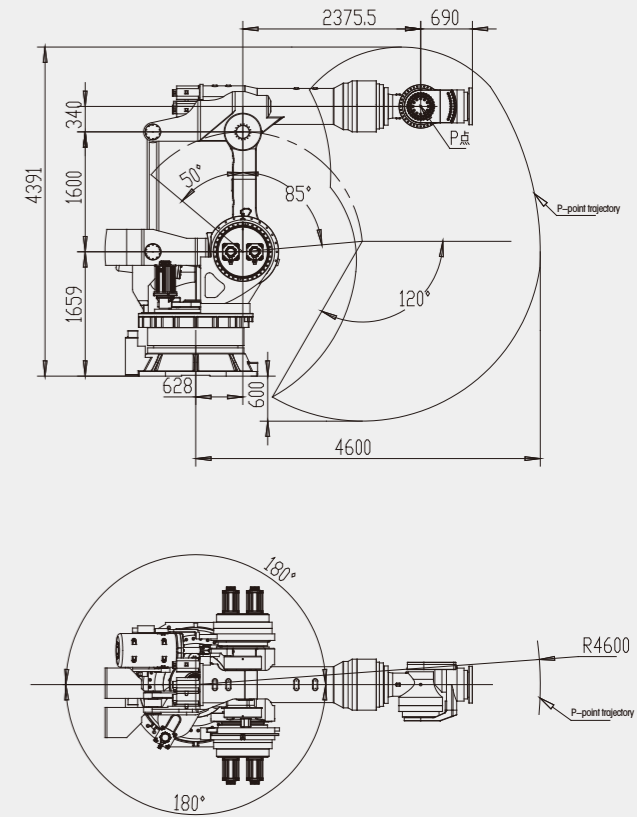
**Applications**



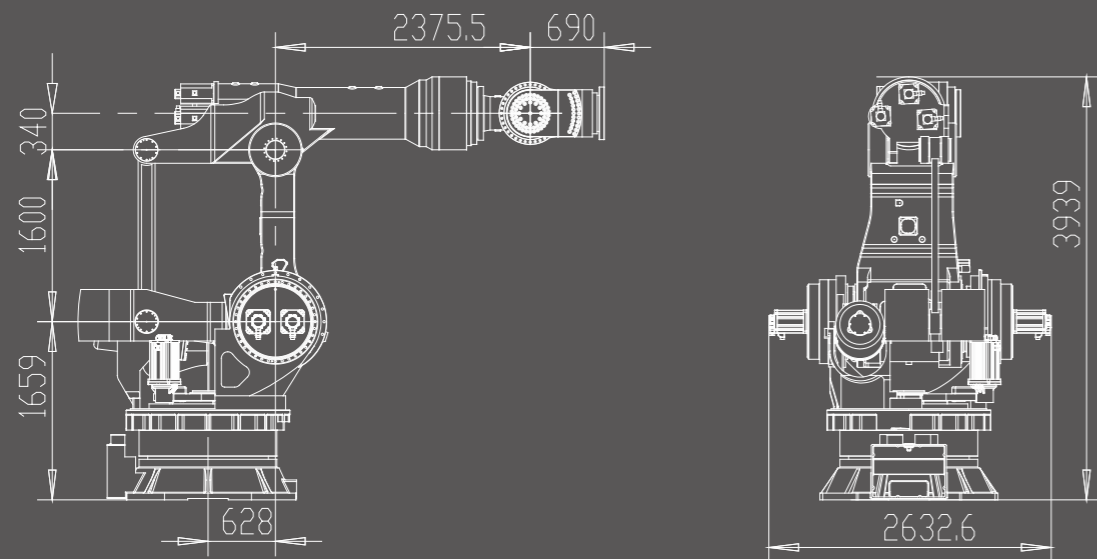
**SF1600-C4600 Data Overview**

<b>Model</b>	SF1600-C4600	
<b>Structure</b>	Vertically Articulated	
<b>Number of Axis</b>	6	
<b>Radius</b>	4600mm	
<b>Payload</b>	1600kg	
<b>Repeatability</b>	±0.3mm	
<b>Drive Mode</b>	AC Servo Motor	
<b>Maximum Speed</b>	J1	20°/s
	J2	12°/s
	J3	12°/s
	J4	19°/s
	J5	19°/s
	J6	40°/s
<b>Range of Motion</b>	J1	±180°
	J2	+50°/-85°
	J3	-120°/+20°
	J4	±360°
	J5	±115°
	J6	±360°
<b>Allowable Moment</b>	J4	29380N.m
	J5	29380N.m
	J6	8815N.m
<b>Allowable Inertia</b>	J4	7560kg.m <sup>2</sup>
	J5	7560kg.m <sup>2</sup>
	J6	5350kg.m <sup>2</sup>
<b>Protection Rating</b>	IP 65, Wrist IP 67	
<b>Operating Conditions</b>	Temp.	0-45°C
	Humidity	Below 95%RH
	Vibration	Below 4.9m/s <sup>2</sup>
	Other	Eliminate Signal Noise
<b>Base Size</b>	1660*1580mm	
<b>Height</b>	3939mm	
<b>Weight</b>	11600KG	
<b>Mounting Positions</b>	Floor	
<b>Power Consumption</b>	16.8kVA	

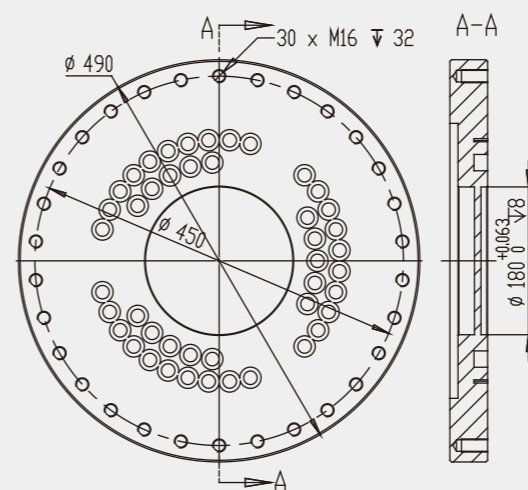
**SF1600-C4600 Range of Motion**



**External & Installation Dimensions**



**A-Way Diagram (End Flange Mounting Dimensions)**



**B-Way Diagram (Base Mounting Dimensions)**

