

Ball Screw-Driven Linear Module

滚珠丝杠驱动线性模块

◆ RG-MZ 40

>> Technical Data 技术数据:

Standard Ball screw 标准滚珠螺母		16 x 5
Optional Ball screw 可选滚珠螺母		16 x 10
No-load Torque for 1605 无负载扭矩 (1605)		0.25 Nm
No-load Torque for 1610 无负载扭矩 (1610)		0.44 Nm
2nd Moment of area 二次截面矩		$I_y = 1.4 \times 10^5 \text{ mm}^4$ $I_z = 1.4 \times 10^5 \text{ mm}^4$
Weight 重量	Basic weight with zero stroke 行程为零时的基本重量	1.9 kg
	Weight/100mm stroke 100mm行程重量	0.37 kg

◆ RG-MZ 60

>> Technical Data 技术数据:

Standard Ball screw 标准滚珠螺母		25 x 10
Optional Ball screw 可选滚珠螺母		25 x 25
No-load Torque for 1605 无负载扭矩 (1605)		0.8 Nm
No-load Torque for 1610 无负载扭矩 (1610)		1.4 Nm
2nd Moment of area 二次截面矩		$I_y = 6.8 \times 10^5 \text{ mm}^4$ $I_z = 7.0 \times 10^5 \text{ mm}^4$
Weight 重量	Basic weight with zero stroke 行程为零时的基本重量	5.8 kg
	Weight/100mm stroke 100mm行程重量	0.93 kg

Robotics System

机器人系统



Definition & Usage

Robots are used in a wide range of industrial applications.

Automatically controlled, programmable, highly dependable with the capacity to achieve high speed, payload and accuracy are among some of the most desirable characteristics of robots.

Today, with advanced technological expertise, we are able to offer robotics solutions for applications such as welding, painting, assembly, pick and place (such as packaging, palletizing and SMT), product inspection, and testing; all accomplished with high endurance, speed, and precision.

定义与用途

机器人的工业应用范围很广。

可自动化控制, 可编程序, 高度可靠且有能达到高速、高荷载和高精准性均是工业用机器人最吸引人的特征之一。

今天, 以先进科技的专门技术为基础, 我们能为多项工业应用例如焊接、喷漆、组装、捡起和放置(例如包装、架装拖盘和SMT), 产品检查和测试等, 提供优质的机器人解决方案, 确保所有任务均以高耐力、速度和精确度完成。

Cartesian Robot

直角坐标机器人

◆ DRM Series

>> Features

- ◆ Rigid frame and compact size
- ◆ Driving type : Ballscrew, Belt Driving type, Rack&Pinion
- ◆ DRMP : High Precision with positioning repeatability $\pm 0.005\text{mm}$
- ◆ DRMC : Clean room specification (Clean class 10)
- ◆ DRMD : Dust proof specification
- ◆ High accurate positioning : C7($\pm 0.02\text{mm}$), C5($\pm 0.01\text{mm}$)
- ◆ Stroke : 100~10,000mm (2,000mm at Ballscrew)
- ◆ Speed : Max 2,000mm/s
- ◆ Payload : Up to 300Kg(Horizontal) / 120Kg(Vertical)
- ◆ Customizing design and various assembly type

>> Model List

◆ Ball Screw Type (Single Slider)

Series	Base Width	Type	Motor	Encoder	Speed	Stroke	Options	
DRM DRMP	50	S	80	I A	L05 / L10 / L20	100 ~ 1100	L1 L2 L3	K R B
	60				L10	100 ~ 400		
	80				L05 / L10 / L20	100 ~ 1100		
	115							
	130	LP	200		L2			
	160					RP		
	200	BP	400		L05 / L10 / L20			
	200		600		L10 / L20	100 ~ 1500		
	250		600		L10 / L25 / L50	100 ~ 2000		
			800					
800								
1000								

◆ Belt Type

Series	Base Width	Type	Motor	Encoder	Speed	Stroke	Options		
DRM	90	B	400	I A	1800	1000 ~ 2500	L1 L2 L3	K R B	
	130		600						
	160				2000				
	200		800			1000 ~ 4000			
	250				2500	1000 ~ 4500			

◆ DRMC Series

Series	Base Width	Type	Motor	Encoder	Speed	Stroke	Options		
DRMC DRMCP	70	S LP RP BP	80	I A	L10	100 ~ 400	L1 L2 L3	K	
	88				L05 / L10 / L20	100 ~ 1100			R
	120				L05 / L10 / L20	100 ~ 1100			
	140		L05 / L10 / L20		100 ~ 1100	RS			
	180		400		L05 / L10 / L20			100 ~ 1500	
			600		L10 / L20				
DRMC	265	S	2000		L10 / L20 / L40	100 ~ 2500			
			2500						
			3000						

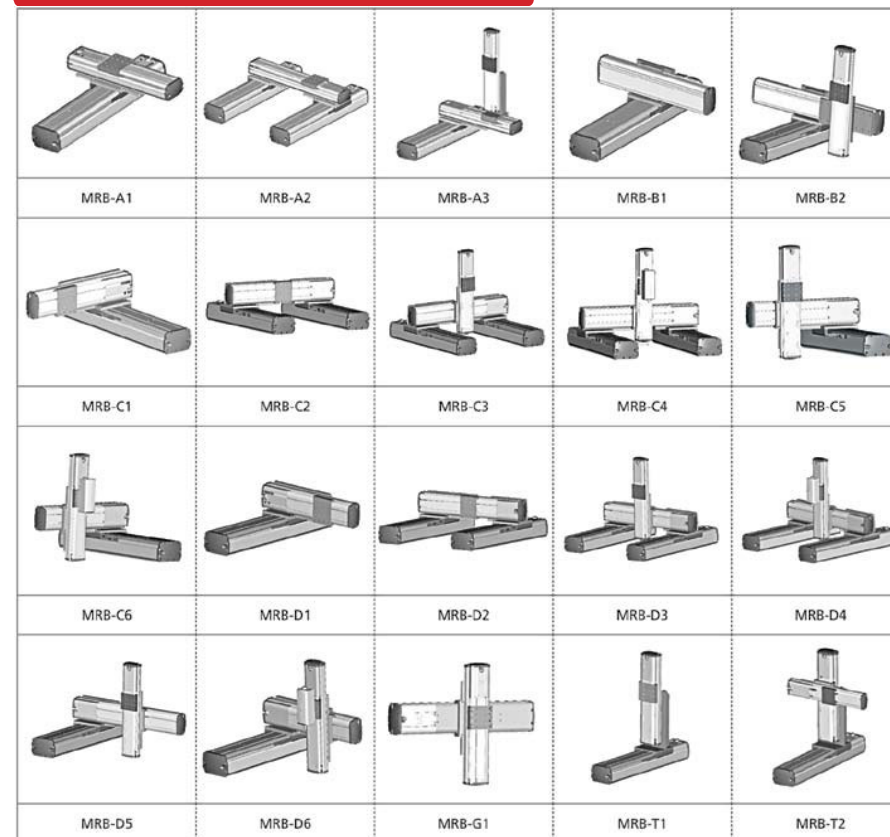
* Belt type is available.



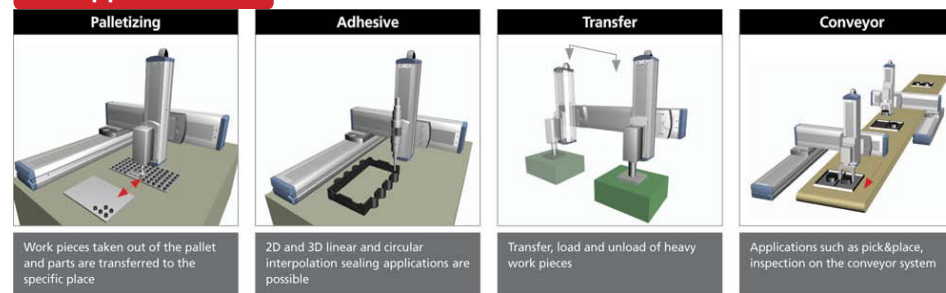
Cartesian Robot

直角坐标机器人

>> Assorted Combinations & Brackets



>> Applications



Desktop Robot

台式机器人

◆ DTR Series

>> Features

DTR series is designed to combine high precision and accurate positioning functions into compact unit with high rigid structure. DTR series has various models of servo motor with ball screw types and step motor with belt types models of and they are very useful and achieve the best performance.

◆ Compact design

Minimize whole dimension by cable treatment into the Robot and save working space*



DTR2(3)-3310/4410-T(ET,S)



DTR4-3510-S series



DTR3-2210-T(ET) series



DTR3-2205-M series

* Cables of the model 2205/2210 series and 4 axes (XYZR) of DTR series are exposed

◆ High Rigid Structure

Aluminium extruded material is employed on the base and gantry structure for all models enhance rigidity.

The servo motor and ball screw types of DTR are a good solution for the required applications of high load such as automotive industry.

◆ Various Line-ups

The DTR series provide various products ranges. Belt driven with Encoder Stepper Motor type, belt driven with Stepper Motor type, ball screw drive with Servo Motor type, 2 axes, 3 axes, 4 axes, and Dual-X axes are available.

>> Model List

Series	Drive	Model	Arm Length (mm)				Allowable Axis
			X axis	Y axis	Z axis*	R axis	
DTR	Belt & Stepper motor	2205	200	200	50	-	3 axes (XYZ)
		2210	200	200	100	-	2 axes (XY)
		2210					3 axes (XYZ)
		3310	300	300	100	+/- 360°C	2 axes (XY)
		3310					3 axes (XYZ)
		3310					4 axes (XYZR)
		4410	400	400	100	+/- 360°C	2 axes (XY)
		4410					3 axes (XYZ)
		4410					4 axes (XYZR)
	Belt & Encoder Stepper motor	2210	200	200	100	-	2 axes (XY)
		2210					3 axes (XYZ)
		3310	300	300	100	+/- 360°C	2 axes (XY)
		3310					3 axes (XYZ)
		3310					4 axes (XYZR)
		4410	400	400	100	+/- 360°C	2 axes (XY)
		4410					3 axes (XYZ)
		4410					4 axes (XYZR)
	Ball screw & Servo motor	3310	300	300	100	+/- 360°C	2 axes (XY)
		3310					3 axes (XYZ)
		3310					4 axes (XYZR)
		4410	400	400	100	+/- 360°C	2 axes (XY)
		4410					3 axes (XYZ)
		4410					4 axes (XYZR)
		3510	300/300	500	100	-	4 axes (XYZR)

>> Applications

Dispensing	Screw tightening	Cutting	Vision inspection
High performance of 2D and 3D linear and circular interpolation sealing and adhesion, coating	Fastening and unfastening screws into electric components and automotive parts	PCB cutting without stress and cracks	Checking PC boards for mounting defects Provides easy teaching and automatic transfer function for off-positioned work piece on the fixture with CCD camera and height sensor

Scara Robot

水平多关节机器人

◆ DSM Series

>> Features

This series provides various model range from 250mm to 1000mm in the arm length and up to 20kg in maximum payload. It used absolute and incremental specification used. Standard and clean room/dust proof specifications are available.

◆ Compact and rigid design

The DSM series is designed to save the space efficiently.

The cable of the models (DSM-6020/7020/8020/9020/K1020) is enclosed into the robot and it allows for flexible design and space in the system.

The DSM-2515/3515/4515 series enhanced rigidity in a light weight by comprising aluminium extruded material.

DSM-6020/7020/8020/9020/K1020 series is capable of transferring high load up to 20kg.

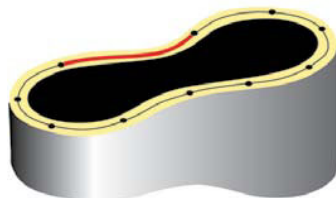
◆ Pursuing ease-of-use

The DSM series has standard user tubing and wiring.

DSM-2515/3515/4515 has the same air tubes as $\Phi 4 \times 3$ and 16 wires and DSM-6020 and higher models have as $\Phi 6 \times 4$ and 24 wires

◆ High performance of interpolation

The DSM series can perform three-dimensional arc/pass motions to allow for easy palletizing and dispensing. The robot can also provide tool offset and R axis position compensation function



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◆ DSM Series

>> Model List

Series	Model	Arm Length (mm)					Encoder	Maximum Payload (kg)	Option
		X axis	Y axis	Z axis*	R axis	T axis			
DSM DSMC	2515	125	125	100 150		-	Absolute	3	
	3515	225	125						
	4515	250	200						
DSM DSM(H)	6020	300	300	200 300	+/- 360°	+/- 360°	Absolute Incremental	5 (20)**	05 10
	7020	400	300						
	8020	400	400						
	9020	500	400						
	K1020	500	500						

* Z axis of all models is using a brake motor

** The maximum payload of DSM and DSMH is each 5kg and 20kg.

>> Applications

Palletizing	Sealing	Assembly	Screw tightening
Transfer work pieces between pallets	Sealing, adhesion application using 3D interpolation	In line assembly and independent cell unit assembly	Provide higher performance to screw tightening application using torque control

Single Axis Controller Robot

单轴控制器

◆ iMS-J Series / 系列



>> Features

iMS-J series is a single axis controller which is characterized by high speed, high accuracy, and motion stability because it adopts the latest 32bit RISC CPU and intelligent power module.

1. All in One - Control system including motion control, servo amp, and sequence function
2. Various Application - Synchronous operation, position transfer by bit Transfer by external pulse without motion operation.
3. Easy Application - Torque sensing and various outputs by time or interval
4. Remote control and programming by RS232/422 interface
5. Easy operation and monitoring by touch screen
6. Various motor brands compatible (DASA, SAMSUNG, PANASONIC, TAMAGAWA etc.)
7. User can set basic input bit and output bit.
8. Efficient scalability for feeder unit, IO transmitter, extension IO and so on
9. I/O control by CC-Link or ProfiBus converter.

Multi Axis Controller Robot

多轴控制器

◆ iMS-Σ Series / 系列



>> Features

iM-Σ series is characterized by high speed, high accuracy, and motion stability because it adopts high performance of a digital amplifier which is controlled by 16 and 32 bit DSP. It is designed to control from 2-axis robot to 8-axis robot or 8 single axes robot at once.

1. Cost effective of all-in-One functions

The iM-Σ series controller combines the functions of motion control, servo drive, and PLC function into a compact unit. Therefore, iM-Σ controller offers high performance with cost-effectiveness

2. Possible to control multi axes of Cartesian robots, Desktop robots, SCARA robots, and Linear servo motor Cartesian robots

The iM-Σ series are capable of controlling more number of 2 axes of the DRM, DRMC, DTR (Built-in), DSM and DLM series robots at the same time.

3. Multitasking

The iM-Σ controller executes each different 4 robot motion programs with maximum 8axes, simultaneously and independently.

4. Various options and extensive usage

The iM-Σ can connect touch screen, CCD camera, magnetic sensor, photo sensor, solenoid, MPG etc. It accommodates installation of extension board up to 8 axes and network options (CC-Link, ProfiBus) are selectable.

5. User friendly software

The iM-Σ series has different types of software to use easy and enhance system performance. It provides the general purpose software, dispensing software, and screw tightening software, and also PC software.