

SF ALPHTIC Series | **Heavy Duty Robot** Model: SF3000-C3800

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 3809 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

























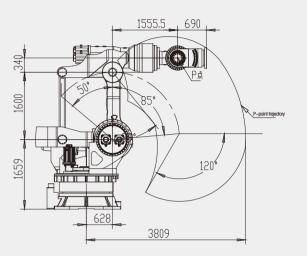
Spraying

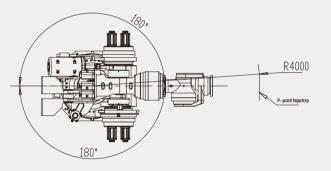
Picking/Packing Stamping

SF3000-C3800 Data Overview

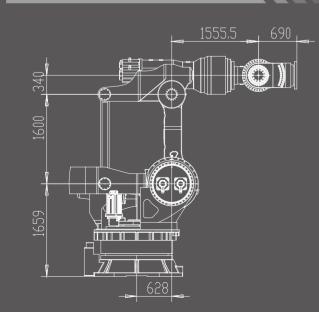
Model SF3000-C3800 Structure Vertically Articulated Number of Axis 6 Radius 3809mm Payload 3000kg Repeatability ±0.3mm Drive Mode AC Servo Motor J1 16°/s Maximum J2 10°/s J3 10°/s J4 12°/s J5 12°/s J6 30°/s Range of J3 -120°/s Motion J4 ±360° J5 ±115° ±360° Motion J4 35970kg.m² Allowable J5 35970kg.m² Moment J6 5025kg.m² Allowable J4 11340kg.m² Inertia J6 5025kg.m² Protection Rating IP 65, Wrist IP 67 Temp. 0-45°C Operating Humidity Below 95%RH Conditions Vibration Below 4.9m/s2 Other Elim	Model		CE3000 C3000
Number of Axis 6			
Radius			•
Payload 3000kg			
Drive Mode			5007111111
Drive Mode			- · · · · J
J1	• •		
Maximum J2 10°/s Speed J4 12°/s J5 12°/s 12°/s J6 30°/s 12°/s Range of J3 -120°/-85° Motion J4 ±360° J5 ±115° J6 ±360° Allowable J5 35970kg.m² Moment J6 5025Kg.m² Allowable J5 11340kg.m² Inertia J5 11340kg.m² J6 5025kg.m² Protection Rating IP 65, Wrist IP 67 Temp. 0-45°C Operating Humidity Below 95%RH Conditions Vibration Below 4.9m/s2 Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor	Drive Mode		AC Servo Motor
Range of J2		J2 J3 J4 J5	10°/s 10°/s 12°/s 12°/s
Allowable Moment J5 J6 35970kg.m² 5025Kg.m2 Allowable J5 11340kg.m² 11340kg.m² 11340kg.m² 5025kg.m² Protection Rating IP 65, Wrist IP 67 Temp. 0-45°C Operating Humidity Below 95%RH Conditions Vibration Below 4.9m/s² Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor		J2 J3 J4 J5	+50°/-85° -120°/+20° ±360° ±115°
Inertia J5 J6 Protection Rating IP 65, Wrist IP 67 Temp. O-45°C Operating Humidity Below 95%RH Conditions Vibration Other Base Size Height Height Hounting Positions Street 11340kg.m² 5025kg.m² IP 65, Wrist IP 67 Below 95%RH Below 4.9m/s2 Eliminate Signal Noise 1660*1580mm 12000KG Mounting Positions Floor		J5	35970kg.m ²
Temp. 0-45°C Operating Humidity Below 95%RH Conditions Vibration Below 4.9m/s2 Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor		J5	11340kg.m ²
Operating Humidity Below 95%RH Conditions Vibration Below 4.9m/s2 Other Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor	Protection Rating		IP 65, Wrist IP 67
Conditions Vibration Below 4.9m/s2 Other Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor		Temp.	0-45°C
Other Eliminate Signal Noise Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor	Operating	Humidity	Below 95%RH
Base Size 1660*1580mm Height 3939mm Weight 12000KG Mounting Positions Floor	Conditions	Vibration	Below 4.9m/s2
Height 3939mm Weight 12000KG Mounting Positions Floor		Other	Eliminate Signal Noise
Height 3939mm Weight 12000KG Mounting Positions Floor	Base Size		1660*1580mm
Mounting Positions Floor	Height		3939mm
1 (56)	Weight		12000KG
Power Consumption 20.5kVA	Mounting Positions		Floor
	Power Consur	nption	20.5kVA

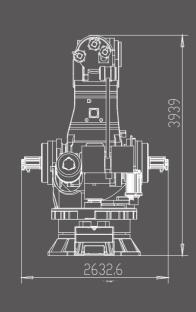
SF3000-C3800 Range of Motion



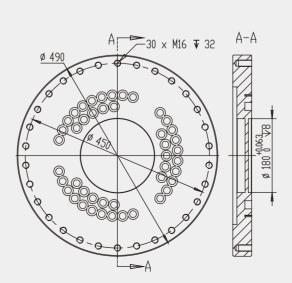


External & Installation Dimensions





A-Way Diagram (End Flange Mounting Dimensions)



B-Way Fiagram (Base Mounting Dimensions)

