Arc Welding Robot

EFORT

ARC12-1400

ARC12-1400 is a medium payloads robot.
Maxium payload 12 kg with maxium reach 1479 mm.

■ Highlights
Thanks to the large and hollow design, the cable can be routed in a hollow way, effectively improving the service life of the cable, and the posture change in a narrow space is more flexible;
High-rigid gearbox with strong impact resistance helps customers challenge various application scenarios;
Thanks to the high stiffness transmission design and advanced trajectory algorithm, the improved robot accuracy performance helps customers to face variety of application scenarios.

■ Applications
It can be used in Arc welding applications.

■ Industries
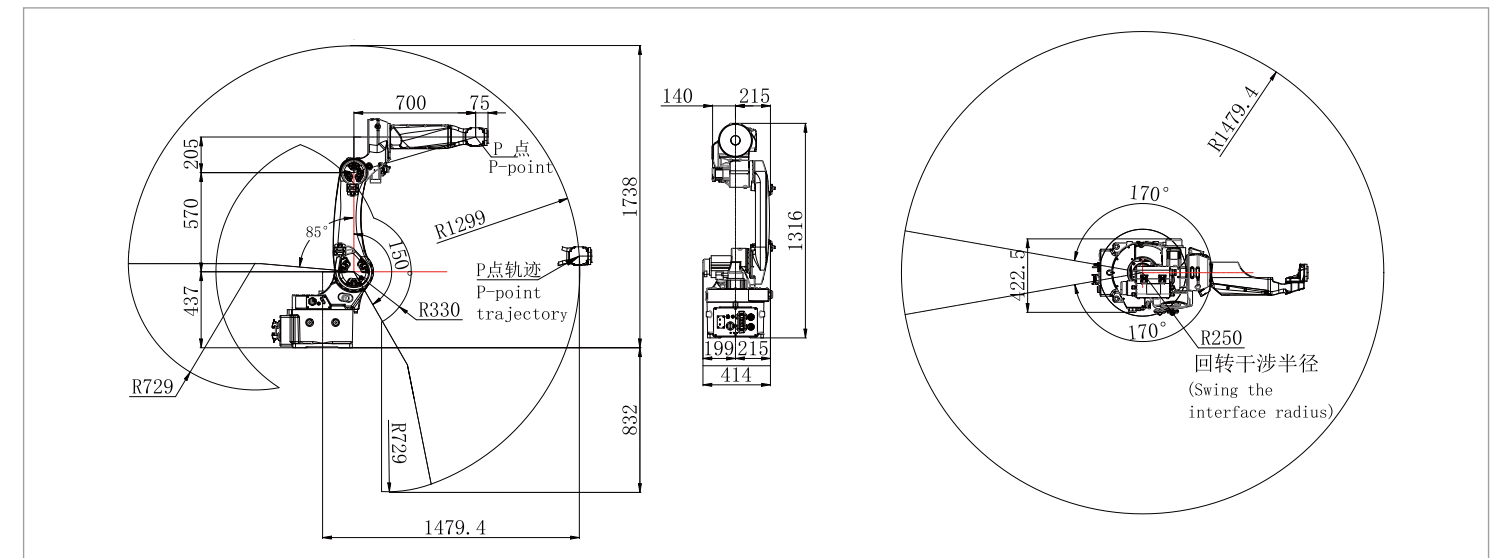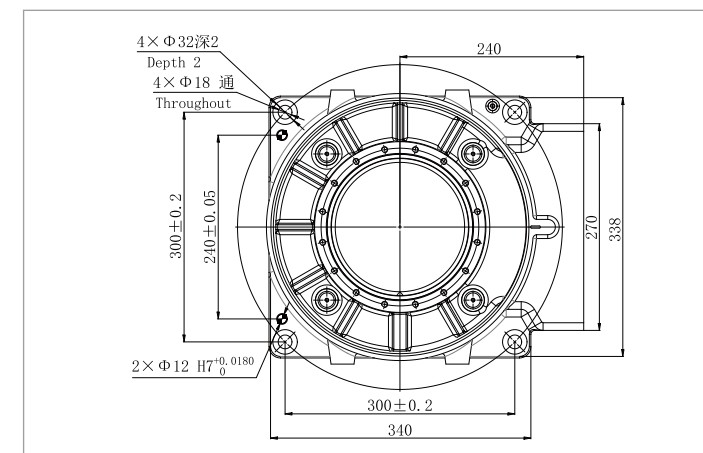Suitable for metal parts, auto parts, steel structure and other industries.

SPECIFICATIONS

Model	ARC12-1400
Type	Articulated
Controlled axes	6 Axes
Max. payload on wrist	12 kg
Repeatability	±0.03 mm
Robot weight	165 kg
Reach	1479 mm
Robot IP grade	IP54 / IP67 (Wrist)
Cabinet IP grade	IP54
Drive mode	AC servo drive
Installation	Floor, Upside-down, Wall

Installation enviroment	Ambient temperature	0~45 ℃
	Ambient humidity	RH≤80% (No dew nor frost allowed)
	Vibration acceleration	4.9 m/s^2 (<0.5 G)

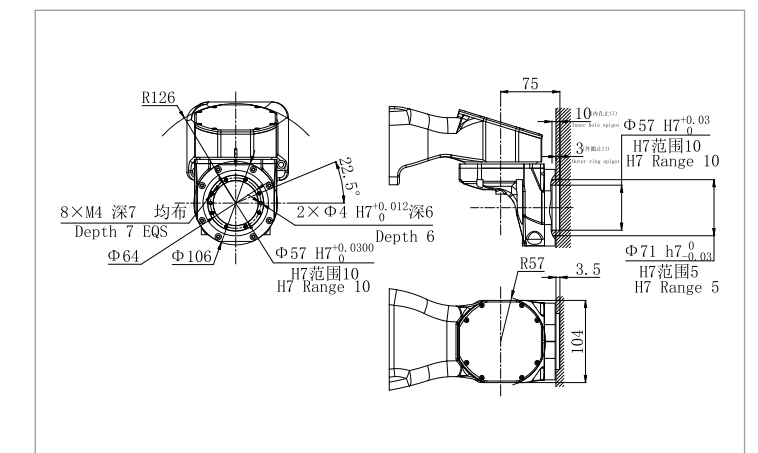| Allowable load moment at wrist	J4	26 N·m
	J5	26 N·m
	J6	11 N·m
Allowable load inertia at wrist	J4	0.9 kg·m^2
	J5	0.9 kg·m^2
	J6	0.3 kg·m^2
Maximum speed	J1	265°/sec
	J2	255°/sec
	J3	270°/sec
	J4	450°/sec
	J5	450°/sec
	J6	700°/sec
Motion range	J1	±170°
	J2	+85°/-150°
	J3	+175°/-85°
	J4	±190°
	J5	±190°(The connect outside robot body.) ±140°(The connect inside robot body.)
	J6	±450°(The connect outside robot body.) ±220°(The connect inside robot body.)

OPERATING SPACE

700 75 P 点 P-point
205 570 85° R1299 150 140 215 1738 1316
437 P点轨迹 P-point trajectory R330 170° R1479.4
R729 199 215 414 832 170° 22.5
R729 R250 回转干涉半径 (Swing the interface radius)
1479.4

BASE MOUNTING SIZE

4×Φ32深2 Depth 2
4×Φ18 通 Throughout
240
300±0.2 240±0.05 270 338
2×Φ12 H7$^{+0.0180}_{0}$
300±0.2
340

END FLANGE MOUNTING SIZE

R126 75 10 Φ57 H7$^{-0.03}_{0}$ H7范围10 H7 Range 10
8×M4 深7 均布 Depth 7 EQS 2×Φ4 H7$^{-0.012}_{0}$深6 Depth 6 3
Φ64 Φ106 Φ57 H7$^{-0.0300}_{0}$ H7范围10 H7 Range 10 R57 3.5 Φ71 h7$^{0}_{-0.03}$ Φ71范围5 H7 Range 5
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