NITTOSEIKO

High Precision Fastening / Compact

Tabletop NejiRobo[®] developed for Small Workpieces Tabletop Screw Fastening Robot

Paired with the NPN/PNP Compatible RC755 Controller

- High Agility
- Advanced Servo System (Type-2 Z Axis)
- Switch Languages via Touch Panel (JP/EN)
- Advanced Thrust Force Controls (Type-2, Type-3D)
- SD550 Communications Function (Optional)



Increase Work Speed (Type-2, Type-3D)

Decrease Cycle Times drastically by increasing Motion Functionality with the help of the Advanced Servo System. Decrease pick up and Fastening time by 1.5 seconds each cycle.

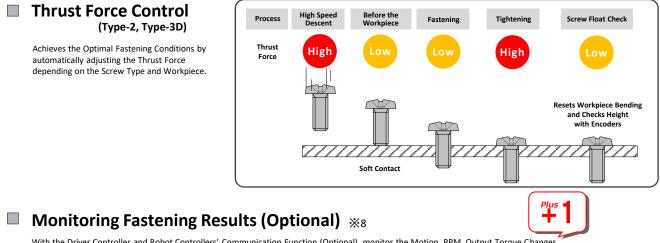
The diagram shows an example configuration of the machine. (SR395DT Type-1)

Ease of Use

The Teaching Process is now easier with the Direct Teaching Function. Switch between Japanese or English using the Touch Panel.

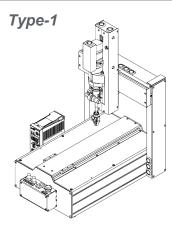
Wide Range of Workpieces, Optimal Fastening

Set Fastening properties such as Torque and RPM individually for optimal fastening of Resin and Thin Metallic Sheet Workpieces. Steady Fastening with no deviation.

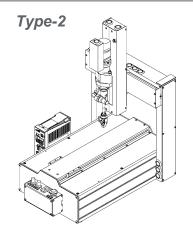


With the Driver Controller and Robot Controllers' Communication Function (Optional), monitor the Motion, RPM, Output Torque Changes, Fastening Results, Error Details etc. from the Teaching Pendent of the Driver Tool Unit.

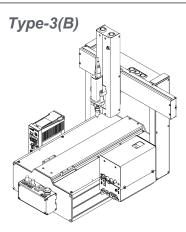
NejiRobo® **DITOMAD**® SR395DT



Low-Cost Standard Type High Speed Fastening for Efficient Production



Variable Thrust Force Type Emphasis on High Speed and High Quality Fastening



Screw Pick up Type Fasten Short Screws with High Reliability

Robot Specifications

No. of Axis 2 3 3 Thrust Control No Yes No Yes Preding Mechanism Blow Feed Pick Up No. of Axis Maximum 3 Axis Compatible Screws %1%2 Machine / Self Tapping Screw Coordination Method PTP Control. Open L PTP Control. Open L PTP Control, Semi C No. in Axis Naminal Dia. 2~3mm 11.2]~2mm 2~3mm Length Max.10mm Max.5mm Max.10mm Coordinate Detection Method Incremental Encode Driver Motor KX Driver(By NITTOSEIKO) Fastening Stroke 50mm 75mm External Input %5 16 Standard User Pr Screw Holding Mechanism Vacuum Pipe Suction Type Field Network ICC-Link] Teaching Method MDI, Remote Teach Motion X Axis 190mm 305mm External Dimensions(WXHxD) Built into SR395DT Standard Base Dimensions 160 × 160mm/sec Handy Type Touch 1 Yaxis - 600mm/sec For Compatible Software IGX Developer or Giguaton, External V0 may Yaxis - 600mm/s	R	obot	Specificati	ions			[]Optional Specs.	Robot Controller Specifications	
No. of Axis Z 3 3 Thrust Control No Yes No Yes Feeding Mechanism Blow Feed Pick Up No. of Axis Maximum 3 Axis Compatible Screws X1%2 Machine / Self Tapping Screw No. of Axis Maximum 3 Axis Compatible Screws X1%2 Machine / Self Tapping Screw Coordination Method PTP Control. Open L Nominal Dia. 2~3mm (1.2)~2mm 2~3mm Coordinate Detection Method Incremental Encode Screw Holding Mechanism Max.10mm Max.5mm Max.10mm Serial Port RS422(For Teaching NG Detection Function Torque Rage \$3 (0.2)~1.5N·m I0.06]~0.4N·m I0.2]~1.5N·m Ver Fastening Stroke 50mm 75mm External Input $\%$ 5 I6 Standard User Pc Karange Y Axis 190mm 305mm Field Network ICC-Link] Maximum X Axis 190mm 305mm External Dimensions(WxHxD) Built into SR395DT Motion X Axis 600mm/sec Y Axis 600mm/sec <th></th> <th></th> <th>Type</th> <th>Turno 1</th> <th>Turne 2</th> <th colspan="2">Type-3</th> <th></th> <th>DOTE</th>			Type	Turno 1	Turne 2	Type-3			DOTE
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Process of the transmitter of transmitte		Thrust (Control	No	Yes	No	Yes	Power Supply	[Single Phase AC100 – 115
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Description Length Max.10mm Max.5mm Max.10mm Coordinate Detection Method Incremental Encode Torque Range %3 [0.2]~1.5N·m [0.06]~0.4N·m [0.2]~1.5N·m [0.2]~1.5N·m Serial Port RS422(For Teaching Driver Motor KX Driver(By NITTOSEIKO) Memory Flash Memory Back External Input %5 16 Standard User Por Screw Holding Mechanism Vacuum Pipe Suction Type External Output %5 16 Standard User Por NG Detection Function Torque NG(Screw Strip), Low Screw(At Screw Feeder), Screw Float Field Network [CC-Link] Motion X Axis 190mm 305mm Point Management Total Points : 1,000 Range X Axis 190mm 305mm External Dimensions(WXHxD) Built into SR395DT Standard Base Dimensions 160 × 160mm(X × Y) Handy Type Touch I (With Emergency St The Pendent can als Yeed X Axis - 600mm/sec PC Compatible Software [GX Developer or Gi Yeed X Axis - 600mm/sec PC Compatible Software [GX Developer or Gi	i H	Compati	ble Screws %1%2	Machine / Self Tapping Screw			crew	Coordination Method	PTP Control. Open Loop Co
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Image: Screw Holding Mechanism Vacuum Pipe Suction Type External Output %5 16 Standard User No NG Detection Function Torque NG(Screw Strip), Low Screw(At Screw Feeder), Screw Float Field Network [CC-Link] Maximum Payload(Y Axis) 6kg Teaching Method MDI, Remote Teach Motion X Axis 190mm 305mm Y Axis 160 × 160mm(X × Y) External Dimensions(WxHxD) Built into SR395DT Maximum X Axis 600mm/sec Handy Type Touch I Y Axis - 600mm/sec Teaching Pendent (With Emergency St The Pendent can als PC Compatible Software Air Supply 0.4~0.5MPa %5 Depending on the Machine Configuration, External I/O mayl %7 GX Developer as well as GX Works are product of MITS	ing	Γ	ength	Max.10mm		Max.5mm	Max.10mm	Coordinate Detection Method	Incremental Encoder
Image: Screw Holding Mechanism Vacuum Pipe Suction Type External Output %5 16 Standard User No NG Detection Function Torque NG(Screw Strip), Low Screw(At Screw Feeder), Screw Float Field Network [CC-Link] Maximum Payload(Y Axis) 6kg Teaching Method MDI, Remote Teach Motion X Axis 190mm 305mm Y Axis 160 × 160mm(X × Y) External Dimensions(WxHxD) Built into SR395DT Maximum X Axis 600mm/sec Handy Type Touch I Y Axis - 600mm/sec Teaching Pendent (With Emergency St The Pendent can als PC Compatible Software Air Supply 0.4~0.5MPa %5 Depending on the Machine Configuration, External I/O mayl %7 GX Developer as well as GX Works are product of MITS	driv	Torque Range		[0.2]~	1.5N∙m	[0.06]∼0.4N·m	[0.2]~1.5N·m	Serial Port	RS422(For Teaching Pende
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Maximum Payload(Y Axis) 6kg Motion Range X Axis 190mm 305mm Y Axis 190mm 305mm Standard Base Dimensions 160 × 160mm(X × Y) External Dimensions(WxHxD) Built into SR395DT Maximum Movement Speed X Axis 600mm/sec Handy Type Touch I V Axis 600mm/sec Teaching Pendent With Emergency St The Pendent can als Z Axis - 600mm/sec PC Compatible Software IGX Developer or GS X Axis - 600mm/sec PC Compatible Software IGX Developer or GS Air Supply 0.4~0.5MPa %5 Depending on the Machine Configuration, External I/O mayl %5 GX Developer as well as GX Works are Product of MIS		Screw H	olding Mechanism	Vacuum Pipe Suction Type				External Output %5	16 Standard User Ports [32
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Z Axis - 600mm/sec PC Compatible Software [GX Developer or GX Coordinate Precision ±0.01mm %5 Depending on the Machine Configuration, External I/O may Air Supply 0.4~0.5MPa %6 The 🗆 in the model name indicates the Type. T1: Type				600mm/sec					The Pendent can also be us
Air Supply 0.4~0.5MPa %6 The □ in the model name indicates the Type. T1 : Type		Speed	Z Axis	-		600mm/sec		PC Compatible Software	[GX Developer or GX Work
The support of the su		Coordinate Precision		±0.01mm				%5 Depending on the Machine Configuration, External I/O may be used as	
External Depth x Height 565 x 485mm X7 GX Developer as well as GX Works are Products of MITS	Air S	Air Supply				0.4~0.5MPa		※6 The □ in the model name indicates the Type. T1 : Type-1, Type-3	
Dimensions Karightening Torque / Angle monitoring (Optional) are sub			Depth x Height	565 × 485mm				%7 GX Developer as well as GX Works are Products of MITSUBISHI EL %8 Tightening Torque / Angle monitoring [Optional] are subjected to	
(Robot Only) Width 385mm 500mm 565mm			Width	385	mm	500mm	565mm	288 lightening lorque / Angle monitoring[Optional]are subjected	
Screw Feeder FF503H(ву NITTOSEIKO) DF200(ву NITTOSEIKO) FF311DR(вуNITTOSEIKO) Recommended Uses	Scre	w Feede	r	FF503H(By	NITTOSEIKO)	DF200(By NITTOSEIKO)	FF311DR(ByNITTOSEIKO)	Recommended Uses	

Robot Controller Specifications []Optional Spec						
Model	RC755-T□ ※ 6					
Power Supply	Single Phase AC200 – 230V 50/60Hz [Single Phase AC100 – 115V 50/60Hz]					
No. of Axis	Maximum 3 Axis					
Coordination Method	PTP Control. Open Loop Control(X, Y Axis) PTP Control, Semi Closed Loop Control(Z Axis)					
Coordinate Detection Method	Incremental Encoder					
Serial Port	RS422(For Teaching Pendent)					
Memory	Flash Memory Backup					
External Input	16 Standard User Ports [32 Point Option Available]					
External Output %5	16 Standard User Ports [32 Point Option Available]					
Field Network	[CC-Link]					
Teaching Method	MDI, Remote Teaching, Direct Teaching					
Point Management	Total Points : 1,000 Points					
External Dimensions(WxHxD)	Built into SR395DT					
Teaching Pendent	Handy Type Touch Panel (With Emergency Stop Switch, Deadman Switch) The Pendent can also be used as a Control Panel.					
PC Compatible Software	[GX Developer or GX Works2 or newer] %7					

he □ in the model name indicates the Type. T1 : Type-1, Type-38 T2 : Type-2, Type-3D X Developer as well as GX Works are Products of MITSUBISHI ELECTRIC Corporation. ightening Torque / Angle monitoring [Optional] are subjected to the Machine Specification.

ommended Uses

By combining the FF311DR (By NITTOSEIKO) with the SR395DT, fastening of "Spring washer + Plane washer Screws" becomes possible.



NITTOSEIKO CO., LTD.

Assembly Machine Division / Shiroyama Plant Global Sales Section

%1 Machines will be designed according to the screws. Hence, it will only be compatible with 1 type of screw.

%4 In cases where there are 2 or more Workpieces, please make sure the total weights of the Workpiece

2 Compatibility will differ according to Screw Size and Head Shape. Therefore, please contact us for further details.

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%3 Driver Models will be determined by the Tightening Torque.

and JIG are within $\pm\,10\%$ throughout all Workpieces.