

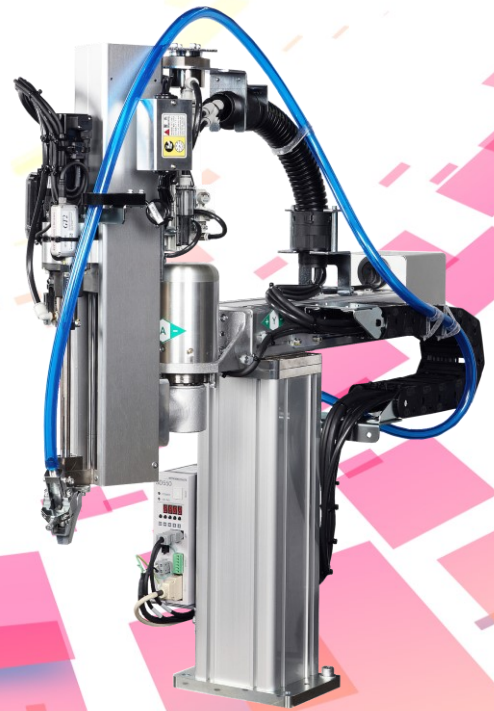
Compact type Robot for small products assembly.

Yθ (Linear Motion + Swivel Movement) Screw Driving Robot.

NITOMAN SR375Yθ

Features

- Three (3) kinds of teaching mode (Remote, MDI, Direct) are available.
- Operation panel with touch screen can select language for English or Japanese.
- RC75 controller is supported NPN and PNP both I/O.
- Driver Monitoring and setup function can be installed in touch screen. (Option)



Example of machine configuration.

■ **Compact system which will save the mounting space.**

■ **Turn key solution**

The package includes all components to feed and drive a screw, allowing immediate use after installation. Near zero integration cost and time.

■ **Equipped with Nitto Seiko screw driving motors.**

Equipped with our KX AC servo motor or NX AC servo motor with torque display function.

■ **“All in one” system to screw driving.**

Customized program and function with robot movement are included as standard.

■ **Monitoring function for the fastening result. (Option) ※5**

It is possible to setup with the teaching pendant for the movement, speed and output torque of driver, and to monitor for result of screw driving and error content by the optional communication function which is communicate between the driver controller and robot controller. And also it is possible to take out the log data with CC-Link.

NITOMAN SR375Yθ

Specifications of robot

Inside of [] is the option.

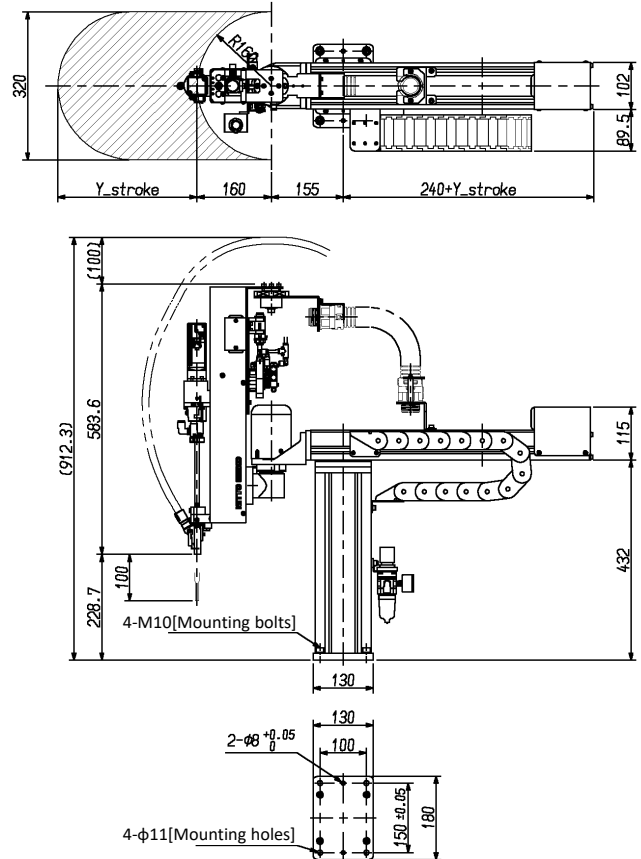
Type		SR375Yθ	
Screw driving unit	Number of axis to be controlled	Two axes, simultaneously	
	Applicable Screws ※1 ※2	Nom Dia.	Machine screw, Tapping screw 2~5mm (except M5 truss head screws)
		Length	Max. 18mm, [25]
	Tightening torque	0.3~3.0N·m ※3	
	Driver	KX driver	
	Tightening stroke	100mm	
	Screw holding system	Vacuum tube suction system	
Fault detections		Faulty torque (faulty screw tightening)	
		Low screw (in screw feeder)	
		Faulty screw height (proximity sensor)	
Robot	Work envelope	Y-axis	100, 200, 300mm
		Turning radius	160mm
	Maximum moving speed	Y-axis	500mm/sec.
		θ-axis	270°/sec.
Locating accuracy		±0.05mm	
Working air supply		0.4~0.5MPa	
Screw feeder		FF503H	

※1 Products will be built up based on specification of screws, therefore it can be used for one kind of screws only.

※2 Application range of screws will be changed by type of screw head, or size. Please contact us to make sure for it.

※3 The type of driver varies depending on target torque.

Outside dimensions (:mm)



Specifications of robot controller

Inside of [] is the option.

Type	RC75-T3
Supply voltage	Single phase AC200~230V 50/60Hz, [Single phase AC100~115V 50/60Hz]
Number of axis to be controlled	Two axis, max
Robot movement	PTP control, Closed loop control
Position feedback	Incremental value encoder system
Serial port	RS-422 (for teaching pendant)
Memory	Flash memory backup
External input ※4	Standard user port 16points, [Additional 32 external points available]
External output ※4	Standard user port 16points, [Additional 32 external points available]
Field network	[CC-Link]
Teaching method	MDI, Remote teaching, Direct teaching
Point control	Max. 1,000 points
Outside dimensions(W×H×D)	170×210×270mm
Weight	Approximately 6.5Kg
Teaching pendant	Handy Type touch panel (with Emergency switch and Dead-man's switch) Pendant can be used as manual control panel

※4 External input/output may be used as a screw-driving system depending on the device configuration.

※5 The optional monitoring function for the value of torque and angle will be limited by the condition of specification.

Example of machine configuration



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