

SMARTSTEP

**A New Proposal from OMRON:
 A Next-generation Servo that Is Both
 Compact and Smart!**

SMARTSTEP Junior

**The Best in Easy-Setup Servos!
 Simply Connect the Servo for
 Immediate Operation**

Quick Startup!

Just wire the system, decide the command pulse, and turn ON the power supply to complete the setup. The Servo features automatic adjustment function to achieve stable control without difficult settings. Start using the Servo immediately.

Easy Setup

Only one setting



Compact

Smallest in the Industry!*
 Enables more efficiently
 using space in control panels.

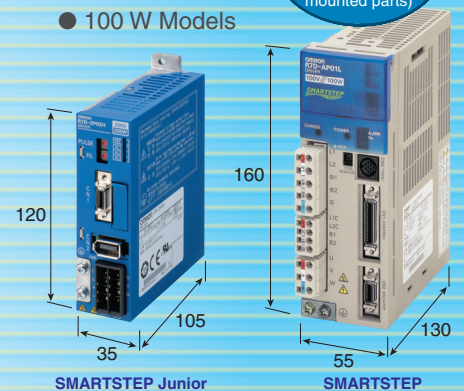
* Single-phase, 200 VAC, as of May 2006.

Smaller control panels!

The SMARTSTEP Junior takes up less than half the volume of the SMARTSTEP to save space in control panels.

60% less volume
 (not including mounted parts)

● 100 W Models



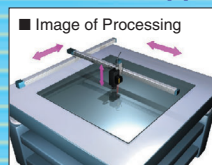
**Achieve high-speed,
 high-accuracy
 applications.**

Variety

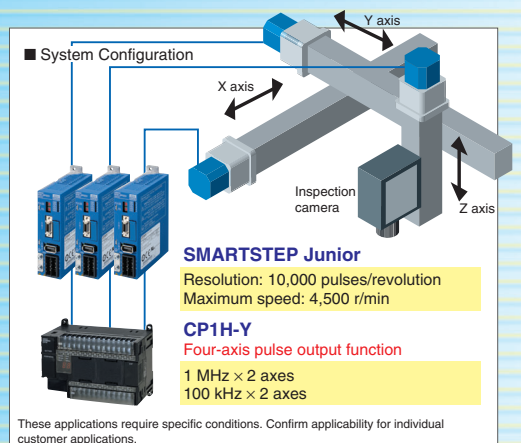
realizing

The Servo easily handles many applications, such as conveyors, fixed-length feeding, and feeder control.

● For example, PCB inspection machine applications



Combine the SMARTSTEP Junior with the CP1H-Y to make the most of Servo performance. Maximum response frequency (command pulse response) SMARTSTEP 250 kpps → SMARTSTEP Junior 750 kpps



■ Servo Driver Specifications

Item	Model			
	R7D-ZP01H	R7D-ZP02H	R7D-ZP04H	R7D-ZP08H
Input power supply (shared by main circuit and control circuit)	Single-phase 200/230 VAC (170 to 253 V) 50/60 Hz			
Applicable motor capacity	100 W	200 W	400 W	750 W
Maximum response frequency (command pulse response)	750 kpps			
Control input signals	Command pulse input, deviation counter reset input, and RUN command input			
Control output signals	Alarm output, brake interlock output, positioning completed output, and phase Z output			

● Dimensions

Capacity	Model	Dimensions [mm]		
		Width	Depth	Height (not including mounted parts)
100 W	R7D-ZP01H	35	105	120
200 W	R7D-ZP02H	35	105	120
400 W	R7D-ZP04H	40	105	120
750 W	R7D-ZP08H	70	145	120

■ Servomotor Specifications

Item	Unit	R7M-Z10030-□S1	R7M-Z20030-□S1	R7M-Z40030-□S1	R7M-Z75030-□S1
Rated output	W	100	200	400	750
Rated torque	N·m	0.318	0.637	1.27	2.39
Rated speed	r/min	3000			
Maximum instantaneous speed	r/min	4500			
Maximum instantaneous torque	N·m	0.955	1.91	3.82	7.16

Note: Model numbers for Servomotors with a brake have the letter B in the place of the box.
The motor selection program is useful for selecting Servomotors.

■ Servo Driver-Servomotor Combinations

Rated output	Servomotor		Servo Driver
	Without brake	With brake	Pulse string input
100 W	R7M-Z10030-S1	R7M-Z10030-BS1	R7D-ZP01H
200 W	R7M-Z20030-S1	R7M-Z20030-BS1	R7D-ZP02H
400 W	R7M-Z40030-S1	R7M-Z40030-BS1	R7D-ZP04H
750 W	R7M-Z75030-S1	R7M-Z75030-BS1	R7D-ZP08H

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This catalog mainly provides information that is necessary for selecting suitable models, and does not contain precautions for correct use. Always read the precautions and other required information provided in product operation manuals before using the product.

- The application examples provided in this catalog are for reference only. Check functions and safety of the equipment before use.
- Never use the products for any application requiring special safety requirements, such as nuclear energy control systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, or other application involving serious risk to life or property, without ensuring that the system as a whole has been designed to address the risks, and that the OMRON products are properly rated and installed for the intended use within the overall equipment or system.

Note: Do not use this document to operate the Unit.

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Note: Specifications subject to change without notice.

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