

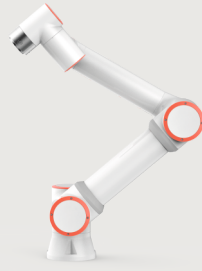
INTELLIGENT COBOT

FAIRINO
EUROPE

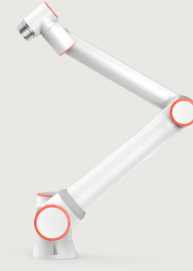
Collaborate. Automate. Innovate.



FR3



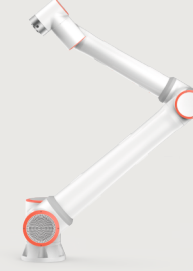
FR5



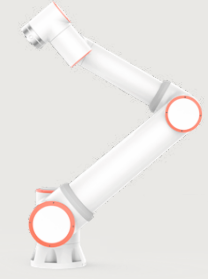
FR10



FR16



FR20



FR30

	3kg		5kg		10kg		16kg		20kg		30kg	
Reach	622mm		922mm		1400mm		1034mm		1854mm		1403mm	
Degrees of freedom	6 rotating joints		6 rotating joints		6 rotating joints		6 rotating joints		6 rotating joints		6 rotating joints	
HMI	10.1 inch teach pendant or mobile terminal Web App		10.1 inch teach pendant or mobile terminal Web App		10.1 inch teach pendant or mobile terminal Web App		10.1 inch teach pendant or mobile terminal Web App		10.1 inch teach pendant or mobile terminal Web App		10.1 inch teach pendant or mobile terminal Web App	
Pose repeatability per ISO 9283	±0.02mm		±0.02mm		±0.05mm		±0.03mm		±0.1mm		±0.1mm	
Axis movement	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed	Working range	Maximum speed
Base	±175°	±180°/s	±175°	±180°/s	±175°	±120°/s	±175°	±120°/s	±175°	±120°/s	±175°	±120°/s
Shoulder	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±120°/s	+ 85°/ - 265°	±120°/s	+ 85°/ - 265°	±120°/s	+ 85°/ - 265°	±120°/s
Elbow	±150°	±180°/s	±160°	±180°/s	±160°	±180°/s	±160°	±180°/s	±160°	±120°/s	±160°	±120°/s
Wrist 1	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s	+ 85°/ - 265°	±180°/s
Wrist 2	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s
Wrist 3	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s	±175°	±180°/s
Typical TCP speed	1m/s		1m/s		1.5m/s		1m/s		2m/s		2m/s	
IP classification	IP54(IP65 Optional)		IP54(IP65 Optional)		IP54(IP65 Optional)		IP54(IP65 Optional)		IP54(IP65 Optional)		IP54(IP65 Optional)	
Noise	<65dB		<65dB		<65dB		<65dB		<70dB		<70dB	
Robot mounting	Any orientation		Any orientation		Any orientation		Any orientation		Any orientation		Any orientation	
I/O Ports	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1	(DI) 2 (DO) 2 (AI) 1 (AO) 1
Tool I/O power supply	24V/1.5A		24V/1.5A		24V/1.5A		24V/1.5A		24V/1.5A		24V/1.5A	
Footprint	128mm		149mm		190mm		190mm		240mm		240mm	
Weight	≈15kg		≈22kg		≈40kg		≈40kg		≈85kg		≈85kg	
Operating temperature	0-45°C		0-45°C		0-45°C		0-45°C		0-45°C		0-45°C	
Operating humidity	90%RH(non-condensing)		90%RH(non-condensing)		90%RH(non-condensing)		90%RH(non-condensing)		90%RH(non-condensing)		90%RH(non-condensing)	
Materials	Aluminium, Steel		Aluminium, Steel		Aluminium, Steel		Aluminium, Steel		Aluminium, Steel		Aluminium, Steel	
Typical power test payload settings, different loads are set according to robot models, payload configuration parameters are as follows :												
	FR3 payload setting: 3kg, Z-axis: 18mm		FR5 payload setting: 5kg, Z-axis: 30mm		FR10 payload setting: 10kg, Z-axis: 60		FR16 payload setting: 16kg, Z-axis: 96mm		FR20 payload setting: 20kg, Z-axis: 120mm		FR30 payload setting: 30kg, Z-axis: 200mm	
Select aging test program, connect robot's total power to power meter, set robot to automatic mode, set global speed to 100, click run, if there are no abnormalities after running two cycles, start continuous testing for 24 hours. After 24 hours, respectively, record the peak and average power of the power meter, and then statistically analyze each model :												
Typical average power	224W		261W		294W		315W		624W		594W	
Typical peak power	276W		314W		503W		410W		806W		909W	