Medium Payloads Robot

ER20-1100

ER20-1100 is a medium payloads robot.

Maxium payload 20 kg with maxium reach 1143 mm.

Highlights

Thanks to the optimization of stiffness and inertia brought by the new mechanical design, with advanced trajectory algorithm. The takt improved by 20%–30%;

40% less monuting size of the base (comparing the previous types) plus compact cabinet design helps customers deploy the production line with more flexibility:

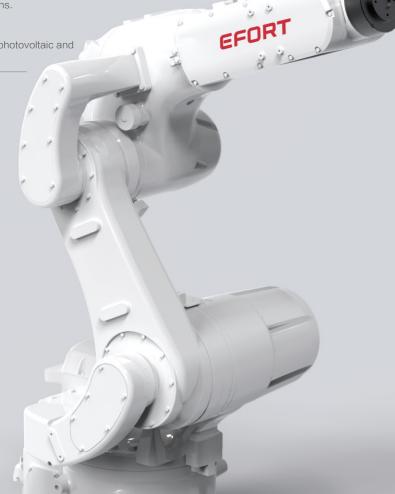
IP67 wrist, high protection grade, to overcome harsh environment;

Applications

It can be widely used in handling, assembly, machine tending, polishing, deburring, and other applications.

■ Industries

Suitable for PCB, metal parts, photovoltaic and other industries.



EFORT INTELLIGENT EQUIPMENT CO.,LTD.

PHONE: (00 86) 400-052-8877

ADDRESS: No.96 East WanChun Road, JiuJiang Economic Development Zone, Wuhu, Anhui, China

WWW.EFORT.COM.CN

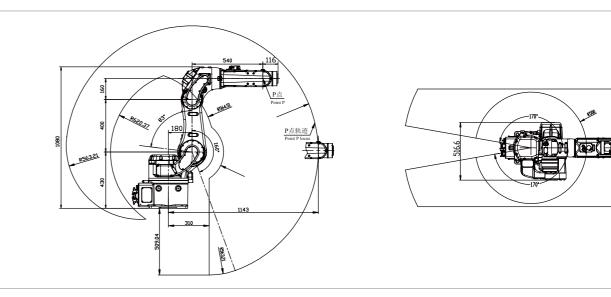
SPECIFICATIONS

EFORT

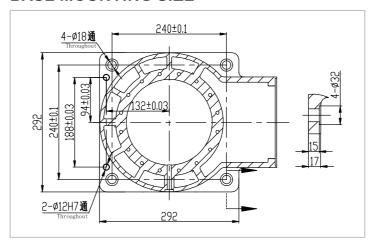
Model		ER20-1100
Туре		Articulated Type
Controlled Axes		6 Axes
Wrist Payload		20 kg
Repeatability		± 0.03 mm
Robot Weight		145 kg
Reach		1143 mm
Robot IP Grade		IP65/IP67 (Wrist)
Cabinet IP Grade		IP20/IP54 (Optional)
Drive Method		Electric servo drive by AC servo motor
Installation		Floor, Upside-down, Wall mount
Environment Requirements	Ambient Temperature	0~45 ℃
	Humidity	<80%/40℃ (No Condensation)
	Vibration Acceleration	4.9 m/s² (< 0.5 G)

Allowable Torque J5			
J6		J4	42 N.m
Allowable Moment of Inertia J5	Allowable Torque	J5	42 N.m
Allowable Moment of Inertia J5		J6	20 N.m
Of Inertia J5 2 kg.m² J6 0.7 kg.m² J1 255°/sec J4 450°/sec J6 600°/sec J6 600°/sec J6 600°/sec J6 600°/sec J1 ± 170° J2 +83°/-160° J3 +175°/-85° J4 ± 190° J4 ± 190° J5 ± 130°		J4	2 kg.m²
Maximum Speed J1 255°/sec J3 210°/sec J4 450°/sec J5 450°/sec J6 600°/sec J1 ±170° J2 +83°/-160° J3 +175°/-85° J4 ±190° J5 ±130°		J5	2 kg.m²
Maximum Speed J2		J6	0.7 kg.m²
Maximum Speed J3 210°/sec J4 450°/sec J5 450°/sec J6 600°/sec J1 ±170° J2 +83°/-160° J3 +175°/-85° J4 ±190° J5 ±130°		J1	260°/sec
Maximum Speed J4 450°/sec J5 450°/sec J6 600°/sec J1 ±170° J2 +83°/-160° J3 +175°/-85° J4 ±190° J5 ±130°		J2	255°/sec
J4 450°/sec J5 450°/sec J6 600°/sec J1 ± 170° J2 +83°/-160° J3 +175°/-85° J4 ± 190° J5 ± 130°	Maximum Spood	J3	210°/sec
Motion Range J6 600°/sec J1 ±170° J2 +83°/-160° J3 +175°/-85° J4 ±190° J5 ±130°	Maximum Speed	J4	450°/sec
Motion Range J1		J5	450°/sec
Motion Range J2		J6	600°/sec
Motion Range J3 +175°/-85° J4 ±190° J5 ±130°		J1	± 170°
Motion Range J4 ± 190° J5 ± 130°		J2	+83°/-160°
J4 ± 190° J5 ± 130°	Mation Dange	J3	+175°/-85°
	wouldn Range	J4	± 190°
J6 ± 360°		J5	± 130°
		J6	± 360°

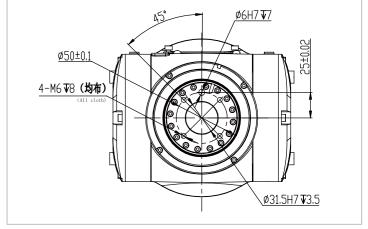
OPERATING SPACE



BASE MOUNTING SIZE



END FLANGE MOUNTING SIZE



Information Release Time 2023/02