

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

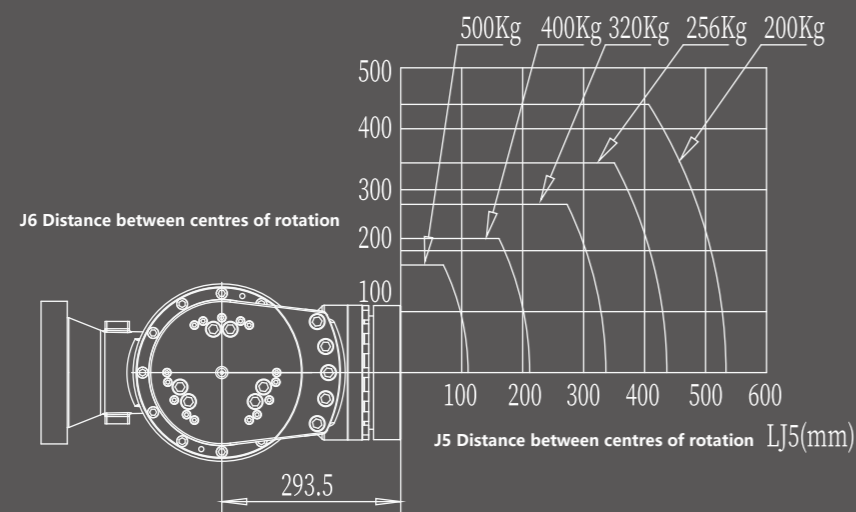
The SF ALPHTIC is the most powerful and technologically advanced heavy-duty robot, ideal for large, high-load applications, and its construction makes the SF ALPHTIC the perfect combination of power and technology.

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 3,121 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



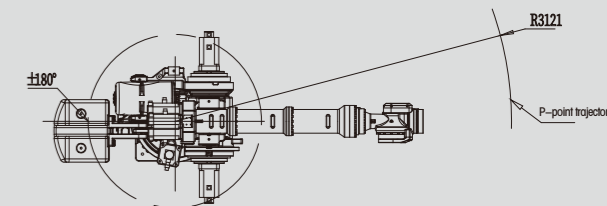
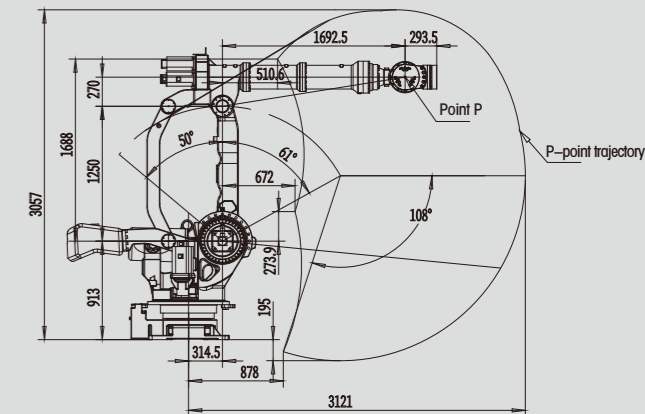
SF500-C3100 Wrist load torque chart

Note: The centre of gravity point of the load should be within the wrist torque diagram when in use

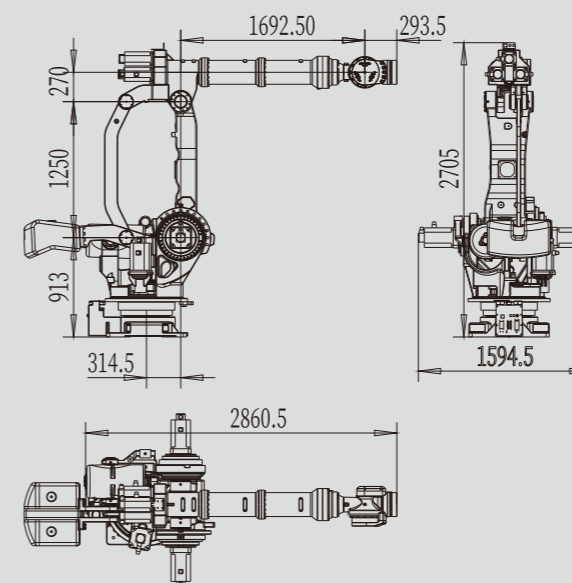
SF500-C3100 Data Overview

Model	SF500-C3100	
Structure	Vertically Articulated	
Number of Axis	6	
Radius	3121mm	
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	-120° /+25°
	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	9.5kVA	

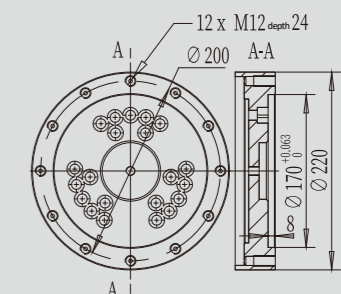
SF500-C3100 Range of Motion



External & Installation Dimensions



A-Way Diagram (End Flange Mounting Dimensions)



B-Way Diagram (Base Mounting Dimensions)

