

Spray robot series products

Zhihui Robot Technology (Jiangyin) Co., Ltd

Company Profile

Zhihui Robot is an innovative technology company dedicated to the research and development, production, sales, and application of specialized intelligent robots in the field of spraying. The domestic first proposed to solve the problem of flexible spraying in customer production through the technical route of "AI+spraying robot+spraying process", creating a "flexible spraying system" with independent intellectual property rights, combining hands, eyes, and brains in the spraying scene, solving the problems of "multiple types and difficult positioning" of customer workpieces, and making the application of spraying robots simpler and more intelligent!

The team members have been deeply involved in the field of spray painting robots for many years, independently developing intelligent spray painting robots with large arms, committed to solving the stubborn problem of "people-oriented" spray painting for medium and large workpieces. Meanwhile, the company We also provide customized automated flexible spraying solutions for customers, offering them affordable and user-friendly spraying robots to help upgrade the traditional spraying industry's intelligence!



SR5-1600

Activity radius 1600mm/offset wrist/load 5kg

■ Functional Features

BBR structure offset wrist, no singular points on the front

Explosion proof certification; Compact structure

1600mm arm span; 5KG end load

Wrist protection level reaches IP67

Can be paired with a 3D vision system for intelligent painting robots and an AR follow-up teaching handle, making it convenient and easy to use

■ Applicable scenarios

Suitable for narrow space spraying operation environment

Widely used in spraying scenarios such as 3C electronics, automotive components, and small metal parts

■ Applications

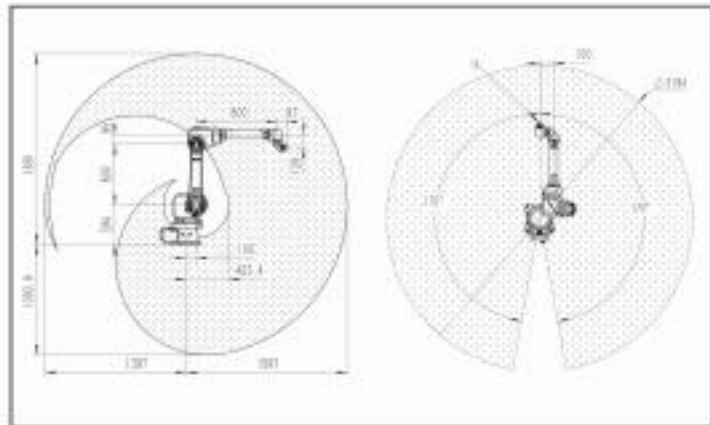
Suitable for industries such as automotive parts and small metal components



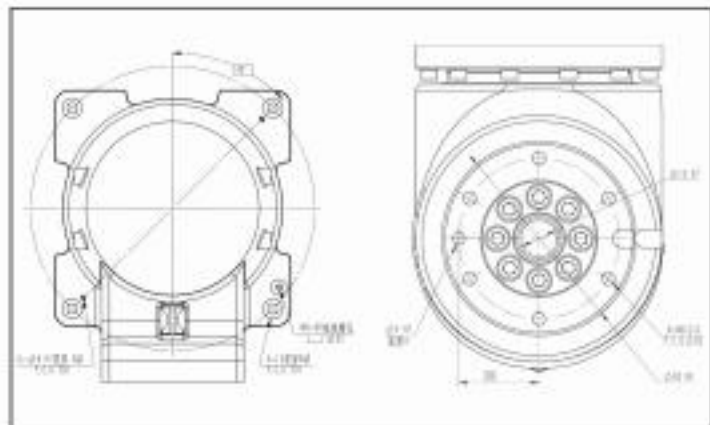
SPECIFICATIONS

Product model		SR5-1600	
Activity radius		1600mm	
Repeat positioning		±0.05mm	
Action range&speed		Action range	speed
	A 1	-170° ~ +170°	2.7rad/s, 159.5°/s
	A 2	-95° ~ +170°	3.0rad/s, 176.4°/s
	A 3	-100° ~ +80°	3.3rad/s, 191.5°/s
	A 4	-360° ~ +360°	6.8rad/s, 392.1°/s
	A 5	-360° ~ +360°	6.8rad/s, 392.1°/s
	A 6	-360° ~ +360°	10.4rad/s, 600°/s
Allow static load torque	J 4	39N.m	
	J 5	31N.m	
	J 6	17.6N.m	
Allow moment of inertia	J 4	0.67kg.m ²	
	J 5	0.54kg.m ²	
	J 6	0.25kg.m ²	

OPERATING SPACE

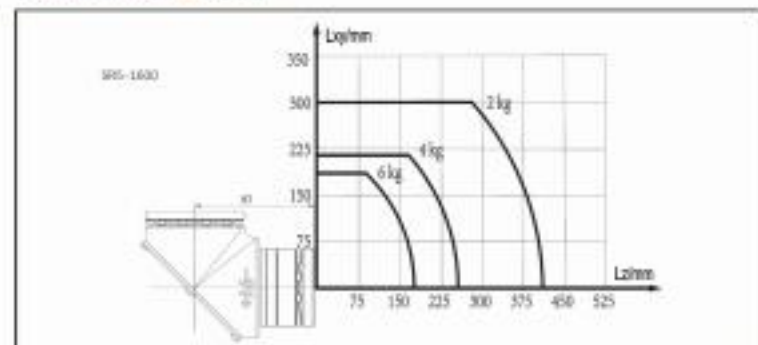


BASE& END FLANGE MOUNTING SIZE



structure		Vertical multi joint type (6 degrees of freedom)	
Installation method		Placed, inverted, wall mounted	
Robot quality		150kg	
protection grade	body	IP65	
	Wrist components	IP67	
Explosion proof sign	Model specifications	SR series	
	gas	Ex eb ib mb pxb IIc T4 Gb	
	dust	Ex tb ib mb pxb IIIC T135°C Db	
Installation environment	temperature	0~45℃	
	humidity	20%~80% RH (no condensation)	
	vibrate	Below 4.9m/s ² (0.5G)	
	other	No corrosive gases or liquids are allowed	
		Stay away from electrical noise sources and electromagnetic sources, Stay away from strong microwaves, ultraviolet rays, X-rays, and radiation	
Transportable weight	hand and wrist	5Kg	
	boom	8kg	
noise		70dB	

WRIST END LOAD MAP



SELECTION&CONFIGURATION TABLE

project	Standard configuration	Optional configuration
Drive unit	6 axes	6+3 axes
Electric cabinet - body	Static cable	Static cable drag chain cable
cable	8m	30m
Teaching pendant cable	10m	30m
Digital quantity DI/DO	14/16	Can increase the number of hardware modules
Analog AI/AO	2	Can add secure IO modules
Fieldbus	MODBUS TCP	RTU TCP/IP 485/232
Program capacity	1G	/
external interface	USB	/
software package	Spray coating process package	vision
display form	Teach Pendant	Touch Screen
colour	LY9H/2K Pure Black	Customer booking

SR12-2000

Activity radius 2000mm/offset wrist/load 15kg

■ Functional Features

BBR structure offset wrist, no singular points on the front

Explosion proof certification; Compact structure

2000mm arm span; 15KG end load

Wrist protection level reaches IP67

Can be paired with a 3D vision system for intelligent painting robots and an AR follow-up teaching handle, making it convenient and easy to use

■ Applicable scenarios

Suitable for narrow space spraying operation environment

Widely used in spray painting scenarios such as automotive parts, furniture, wheels, motors, engines, etc

■ Applications

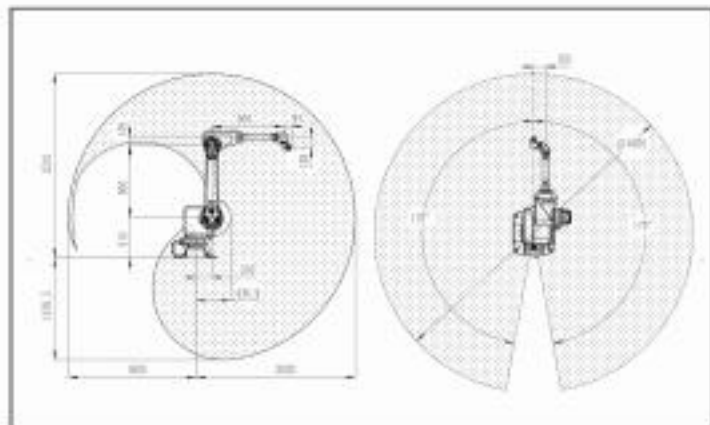
Suitable for industries such as automotive parts, furniture, wheels, motors, engines, etc



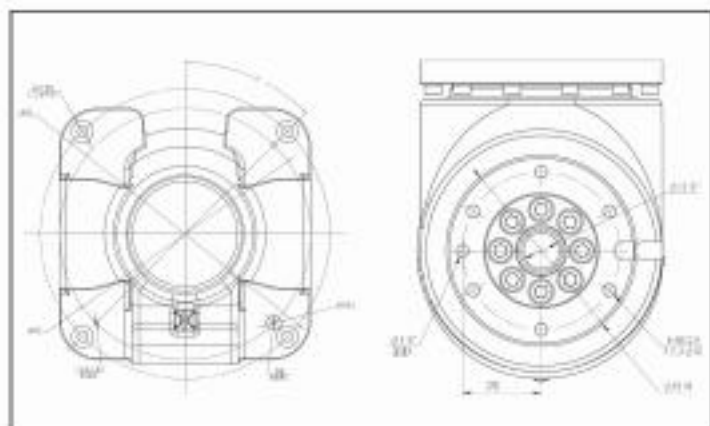
SPECIFICATIONS

Product model		SR12-2000	
Activity radius		2000mm	
Repeat positioning		±0.1mm	
Action range&speed		Action range	speed
	A 1	-170° ~ +170°	2.3rad/s,131.1°/s
	A 2	-87° ~ +170°	1.9rad/s,111.8°/s
	A 3	-120° ~ +75°	3.4rad/s,196.0°/s
	A 4	-360° ~ +360°	6.8rad/s,392.1°/s
	A 5	-360° ~ +360°	6.8rad/s,392.1°/s
	A 6	-360° ~ +360°	10.4rad/s,600°/s
Allow static load torque	J 4	39N.m	
	J 5	31N.m	
	J 6	17.6N.m	
Allow moment of inertia	J 4	1.22kg.m ²	
	J 5	0.9kg.m ²	
	J 6	0.3kg.m ²	

OPERATING SPACE

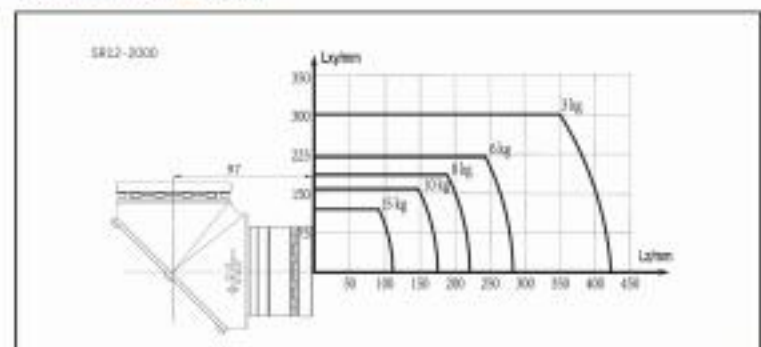


BASE& END FLANGE MOUNTING SIZE



structure		Vertical multi joint type (6 degrees of freedom)	
Installation method		Placed, inverted, wall mounted	
Robot quality		330kg	
protection grade	body	IP65	
	Wrist components	IP67	
Explosion proof sign	Model specifications	SR series	
	gas	Ex eb ib mb pxb IIC T4 Gb	
	dust	Ex tb ib mb pxb IIC T135'CDb	
Installation environment	temperature	0~45℃	
	humidity	20%~80% RH (no condensation)	
	vibrate	Below 4.9m/s ² (0.5G)	
	other	No corrosive gases or liquids are allowed Stay away from electrical noise sources and electromagnetic sources, Stay away from strong microwaves, ultraviolet rays, X-rays, and radiation	
Transportable weight	hand and wrist	15Kg	
	boom	20kg	
noise		70dB	

WRIST END LOAD MAP



SELECTION&CONFIGURATION TABLE

project	Standard configuration	Optional configuration
Drive unit	6 axes	6+3 axes
Electric cabinet - body	Static cable	Static cable drag chain cable
cable	8m	30m
Teaching pendant cable	10m	30m
Digital quantity DI/DO	14/16	Can increase the number of hardware modules
Analog AI/AO	2	Can add secure IO modules
Fieldbus	MODBUS TCP	RTU TCP/IP 485/232
Program capacity	1G	/
external interface	USB	/
software package	Spray coating process package	vision
display form	Teach Pendant	Touch Screen
colour	LY9H/2K Pure Black	Customer booking

SR8-2600

Activity radius 2600mm/offset wrist/load 8kg

■ Functional Features

BBR structure offset wrist, no singular points on the front

Explosion proof certification; Compact structure

2600mm arm span; 8KG end load

Wrist protection level reaches IP67

Can be paired with a 3D vision system for intelligent painting robots and an AR follow-up teaching handle, making it convenient and easy to use

■ Applicable scenarios

Suitable for narrow space spraying operation environment

Widely used in spraying scenarios such as automotive parts, furniture, electric vehicles, motors, engines, steel structures, etc

■ Applications

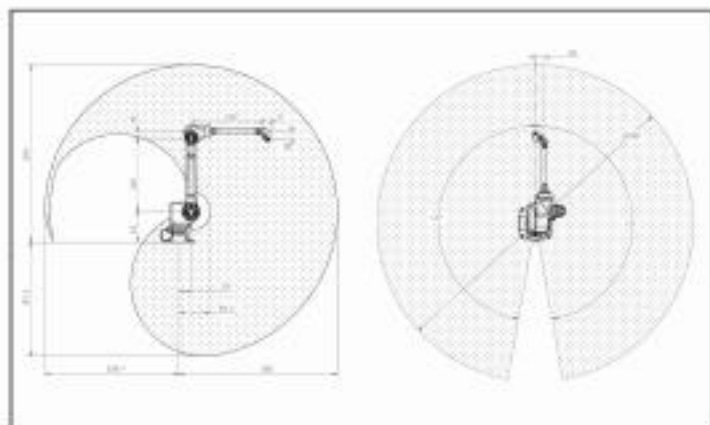
Suitable for industries such as automotive parts, furniture, electric vehicles, motors, engines, steel structures, etc



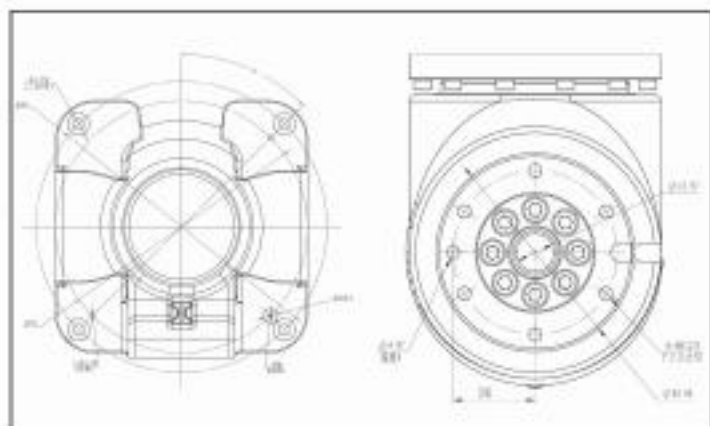
SPECIFICATIONS

Product model		SR8-2600	
Activity radius		2600mm	
Repeat positioning		±0.1mm	
Action range&speed		Action range	speed
	A 1	-170° ~ +170°	2.3rad/s,131.1°/s
	A 2	-87° ~ +170°	1.9rad/s,111.8°/s
	A 3	-110° ~ +75°	3.4rad/s,196.0°/s
	A 4	-360° ~ +360°	6.8rad/s,392.1°/s
	A 5	-360° ~ +360°	6.8rad/s,392.1°/s
	A 6	-360° ~ +360°	10.4rad/s,600°/s
Allow static load torque	J 4	39N.m	
	J 5	31N.m	
	J 6	17.6N.m	
Allow moment of inertia	J 4	0.8kg.m ²	
	J 5	0.66kg.m ²	
	J 6	0.2kg.m ²	

OPERATING SPACE

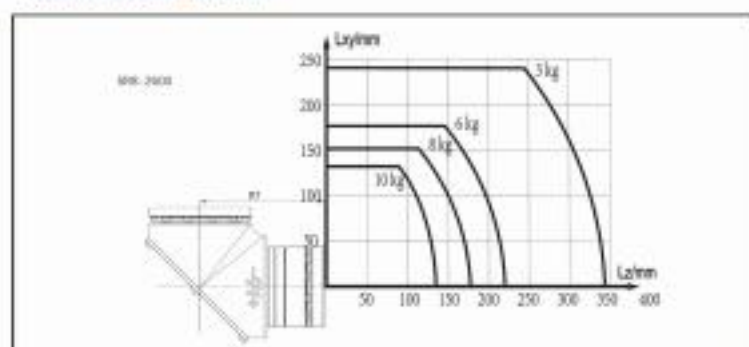


BASE& END FLANGE MOUNTING SIZE



structure		Vertical multi joint type (6 degrees of freedom)	
Installation method		Placed, inverted, wall mounted	
Robot quality		350kg	
protection grade	body	IP65	
	Wrist components	IP67	
Explosion proof sign	Model specifications	SR series	
	gas	Ex eb ib mb pxb IIc T4 Gb	
	dust	Ex tb ib mb pxb IIIC T135°C Db	
Installation environment	temperature	0~45℃	
	humidity	20%~80% RH (no condensation)	
	vibrate	Below 4.9m/s ² (0.5G)	
	other	No corrosive gases or liquids are allowed	
		Stay away from electrical noise sources and electromagnetic sources, Stay away from strong microwaves, ultraviolet rays, X-rays, and radiation	
Transportable weight	hand and wrist	8Kg	
	boom	16kg	
noise		70dB	

WRIST END LOAD MAP



SELECTION&CONFIGURATION TABLE

project	Standard configuration	Optional configuration
Drive unit	6 axes	6+3 axes
Electric cabinet - body	Static cable	Static cable drag chain cable
cable	8m	30m
Teaching pendant cable	10m	30m
Digital quantity DI/DO	14/16	Can increase the number of hardware modules
Analog AI/AO	2	Can add secure IO modules
Fieldbus	MODBUS TCP	RTU TCP/IP 485/232
Program capacity	1G	/
external interface	USB	/
software package	Spray coating process package	vision
display form	Teach Pendant	Touch Screen
colour	LY9H/2K Pure Black	Customer booking

SR12-3200

Activity radius 3200mm/offset wrist/load 15kg

■ Functional Features

BBR structure offset wrist, no singular points on the front

Explosion proof certification; Compact structure

3200mm arm span; 15KG end load

Wrist protection level reaches IP67

Can be paired with a 3D vision system for intelligent painting robots and an AR follow-up teaching handle, making it convenient and easy to use

■ Applicable scenarios

Suitable for narrow space spraying operation environment

Widely used in spray painting scenarios such as automotive parts, electric vehicles, wind turbine blades, and car compartments

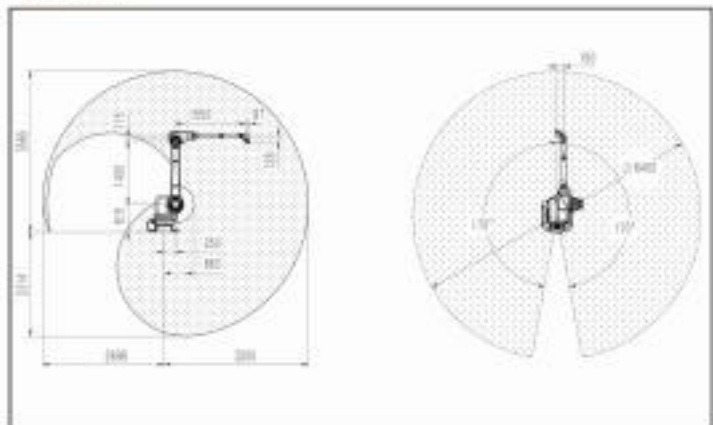
■ Applications

Suitable for industries such as automotive parts, electric vehicles, wind turbine blades, and carriages

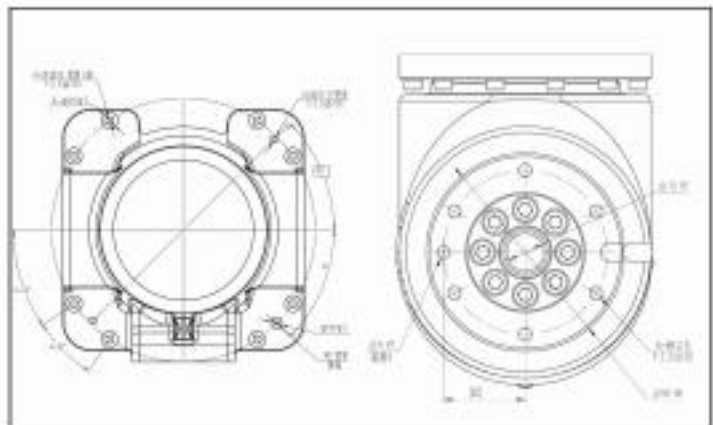


Product model		SR12-3200	
Activity radius		3200mm	
Repeat positioning		±0.1mm	
Action range&speed		Action range	speed
	A 1	-170° ~ +170°	1.5rad/s,85°/s
	A 2	-90° ~ +170°	1.8rad/s,105°/s
	A 3	-125° ~ +75°	3.4rad/s,196.0°/s
	A 4	-360° ~ +360°	6.1rad/s,352°/s
	A 5	-360° ~ +360°	6.1rad/s,352°/s
	A 6	-360° ~ +360°	9.4rad/s,540°/s
Allow static load torque	J 4	39N.m	
	J 5	31N.m	
	J 6	17.6N.m	
Allow moment of inertia	J 4	2kg.m ²	
	J 5	1.7kg.m ²	
	J 6	0.3kg.m ²	

动作范围/OPERATING SPACE

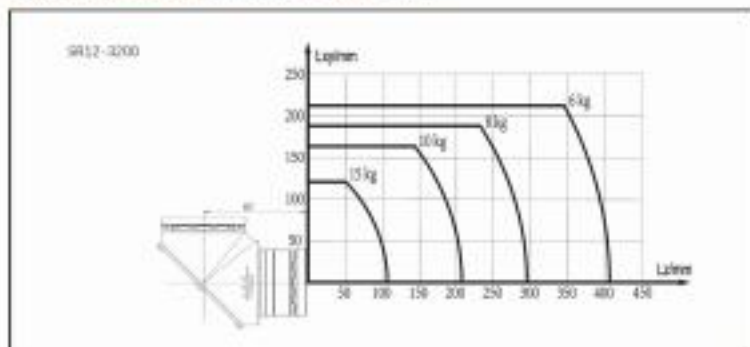


底座&法兰尺寸/BASE& END FLANGE MOUNTING SIZE



structure		Vertical multi joint type (6 degrees of freedom)	
Installation method		Placed, inverted, wall mounted	
Robot quality		620kg	
protection grade	body	IP65	
	Wrist components	IP67	
Explosion proof sign	Model specifications	SR series	
	gas	Ex eb ib mb pxb IIC T4 Gb	
	dust	Ex tb ib mb pxb IIIC T135°C Db	
Installation environment	temperature	0~45℃	
	humidity	20%~80% RH (no condensation)	
	vibrate	Below 4.9m/s ² (0.5G)	
	other	No corrosive gases or liquids are allowed	
		Stay away from electrical noise sources and electromagnetic sources, Stay away from strong microwaves, ultraviolet rays, X-rays, and radiation	
Transportable weight	hand and wrist	15Kg	
	boom	20kg	
noise		70dB	

手腕末端负载图 / WRIST END LOAD MAP



选型配置表 / SELECTION&CONFIGURATION TABLE

project	Standard configuration	Optional configuration
Drive unit	6 axes	6+3 axes
Electric cabinet - body	Static cable	Static cable drag chain cable
cable	8m	30m
Teaching pendant cable	10m	30m
Digital quantity DI/DO	14/16	Can increase the number of hardware modules
Analog AI/AO	2	Can add secure IO modules
Fieldbus	MODBUS TCP	RTU TCP/IP 485/232
Program capacity	1G	/
external interface	USB	/
software package	Spray coating process package	vision
display form	Teach Pendant	Touch Screen
colour	LY9H/2K Pure Black	Customer booking

SR10-3800

Activity radius 3800mm/offset wrist/load 10kg

■ Functional Features

BBR structure offset wrist, no singular points on the front

Explosion proof certification; Compact structure

3800mm arm span; 10KG end load

The largest arm extended spraying robot on the market, with a wrist protection level of IP67

Can be paired with a 3D vision system for intelligent painting robots and an AR follow-up teaching handle, making it convenient and easy to use

■ Applicable scenarios

Widely used in spraying scenarios such as electric vehicles, wind turbine blades, carriages, wooden doors, and buses.

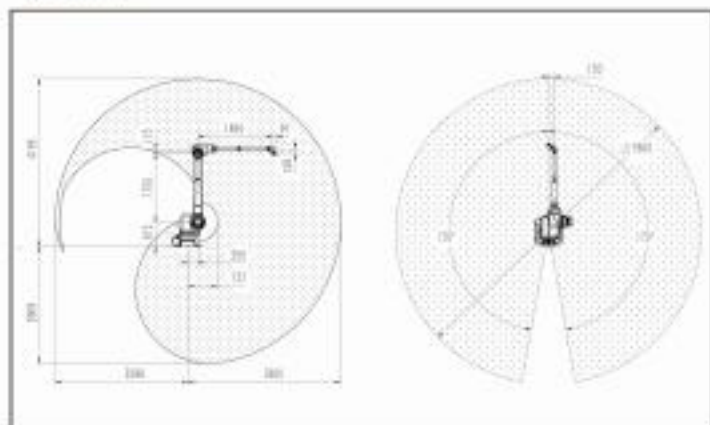
■ Applications

Suitable for industries such as electric vehicles, wind turbine blades, carriages, wooden doors, buses, etc

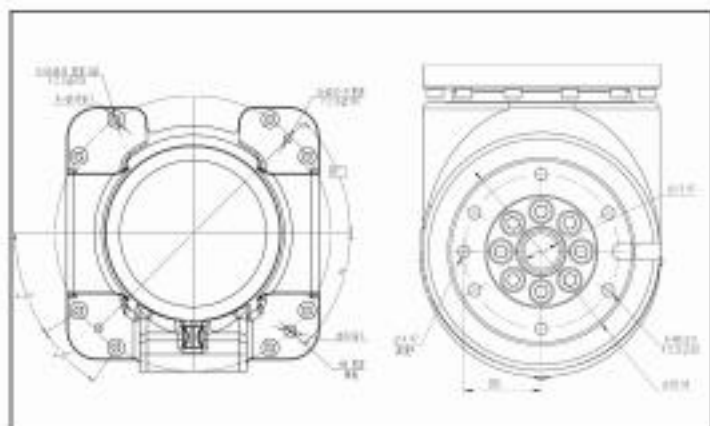


Product model		SR10-3800	
Activity radius		3800mm	
Repeat positioning		±0.1mm	
Action range&speed		Action range	speed
	A 1	-170° ~ +170°	1.5rad/s, 85°/s
	A 2	-90° ~ +170°	1.8rad/s, 105°/s
	A 3	-125° ~ +75°	3.4rad/s, 196.0°/s
	A 4	-360° ~ +360°	6.1rad/s, 352°/s
	A 5	-360° ~ +360°	6.1rad/s, 352°/s
	A 6	-360° ~ +360°	9.4rad/s, 540°/s
Allow static load torque	J 4	39N.m	
	J 5	31N.m	
	J 6	17.6N.m	
Allow moment of inertia	J 4	1.5kg.m ²	
	J 5	1.2kg.m ²	
	J 6	0.2kg.m ²	

动作范围/OPERATING SPACE

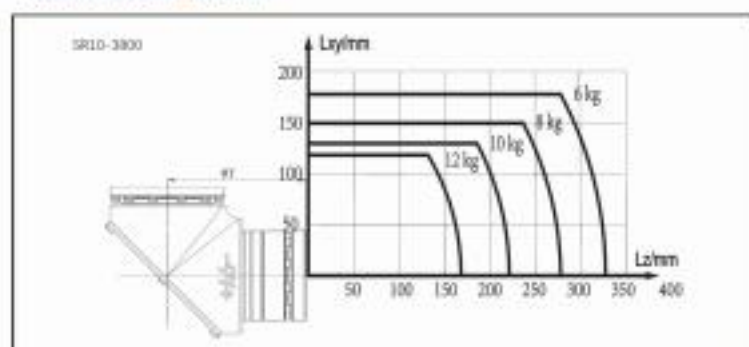


底座&法兰尺寸/BASE& END FLANGE MOUNTING SIZE



structure		Vertical multi joint type (6 degrees of freedom)	
Installation method		Placed, inverted, wall mounted	
Robot quality		650kg	
protection grade	body	IP65	
	Wrist components	IP67	
Explosion proof sign	Model specifications	SR series	
	gas	Ex eb ib mb pxb IIC T4 Gb	
	dust	Ex tb ib mb pxb IIIC T135°C Db	
Installation environment	temperature	0~45°C	
	humidity	20%~80% RH (no condensation)	
	vibrate	Below 4.9m/s ² (0.5G)	
	other	No corrosive gases or liquids are allowed Stay away from electrical noise sources and electromagnetic sources, Stay away from strong microwaves, ultraviolet rays, X-rays, and radiation	
Transportable weight	hand and wrist	10Kg	
	boom	20kg	
noise		70dB	

WRIST END LOAD MAP



SELECTION&CONFIGURATION TABLE

project	Standard configuration	Optional configuration
Drive unit	6 axes	6+3 axes
Electric cabinet - body cable	Static cable	Static cable drag chain cable
	8m	30m
Teaching pendant cable	10m	30m
Digital quantity DI/DO	14/16	Can increase the number of hardware modules
Analog AI/AO	2	Can add secure IO modules
Fieldbus	MODBUS TCP	RTU TCP/IP 485/232
Program capacity	1G	/
external interface	USB	/
software package	Spray coating process package	vision
display form	Teach Pendant	Touch Screen
colour	LY9H/2K Pure Black	Customer booking