

**AC Servomotors/Linear Motors/Servo Drives** 

### **G5** Series

The Preeminent Servo That Revolutionizes Motion Control



» EtherCAT

»High Speed and High Precision

» International Safety Standards

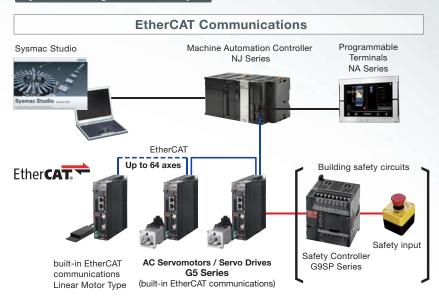


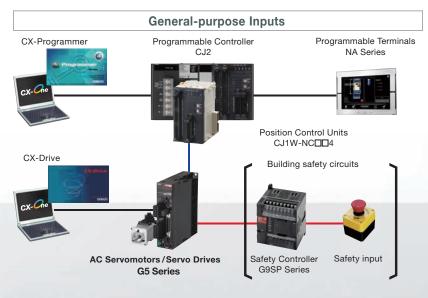
### **Higher Throughput and Shorter Tact Time,** Plus Improved Machine Safety

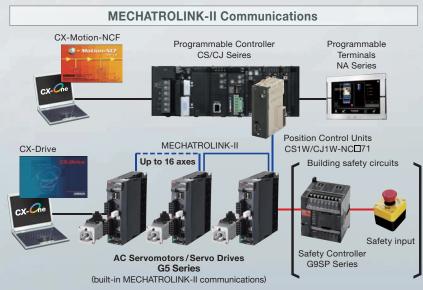


### Achieve the fastest position control in the industry by combining the G5 with an OMRON Controller.

### System Configuration Example







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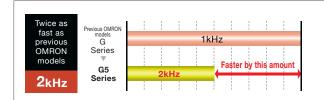
The product photographs and figures that are used in this catalog may vary somewhat from the actual products. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.



### **Industry Top-class Tracking Performance**

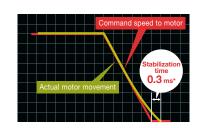
### Speed Response Frequency of 2 kHz

Speed response is representative of servo system characteristics. In the G5, the industry's fastest response has been achieved at 2 kHz. By improving the speed response by twice compared to previous OMRON models, the stabilization time has been shortened and this contributes to tact time reduction.



Motion control accurately follows commands.Effective for simultaneous control as well as improving tact time.

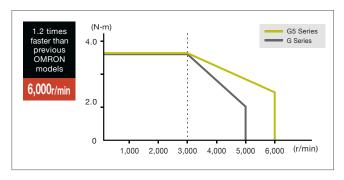
Combination of R88D-KT01L Servo Drive and R88M-K10030L Servomotor. Example of actual measurements taken with gain adjusted by CX-Drive, with inertia ratio of x3 on ball screw mechanical system.



### **Reduced Tact Time with Higher Speed**

### Maximum rotation speed: 6,000 r/min\*

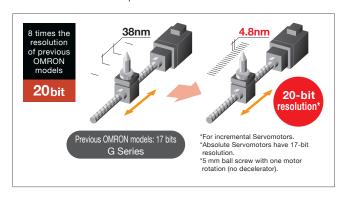
The maximum rotation speed of R88M-series Servomotors has increased to 6,000 r/min, resulting in high-speed positioning that can reduce tact time. \*Applicable to 100 V/200 V models with 750 W or less.



### **Best Positioning Accuracy**

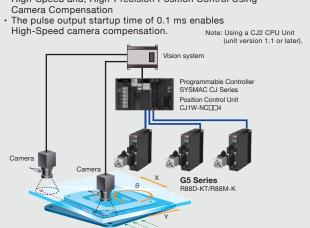
#### Featuring a 20-bit high-resolution incremental encoder

High-precision positioning can be achieved with the built-in encoder, 8 times the resolution of previous OMRON models at 20 bits.



#### Example of High-speed/High-precision Application

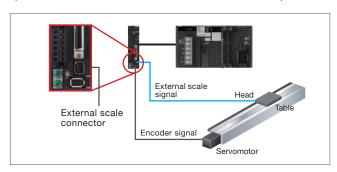
High-Speed and, High-Precision Position Control Using Camera Compensation



### **High-precision Positioning**

### **Fully Closed Loop Control Is a Standard Feature**

High-precision and high-response positioning can be realized without being affected by temperature changes by determining the position using direct feedback of the control position from the external scale, to enable using fully closed loop control without options. (The external scale connector terminal is a standard feature.)



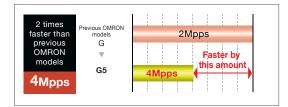
### h Accuracy

# Safety Motion Control That Provides Safety and Reliability

### High-speed and High-precision Positioning

### Pulse input response frequency: 4 Mpps

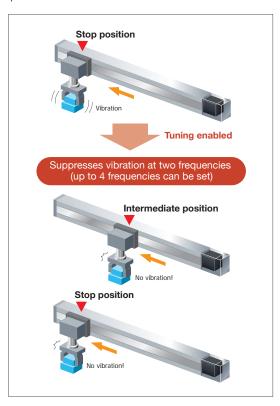
The Servo Drive response to command pulses is 4 Mpps, twice that of previous OMRON models. Response delays are thus reduced enabling high-speed and high-precision positioning.



### Ideal for Applications That Require High Accuracy

#### Improved vibration control function

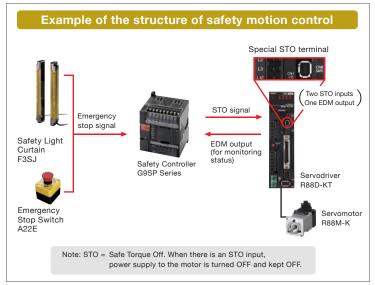
With the vibration control function, if the tip of the device is vibrating, the vibration frequency can be set to remove the vibration. It can also be used to suppress vibration resulting from starting and stopping the device, allowing precise movement.



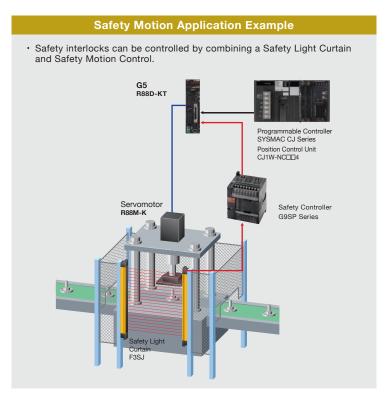
### **Conforms to the Latest International Standards**

#### Safety and Productivity

The G5 was the first to acquire international standard IEC 61800-5-2 (STO) for motion control in the industry within Japan. It also conforms to the European Directives ISO 13849-1(PLc,d)  $\ast$  and EN 61508 (SIL2). Safety control circuits can be constructed with the Servo Drive, delivering both safety and productivity.



\* Refer to General Specification of Servo Drive for the compliance of international standards.



### Easy Adjustment and Reduce works to

### **Complete Support from Setup to Maintenance**

#### **Software**

#### How to Select Required Support Software for Your Controller

The required Support Software depends on the Controller to connect. Please check the following table when purchasing the Support Software.

ltem	Omron Machine Automation Controller System	Omron PLC System	
Controller	NJ-series	CS, CJ, CP, and other series	
AC Servomotor/Drives	G5-series • EtherCAT Communications (Unit version 2.1 or later reccomended) • EtherCAT Communications Linear Motor	G5-series	
	Automation Software Sysmac Studio	FA Integrated Tool Package CX-One	
Software	The Sysmac Studio provides an integrated development environment to set up, program, debug, and maintain NJ-series Controllers and other Machine Automation Controllers, as well as EtherCAT slaves.	The CX-Drive software allows you to set, transfer, and compare Servo Drive parameters, to perform trial operation and adjustments, and to monitor and trace operation. CX-Drive is bundled in CX-One.	
	Setting, adjustment, monitoring/tracing with the Servo Drive can be done via an EtherCAT network. <connecting drive="" method="" servo="" the="" with=""> - Connection via the NJ</connecting>	<connecting drive="" method="" servo="" the="" with=""> <ul> <li>Direct connection with the Servo Drive.</li> <li>Connection via a PLC (possible with the Servo Drive with built-in EtherCAT communications function)</li> </ul></connecting>	

### Simple Gain Adjustment

### Quickly adjust the gain using a wizard.

The autotuning feature provided with the CX-Drive makes it easy to adjust the Servo Drive gain. You can use a wizard to complete gain adjustment in approximately five minutes or less per axis simply by selecting the machine configuration and entering the target set time.

4 steps for gain adjusted (5 minutes per axis)

### **Autotuning**

### 1. Machine Configuration

Although previously the machine configuration was set using parameters, it can now be selected from ball screws, turntables, belts, and other devices.

### 2. Automatic Adjustment

Setting for automatic adjustment and conditions after completing automatic adjustment.

#### 3. Autotuning

Implement auto-tuning until reaching to a target value. Stabilization time, overshooting amount and efective load rate can be monitored.

#### 4. Autotuning Completed

After completing autotuning, the results can be checked using the data tracing.

### **Editing Parameters**

- Operation is as easy as with a digital operator.
- Easily set parameters for Inverters and Servo Drives.





# Sysmac Studio CX-Drive

### Simple FFT

- Device frequency characteristics can be easily measured to analyze resonant frequencies.
- Use notch filters for resonance frequencies to improve response.

   Sysmac Studio CX-Drive





### **System Start-up**



### **Automatic damping control setting**

#### Settings for damping control for the axis at the tip of the machine in a short time

Automatic damping control setting function is useful to execute damping control for Servo Drives. Manual settings will not be necessary. JOG operation, measuring vibration and parameter settings can be made on one screen.

2 steps for damping filter settings (5 minutes per axis)

### Starting automatic damping control setting

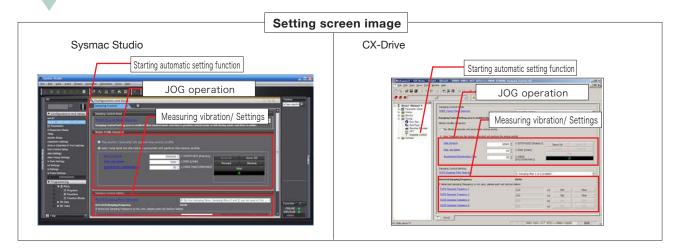
#### 1. Measuring machine vibration

Automatically measures vibration frequency by starting JOG operation from the software or operation executed by the Controller.

### 2. Damping filter setting

Apply the damping filter 1 to 4 for the measured vibration frequency. Vibration can be suppressed by setting the filters.

#### Damping control filter setting completed



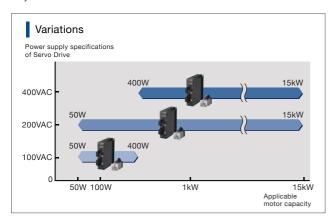


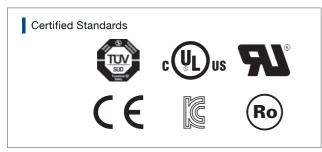
# Easy Adjustment and Reduce works to System Start-up

### Globalization

### **Lineup of 400VAC Servomotors**

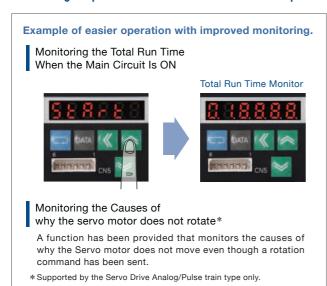
Servomotors are available for 100VAC, 200VAC, and 400VAC. And they conform to international safety standards for easy application anywhere worldwide.





### Reduced Work with Increased Monitor Functions

Monitoring for preventive maintenance have been improved.

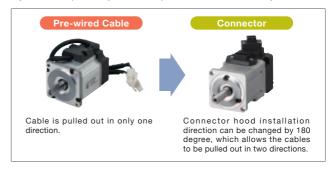


### Flexible cable pull-out direction

### Direct conenctors for power cable, encoder cable, and brake cable connection.

In case that user creates motor cables, cable pull-out direction can be changed by 180 degree. (Refer to G5 Series User's manual (Cat,No. I571/I572) for the information about applicable motor capacity and connection method).

If you use cables provided by Omron, cable pull-out direction is limited to only one direction.



### Side by side installation to save space

### Possible to install multiple drivers side by side.



\*Drivers with 750W or less capacity only
There are usage limitations including ambient

temperature and load rate. Refer to G5 Series User's manual (Cat.No. I571/I572) for detailed information.

### **Servomotors Conform to IP67**

(Excluding through-shaft parts, connector pins of Servomotor Connector and connector pins of Encoder Connector)

#### The power cable and encoder cable also conform to IP67

\*Applicable to 3 to 20m cables of 100V/200V models with 750W or less.

The Servomotor provides IP67 protection, enhancing resistance to the environment.



### **Reduced Stabilization Time by Suppressing Vibration**

### **60% cogging torque reduction** (compared to previous G models)

Motor torque variation is reduced due to a 60% reduction in the cogging torque, resulting in high-precision positioning. This enables smooth operation at low speeds.

# Lineup of Linear Motors to Achieve Higher Speed and Higher Precision

### Inherited functions and performance of G5 series with EtherCAT communications

#### **EtherCAT**

Linear motors joined the lineup and the following functions of G5 series achieve higher speed and higher precision.

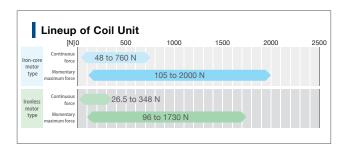
- \* High-speed communication via EtherCAT communications at 100 Mbps
- \* Autotuning for simple adjustment
- \* Useful damping control function to improve device quality
- \* Safety function STO (Safe Torque Off)



### Selectable motors suitable for device

### Iron-core motor type and ironless motor type

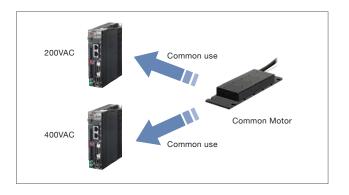
You can choose between compact and high-thrust iron-core motor type and cogging-free ironless motor type with excellent speed stability



### Power supply voltage sharing iron-core motor

### Using the same Iron-core motor for 200VAC/400VAC

Iron-core motor type The same motor can be used for 200VAC and 400VAC. The same maintenance parts for motors can be used regardless of device and user.



### Reduced tact time with higher speed

### **Higher speed by direct drive**

Significantly higher speed than ball screws contributes to make G5 series suitable for faster device application and reduce tact time. Maximum speed 16 m/s\*

\* This value is for R88L-EC-GW0309 200VAC motor. It is limited by power supply voltage, model, linear guide, linear scale, and load.

### **High-precision positioning**

#### **Available with various linear scales**

High-precision and high-speed positioning Maximum speed at 0.01  $\mu m$  of scale resolution for serial communications: 4 m/s\*

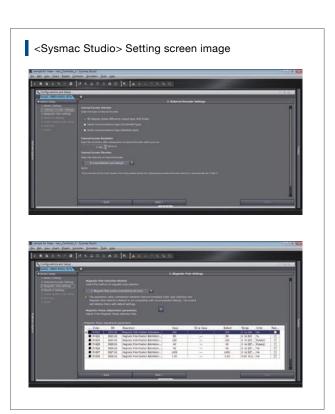
\* This value is for Servo Drive. It is limited by the scale specifications. Available linear scale

Serial communications (incremental/absolute), phase A/B/Z pulse type

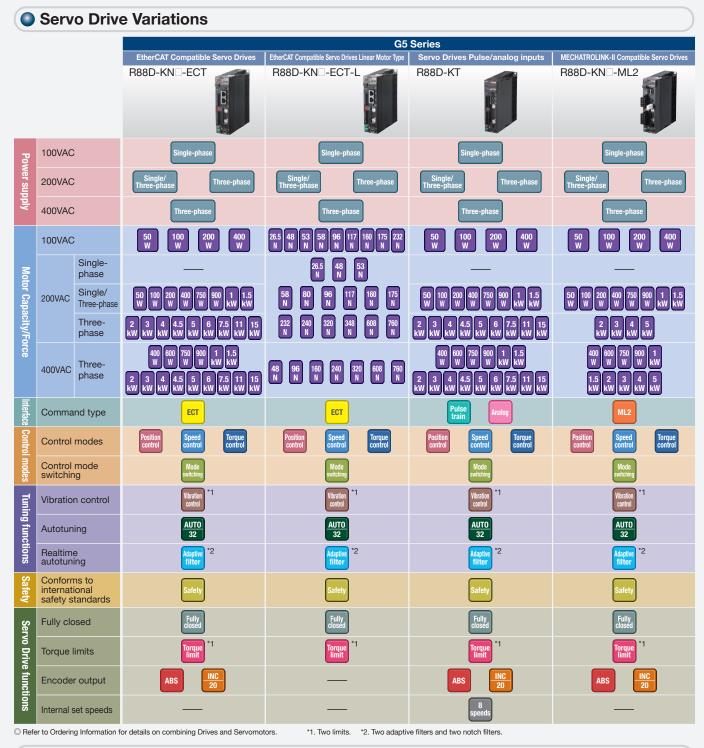
### **Quick setup**

#### **Automatic setup**

Automatic setup for motor parameters by selecting the motor. A wizard helps set the scale direction, magnetic pole, or current gain automatically.



### The optimum combination can be found from a v model variations to handle various applications.





**ECT:** EtherCAT high-speed Servo communications motion network.

Position control: Control is applied to move to the target position and then stop at the target position.

Vibration control function: Vibration is suppressed by automatically setting a filter for the vibration frequency.

Adaptive filter: The machine load inertia is calculated in realtime and the result is used to automatically set the

Internal set speeds: Speed control according to the internal set speed that is set for the parameter.
Up to 8 internal set speeds can be selected.



Pulse train: The speed and travel distance are input to the Servo as pulse

Speed control: Control is applied to change the linear or rotational speed. For example, speed control is used for applications such as turning grindstones, controlling welding speeds, and controlling feeding speeds.

Autotuning: This function automatically sets an appropriate gain based on the rigidity setting of the machine load; 32 levels of rigidity settings are possible.

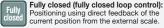
Safety function: Conforms to IEC 61800-5-2 (STO), EN ISO 13849-1: 2008 (PLc,d), ISO13849-1: 2006(PLc,d) and EN 61508 (SIL2).



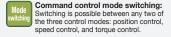
**Analog:** The speed and torque are input to the Servo as analog signals

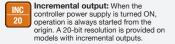


**Absolute output:** When the Controller power supply is turned ON, the Controller reads the Servo absolute position data to restore the absolute position.





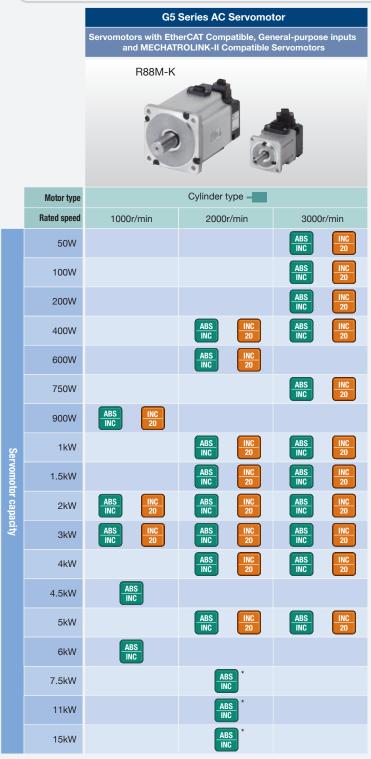




Torque limit: Switching is possible between the first torque limit and the second torque limit to limit the Servomotor output torque.

### ariety of functions and

### Motor Variations



		G5 Series Linear Motor				
		Servomotors with EtherCAT Compatible Linear motor Type				
		R88L-EC-FW-	R88L-EC-GW-□			
			James in the second			
	Motor type	Iron-core	Ironless			
	26.5N		Iron			
	48N	Iron				
	53N		Iron			
	58N		Iron			
	80N		Iron less			
	96N	Iron				
	117N		Iron less			
Ler	160N	Iron				
Lenear Motor Force	175N		Iron			
tor For	232N		Iron			
Ce	240N	Iron				
	320N	Iron				
	348N		Iron			
	608N	Iron				
	760N	Iron				

\* The rated speed is 1,500 r/min

### Functions

absolute/Incremental output: The Servomotor can be switched between an absolute output and an Incremental output. When an absolute output is selected and the Controller power supply is turned ON, the Controller reads the Servo absolute position data to restore the absolute position. A-17bit resolution is provided on model with an absolute output and an incremental output.

Iron-core: Coil units consist of cores and coils. Compact and high-thrust type.

Incremental output: When the controller power supply is turned ON, operation is always started from the origin. A 20-bit resolution is provided on models with incremental outputs.

Iron less: Coil units do not include a core. Cogging-free type with excellent speed stability.

### R88M-K/R88D-KN -ECT

### **System Configuration**







- Machine Automation Controller
- NJ/NX-series Industrial PC Platform NY-series IPC Machine Controller

#### **Automation Software**

Sysmac Studio





- Industrial PC Platform
- NY-series IPC RTOS Controller
- Programmable Multi Axis Controller (PMAC) CK3E/NY51□-A

#### **EtherCAT Cables**

Use a category 5 or higher cable with double, aluminium tape and braided shielding.



Note: PMAC is an abbreviation for Programmable Multi Axis Controller.

### **Support Software**

 CX-One FA Integrated Tool Package (Including CX-Programmer)



### **Support Software**

 CX-One FA Integrated Tool Package (Including CX-Drive)



### **High-Speed and High-Precision G5 Series EtherCAT Communications** with the Controller













- Servo Drives for 400VAC globally widens applicable systems and environment, including large-scale equipment.
- Safe design and Safe Torque Off (STO) function.
- Vibration can be suppressed in acceleration/deceleration even in low-rigidity mechanical systems.







Reactors

Resistors

R88A-RR

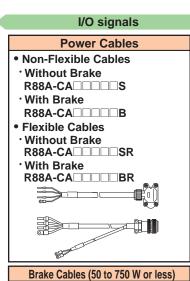
External

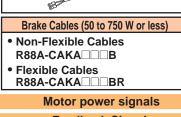
scale

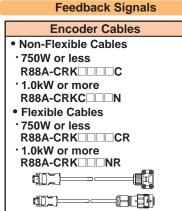
3G3AX-DL

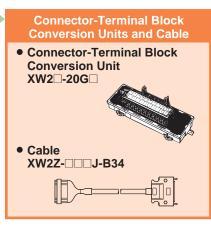
3G3AX-AL

External Regeneration

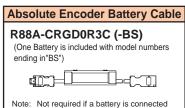












to the control connector (CN1).



### R88L-EC/R88D-KN -ECT-L

### **System Configuration**





- Machine Automation Controller NJ/NX-series
- Industrial PC Platform
   NY-series IPC Machine Controller

### **Automation Software**

Sysmac Studio





- · Industrial PC Platform
- NY-series IPC RTOS Controller
- Programmable Multi Axis Controller (PMAC) CK3E/NY51□-A

### **EtherCAT Cables**

Use a category 5 or higher cable with double, aluminium tape and braided shielding.



Note: PMAC is an abbreviation for Programmable Multi Axis Controller.

### **Support Software**

CX-One FA Integrated Tool Package (Including CX-Programmer)

### Support Software CX-One FA Integrated

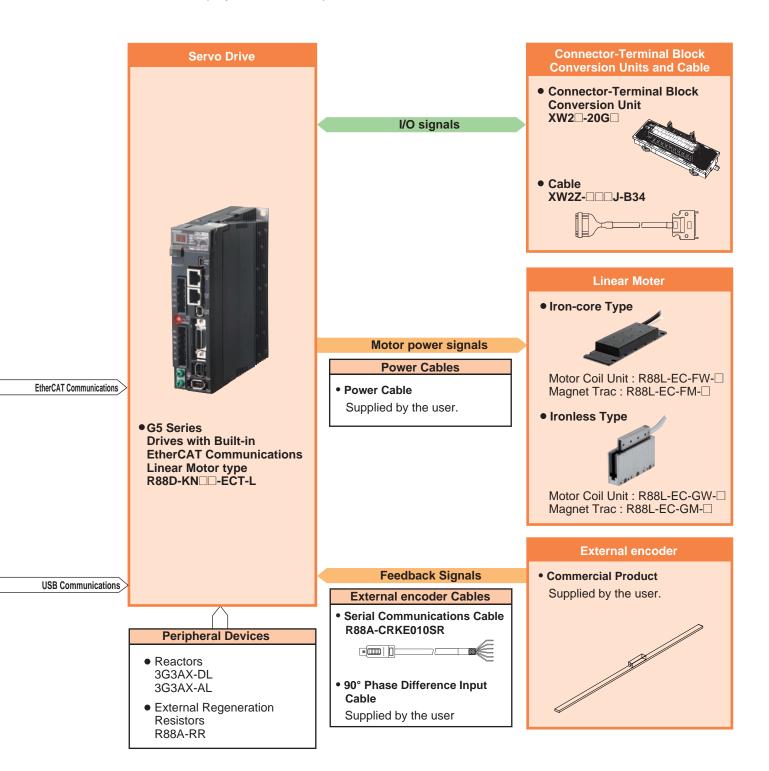
 CX-One FA Integrated Tool Package (Including CX-Drive)



### Linear Motor for Higher-speed and Higher-precision

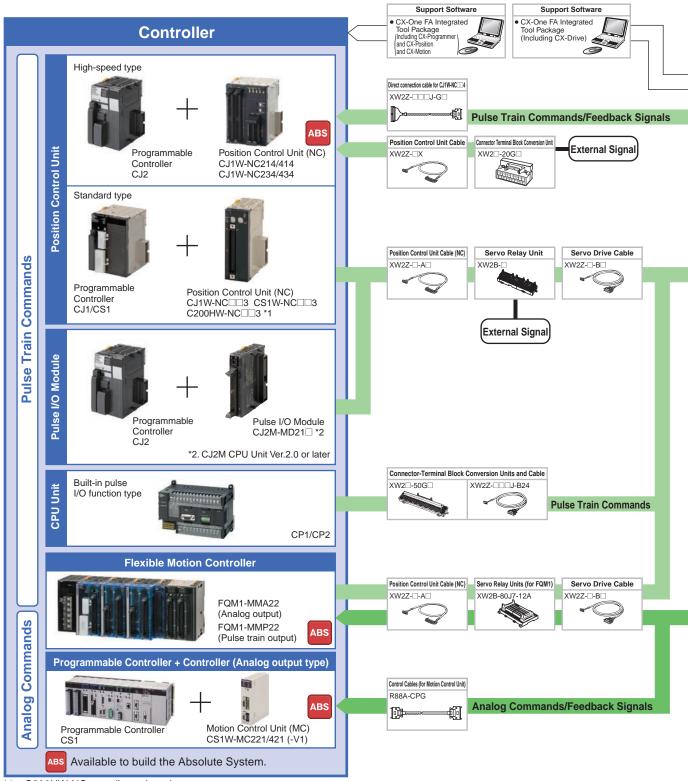
- Inherited functions and performance of G5 series and EtherCAT communications achieve high-speed and high-precision positioning.
- Lineup of compact and high-thrust iron-core motor type and cogging-free ironless motor type with excellent speed stability.
- Same Iron-core motor type for 200V AC and 400V AC.
- Quick setup by automatic setup function.





### R88M-K/R88D-KT

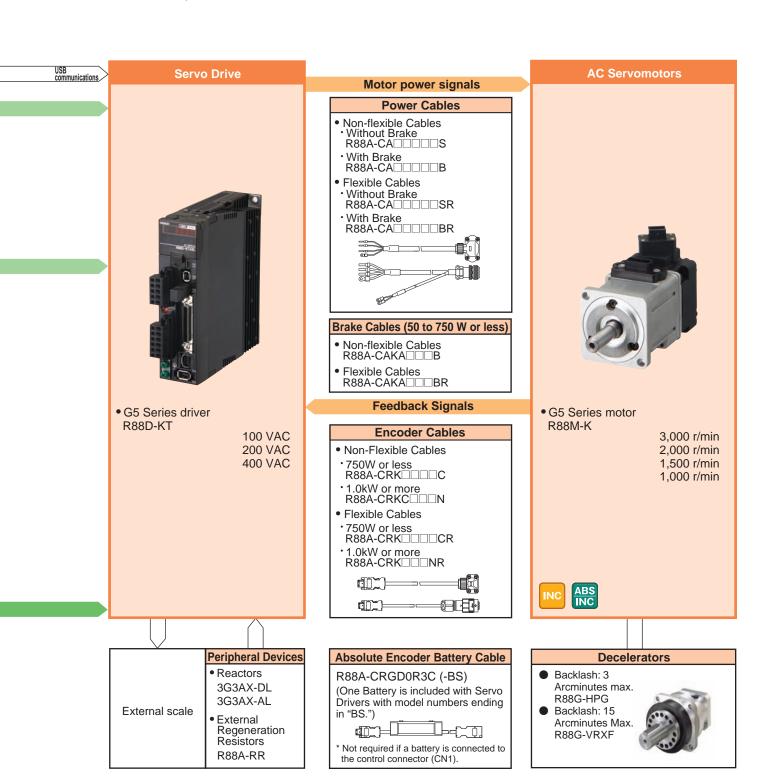
### **System Configuration**



### The Preeminent Servo That Revolutionizes Motion Controll

- Industry Top-class Tracking Performance.
   Speed Response Frequency of 2 kHz.
- Best Positioning Accuracy\*.
   Featuring a 20-bit high-resolution incremental encoder.
   \*8 times the resolution of previous OMRON models
- High-precision Positioning.
   Fully Closed Loop Control Is a Standard Feature.
- Conforms to the Latest International Standards.
   Safety and Productivity.
- Globalization. Lineup of 400 VAC Servomotors.





### R88M-K/R88D-KN -ML2

### **System Configuration**

### Controllers (MECHATROLINK-II type)





## Support Software CX-One FA Integrated Tool Package Including CX-Programmer and CX-Position and CX-Motion



### **MECHATROLINK-II**

### **MECHATROLINK-II Cables**

(With ring core and USB connector on both ends) FNY-W6003- (OMRON model number) (Without ring core USB connector on both ends) FNY-W6002- (OMRON model number)

### **MECHATROLINK-II Repeater**

П				
			Maximum transr	mission distance
		0 to 30 m	30 to 50 m	
l	Number of	1 to 15	Repeater not required.	Repeater not required.
l	connected devices	16	Repeater not required.	Repeater required.
ı				

### High-Speed and High-Precision G5 Series MECHATROLINK-II Communications with the Controller

 Data transfer using MECHATROLINK-II Communications:

All control data that can be interfaced between the Servo Driver and the Controller is transmitted using data communications. This enables maximizing the Servomotor performance without restricting the transmission performance of the control signals.

 Having a communications module built into the Servo Driver significantly saves space in the control panel.







Servo Drive

• G5 Series driver R88D-KN□□-ML2

External scale

**Peripheral Devices** 

Reactors

External

Rešistors

R88A-RR

3G3AX-DL

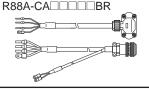
3G3AX-AL

Regeneration

### I/O signals

#### **Power Cables**

- Non-flexible Cables
- Without Brake
- R88A-CA
- R88A-CA
- Flexible Cables
- · Without Brake
- R88A-CA
- · With Brake



### Brake Cables (50 to 750 W or less)

- Non-flexible Cables R88A-CAKA□□□B
- Flexible Cables
   R88A-CAKA□□□□BR

### Motor power signals

#### Feedback Signals

#### **Encoder Cables**

#### Non-Flexible Cables

- 750W or less
- R88A-CRK□□□□C
- 1.0kW or more R88A-CRKC□□□N
- NOOA-CRNC
- Flexible Cables
- •750W or less R88A-CRK□□□□□CR
- 1.0kW or more R88A-CRK□□□NR



#### **Absolute Encoder Battery Cable**

#### R88A-CRGD0R3C (-BS)

(One Battery is included with Servo Drivers with model numbers ending in "BS.")

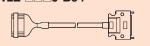


\* Not required if a battery is connected to the control connector (CN1).

### Connector-Terminal Block Conversion Units and Cable



• Cable XW2Z-□□□J-B34



#### **AC Servomotors**



 G5 Series motor R88M-K

3000r/min 2000r/min 1000r/min



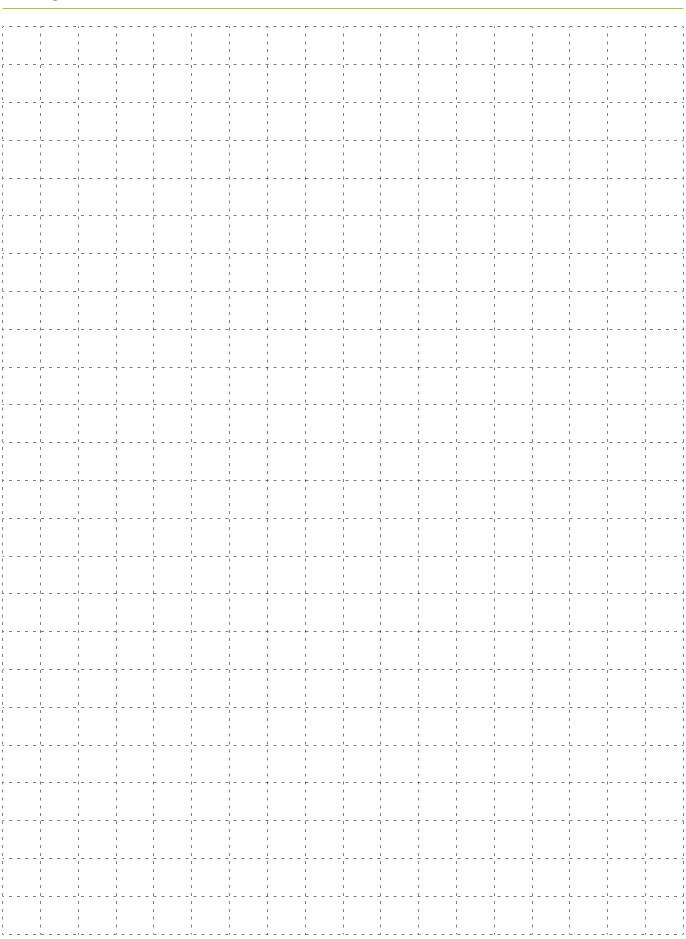


#### **Decelerators**

- Backlash: 3 Arcminutes max. R88G-HPG
- Backlash: 15
   Arcminutes Max
   R88G-VRXF



### **MEMO**



### **Ordering Information**

Product name	AC Servomotors / Linear Motors / Servo Drives G5-series
Interpreting Mod	del NumbersB-2
■ AC Serve ■ AC Serve ■ Linear M ■ Understa	o Drive Rotary Motor Type Model Numbers o Drive Linear Motor Type Model Numbers omotor Model Numbers otor Model Numbers anding Decelerator Model Numbers h = 3' Max./Backlash = 15' Max.)
Table of AC Ser	vomotor VariationsB-5
Ordering Inform	ationB-6
Ether0 Linear Gener	vesB-6 CAT Communications  Motor with built-in EtherCAT communications al-purpose Inputs ATROLINK-II Communications
Linear Motors Decelerators	ors
(Non-f	ion Cables (Power Cables, Brake Cables, Encoder Cables) flexible Cables) ble Cables)
■ Commur ●For Mi	······································
■ Peripher (Externa ■ Support	Regeneration Resistors, Reactors, Mounting Brackets)
Combination tal	oleB-25
■ AC Serve ■ Linear M ■ Controlle	o Drive and Servomotor Combinations omotor and Decelerator Combinations otor and AC Servo Drive Linear Motor Type Combinations er Combinations ombinations
Related Manuals	sB-37

As a Sysmac Device, the G5-series AC Servomotor/Servo Drive with Built-in EtherCAT Communications is designed to provide optimal functionality and enhanced operability when used in conjunction with a Machine Automation Controller such as NJ series and the automation software Sysmac Studio. Sysmac Device is a generic term for OMRON control devices such as an EtherCAT Slave, designed with unified communications specifications and user interface specifications.

When connecting a Servo Drive to the NJ5 series Machine Automation Controller, it is recommended that you use the Servo Drive with Built-in EtherCAT Communications, R88D-KN $\square\square$ -ECT, with unit version 2.1 or later.

### **Interpreting Model Numbers**

### **AC Servo Drive Rotary Motor Type Model Numbers**

### **R88D-K N 01 H -ECT**

(1) (2) (3) (4) (5)

No	Item	Symbol	Specifications
(1)	G5-series Servo Drive		
(2)	Drive Tune	Т	Analog input/Pulse train input type
(2)	Drive Type	N	Communication type
		A5	50 W
		01	100 W
		02	200 W
		04	400 W
		06	600 W
	Maximum	08	750 W
(3)	Applicable Servomotor Capacity	10	1 kW
(3)		15	1.5 kW
		20	2 kW
		30	3 kW
		40	4 kW
		50	5 kW
		75	7.5 kW
		150	15 kW
		L	100 VAC
(4)	Power Supply Voltage	Н	200 VAC
		F	400 VAC
		Blank	General-purpose Inputs
(5)	Network type	-ML2	MECHATROLINK-II Communications
		-ECT	EtherCAT Communications

### **AC Servo Drive Linear Motor Type Model Numbers**

### **R88D-K N 01 H -ECT -L**

(1) (2) (3) (4) (5) (6)

No	Item	Symbol	Specifications
(1)		G5-se	eries Servo Drive
(2)	Drive Type	N	Communication type
		01	100 W
		02	200 W
		04	400 W
	Maximum	06	600 W
(3)	Applicable Linear Motor Capacity	08	750 W
		10	1 kW
		15	1.5 kW
		20	2 kW
		30	3 kW
	Power Supply Voltage	L	100 VAC
(4)		Н	200 VAC
		F	400 VAC
(5)	Network type	-ECT	EtherCAT Communications
(6)	Motor type	-L	Linear Motor

### **AC Servomotor Model Numbers**

R88M-K □ 750 30 H -BO S2

(6)

No	Item	Symbol	Specifications
(1)		G5-se	eries Servomotor
(2)	Motor Type	Blank	Cylinder type
		050	50 W
		100	100 W
		200	200 W
		400	400 W
		600	600 W
		750	750 W
		900	900 W
		1K0	1 kW
(0)	Servomotor	1K5	1.5 kW
(3)	Capacity	2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		4K5	4.5 kW
		5K0	5 kW
		6K0	6 kW
		7K5	7.5 kW
		11K0	11 kW
		15K0	15 kW
		10	1,000 r/min
(4)	Rated Rotation	15	1,500 r/min
(4)	Speed	20	2,000 r/min
		30	3,000 r/min
		F	400 VAC (with incremental encoder specifications)
		Н	200 VAC (with incremental encoder specifications)
<b>(</b> E)		L	100 VAC (with incremental encoder specifications)
(5)	Applied Voltage	С	400 VAC (with absolute encoder specifications)  ABS/INC
		Т	200VAC (with absolute encoder specifications)  ABS/INC
		S	100 VAC (with absolute encoder specifications)  ABS/INC
		Blank	Straight shaft
(C)	Ontion	В	With brake
(6)	Option	0	With oil seal
		S2	With key and tap

Note: INC incremental encoder: 20bit

ABS/INC incremental encoder: 17bit, absolute encoder: 17bit

### **Linear Motor**

### ● Iron-core linear motor

**Motor Coil Unit** 

### R88L-EC -FW -03 03 -A NP C

(3)

(1)

(2)

(4) (5)

(6)

### **Magnet Trac**

### R88L-EC -FM -03 096 -A

(1)

No	Item	Symbol	Specifications	
(1)		G5-series Linear Motor		
(2)	Part Type	FW	Iron-core type Motor Coil Unit	
		03	30mm	
(3)	Effective Magnet Width	06	60mm	
		11	110mm	
	Coil Model	03	3-coil	
		06	6-coil	
(4)		09	9-coil	
		12	12-coil	
		15	15-coil	
(5)	Version	Α	Ver.A	
(6)	Connector	NP	Not Provided	
(7)	Туре	С	Compact type	

No	Item	Symbol	Specifications
(1)		G5-se	ries Linear Motor
(2)	Part Type	FM	Iron-core type Magnet Trac
		03	30mm
(3)	Effective Magnet Width	06	60mm
		11	110mm
	Magnet Trac Unit Length	096	96mm
		144	144mm
(4)		192	192mm
		288	288mm
		384	384mm
(5)	Version	Α	Ver.A

### Ironless linear motor

**Motor Coil Unit** 

### R88L-EC -GW -03 03 -A NP S

(3) (4) (5) (6) (7)

### **Magnet Trac**

### R88L-EC -GM -03 090 -A

(1)

3

**(4**)

No	Item	Symbol	Specifications	
(1)		G5-series Linear Motor		
(2)	Part Type	GW	Ironless type Motor Coil Unit	
		03	30mm	
(3)	Effective Magnet Width	05	50mm	
		07	70mm	
	Coil Model	03	3-coil	
(4)		06	6-coil	
		09	9-coil	
(5)	Version	Α	Ver.A	
(6)	Connector	NP	Not Provided	
(7)	Туре	S	Standard type	

No	Item	Symbol	Specifications
(1)		G5-se	ries Linear Motor
(2)	Part Type	GM	Ironless type Magnet Trac
		03	30mm
(3)	Effective Magnet Width	05	50mm
		07	70mm
	Magnet Trac Unit Length	090	90mm
		114	114mm
		120	120mm
		126	126mm
(4)		168	168mm
(4)		171	171mm
		210	210mm
		390	390mm
		456	456mm
		546	546mm
(5)	Version	Α	Ver.A

### **Understanding Decelerator Model Numbers (Backlash = 3' Max./Backlash = 15' Max.)**

Refer to the *Decelerators* in *Ordering Information* for motor capacity and decelerator combinations.

Backlash = 3' Max.

### R88G-HPG 14A 05 100 S B J

(1) (2) (3) (4) (5) (6) (7)

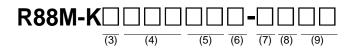
No	Item	Symbol	Specifications
(1)	Decelerator for Servomotors Backlash = 3' Max.		
		11B	□40
		14A	□60
(0)	Flange Size	20A	□90
(2)	Number	32A	□120
		50A	□170
		65A	□230
		05	1/5
		09	1/9
		11	1/11
(2)	Coor Datio	20	1/20
(3)	Gear Ratio	21	1/21
		25	1/25
		33	1/33
		45	1/45
		050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
	Applicable	900	900 W
(4)	Servomotor	1K0	1 kW
	Capacity	1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		4K5	4.5 kW
		5K0	5 kW
(5)		Blank	3,000-r/min cylindrical servomotors
	Motor Type	S	2,000-r/min cylindrical servomotors
	•	Т	1,000-r/min cylindrical servomotors
(6)	Backlash	В	Backlash = 3' Max
(7)	Ontion	Blank	Straight shaft
(7)	Option		Mith key and ten

Backlash = 15' Max.

### R88G-VRXF 09 B 100 C J

No	Item	Symbol	Specifications
(1)			ator for Servomotor 15 Arcminutes max.
		05	1/5
(2)	Coor Dotio	09	1/9
(2) Gear Ratio	15	1/15	
	25	1/25	
	Flange Size Number	В	□52
(3)		С	□78
	rambor	D	□98
		100	50 W, 100 W
(4)	Applicable Servomotor	200	200 W
(4)	Capacity	400	400 W
		750	750 W
(5)	Backlash	С	Backlash = 15' Max
(6)	Option	J	With key and tap

### **Table of AC Servomotor Variations**



(3)	(4)	(5)				((	6)			(	7)	3)	3)	(9)	
				Applied Voltage						With brake /					
	Applicable		Model	INC	INC	INC	ABS	ABS	ABS	Withou	ıt brake	Model oil s		Shaft	type
Type	Servomotor	Rotation speed	Model	400	200	100	400	200	100	-	В	011 3	On Scals		
	Capacity			F	н	L	С	т	s	Blank	With brake	Blank	0	Blank	S2
	50 W		R88M-K05030 <b>*1</b>		√			√		√	1	√	√	<b>√</b>	√
	100 W	-	R88M-K10030		√	√		√	√	√	<b>V</b>	<b>V</b>	√	<b>V</b>	<b>V</b>
	200 W	-	R88M-K20030		√	√		√	√	√	<b>V</b>	<b>V</b>	√	1	√
	400 W		R88M-K40030		√	√		√	√	√	V	√	√	√	√
	750 W		R88M-K75030	√	√		√	√		√	V	√	√	√	√
	1 kW	3,000 r/min	R88M-K1K030	√	√		√	√		√	V	√	√	√	√
	1.5 kW	=	R88M-K1K530	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	2 kW	=	R88M-K2K030	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	3 kW		R88M-K3K030	√	√		√	√		√	V	√	√	√	√
	4 kW	=	R88M-K4K030	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	5 kW	=	R88M-K5K030	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	400 W		R88M-K40020	√			√			√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	600 W	=	R88M-K60020	√			√			√	√	<b>V</b>	$\sqrt{}$	√	<b>√</b>
Cylinder	1 kW	=	R88M-K1K020	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	1.5 kW	=	R88M-K1K520	√	√		√	√		√	<b>V</b>	<b>V</b>	$\sqrt{}$	√	<b>V</b>
	2 kW	=	R88M-K2K020	√	√		√	√		√	√	<b>V</b>	$\sqrt{}$	√	<b>√</b>
	3 kW	2,000 r/min	R88M-K3K020	√	√		√	√		√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	4 kW	=	R88M-K4K020	√	√		√	√		√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	5 kW	=	R88M-K5K020	√	√		√	√		√	√	<b>V</b>	$\sqrt{}$	√	<b>√</b>
	7.5 kW	=	R88M-K7K515 <b>*2</b>				√	√		√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	11 kW	=	R88M-K11K015 *2				√	√		√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	15 kW		R88M-K15K015 *2				√	√		<b>V</b>	<b>V</b>	√	$\checkmark$	√	<b>V</b>
	900 W		R88M-K90010	<b>V</b>	√		<b>√</b>	√		1	1	√		1	<b>V</b>
	2 kW		R88M-K2K010	√	√		√	√		<b>V</b>	<b>V</b>	√	$\sqrt{}$	1	1
	3 kW	1,000 r/min	R88M-K3K010	√	√		√	√		√	<b>V</b>	√	$\sqrt{}$	√	<b>V</b>
	4.5 kW	1	R88M-K4K510				√	√		√	<b>V</b>	<b>V</b>	V	<b>V</b>	<b>V</b>
	6 kW	1	R88M-K6K010				√	√		√	<b>V</b>	<b>V</b>	V	<b>V</b>	<b>V</b>
Blank: Cylinder type	example 030: 30 W 100: 100 W 1K0: 1 kW	10: 1,000 r/min 20: 2,000 r/min 30: 3,000 r/min		H: 200 L: 100 C: 400 T: 200	VAC (wi VAC (wit VAC (wi VAC (wit	th increr th incren th absol th absol	nental e nental ei ute enco ute enco	ncoder) ncoder) ncoder) oder) AB oder) AB	INC INC S/INC S/INC	Blank: Withou brake B: 24 VD With b	ut C	Blank: Withou seals O: With seals		Blank: Straigh S2: With ke	

**<sup>\*1.</sup>** R88M-K05030H-□, R88M-K05030T-□, can be used for Power Supply Voltage of 100/200VAC. **\*2.** The rated speed is 1,500 r/min.

### **Ordering Information**

### **AC Servo Drives**

#### **EtherCAT Communications**

Specifi	ications					
Power Model Supply Voltage	Applicable Servomotor Capacity	Model				
	50 W	R88D-KNA5L-ECT				
Single-phase 100 VAC	100 W	R88D-KN01L-ECT				
	200 W	R88D-KN02L-ECT				
	400 W	R88D-KN04L-ECT				
	100 W	R88D-KN01H-ECT				
Cinalo	200 W	R88D-KN02H-ECT				
Single- phase/three-	400 W	R88D-KN04H-ECT				
phase	750 W	R88D-KN08H-ECT				
200 VAC	1 kW	R88D-KN10H-ECT				
	1.5 kW	R88D-KN15H-ECT				
	2 kW	R88D-KN20H-ECT				
	3 kW	R88D-KN30H-ECT				
Three-phase 200 VAC	5 kW	R88D-KN50H-ECT				
200 17.0	7.5 kW	R88D-KN75H-ECT				
	15 kW	R88D-KN150H-ECT				
	600 W	R88D-KN06F-ECT				
	1 kW	R88D-KN10F-ECT				
	1.5 kW	R88D-KN15F-ECT				
Three-phase	2 kW	R88D-KN20F-ECT				
400 VÁC	3 kW	R88D-KN30F-ECT				
	5 kW	R88D-KN50F-ECT				
	7.5 kW	R88D-KN75F-ECT				
	15 kW	R88D-KN150F-ECT				

Note: When connecting a Servo Drive to the NJ5 series Machine Automation Controller, it is recommended that you use the Servo Drive with Built-in EtherCAT Communications, R88D-KN□□□-ECT, with unit version 2.1 or later.

### General-purpose Inputs (Analog input/Pulse train input type)

Specif	ications			
Power Supply Voltage	Applicable Servomotor Capacity	Model		
	50 W	R88D-KTA5L		
Single-phase 100 VAC	100 W	R88D-KT01L		
	200 W	R88D-KT02L		
	400 W	R88D-KT04L		
Single- phase/three- phase 200 VAC	100 W	R88D-KT01H		
	200 W	R88D-KT02H		
	400 W	R88D-KT04H		
	750 W	R88D-KT08H		
	1 kW	R88D-KT10H		
	1.5 kW	R88D-KT15H		
	2 kW	R88D-KT20H		
_	3 kW	R88D-KT30H		
Three-phase 200 VAC	5 kW	R88D-KT50H		
	7.5 kW	R88D-KT75H		
	15 kW	R88D-KT150H		
	600 W	R88D-KT06F		
	1 kW	R88D-KT10F		
	1.5 kW	R88D-KT15F		
Three-phase	2 kW	R88D-KT20F		
400 VAC	3 kW	R88D-KT30F		
	5 kW	R88D-KT50F		
	7.5 kW	R88D-KT75F		
	15 kW	R88D-KT150F		

#### **Linear Motor with built-in EtherCAT communications**

Specif	ications	
Power Supply Voltage	Applicable Servomotor Capacity	Model
Single-phase 100 VAC	100 W	R88D-KN01L-ECT-L
	200 W	R88D-KN02L-ECT-L
	400 W	R88D-KN04L-ECT-L
Single-	100 W	R88D-KN01H-ECT-L
	200 W	R88D-KN02H-ECT-L
phase/three-	400 W	R88D-KN04H-ECT-L
phase	750 W	R88D-KN08H-ECT-L
200 VAC	1 kW	R88D-KN10H-ECT-L
	1.5 kW	R88D-KN15H-ECT-L
	600 W	R88D-KN06F-ECT-L
	1 kW	R88D-KN10F-ECT-L
Three-phase	1.5 kW	R88D-KN15F-ECT-L
	2 kW	R88D-KN20F-ECT-L
	3 kW	R88D-KN30F-ECT-L

#### **MECHATROLINK-II Communications**

Specif	ications	
Power Supply Voltage	Applicable Servomotor Capacity	Model
	50 W	R88D-KNA5L-ML2
Single-phase 100 VAC	100 W	R88D-KN01L-ML2
	200 W	R88D-KN02L-ML2
	400 W	R88D-KN04L-ML2
Single- phase/three- phase 200 VAC	100 W	R88D-KN01H-ML2
	200 W	R88D-KN02H-ML2
	400 W	R88D-KN04H-ML2
	750 W	R88D-KN08H-ML2
	1 kW	R88D-KN10H-ML2
	1.5 kW	R88D-KN15H-ML2
	2 kW	R88D-KN20H-ML2
Three-phase 200 VAC	3 kW	R88D-KN30H-ML2
200 1710	5 kW	R88D-KN50H-ML2
	600 W	R88D-KN06F-ML2
	1 kW	R88D-KN10F-ML2
Three-phase	1.5 kW	R88D-KN15F-ML2
400 VAC	2 kW	R88D-KN20F-ML2
	3 kW	R88D-KN30F-ML2
	5 kW	R88D-KN50F-ML2

### **AC Servomotors**

### <Cylinder Type> 3,000-r/min servomotors



			Model
	Specificat	ions	With incremental encoder
	-		Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
		50 W	R88M-K05030H-S2
		100 W	R88M-K10030L-S2
	100 V	200 W	R88M-K20030L-S2
		400 W	R88M-K40030L-S2
Ī		50 W	R88M-K05030H-S2
		100 W	R88M-K10030H-S2
		200 W	R88M-K20030H-S2
		400 W	R88M-K40030H-S2
		750 W	R88M-K75030H-S2
аке	200 V	1 kW	R88M-K1K030H-S2
t br		1.5 kW	R88M-K1K530H-S2
סט		2 kW	R88M-K2K030H-S2
Without brake		3 kW	R88M-K3K030H-S2
		4 kW	R88M-K4K030H-S2
		5 kW	R88M-K5K030H-S2
Ī		750 W	R88M-K75030F-S2
		1 kW	R88M-K1K030F-S2
	400 V	1.5 kW	R88M-K1K530F-S2
400 V	2 kW	R88M-K2K030F-S2	
	3 kW	R88M-K3K030F-S2	
		4 kW	R88M-K4K030F-S2
		5 kW	R88M-K5K030F-S2
		50 W	R88M-K05030H-BS2
	400.1/	100 W	R88M-K10030L-BS2
	100 V	200 W	R88M-K20030L-BS2
		400 W	R88M-K40030L-BS2
Ī		50 W	R88M-K05030H-BS2
		100 W	R88M-K10030H-BS2
		200 W	R88M-K20030H-BS2
		400 W	R88M-K40030H-BS2
		750 W	R88M-K75030H-BS2
e	200 V	1 kW	R88M-K1K030H-BS2
brake		1.5 kW	R88M-K1K530H-BS2
₽		2 kW	R88M-K2K030H-BS2
₹		3 kW	R88M-K3K030H-BS2
		4 kW	R88M-K4K030H-BS2
		5 kW	R88M-K5K030H-BS2
İ		750 W	R88M-K75030F-BS2
		1 kW	R88M-K1K030F-BS2
		1.5 kW	R88M-K1K530F-BS2
	400 V	2 kW	R88M-K2K030F-BS2
		3 kW	R88M-K3K030F-BS2
		4 kW	R88M-K4K030F-BS2

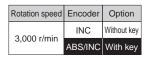
Note: Models with oil seals are also available.

	Rotation speed	Encoder	Option		
	3,000 r/min	INC	Without key		
		ABS/INC	With key		

			Model					
Specifications		ions	With incremental encoder					
			Straight shaft without key					
	Voltage	Rated output	Without oil seals					
		50 W	R88M-K05030H					
100 V		100 W	R88M-K10030L					
100 V	200 W	R88M-K20030L						
		400 W	R88M-K40030L					
		50 W	R88M-K05030H					
		100 W	R88M-K10030H					
		200 W	R88M-K20030H					
		400 W	R88M-K40030H					
		750 W	R88M-K75030H					
ake	200 V	1 kW	R88M-K1K030H					
t br		1.5 kW	R88M-K1K530H					
por		2 kW	R88M-K2K030H					
Without brake		3 kW	R88M-K3K030H					
		4 kW	R88M-K4K030H					
		5 kW	R88M-K5K030H					
		750 W	R88M-K75030F					
		1 kW	R88M-K1K030F					
	400 V	1.5 kW	R88M-K1K530F					
		2 kW	R88M-K2K030F					
		3 kW	R88M-K3K030F					
		4 kW	R88M-K4K030F					
		5 kW	R88M-K5K030F					
		50 W	R88M-K05030H-B					
	100 V	100 W	R88M-K10030L-B					
	100 4	200 W	R88M-K20030L-B					
		400 W	R88M-K40030L-B					
		50 W	R88M-K05030H-B					
		100 W	R88M-K10030H-B					
		200 W	R88M-K20030H-B					
		400 W	R88M-K40030H-B					
		750 W	R88M-K75030H-B					
ě	200 V	1 kW	R88M-K1K030H-B					
bra		1.5 kW	R88M-K1K530H-B					
Œ.	With brake	2 kW	R88M-K2K030H-B					
>		3 kW	R88M-K3K030H-B					
		4 kW	R88M-K4K030H-B					
		5 kW	R88M-K5K030H-B					
		750 W	R88M-K75030F-B					
		1 kW	R88M-K1K030F-B					
		1.5 kW	R88M-K1K530F-B					
	400 V	2 kW	R88M-K2K030F-B					
		3 kW	R88M-K3K030F-B					
		4 kW	R88M-K4K030F-B					
		5 kW	R88M-K5K030F-B					

Note: Models with oil seals are also available.

### AC Servomotor/Drive G5-series



			Model
	Specificat	ions	With absolute encoder
			Straight shaft withkey and tap
	Voltage	Rated output	Without oil seals
		50 W	R88M-K05030T-S2
	100 V	100 W	R88M-K10030S-S2
	100 V	200 W	R88M-K20030S-S2
		400 W	R88M-K40030S-S2
		50 W	R88M-K05030T-S2
		100 W	R88M-K10030T-S2
		200 W	R88M-K20030T-S2
		400 W	R88M-K40030T-S2
		750 W	R88M-K75030T-S2
ake	200 V	1 kW	R88M-K1K030T-S2
= p		1.5 kW	R88M-K1K530T-S2
Without brake		2 kW	R88M-K2K030T-S2
Ķ		3 kW	R88M-K3K030T-S2
		4 kW	R88M-K4K030T-S2
		5 kW	R88M-K5K030T-S2
		750 W	R88M-K75030C-S2
		1 kW	R88M-K1K030C-S2
	400 V	1.5 kW	R88M-K1K530C-S2
		2 kW	R88M-K2K030C-S2
		3 kW	R88M-K3K030C-S2
		4 kW	R88M-K4K030C-S2
		5 kW	R88M-K5K030C-S2
		50 W	R88M-K05030T-BS2
	100 V	100 W	R88M-K10030S-BS2
	100 V	200 W	R88M-K20030S-BS2
		400 W	R88M-K40030S-BS2
		50 W	R88M-K05030T-BS2
		100 W	R88M-K10030T-BS2
		200 W	R88M-K20030T-BS2
		400 W	R88M-K40030T-BS2
		750 W	R88M-K75030T-BS2
ě	200 V	1 kW	R88M-K1K030T-BS2
brake		1.5 kW	R88M-K1K530T-BS2
듚		2 kW	R88M-K2K030T-BS2
>		3 kW	R88M-K3K030T-BS2
		4 kW	R88M-K4K030T-BS2
		5 kW	R88M-K5K030T-BS2
		750 W	R88M-K75030C-BS2
		1 kW	R88M-K1K030C-BS2
		1.5 kW	R88M-K1K530C-BS2
	400 V	2 kW	R88M-K2K030C-BS2
		3 kW	R88M-K3K030C-BS2
		4 kW	R88M-K4K030C-BS2
		5 kW	R88M-K5K030C-BS2
Note:	Modele wi	th oil spals	are also available.

Note:	Models	with (	OII	seals	are	also	avaıl	able.

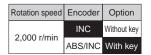
Rotation speed	Encoder	Option
3,000 r/min	INC	Without key
	ABS/INC	With key

Specifications			Model		
		ions	With absolute encoder		
			Straight shaft without key		
	Voltage Rated output		Without oil seals		
		50 W	R88M-K05030T		
	100 V	100 W	R88M-K10030S		
	100 4	200 W	R88M-K20030S		
		400 W	R88M-K40030S		
		50 W	R88M-K05030T		
		100 W	R88M-K10030T		
		200 W	R88M-K20030T		
		400 W	R88M-K40030T		
•		750 W	R88M-K75030T		
Without brake	200 V	1 kW	R88M-K1K030T		
<u> =</u>		1.5 kW	R88M-K1K530T		
Þo		2 kW	R88M-K2K030T		
₹		3 kW	R88M-K3K030T		
		4 kW	R88M-K4K030T		
		5 kW	R88M-K5K030T		
		750 W	R88M-K75030C		
		1 kW	R88M-K1K030C		
	400 V	1.5 kW	R88M-K1K530C		
		2 kW	R88M-K2K030C		
		3 kW	R88M-K3K030C		
		4 kW	R88M-K4K030C		
		5 kW	R88M-K5K030C		
	100 V	50 W	R88M-K05030T-B		
	1.5 kW R88M-K1K5300 2 kW R88M-K2K0300 3 kW R88M-K3K0300 4 kW R88M-K4K0300 5 kW R88M-K5K0300 50 W R88M-K50300 100 W R88M-K100305 400 W R88M-K400305 50 W R88M-K400305 400 W R88M-K400305 50 W R88M-K400305 200 W R88M-K400307				
		750 W			
<del>k</del> e	200 V	1 kW			
With brake		1.5 kW			
Ĕ		2 kW			
_		3 kW			
		4 kW			
		5 kW			
		750 W			
		1 kW			
	400.11	1.5 kW			
	400 V	2 kW			
		3 kW	R88M-K3K030C-B		
		4 kW	R88M-K5K030T R88M-K75030C R88M-K1K030C R88M-K1K530C R88M-K2K030C R88M-K3K030C R88M-K4K030C R88M-K5K030C R88M-K5K030C R88M-K5K030C R88M-K5030T-B R88M-K10030S-B R88M-K20030S-B R88M-K20030T-B R88M-K40030T-B R88M-K40030T-B R88M-K105030T-B R88M-K105030T-B R88M-K105030T-B R88M-K105030T-B R88M-K105030T-B R88M-K10030T-B R88M-K1K030T-B R88M-K1K030T-B R88M-K1K530T-B R88M-K1K530C-B R88M-K1K530C-B R88M-K1K530C-B		
N - 1	Madalawi	5 kW			

Note: Models with oil seals are also available.

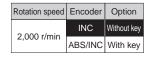
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### 2,000-r/min servomotors



			Model		
Specifications			With incremental encoder		
			Straight shaft with key and tap		
Voltage Rated output			Without oil seals		
		1 kW	R88M-K1K020H-S2		
		1.5 kW	R88M-K1K520H-S2		
	200 V	2 kW	R88M-K2K020H-S2		
	200 V	3 kW	R88M-K3K020H-S2		
		4 kW	R88M-K4K020H-S2		
ake		5 kW	R88M-K5K020H-S2		
t br		400 W	R88M-K40020F-S2		
Without brake		600 W	R88M-K60020F-S2		
		1 kW	R88M-K1K020F-S2		
	400 V	1.5 kW	R88M-K1K520F-S2		
		2 kW	R88M-K2K020F-S2		
		3 kW	R88M-K3K020F-S2		
		4 kW	R88M-K4K020F-S2		
		5 kW	R88M-K5K020F-S2		
		1 kW	R88M-K1K020H-BS2		
		1.5 kW	R88M-K1K520H-BS2		
	200 V	2 kW	R88M-K2K020H-BS2		
		3 kW	R88M-K3K020H-BS2		
		4 kW	R88M-K4K020H-BS2		
ē		5 kW	R88M-K5K020H-BS2		
With brake		400 W	R88M-K40020F-BS2		
듄		600 W	R88M-K60020F-BS2		
≥		1 kW	R88M-K1K020F-BS2		
	400 V	1.5 kW	R88M-K1K520F-BS2		
	400 V	2 kW	R88M-K2K020F-BS2		
		3 kW	R88M-K3K020F-BS2		
		4 kW	R88M-K4K020F-BS2		
		5 kW	R88M-K5K020F-BS2		

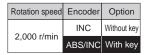
Note: Models with oil seals are also available.



Voltage
Voltage
1 kW   R88M-K1K020H
200 V  2 kW R88M-K1K520H  3 kW R88M-K3K020H  4 kW R88M-K4K020H  5 kW R88M-K5K020H  400 W R88M-K40020F  600 W R88M-K1K020F  1 kW R88M-K1K020F  1.5 kW R88M-K1K020F  3 kW R88M-K1K020F  3 kW R88M-K3K020F  4 kW R88M-K3K020F  1 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K4K020F  5 kW R88M-K1K520H-B  1.5 kW R88M-K1K520H-B  1.5 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B  2 kW R88M-K3K020H-B  3 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B
200 V  2 kW R88M-K2K020H  3 kW R88M-K3K020H  4 kW R88M-K4K020H  5 kW R88M-K5K020H  400 W R88M-K40020F  600 W R88M-K1K020F  1 kW R88M-K1K020F  2 kW R88M-K1K020F  3 kW R88M-K1K520F  4 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K520H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  1.5 kW R88M-K4K020H-B  1.5 kW R88M-K4K020H-B  1.5 kW R88M-K4K020H-B  2 kW R88M-K4K020H-B  3 kW R88M-K4K020H-B
3 kW   R88M-K3K020H
3 kW R88M-K3K020H  4 kW R88M-K4K020H  5 kW R88M-K5K020H  400 W R88M-K40020F  600 W R88M-K1K020F  1 kW R88M-K1K020F  2 kW R88M-K1K520F  3 kW R88M-K2K020F  4 kW R88M-K3K020F  1 kW R88M-K3K020F  4 kW R88M-K3K020F  1 kW R88M-K3K020F  2 kW R88M-K3K020F  3 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B  1.5 kW R88M-K3K020H-B
S kW   R88M-K5K020H
1.5 kW R88M-K1K520F  2 kW R88M-K2K020F  3 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
1.5 kW R88M-K1K520F  2 kW R88M-K2K020F  3 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
1.5 kW R88M-K1K520F  2 kW R88M-K2K020F  3 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
1.5 kW R88M-K1K520F  2 kW R88M-K2K020F  3 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
200 V  2 kW R88M-K2K020F 3 kW R88M-K3K020F 4 kW R88M-K4K020F 5 kW R88M-K5K020F 1 kW R88M-K1K020H-B 1.5 kW R88M-K1K520H-B 2 kW R88M-K2K020H-B 3 kW R88M-K3K020H-B 4 kW R88M-K4K020H-B
2 kW R88M-K2K020F  3 kW R88M-K3K020F  4 kW R88M-K4K020F  5 kW R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
200 V  200 V  R88M-K4K020F  R88M-K5K020F  1 kW R88M-K1K020H-B  1.5 kW R88M-K1K520H-B  2 kW R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
200 V    SkW   R88M-K5K020F
200 V R88M-K1K020H-B 1.5 kW R88M-K1K520H-B 2 kW R88M-K2K020H-B 3 kW R88M-K3K020H-B 4 kW R88M-K4K020H-B
200 V  1.5 kW R88M-K1K520H-B 2 kW R88M-K2K020H-B 3 kW R88M-K3K020H-B 4 kW R88M-K4K020H-B
200 V R88M-K2K020H-B  3 kW R88M-K3K020H-B  4 kW R88M-K4K020H-B
200 V R88M-K3K020H-B 4 kW R88M-K4K020H-B
3 kW R88M-K3K020H-B 4 kW R88M-K4K020H-B
E LIM DOOM I/EI/02011 D
5 kW R88M-K5K020H-B
B AND W DOOM KANNOT D
<b>400 W</b> R88M-K40020F-B
<b>€ 600 W</b> R88M-K60020F-B
<b>1 kW</b> R88M-K1K020F-B
400 V R88M-K1K520F-B
2 kW R88M-K2K020F-B
3 kW R88M-K3K020F-B
4 kW R88M-K4K020F-B
5 kW R88M-K5K020F-B

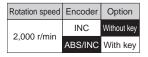
Note: Models with oil seals are also available.

### AC Servomotor/Drive G5-series



Specifications			Model		
		ions	With absolute encoder		
			Straight shaft with key and tap		
	Voltage	Rated output	Without oil seals		
		1 kW	R88M-K1K020T-S2		
		1.5 kW	R88M-K1K520T-S2		
		2 kW	R88M-K2K020T-S2		
		3 kW	R88M-K3K020T-S2		
	200 V	4 kW	R88M-K4K020T-S2		
		5 kW	R88M-K5K020T-S2		
		7.5 kW	R88M-K7K515T-S2 *		
		11 kW	R88M-K11K015T-S2 *		
Without brake		15 kW	R88M-K15K015T-S2 *		
t b		400 W	R88M-K40020C-S2		
Pou		600 W	R88M-K60020C-S2		
×=		1 kW	R88M-K1K020C-S2		
		1.5 kW	R88M-K1K520C-S2		
		2 kW	R88M-K2K020C-S2		
	400 V	3 kW	R88M-K3K020C-S2		
		4 kW	R88M-K4K020C-S2		
		5 kW	R88M-K5K020C-S2		
		7.5 kW	R88M-K7K515C -S2 *		
		11 kW	R88M-K11K015C-S2 *		
		15 kW	R88M-K15K015C-S2 *		
		1 kW	R88M-K1K020T-BS2		
		1.5 kW	R88M-K1K520T-BS2		
		2 kW	R88M-K2K020T-BS2		
		3 kW	R88M-K3K020T-BS2		
	200 V	4 kW	R88M-K4K020T-BS2		
		5 kW	R88M-K5K020T-BS2		
		7.5 kW	R88M-K7K515T-BS2 *		
		11 kW	R88M-K11K015T-BS2 *		
ē		15 kW	R88M-K15K015T-BS2 *		
With brake		400 W	R88M-K40020C-BS2		
Ę		600 W	R88M-K60020C-BS2		
>		1 kW	R88M-K1K020C-BS2		
		1.5 kW	R88M-K1K520C-BS2		
		2 kW	R88M-K2K020C-BS2		
	400 V	3 kW	R88M-K3K020C-BS2		
		4 kW	R88M-K4K020C-BS2		
		5 kW	R88M-K5K020C-BS2		
		7.5 kW	R88M-K7K515C-BS2 *		
		11 kW	R88M-K11K015C-BS2 *		
Note	Models wit	15 kW	R88M-K15K015C-BS2 *		

Note: Models with oil seals are also available. \* The rated speed is 1,500 r/min.

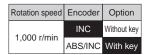


			Model		
	Specifications		With absolute encoder		
			Straight shaft without key		
	Voltage	Rated output	Without oil seals		
		1 kW	R88M-K1K020T		
		1.5 kW	R88M-K1K520T		
		2 kW	R88M-K2K020T		
		3 kW	R88M-K3K020T		
	200 V	4 kW	R88M-K4K020T		
		5 kW	R88M-K5K020T		
		7.5 kW	R88M-K7K515T *		
		11 kW	R88M-K11K015T *		
ake		15 kW	R88M-K15K015T *		
t p		400 W	R88M-K40020C		
Without brake		600 W	R88M-K60020C		
N X		1 kW	R88M-K1K020C		
		1.5 kW	R88M-K1K520C		
		2 kW	R88M-K2K020C		
	400 V	3 kW	R88M-K3K020C		
		4 kW	R88M-K4K020C		
		5 kW	R88M-K5K020C		
		7.5 kW	R88M-K7K515C *		
		11 kW	R88M-K11K015C *		
		15 kW	R88M-K15K015C *		
		1 kW	R88M-K1K020T-B		
		1.5 kW	R88M-K1K520T-B		
		2 kW	R88M-K2K020T-B		
		3 kW	R88M-K3K020T-B		
	200 V	4 kW	R88M-K4K020T-B		
		5 kW	R88M-K5K020T-B		
		7.5 kW	R88M-K7K515T-B *		
		11 kW	R88M-K11K015T-B *		
<u>8</u>		15 kW	R88M-K15K015T-B *		
With brake		400 W	R88M-K40020C-B		
ŧ		600 W	R88M-K60020C-B		
5		1 kW	R88M-K1K020C-B		
		1.5 kW	R88M-K1K520C-B		
		2 kW	R88M-K2K020C-B		
	400 V	3 kW	R88M-K3K020C-B		
		4 kW	R88M-K4K020C-B		
		5 kW	R88M-K5K020C-B		
		7.5 kW	R88M-K7K515C-B *		
		11 kW	R88M-K11K015C-B *		
		15 kW	R88M-K15K015C-B *		

Note: Models with oil seals are also available.

\* The rated speed is 1,500 r/min.

### 1,000-r/min servomotors



			Model	
Specifications			With incremental encoder	
			Straight shaft with key and tap	
	Voltage Rated output		Without oil seals	
	900 \		R88M-K90010H-S2	
ake	200 V	2 kW	R88M-K2K010H-S2	
Without brake		3 kW	R88M-K3K010H-S2	
nοι	400 V	900 W	R88M-K90010F-S2	
Ž		2 kW	R88M-K2K010F-S2	
_		3 kW	R88M-K3K010F-S2	
		900 W	R88M-K90010H-BS2	
e e	200 V	2 kW	R88M-K2K010H-BS2	
orał		3 kW	R88M-K3K010H-BS2	
With brake	400 V	900 W	R88M-K90010F-BS2	
≶		2 kW	R88M-K2K010F-BS2	
		3 kW	R88M-K3K010F-BS2	

N	ote:	Mode	els with	oil seal	s are a	lso available.
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Rotation speed	Encoder	Option
1 000 r/min	INC	Without key
1,000 r/min	ABS/INC	With key

			Model	
Specifications			With incremental encoder	
			Straight shaft without key	
	Voltage Rated output		Without oil seals	
		900 W	R88M-K90010H	
ake	200 V	2 kW	R88M-K2K010H	
Without brake		3 kW	R88M-K3K010H	
	400 V	900 W	R88M-K90010F	
Ξ		2 kW	R88M-K2K010F	
_		3 kW	R88M-K3K010F	
		900 W	R88M-K90010H-B	
ē	200 V	2 kW	R88M-K2K010H-B	
With brake		3 kW	R88M-K3K010H-B	
th	400 V	900 W	R88M-K90010F-B	
≶		2 kW	R88M-K2K010F-B	
		3 kW	R88M-K3K010F-B	

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
4.000 =/	INC	Without key
1,000 r/min	ABS/INC	With key

			Model	
Specifications  Voltage Rated output		ions	With absolute encoder	
			Straight shaft with key and tap	
			Without oil seals	
		900 W	R88M-K90010T-S2	
		2 kW	R88M-K2K010T-S2	
	200 V	3 kW	R88M-K3K010T-S2	
ake		4.5 kW	R88M-K4K510T-S2	
Without brake		6 kW	R88M-K6K010T-S2	
		900 W	R88M-K90010C-S2	
	400 V	2 kW	R88M-K2K010C-S2	
		3 kW	R88M-K3K010C-S2	
		4.5 kW	R88M-K4K510C-S2	
		6 kW	R88M-K6K010C-S2	
		900 W	R88M-K90010T-BS2	
		2 kW	R88M-K2K010T-BS2	
	200 V	3 kW	R88M-K3K010T-BS2	
e		4.5 kW	R88M-K4K510T-BS2	
ora		6 kW	R88M-K6K010T-BS2	
With brake		900 W	R88M-K90010C-BS2	
≥	400 V	2 kW	R88M-K2K010C-BS2	
		3 kW	R88M-K3K010C-BS2	
		4.5 kW	R88M-K4K510C-BS2	
		6 kW	R88M-K6K010C-BS2	

Rotation speed	Encoder	Option
4 000 =/:-	INC	Without key
1,000 r/min	ABS/INC	With key

Specifications		Model	
		With absolute encoder	
		Straight shaft without key	
Voltage Rated output		Without oil seals	
	900 W	R88M-K90010T	
	2 kW	R88M-K2K010T	
200 V	3 kW	R88M-K3K010T	
	4.5 kW	R88M-K4K510T	
	6 kW	R88M-K6K010T	
Without brake A 000 A	900 W	R88M-K90010C	
	2 kW	R88M-K2K010C	
	3 kW	R88M-K3K010C	
	4.5 kW	R88M-K4K510C	
	6 kW	R88M-K6K010C	
	900 W	R88M-K90010T-B	
	2 kW	R88M-K2K010T-B	
200 V	3 kW	R88M-K3K010T-B	
	4.5 kW	R88M-K4K510T-B	
ak	6 kW	R88M-K6K010T-B	
With brake V 000 V	900 W	R88M-K90010C-B	
	2 kW	R88M-K2K010C-B	
	3 kW	R88M-K3K010C-B	
	4.5 kW	R88M-K4K510C-B	
	6 kW	R88M-K6K010C-B	
	Voltage 200 V 400 V 400 V	Voltage	

### **Linear Motors**

### <lron-core motor type>

### **Motor Coil Unit**

Motor Coil Unit model	Continuous force [N]	Momentary maximum force [N]
R88L-EC-FW-0303-ANPC	48	105
R88L-EC-FW-0306-ANPC	96	210
R88L-EC-FW-0606-ANPC	160	400
R88L-EC-FW-0609-ANPC	240	600
R88L-EC-FW-0612-ANPC	320	800
R88L-EC-FW-1112-ANPC	608	1600
R88L-EC-FW-1115-ANPC	760	2000

### **Magnet Trac**

Magnet Trac model	Magnet Trac Unit Length (mm)
R88L-EC-FM-03096-A	96
R88L-EC-FM-03144-A	144
R88L-EC-FM-03384-A	384
R88L-EC-FM-06192-A	192
R88L-EC-FM-06288-A	288
R88L-EC-FM-11192-A	192
R88L-EC-FM-11288-A	288

### <Ironless motor type> Motor Coil Unit

Motor Coil Unit model	Continuous force [N]	Momentary maximum force [N]
R88L-EC-GW-0303-ANPS	26.5	96
R88L-EC-GW-0306-ANPS	53	200
R88L-EC-GW-0309-ANPS	80	300
R88L-EC-GW-0503-ANPS	58	240
R88L-EC-GW-0506-ANPS	117	480
R88L-EC-GW-0509-ANPS	175	720
R88L-EC-GW-0703-ANPS	117	552
R88L-EC-GW-0706-ANPS	232	1110
R88L-EC-GW-0709-ANPS	348	1730

### **Magnet Trac**

Magnet Trac model	Magnet Trac Unit Length (mm)
R88L-EC-GM-03090-A	90
R88L-EC-GM-03120-A	120
R88L-EC-GM-03390-A	390
R88L-EC-GM-05126-A	126
R88L-EC-GM-05168-A	168
R88L-EC-GM-05210-A	210
R88L-EC-GM-05546-A	546
R88L-EC-GM-07114-A	114
R88L-EC-GM-07171-A	171
R88L-EC-GM-07456-A	456

### **Combination table**

Motor Coil Unit and Magnet Trac Combinations

### Iron-core motor type

Motor Coil Unit model	Magnet Trac model
R88L-EC-FW-0303-ANPC R88L-EC-FW-0306-ANPC	R88L-EC-FM-03096-A R88L-EC-FM-03144-A R88L-EC-FM-03384-A
R88L-EC-FW-0606-ANPC R88L-EC-FW-0609-ANPC R88L-EC-FW-0612-ANPC	R88L-EC-FM-06192-A R88L-EC-FM-06288-A
R88L-EC-FW-1112-ANPC R88L-EC-FW-1115-ANPC	R88L-EC-FM-11192-A R88L-EC-FM-11288-A

### Ironless motor type

Motor Coil Unit model	Magnet Trac model
R88L-EC-GW-0303-ANPS	R88L-EC-GM-03090-A
R88L-EC-GW-0306-ANPS	R88L-EC-GM-03120-A
R88L-EC-GW-0309-ANPS	R88L-EC-GM-03390-A
R88L-EC-GW-0503-ANPS R88L-EC-GW-0506-ANPS R88L-EC-GW-0509-ANPS	R88L-EC-GM-05126-A R88L-EC-GM-05168-A R88L-EC-GM-05210-A R88L-EC-GM-05546-A
R88L-EC-GW-0703-ANPS	R88L-EC-GM-07114-A
R88L-EC-GW-0706-ANPS	R88L-EC-GM-07171-A
R88L-EC-GW-0709-ANPS	R88L-EC-GM-07456-A

### Decelerators (Backlash = 3' Max./Backlash = 15' Max.)

Backlash = 3' Max <Cylinder Type>

● 3,000-r/min servomotors

Straight shaft without key

	en angini on are miniote koy			
Motor capacity	Gear Ratio	Model (Straight shaft)		
	1/5	R88G-HPG11B05100B		
50 W	1/9	R88G-HPG11B09050B		
	1/21	R88G-HPG14A21100B		
	1/33	R88G-HPG14A33050B		
	1/45	R88G-HPG14A45050B		
	1/5	R88G-HPG11B05100B		
	1/11	R88G-HPG14A11100B		
100 W	1/21	R88G-HPG14A21100B		
	1/33	R88G-HPG20A33100B		
	1/45	R88G-HPG20A45100B		
	1/5	R88G-HPG14A05200B		
	1/11	R88G-HPG14A11200B		
200 W	1/21	R88G-HPG20A21200B		
	1/33	R88G-HPG20A33200B		
	1/45	R88G-HPG20A45200B		
	1/5	R88G-HPG14A05400B		
	1/11	R88G-HPG20A11400B		
400 W	1/21	R88G-HPG20A21400B		
	1/33	R88G-HPG32A33400B		
	1/45	R88G-HPG32A45400B		
	1/5	R88G-HPG20A05750B		
	1/11	R88G-HPG20A11750B		
750 W	1/21	R88G-HPG32A21750B		
(200 V)	1/33	R88G-HPG32A33750B		
	1/45	R88G-HPG32A45750B		
	1/5	R88G-HPG32A052K0B		
	1/11	R88G-HPG32A112K0B		
750W	1/21	R88G-HPG32A211K5B		
(400 V)	1/33	R88G-HPG32A33600SB		
	1/45	R88G-HPG50A451K5B		
	1/5	R88G-HPG32A052K0B		
	1/11	R88G-HPG32A112K0B		
1kW	1/21	R88G-HPG32A211K5B		
11000	1/33	R88G-HPG50A332K0B		
	1/45	R88G-HPG50A451K5B		
	1/43	R88G-HPG32A052K0B		
	1/11	R88G-HPG32A112K0B		
1.5kW	1/21	R88G-HPG32A211K5B		
1.5KVV	1/33	R88G-HPG50A332K0B		
	1/45	R88G-HPG50A451K5B		
	1/45	R88G-HPG32A052K0B		
	1/11	R88G-HPG32A052K0B		
2kW		R88G-HPG50A212K0B		
	1/21			
	1/33	R88G-HPG50A332K0B R88G-HPG32A053K0B		
31441	1/5			
3kW	1/11	R88G-HPG50A113K0B		
	1/21	R88G-HPG50A213K0B		
4kW	1/5	R88G-HPG32A054K0B		
	1/11	R88G-HPG50A115K0B		
5kW	1/5	R88G-HPG50A055K0B		
	1/11	R88G-HPG50A115K0B		

Note: 1. The standard models have a straight shaft.

### ● 2,000-r/min servomotors

Straight shaft without key

Motor Gear Model (Straight share	
capacity Ratio	ft)
1/5 R88G-HPG32A052K0B	
1/11 R88G-HPG32A112K0B	
400 W 1/21 R88G-HPG32A211K5B	
1/33 R88G-HPG32A33600SB	
1/45 R88G-HPG32A45400SB	
1/5 R88G-HPG32A052K0B	
1/11 R88G-HPG32A112K0B	
600 W 1/21 R88G-HPG32A211K5B	
1/33 R88G-HPG32A33600SB	
1/45 R88G-HPG50A451K5B	
1/5 R88G-HPG32A053K0B	
1/11 R88G-HPG32A112K0SB	
1 kW 1/21 R88G-HPG32A211K0SB	
1/33 R88G-HPG50A332K0SB	
1/45 R88G-HPG50A451K0SB	
1/5 R88G-HPG32A053K0B	
1/11 R88G-HPG32A112K0SB	
1.5 kW 1/21 R88G-HPG50A213K0B	
1/33 R88G-HPG50A332K0SB	
1/5 R88G-HPG32A053K0B	
1/11 R88G-HPG32A112K0SB	
2 kW 1/21 R88G-HPG50A213K0B	
1/33 R88G-HPG50A332K0SB	
1/5 R88G-HPG32A054K0B	
1/11 R88G-HPG50A115K0B	
3 kW 1/21 R88G-HPG50A213K0SB	
1/25 R88G-HPG65A253K0SB	
1/5 R88G-HPG50A055K0SB	
1/11 R88G-HPG50A115K0SB	
4 kW 1/20 R88G-HPG65A205K0SB	
1/25 R88G-HPG65A255K0SB	
1/5 R88G-HPG50A055K0SB	
1/11 R88G-HPG50A115K0SB	
5 kW 1/20 R88G-HPG65A205K0SB	
1/25 R88G-HPG65A255K0SB	

**Note: 1.** The standard models have a straight shaft.

 To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the box.

### ● 1,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)	
	1/5	R88G-HPG32A05900TB	
900 W	1/11	R88G-HPG32A11900TB	
900 W	1/21	R88G-HPG50A21900TB	
	1/33	R88G-HPG50A33900TB	
	1/5	R88G-HPG32A052K0TB	
2 kW	1/11	R88G-HPG50A112K0TB	
2 KVV	1/21	R88G-HPG50A212K0TB	
	1/25	R88G-HPG65A255K0SB	
	1/5	R88G-HPG50A055K0SB	
3 kW	1/11	R88G-HPG50A115K0SB	
	1/20	R88G-HPG65A205K0SB	
	1/25	R88G-HPG65A255K0SB	

Note: 1. The standard models have a straight shaft.

2. To order a Servomotor with a straight shaft with key, add "J" to the end of the model number, in the place indicated by the

Backlash = 15' Max <Cylinder Type>

### ● 3,000-r/min servomotors

Straight shaft with key

Motor capacity	Gear	M - 1-1 (0(1-1 (-1-f))	
capacity	Ratio	Model (Straight shaft)	
	1/5	R88G-VRXF05B100CJ	
50 W	1/9	R88G-VRXF09B100CJ	
50 W	1/15	R88G-VRXF15B100CJ	
	1/25	R88G-VRXF25B100CJ	
	1/5	R88G-VRXF05B100CJ	
400 W	1/9	R88G-VRXF09B100CJ	
100 W	1/15	R88G-VRXF15B100CJ	
	1/25	R88G-VRXF25B100CJ	
	1/5	R88G-VRXF05B200CJ	
000 14/	1/9	R88G-VRXF09C200CJ	
200 W	1/15	R88G-VRXF15C200CJ	
	1/25	R88G-VRXF25C200CJ	
	1/5	R88G-VRXF05C400CJ	
400 144	1/9	R88G-VRXF09C400CJ	
400 W	1/15	R88G-VRXF15C400CJ	
	1/25	R88G-VRXF25C400CJ	
	1/5	R88G-VRXF05C750CJ	
750 W	1/9	R88G-VRXF09D750CJ	
(200 V)	1/15	R88G-VRXF15D750CJ	
	1/25	R88G-VRXF25D750CJ	

Note: Decelerators (Backlash = 15' Max.)

The new R88G-VRXF Series of the Decelerators (Backlash = 15' Max.) was released in October 2017.

The old R88G-VRSF Series will be discontinued at the end of March 2019.

### **Accessories and Cables**

### ■ Connection Cables (Power Cables, Brake Cables, Encoder Cables) <Non-flexible Cables>

#### Power cable

		Without brake	With brake
Specifications		Model	Model
	3 m	R88A-CAKA003S	
	5 m	R88A-CAKA005S	
	10 m	R88A-CAKA010S	
[100 V/200 V]	15m	R88A-CAKA015S	
3,000-r/min Servomotors of 50 to 750 W	20 m	R88A-CAKA020S	
	30 m	R88A-CAKA030S	
	40 m	R88A-CAKA040S	
	50 m	R88A-CAKA050S	
	3 m	R88A-CAGB003S	R88A-CAGB003B
	5 m	R88A-CAGB005S	R88A-CAGB005B
[200 V]	10 m	R88A-CAGB010S	R88A-CAGB010B
3,000-r/min Servomotors of 1 to 2 kW	15 m	R88A-CAGB015S	R88A-CAGB015B
2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	20 m	R88A-CAGB020S	R88A-CAGB020B
1,000-r/min Servomotors of 900 W	30 m	R88A-CAGB030S	R88A-CAGB030B
	40 m	R88A-CAGB040S	R88A-CAGB040B
	50 m	R88A-CAGB050S	R88A-CAGB050B
	3 m	R88A-CAGB003S	R88A-CAKF003B
	5 m	R88A-CAGB005S	R88A-CAKF005B
[400 V]	10 m	R88A-CAGB010S	R88A-CAKF010B
3,000-r/min Servomotors of 750 W to 2 kW	15 m	R88A-CAGB015S	R88A-CAKF015B
2,000-r/min Servomotors of 400 W to 2 kW 1,000-r/min Servomotors of 900 W	20 m	R88A-CAGB020S	R88A-CAKF020B
1,000-r/min Servomotors of 900 W	30 m	R88A-CAGB030S	R88A-CAKF030B
	40 m	R88A-CAGB040S	R88A-CAKF040B
	50 m	R88A-CAGB050S	R88A-CAKF050B
	3 m	R88A-CAGD003S	R88A-CAGD003B
	5 m	R88A-CAGD005S	R88A-CAGD005B
[200 V] [400 V]	10 m	R88A-CAGD010S	R88A-CAGD010B
3,000-r/min Servomotors of 3 to 5 kW	15 m	R88A-CAGD015S	R88A-CAGD015B
2,000-r/min Servemeters of 3 to 5 kW	20 m	R88A-CAGD020S	R88A-CAGD020B
1,000-r/min Servomotors of 2 to 4.5 kW	30 m	R88A-CAGD030S	R88A-CAGD030B
	40 m	R88A-CAGD040S	R88A-CAGD040B
	50 m	R88A-CAGD050S	R88A-CAGD050B
	3 m	R88A-CAGE003S	
	5 m	R88A-CAGE005S	
	10 m	R88A-CAGE010S	
[200 V] [400 V] 1,500-r/min Servomotors of 7.5 kW	15 m	R88A-CAGE015S	
1,000-r/min Servomotors of 7.5 kW	20 m	R88A-CAGE020S	
	30 m	R88A-CAGE030S	
	40 m	R88A-CAGE040S	
	50 m	R88A-CAGE050S	

Note: 1. Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.

<sup>2.</sup> For non-flexible power cables for Servomotors of 11 or 15 kW, refer to the G5 series USER'S MANUAL and make your own cable. Confirm the Manual No. that is listed in Related Manuals.

#### **Brake Cable**

Specifications		Non-flexible Cables	
		Model	
	3 m	R88A-CAKA003B	
	5 m	R88A-CAKA005B	
[100 V][200 V]	10 m	R88A-CAKA010B	
3,000-r/min	15 m	R88A-CAKA015B	
Servomotors of	20 m	R88A-CAKA020B	
50 to 750 W	30 m	R88A-CAKA030B	
	40 m	R88A-CAKA040B	
	50 m	R88A-CAKA050B	
	3 m	R88A-CAGE003B	
[200 V][400 V]	5 m	R88A-CAGE005B	
1,500-r/min	10 m	R88A-CAGE010B	
Servomotors of 7.5 to 15 kW	15 m	R88A-CAGE015B	
1,000-r/min	20 m	R88A-CAGE020B	
Servomotors of	30 m	R88A-CAGE030B	
6 kW	40 m	R88A-CAGE040B	
•	50 m	R88A-CAGE050B	

#### **Encoder Cable**

Specifications		Non-flexible Cables
		Model
	3 m	R88A-CRKA003C
	5 m	R88A-CRKA005C
[100 V/200 V]	10 m	R88A-CRKA010C
3,000-r/min	15 m	R88A-CRKA015C
Servomotors of 50 to 750 W	20 m	R88A-CRKA020C
50 to 750 W	30 m	R88A-CRKA030C
	40 m	R88A-CRKA040C
	50 m	R88A-CRKA050C
[100 V and 200 V] 3,000-r/min Servomotors	3 m	R88A-CRKC003N
	5 m	R88A-CRKC005N
of 1.0 kW or more 2,000-r/min Servomotors	10 m	R88A-CRKC010N
1,500-r/min Servomotors 1,000-r/min Servomotors [400 V] 3,000-r/min Servomotors 2,000-r/min Servomotors	15 m	R88A-CRKC015N
	20 m	R88A-CRKC020N
	30 m	R88A-CRKC030N
1,500-r/min Servomotors 1,000-r/min Servomotors	40 m	R88A-CRKC040N
1,000-1/IIIIII Servoiliotois	50 m	R88A-CRKC050N

#### <Flexible Cables>

#### Power cable

Specifications		Without brake	With brake
Specifications		Model	Model
	3 m	R88A-CAKA003SR	
	5 m	R88A-CAKA005SR	Note: There are separate connectors for
	10 m	R88A-CAKA010SR	power and brakes for 3,000-r/min
[100 V/200 V]	15 m	R88A-CAKA015SR	Servomotors of 50 to 750W. When a Servomotor with a brake is used, it is
3,000-r/min Servomotors of 50 to 750 W	20 m	R88A-CAKA020SR	necessary to use both a PowerCable
	30 m	R88A-CAKA030SR	for Servomotors without brakes and
	40 m	R88A-CAKA040SR	Power cable.
	50 m	R88A-CAKA050SR	
	3 m	R88A-CAGB003SR	R88A-CAGB003BR
	5 m	R88A-CAGB005SR	R88A-CAGB005BR
[200 V]	10 m	R88A-CAGB010SR	R88A-CAGB010BR
3,000-r/min Servomotors of 1 to 2 kW	15 m	R88A-CAGB015SR	R88A-CAGB015BR
2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	20 m	R88A-CAGB020SR	R88A-CAGB020BR
1,000-1/IIIII Servoinotors of 900 W	30 m	R88A-CAGB030SR	R88A-CAGB030BR
	40 m	R88A-CAGB040SR	R88A-CAGB040BR
	50 m	R88A-CAGB050SR	R88A-CAGB050BR
	3 m	R88A-CAGB003SR	R88A-CAKF003BR
	5 m	R88A-CAGB005SR	R88A-CAKF005BR
[400 V]	10 m	R88A-CAGB010SR	R88A-CAKF010BR
3,000-r/min Servomotors of 750 W to 2 kW	15 m	R88A-CAGB015SR	R88A-CAKF015BR
2,000-r/min Servomotors of 400 W to 2 kW 1,000-r/min Servomotors of 900 W	20 m	R88A-CAGB020SR	R88A-CAKF020BR
1,000-1/IIIII Servoinotors of 900 W	30 m	R88A-CAGB030SR	R88A-CAKF030BR
	40 m	R88A-CAGB040SR	R88A-CAKF040BR
	50 m	R88A-CAGB050SR	R88A-CAKF050BR
	3 m	R88A-CAGD003SR	R88A-CAGD003BR
[200 V] [400 V] 3,000-r/min Servomotors of 3 to 5 kW	5 m	R88A-CAGD005SR	R88A-CAGD005BR
	10 m	R88A-CAGD010SR	R88A-CAGD010BR
	15 m	R88A-CAGD015SR	R88A-CAGD015BR
2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 4.5 kW	20 m	R88A-CAGD020SR	R88A-CAGD020BR
1,000-1/IIIIII Servoinotors of 4.5 kW	30 m	R88A-CAGD030SR	R88A-CAGD030BR
	40 m	R88A-CAGD040SR	R88A-CAGD040BR
	50 m	R88A-CAGD050SR	R88A-CAGD050BR

Note: 1. Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.

Note: 2. For flexible power cables for Servomotors of 11 to 15 kW, refer to the G5 series USER'S MANUAL and make your own cable.

For flexible power cables for Servomotors of 6 to 7.5 kW, refer to the G5 series USER'S MANUAL and make your own power cable.

#### **Brake Cable**

Diane Capic			
Specifications		Flexible Cables	
		Model	
	3 m	R88A-CAKA003BR	
[100 V] [200 V] 3,000-r/min	5 m	R88A-CAKA005BR	
	10 m	R88A-CAKA010BR	
	15 m	R88A-CAKA015BR	
Servomotors of	20 m	R88A-CAKA020BR	
	30 m	R88A-CAKA030BR	
	40 m	R88A-CAKA040BR	
	50 m	R88A-CAKA050BR	

Note: For flexible brake cables for Servomotors of 6 to 15 kW, refer to the G5 series USER'S MANUAL and make your own brake cable. Confirm the Manual No. that is listed in Related Manuals.

#### **Encoder Cable**

Specifications		Flexible Cables
		Model
	3 m	R88A-CRKA003CR
[100 V/200 V]	5 m	R88A-CRKA005CR
3,000-r/min Servomotors of	10 m	R88A-CRKA010CR
50 to 750 W	15 m	R88A-CRKA015CR
(for both absolute encoders and	20 m	R88A-CRKA020CR
incremental	30 m	R88A-CRKA030CR
encoders)	40 m	R88A-CRKA040CR
	50 m	R88A-CRKA050CR
	3 m	R88A-CRKC003NR
[100 V and 200 V] 3,000-r/min Servomotors	5 m	R88A-CRKC005NR
of 1.0 kW or more 2,000-r/min Servomotors	10 m	R88A-CRKC010NR
1,500-r/min Servomotors 1,000-r/min Servomotors	15 m	R88A-CRKC015NR
[400 V] 3,000-r/min Servomotors 2,000-r/min Servomotors	20 m	R88A-CRKC020NR
	30 m	R88A-CRKC030NR
1,500-r/min Servomotors 1,000-r/min Servomotors	40 m	R88A-CRKC040NR
,	50 m	R88A-CRKC050NR

# Ordering Information

#### **■** Cable/Connector

#### **Absolute Encoder Battery Cable**

Name	Length	model
Absolute Encoder Battery Cable (Battery not included)	0.3 m	R88A-CRGD0R3C
Absolute Encoder Battery Cable (One R88A-BAT01G Battery included)	0.3 m	R88A-CRGD0R3C-BS

#### **Absolute Encoder Backup Battery**

Specifications	Model	
2,000 mA • h 3.6 V	R88A-BAT01G	

#### **Analog Monitor Cable**

Name	Length	Model
Analog Monitor Cable	1 m	R88A-CMK001S

#### **Servo Drive Connectors (common)**

Name	Connects to	Model
Encoder Connector	CN2	R88A-CNW01R
External Scale Connector	CN4	R88A-CNK41L
safety bypass connector	CN8	R88A-CNK81S

#### **Servo Drive Connectors**

Name	Connects to	Drive type	Model
		General-purpose Input	R88A-CNU11C
Control I/O Connector	CN1	MECHATROLINK-II Communications EtherCAT Communications EtherCAT Communications Linear motor	R88A-CNW01C

#### **Servomotor Connector**

Name		Model
Name	Applicable Servomotor Capacity	Woder
	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK02R
Servomotor Connector for Encoder Cable	[100 V/200 V] 3,000 r/min (1 to 5 kW) 2,000r/min,1,000r/min [400 V] 3,000 r/min, 2,000 r/min, 1,000 r/min	R88A-CNK04R
Power Cable Connector	(750 W max.)	R88A-CNK11A
Brake Cable Connector	(750 W max.)	R88A-CNK11B

#### **External Encoder Cable**

Name	Lengths	Model
Serial Communications Cable	10 m	R88A-CRKE010SR

#### **■** Control Cables

#### Control Cables (for Connector Terminal Block/CN1)

Name				Model
Name		Specifications		Wiodei
	General-pur	General-purpose Input		XW2Z-100J-B24
Connector Terminal Block Cables	General-pur	pose input	Length 2.0 m	XW2Z-200J-B24
Connector Terminal Block Cables	MECHATRO	DLINK-II Communications	Length 1.0 m	XW2Z-100J-B34
	EtherCAT C	ommunications	Length 2.0 m	XW2Z-200J-B34
Connector Terminal Block Conversion Unit	0 1	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-50G4
	General- purpose Input	Conversion Unit for General-purpose Controllers (M3.5 screws)	Through type	XW2B-50G5
		Conversion Unit for General-purpose Controllers (M3 screws)	Slim type	XW2D-50G6
	MECHATR OLINK-II	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-20G4
	Communic ations EtherCAT	Conversion Unit for General-purpose Controllers (M3.5 screws)	- I i i i ougii type	XW2B-20G5
	Communic	Conversion Unit for General-purpose Controllers (M3 screws)	Slim type	XW2D-20G6

# ● General-purpose Inputs (Analog input/Pulse train input type) Connection Cables (for CN1)

Specifications		The number	Length	Model
Name	Unit	of axes	Lengin	Model
			1 m	XW2Z-100J-G9
		for 1 axis	5 m	XW2Z-500J-G9
Position Control Unit (High-speed type)	CJ1W-NC234/434		10 m	XW2Z-10MJ-G9
for Line-driver output	C31VV-NC234/434		1 m	XW2Z-100J-G1
		for 2 axis	5 m	XW2Z-500J-G1
			10 m	XW2Z-10MJ-G1
Position Control Unit (High-speed type)	CJ1W-NC214/NC414	for 1 axis	1 m	XW2Z-100J-G13
		101 1 4315	3 m	XW2Z-300J-G13
for Open collector output		for 2 axis	1 m	XW2Z-100J-G5
			3 m	XW2Z-300J-G5
	CS1W-MC221 (-V1)	for 1 axis	1 m	R88A-CPG001M1
			2 m	R88A-CPG002M1
			3 m	R88A-CPG003M1
Control Cables			5 m	R88A-CPG005M1
for Motion Control Unit	CS1W-MC421 (-V1)		1 m	R88A-CPG001M2
		for 2 axis	2 m	R88A-CPG002M2
		IUI Z dXIS	3 m	R88A-CPG003M2
			5 m	R88A-CPG005M2
General-purpose Control Cables with	Cables for General-purpose Controllers		1 m	R88A-CPG001S
Connector on One End	Cables for General-purpose Controllers	_	2 m	R88A-CPG002S

#### Device for External Signal Connection / Connecting Cables (for CJ1W-NC□□4)

Name		Specifications	Model	
		Normal wiring	Length 0.5 m	XW2Z-C50X
			Length 1.0 m	XW2Z-100X
Connection Cables  Cables  Connector Terminal Block Connector Terminal Block Conversion Unit	Connection		Length 2.0 m	XW2Z-200X
	Cables		Length 3.0 m	XW2Z-300X
			Length 5.0 m	XW2Z-500X
			Length 10.0 m	XW2Z-010X
	20 pin M3 screw Terminal Block type	Through type	XW2B-20G4	
	Terminal Block	20 pin M3.5 screw Terminal Block type	Through type	XW2B-20G5
	Conversion Unit	20 pin M3 screw Terminal Block type	Slim type	XW2D-20G6

#### Servo Relay Units (for CN1)

Specifications	The number of axes	Model
Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 For C200HW-NC113 *	for 1 axis	XW2B-20J6-1B
Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 For C200HW-NC213/NC413 *	for 2 axis	XW2B-40J6-2B
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35	for 1 axis	XW2B-20J6-8A
For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15	for 2 axis	XW2B-40J6-9A
For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	for 2 axis	XW2B-80J7-12A

<sup>\*</sup> C200HW-NC was discontinued.

#### Servo Relay Unit cable (for Servo Drive/CN1)

Specifications	Length	Model
Position Control Unit: For CJ1W-NC□□3□	1 m	XW2Z-100J-B25
For CS1W/C200HW-NC□□□ * (XW2B-20J6-1B, XW2B-40J6-2B)	2 m	XW2Z-200J-B25
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35	1 m	XW2Z-100J-B31
For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15 (XW2B-20J6-8A, XW2B-40J6-9A)	2 m	XW2Z-200J-B31
For FQM1-MMA22 (Analog output)	1 m	XW2Z-100J-B27
(XW2B-80J7-12A)	2 m	XW2Z-200J-B27
For FQM1-MMP22 (Pulse train output)	1 m	XW2Z-100J-B26
(XW2B-80J7-12A)	2 m	XW2Z-200J-B26

<sup>\*</sup> C200HW-NC was discontinued.

Note: You cannot use a Servo Relay Unit Cable for line-receiver inputs (+CWLD: CN1 pin 44, -CWLD: CN1 pin 45, +CCWLD: CN1 pin 46, -CCWLD: CN1 pin 47).

Use a General-purpose Control Cable and wire the connector to match the controller.

#### Servo Relay Unit cable (Position Control Unit)

Specifications		The number of axes	Length	Model
CJ1W line-driver output type		for 1 axis	0.5 m	XW2Z-050J-A18
For CJ1W-NC133 (XW2B-20J6-1B)		IOI I dals	1 m	XW2Z-100J-A18
CJ1W line-driver output type		for 2 axis	0.5 m	XW2Z-050J-A19
For CJ1W-NC233/NC433 (XW2B-40J6-	2B)	IOI Z dxIS	1 m	XW2Z-100J-A19
CS1W line-driver output type		for 1 axis	0.5 m	XW2Z-050J-A10
For CS1W-NC133 (XW2B-20J6-1B)		IOI I UNIO	1 m	XW2Z-100J-A10
CS1W line-driver output type		for 2 axis	0.5 m	XW2Z-050J-A11
For CS1W-NC233/NC433 (XW2B-40J6	-2B)	IOI Z dalo	1 m	XW2Z-100J-A11
CJ1W open collector output type		for 1 axis	0.5 m	XW2Z-050J-A14
For CJ1W-NC113 (XW2B-20J6-1B)		TOT T GAILO	1 m	XW2Z-100J-A14
CJ1W open collector output type		for 2 axis	0.5 m	XW2Z-050J-A15
For CJ1W-NC213/NC413 (XW2B-40J6-	2B)	101 Z UNIO	1 m	XW2Z-100J-A15
CS1W/C200HW open collector output ty For CS1W-NC113	/pe	for 1 axis	0.5 m	XW2Z-050J-A6
For C200HW-NC113 * (XW2B-20J6-1E	3)	TOT T AXIS	1 m	XW2Z-100J-A6
CS1W/C200HW open collector output type For CS1W-NC213/NC413		for 2 axis	0.5 m	XW2Z-050J-A7
For C200HW-NC213/NC413 * (XW2B-	40J6-2B)	101 2 4313	1 m	XW2Z-100J-A7
CJ1M open collector output type			0.5 m	XW2Z-050J-A33
For CJ2M-CPU31/CPU32/CPU33/CPU: For CJ2M-CPU11/CPU12/CPU13/CPU XW2B-20J6-8A, XW2B-40J6-9A)		for 1 axis	1 m	XW2Z-100J-A33
	General-		0.5 m	XW2Z-050J-A28
	purpose I/O	for 2 axis	1 m	XW2Z-100J-A28
For FQM1-MMA22 (Analog output)	(26 pin)		2 m	XW2Z-200J-A28
(XW2B-80J7-12A)	0 : 11/0		0.5 m	XW2Z-050J-A31
	Special I/O (40 pin)	for 2 axis	1 m	XW2Z-100J-A31
	(40 piii)		2 m	XW2Z-200J-A31
	General-		0.5 m	XW2Z-050J-A28
	purpose I/O	for 2 axis	1 m	XW2Z-100J-A28
For FQM1-MMP22 (Pulse train output)	(26 pin)		2 m	XW2Z-200J-A28
(XW2B-80J7-12A)	0 : 11/0		0.5 m	XW2Z-050J-A30
	Special I/O (40 pin)	for 2 axis	1 m	XW2Z-100J-A30
	(40 piii)		2 m	XW2Z-200J-A30

<sup>\*</sup>C200HW-NC was discontinued.

#### **■** Communication Cables

#### MECHATROLINK-II Communications

**MECHATROLINK-related Devices and Cables (Manufactured by Yaskawa Corporation)** 

Name			Model	Yaskawa model number
Name		Length	(OMRON model number)	raskawa model number
		0.5 m	FNY-W6002-A5	JEPMC-W6002-A5-E
MECHATROLINK-II Cables (without ring core and USB connector on b	oth anda)	1.0 m	FNY-W6002-01	JEPMC-W6002-01-E
* Can be connected to R88D-GN and R88		3.0 m	FNY-W6002-03	JEPMC-W6002-03-E
4. Can be connected to Noob of and Noob fit only.		5.0 m	FNY-W6002-05	JEPMC-W6002-05-E
		0.5 m	FNY-W6003-A5	JEPMC-W6003-A5
		1.0 m	FNY-W6003-01	JEPMC-W6003-01
MEGUATROLINIK II O. I.		3.0 m	FNY-W6003-03	JEPMC-W6003-03
MECHATROLINK-II Cables (with ring core and USB connector on both	ends)	5.0 m	FNY-W6003-05	JEPMC-W6003-05
(With hing core and COB connector on both	Crid3)	10.0 m	FNY-W6003-10	JEPMC-W6003-10
		20.0 m	FNY-W6003-20	JEPMC-W6003-20
	30.0 m	FNY-W6003-30	JEPMC-W6003-30	
MECHATROLINK-II Terminating Resistor	Terminating r	esistance	FNY-W6022	JEPMC-W6022
MECHATROLINK-II Repeater	Communication	ons Repeater	_	JEPMC-REP2000-E

MECHATROLINK-related Devices and Cables are manufactured by Yaskawa Corporation, but they can be ordered directly from OMRON using the OMRON model numbers. (Yaskawa-brand products will be delivered even when they are ordered from OMRON.)

#### Recommended EtherCAT Communications Cables

Use Straight STP (shielded twisted-pair) cable of category 5 or higher with double shielding (braiding and aluminum foil tape) for EtherCAT.

#### **Cabel with Connectors**

ltem	Appearance	Recommended manufacturer	Cable length(m)	Model
			0.3	XS6W-6LSZH8SS30CM-Y
Cable with Connectors on Both Ends (RJ45/RJ45)			0.5	XS6W-6LSZH8SS50CM-Y
Standard RJ45 plugs type *1 Wire Gauge and Number of Pairs: AWG26, 4-pair cable		OMRON	1	XS6W-6LSZH8SS100CM-Y
Cable Sheath material: LSZH *2		OWINON	2	XS6W-6LSZH8SS200CM-Y
Cable color: Yellow			3	XS6W-6LSZH8SS300CM-Y
			5	XS6W-6LSZH8SS500CM-Y
	00	OMRON	0.3	XS5W-T421-AMD-K
Cable with Connectors on Both Ends (RJ45/RJ45)			0.5	XS5W-T421-BMD-K
Rugged RJ45 plugs type *1			1	XS5W-T421-CMD-K
Wire Gauge and Number of Pairs: AWG22, 2-pair cable			2	XS5W-T421-DMD-K
Cable color: Light blue			5	XS5W-T421-GMD-K
			10	XS5W-T421-JMD-K
California Carra and California (MACCALIFE AND LAS)			0.5	XS5W-T421-BMC-SS
Cable with Connectors on Both Ends (M12 Straight/RJ45) Shield Strengthening Connector cable *4	ALC:		1	XS5W-T421-CMC-SS
M12/Smartclick Connectors		OMRON	2	XS5W-T421-DMC-SS
Rugged RJ45 plugs type Wire Gauge and Number of Pairs: AWG22, 2-pair cable Cable color: Black		OWINON	3	XS5W-T421-EMC-SS
			5	XS5W-T421-GMC-SS
Cable Color. Black			10	XS5W-T421-JMC-SS

**<sup>\*1.</sup>** Standard type cables length 0.2, 0.3, 0.5, 1, 1.5, 2, 3, 5, 7.5, 10, 15 and 20 m are available. Rugged type cables length 0.3, 0.5, 1, 2, 3, 5, 10 and 15 m are available. For details, refer to Cat.No.G019.

<sup>\*2.</sup> The lineup features Low Smoke Zero Halogen cables for in-cabinet use and PUR cables for out-of-cabinet use. Although the LSZH cable is single shielded, its communications and noise characteristics meet the standards. **\*3.** Cables colors are available in blue, yellow, or Green.

**<sup>\*4.</sup>** For details, contact your OMRON representative.

#### Cables / Connectors

#### Wire Gauge and Number of Pairs: AWG24, 4-pair Cable

Item Appearance		Recommended manufacturer	Model	
Cables	_	Hitachi Metals, Ltd.	NETSTAR-C5E SAB 0.5 x 4P CP *	
	_	Kuramo Electric Co.	KETH-SB *	
RJ45 Connectors	_	Panduit Corporation	MPS588-C *	

 $<sup>\</sup>ensuremath{\bigstar}$  We recommend you to use above cable and connector together.

#### Wire Gauge and Number of Pairs: AWG22, 2-pair Cable

Item	Appearance	Recommended manufacturer	Model
Cables		Kuramo Electric Co.	KETH-PSB-OMR *
Cables	_	JMACS Japan Co., Ltd.	PNET/B *
RJ45 Assembly Connector		OMRON	XS6G-T421-1 *

<sup>\*</sup>We recommend you to use above cable and connector together.

# ■ Peripheral Devices (External Regeneration Resistors, Reactors, Mounting Brackets) External Regeneration Resistors

Specifications	Model
80 W 50 Ω	R88A-RR08050S
80 W 100 Ω	R88A-RR080100S
220 W 47 Ω	R88A-RR22047S1
500 W 20 Ω	R88A-RR50020S

#### **Reactors**

Specifications				
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	Linear Motor with built-in EtherCAT communications	Model
R88D-KTA5L/-KT01H (For single-phase input)	R88D-KNA5L-ML2/-KN01H-ML2 (For single-phase input)	R88D-KNA5L-ECT/-KN01H-ECT (For single-phase input)	R88D-KN01H-ECT-L (For single-phase input)	3G3AX-DL2002
R88D-KT01L/-KT02H (For single-phase input)	R88D-KN01L-ML2/-KN02H-ML2 (For single-phase input)	R88D-KN01L-ECT/-KN02H-ECT (For single-phase input)	R88D-KN01L-ECT-L/-KN02H-ECT-L (For single-phase input)	3G3AX-DL2004
R88D-KT02L/-KT04H (For single-phase input)	R88D-KN02L-ML2/-KN04H-ML2 (For single-phase input)	R88D-KN02L-ECT/-KN04H-ECT (For single-phase input)	R88D-KN02L-ECT-L/-KN04H-ECT-L (For single-phase input)	3G3AX-DL2007
R88D-KT04L/-KT08H/ -KT10H (For single-phase input)	R88D-KN04L-ML2/-KN08H-ML2/ -KN10H-ML2 (For single-phase input)	R88D-KN04L-ECT/-KN08H-ECT/ -KN10H-ECT (For single-phase input)	R88D-KN04L-ECT-L/-KN08H-ECT-L/ -KN10H-ECT-L (For single-phase input)	3G3AX-DL2015
R88D-KT15H (For single-phase input)	R88D-KN15H-ML2 (For single-phase input)	R88D-KN15H-ECT (For single-phase input)	R88D-KN15H-ECT-L (For single-phase input)	3G3AX-DL2022
R88D-KT01H/-KT02H/ -KT04H/-KT08H/ -KT10H/-KT15H (For three-phase input)	R88D-KN01H-ML2/-KN02H-ML2/ -KN04H-ML2/-KN08H-ML2/ -KN10H-ML2/-KN15H-ML2 (For three-phase input)	R88D-KN01H-ECT/-KN02H-ECT/ -KN04H-ECT/KN08H-ECT/ -KN10H-ECT/-KN15H-ECT (For three-phase input)	R88D-KN01H-ECT-L/-KN02H-ECT-L/ -KN04H-ECT-L/-KN08H-ECT-L/ -KN10H-ECT-L/-KN15H-ECT-L (For three-phase input)	3G3AX-AL2025
R88D-KT20H/-KT30H	R88D-KN20H-ML2/-KN30H-ML2	R88D-KN20H-ECT/-KN30H-ECT	-	3G3AX-AL2055
R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	-	3G3AX-AL2110
R88D-KT06F/-KT10F/-KT15F	R88D-KN06F-ML2/-KN10F-ML2/ -KN15F-ML2	R88D-KN06F-ECT/-KN10F-ECT/ -KN15F-ECT	R88D-KN06F-ECT-L/-KN10F-ECT-L/ -KN15F-ECT-L	3G3AX-AL4025
R88D-KT20F/-KT30F	R88D-KN20F-ML2/-KN30F-ML2	R88D-KN20F-ECT/-KN30F-ECT	R88D-KN20F-ECT-L/-KN30F-ECT-L	3G3AX-AL4055
R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	-	3G3AX-AL4110
R88D-KT75H/-KT150F	-	R88D-KT75H-ECT/-KT150F-ECT	-	3G3AX-AL4220

#### **Mounting Brackets (L Brackets for Rack Mounting)**

Specifications					
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	Linear Motor with built-in EtherCAT communications	Model	
R88D-KTA5L/-KT01L/ -KT01H/-KT02H	R88D-KNA5L-ML2/-KN01L-ML2/ -KN01H-ML2/-KN02H-ML2	R88D-KNA5L-ECT/-KN01L-ECT/ -KN01H-ECT/-KN02H-ECT	R88D-KN01L-ECT-L/-KN01H-ECT-L/ -KN02H-ECT-L	R88A-TK01K	
R88D-KT02L/-KT04H	R88D-KN02L-ML2/-KN04H-ML2	R88D-KN02L-ECT/-KN04H-ECT	R88D-KN02L-ECT-L/-KN04H-ECT-L	R88A-TK02K	
R88D-KT04L/-KT08H	R88D-KN04L-ML2/-KN08H-ML2	R88D-KN04L-ECT/-KN08H-ECT	R88D-KN04L-ECT-L/-KN08H-ECT-L	R88A-TK03K	
R88D-KT10H/KT15H/ -KT06F/-KT10F/-KT15F	R88D-KN10H-ML2/-KN15H-ML2/ -KN06F-ML2/-KN10F-ML2/ -KN15F-ML2	R88D-KN10H-ECT/-KN15H-ECT/ -KN06F-ECT/-KN10F-ECT/ -KN15F-ECT	R88D-KN10H-ECT-L/-KN15H-ECT-L/ -KN06F-ECT-L/-KN10F-ECT-L/ -KN15F-ECT-L	R88A-TK04K	

**Note:** Mounting brackets are provided with Servo Drives of 2 to 15 kW.

#### **■** Software

#### **How to Select Required Support Software for Your Controller**

The required Support Software depends on the Controller to connect. Please check the following table when purchasing the Support Software.

Item	Omron PLC System	Omron Machine Automation Controller System
Controller	CS, CJ, CP, and other series	NJ-series
AC Servomotor/Drivers	G5-series  • EtherCAT Communications  • EtherCAT Communications Linear Motor  • General-purpose input type(PulseTrain or Analog inputs)  • MECHATROLINK-II Communications	G5-series  • EtherCAT Communications (Unit version 2.1 or later recommended)  • EtherCAT Communications Linear Motor
Software	FA Intergrated Tool Package CX-One	Automation Software Sysmac Studio

#### ■ FA Integrated Tool Package CX-One

Product name	Specifications	Number of licenses	Media	Model	Standards
FA Integrated Tool Package CX-One Ver. 4.□	The CX-One is a comprehensive software package that integrates Support Software for OMRON PLCs and components.  CX-One runs on following OS. OS: Windows 7 (32-bit/64-bit version) / Windows 8 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version)  CX-One Version.4. ☐ includes CX-Drive Ver.2. ☐, For details, refer to the CX-One catalog (Cat. No. R134).	1 license <b>≭</b>	DVD	CXONE-AL01D-V4	-

<sup>\*</sup>Multi licenses (3, 10, 30, or 50 licenses) and DVD media without licenses are also available for the CX-One.

#### ■ Automation Software Sysmac Studio

Please purchase a DVD and required number of licenses the first time you purchase the Sysmac Studio. DVDs and licenses are available individually. Each model of licenses does not include any DVD.

Product name	Specifications	Specifications Number of licenses Media		Model	Standards
	The Sysmac Studio is the software that provides an integrated environment for setting, programming, debugging and maintenance of machine automation controllers including the NJ/NX-series CPU Units, NY-	(Media only)	Sysmac Studio (32 bit) DVD	SYSMAC-SE200D	-
Sysmac Studio Standard Edition Ver.1.□□	series Industrial PC, EtherCAT Slave, and the HMI.  Sysmac Studio runs on the following OS. *1 Windows 7 (32-bit/64-bit version) / Windows 8.1 (32-bit/64-bit version) / Windows 10 (32-bit/64-bit version) / Windows 11 (64-bit version)  The Sysmac Studio Standard Edition DVD includes	_ (Media only)	Sysmac Studio (64 bit) DVD	SYSMAC-SE200D-64	-
	Support Software to set up EtherNet/IP Units, DeviceNet slaves, Serial Communications Units, and Support Software for creating screens on HMIs (CX-Designer).  For details, refer to your OMRON website.	1 license *2	-	SYSMAC-SE201L	-

<sup>\*1.</sup> Model "SYSMAC-SE200D-64" runs on Windows 10 (64 bit) or higher.

**<sup>\*2.</sup>** Multi licenses are available for the Sysmac Studio (3, 10, 30, or 50 licenses).

## **Combination table**

# AC Servo Drive and Servomotor Combinations (3,000 r/min, 2,000 r/min, 1,500r/min, 1,000 r/min)

#### <Cylinder Type>

#### ● 3,000-r/min servomotors

Power Supply	Servo Drive Model Numbers			Servomotor Model Numbers		
Voltage	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
	R88D-KTA5L	R88D-KNA5L-ML2	R88D-KNA5L-ECT	50 W	R88M-K05030H-□	R88M-K05030T-□
Single-phase	R88D-KT01L	R88D-KN01L-ML2	R88D-KN01L-ECT	100 W	R88M-K10030L-□	R88M-K10030S-□
100 to 120 VAC	R88D-KT02L	R88D-KN02L-ML2	R88D-KN02L-ECT	200 W	R88M-K20030L-□	R88M-K20030S-□
	R88D-KT04L	R88D-KN04L-ML2	R88D-KN04L-ECT	400 W	R88M-K40030L-□	R88M-K40030S-□
	R88D-KT01H *	R88D-KN01H-ML2 *	R88D-KN01H-ECT *	50 W	R88M-K05030H-□ *	R88M-K05030T-□ *
	R88D-KT01H	R88D-KN01H-ML2	R88D-KN01H-ECT	100 W	R88M-K10030H-□	R88M-K10030T-□
Single-phase/	R88D-KT02H	R88D-KN02H-ML2	R88D-KN02H-ECT	200 W	R88M-K20030H-□	R88M-K20030T-□
three-phase	R88D-KT04H	R88D-KN04H-ML2	R88D-KN04H-ECT	400 W	R88M-K40030H-□	R88M-K40030T-□
200 to 240 VAC	R88D-KT08H	R88D-KN08H-ML2	R88D-KN08H-ECT	750 W	R88M-K75030H-□	R88M-K75030T-□
	R88D-KT15H *	R88D-KN15H-ML2 *	R88D-KN15H-ECT *	1 kW	R88M-K1K030H-□ *	R88M-K1K030T-□ *
	R88D-KT15H	R88D-KN15H-ML2	R88D-KN15H-ECT	1.5 kW	R88M-K1K530H-□	R88M-K1K530T-□
	R88D-KT20H	R88D-KN20H-ML2	R88D-KN20H-ECT	2 kW	R88M-K2K030H-□	R88M-K2K030T-□
Three-phase	R88D-KT30H	R88D-KN30H-ML2	R88D-KN30H-ECT	3 kW	R88M-K3K030H-□	R88M-K3K030T-□
200 to 240 VAC	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT *	4 kW	R88M-K4K030H-□	R88M-K4K030T-□
	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	5 kW	R88M-K5K030H-□	R88M-K5K030T-□
	R88D-KT10F	R88D-KN10F-ML2	R88D-KN10F-ECT *	750 W	R88M-K75030F-□	R88M-K75030C-□
	R88D-KT15F *	R88D-KN15F-ML2 *	R88D-KN15F-ECT *	1 kW	R88M-K1K030F-□ *	R88M-K1K030C-□ *
	R88D-KT15F	R88D-KN15F-ML2	R88D-KN15F-ECT	1.5 kW	R88M-K1K530F-□	R88M-K1K530C-□
Three-phase 400 to 480 VAC	R88D-KT20F	R88D-KN20F-ML2	R88D-KN20F-ECT	2 kW	R88M-K2K030F-□	R88M-K2K030C-□
400 to 460 VAC	R88D-KT30F	R88D-KN30F-ML2	R88D-KN30F-ECT	3 kW	R88M-K3K030F-□	R88M-K3K030C-□
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT *	4 kW	R88M-K4K030F-□	R88M-K4K030C-□
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	5 kW	R88M-K5K030F-□	R88M-K5K030C-□

#### ● 1,500r/min, 2,000-r/min servomotors

Power Supply		Servo Drive Model Num	bers		Servomotor Model	Numbers
Voltage	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
Single-phase/	R88D-KT10H	R88D-KN10H-ML2	R88D-KN10H-ECT	1 kW	R88M-K1K020H-□	R88M-K1K020T-□
three-phase 200 to 240 VAC	R88D-KT15H	R88D-KN15H-ML2	R88D-KN15H-ECT	1.5 kW	R88M-K1K520H-□	R88M-K1K520T-□
200 10 240 VAO	R88D-KT20H	R88D-KN20H-ML2	R88D-KN20H-ECT	2 kW	R88M-K2K020H-□	R88M-K2K020T-□
	R88D-KT30H	R88D-KN30H-ML2	R88D-KN30H-ECT	3 kW	R88M-K3K020H-□	R88M-K3K020T-□
	R88D-KT50H *	R88D-KN50H-ML2 *	R88D-KN50H-ECT *	4 kW	R88M-K4K020H-□ *	R88M-K4K020T-□ *
Three-phase 200 to 240 VAC	R88D-KT50H	R88D-KN50H-ML2	R88D-KN50H-ECT	5 kW	R88M-K5K020H-□	R88M-K5K020T-□
200 10 240 VAC	R88D-KT75H	-	R88D-KN75H-ECT	7.5 kW	_	R88M-K7K515T-□
	R88D-KT150H *	-	R88D-KN150H-ECT *	11 kW	-	R88M-K11K015T-□ \$
	R88D-KT150H	-	R88D-KN150H-ECT	15 kW	-	R88M-K15K015T-□
	R88D-KT06F	R88D-KN06F-ML2	R88D-KN06F-ECT*	400 W	R88M-K40020F-□	R88M-K40020C-□
	R88D-KT06F	R88D-KN06F-ML2	R88D-KN06F-ECT	600 W	R88M-K60020F-□	R88M-K60020C-□
	R88D-KT10F	R88D-KN10F-ML2	R88D-KN10F-ECT	1 kW	R88M-K1K020F-□	R88M-K1K020C-□
	R88D-KT15F	R88D-KN15F-ML2	R88D-KN15F-ECT	1.5 kW	R88M-K1K520F-□	R88M-K1K520C-□
	R88D-KT20F	R88D-KN20F-ML2	R88D-KN20F-ECT	2 kW	R88M-K2K020F-□	R88M-K2K020C-□
Three-phase 400 to 480 VAC	R88D-KT30F	R88D-KN30F-ML2	R88D-KN30F-ECT	3 kW	R88M-K3K020F-□	R88M-K3K020C-□
400 to 400 VAC	R88D-KT50F *	R88D-KN50F-ML2 *	R88D-KN50F-ECT *	4 kW	R88M-K4K020F-□ *	R88M-K4K020C-□ *
	R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	5 kW	R88M-K5K020F-□	R88M-K5K020C-□
	R88D-KT75F	-	R88D-KN75F-ECT	7.5 kW	-	RR88M-K7K515C-□
	R88D-KT150F *	-	R88D-KN150F-ECT *	11 kW	-	R88M-K11K015C-□:
	R88D-KT150F	-	R88D-KN150F-ECT	15 kW	-	R88M-K15K015C-□

<sup>\*</sup> Please use the Servo Drive and Servomotor in this combination although their capacity is not same.

#### ● 1,000-r/min servomotors

Dawer Summly	Servo Drive Model Numbers			Servomotor Model Numbers		
Power Supply Voltage	General-purpose Inputs	MECHATROLINK-II	EtherCAT	Output	With incremental encoder	With absolute encoder
Single-phase/ three-phase 200 to 240 VAC	R88D-KT15H *	R88D-KN15H-ML2 *	R88D-KN15H-ECT *	900 W	R88M-K90010H-□ <b>*</b>	R88M-K90010T-□ *
	R88D-KT30H *	R88D-KN30H-ML2 *	R88D-KN30H-ECT *	2 kW	R88M-K2K010H-□ *	R88M-K2K010T-□ *
Three-phase	R88D-KT50H *	R88D-KN50H-ML2 *	R88D-KN50H-ECT *	3 kW	R88M-K3K010H-□ <b>*</b>	R88M-K3K010T-□ *
200 to 240 VAC	R88D-KT50H *	_	R88D-KN50H-ECT *	4.5 kW	_	R88M-K4K510T-□ *
	R88D-KT75H *	_	R88D-KN75H-ECT *	6 kW	_	R88M-K6K010T-□ *
	R88D-KT15F *	R88D-KN15F-ML2 *	R88D-KN15F-ECT *	900 W	R88M-K90010F-□ <b>*</b>	R88M-K90010C-□ *
	R88D-KT30F *	R88D-KN30F-ML2 *	R88D-KN30F-ECT *	2 kW	R88M-K2K010F-□ *	R88M-K2K010C-□ *
Three-phase 400 to 480 VAC	R88D-KT50F *	R88D-KN50F-ML2 *	R88D-KN50F-ECT *	3 kW	R88M-K3K010F-□ *	R88M-K3K010C-□ *
	R88D-KT50F *	_	R88D-KN50F-ECT *	4.5 kW	_	R88M-K4K510C-□ *
	R88D-KT75F *	-	R88D-KN75F-ECT *	6 kW	ı	R88M-K6K010C-□ *

<sup>\*</sup> Please use the Servo Drive and Servomotor in this combination although their capacity is not same.

# AC Servomotor and Decelerator Combinations (3,000 r/min, 2,000 r/min, 1,000 r/min)

#### <Cylinder Type>

## ● 3,000-r/min servomotors

Motor model	1/5	1/11 (1/9 for flange size No.11)	1/21	1/33	1/45	
R88M-K05030□	R88G-HPG11B05100B	R88G-HPG11B09050B (Gear ratio 1/9)	R88G-HPG14A21100B	R88G-HPG14A33050B	R88G-HPG14A45050B□	
R88M-K10030□		R88G-HPG14A11100B		R88G-HPG20A33100B	R88G-HPG20A45100B	
R88M-K20030□	R88G-HPG14A05200B□	R88G-HPG14A11200B	R88G-HPG20A21200B	R88G-HPG20A33200B□	R88G-HPG20A45200B□	
R88M-K40030□	R88G-HPG14A05400B□	R88G-HPG20A11400B	R88G-HPG20A21400B□	R88G-HPG32A33400B□	R88G-HPG32A45400B□	
R88M-K75030H/T (200 V)	R88G-HPG20A05750B	R88G-HPG20A11750B	R88G-HPG32A21750B	R88G-HPG32A33750B	R88G-HPG32A45750B	
R88M-K75030F/C (400 V)	R88G-HPG32A052K0B□	R88G-HPG32A112K0B□	R88G-HPG32A211K5B□	R88G- HPG32A33600SB□ (Also used with R88M- K60020□)	R88G-HPG50A451K5B	
R88M-K1K030□	- KOOG-HF G32A032KOD	K00G-HF G32AT 12K0B			1	
R88M-K1K530□				R88G-HPG50A332K0B□		
R88M-K2K030□			R88G-HPG50A212K0B□		-	
R88M-K3K030□	R88G-HPG32A053K0B□	R88G-HPG50A113K0B□	R88G-HPG50A213K0B□	_	-	
R88M-K4K030□	R88G-HPG32A054K0B□	R88G-HPG50A115K0B	-	_	-	
R88M-K5K030□	R88G-HPG50A055K0B□	KOOG-HEGOUATIONUBL	_	_	_	

#### ● 2,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)	1/45
R88M-K40020□ (Only 400 V)	R88G-HPG32A052K0B  (Also used with R88M-	R88G-HPG32A112K0B	R88G-HPG32A211K5B  (Also used with R88M-	R88G-	R88G- HPG32A45400SB□
R88M-K60020 (Only 400 V)	K2K030□)	(Also used with R88M- K2K030□)	(Also used with Regin- K1K5030□)	HPG32A33600SB□	R88G-HPG50A451K5B (R88M-K1K530)
R88M-K1K020□	R88G-HPG32A053K0B	R88G-	R88G- HPG32A211K0SB□	R88G- HPG50A332K0SB□	R88G- HPG50A451K0SB□
R88M-K1K520□	(Also used with R88M-	HPG32A112K0SB□	R88G-HPG50A213K0B  (Also used with R88M-		_
R88M-K2K020□	— K3K030□)	K030□)			-
R88M-K3K020□	R88G-HPG32A054K0B□ (Also used with R88M- K4K030□)	R88G-HPG50A115K0B  (Also used with R88M-K5K030  )	R88G- HPG50A213K0SB□	R88G- HPG65A253K0SB□	-
R88M-K4K020□	R88G-	R88G-	R88G-	R88G-	-
R88M-K5K020□	HPG50A055K0SB□	HPG50A115K0SB□	HPG65A205K0SB□	HPG65A255K0SB□	-

## ● 1,000-r/min servomotors

Motor model	1/5	1/11	1/21 (1/20 for flange size No.65)	1/33 (1/25 for flange size No.65)
R88M-K90010□	R88G-HPG32A05900TB□	R88G-HPG32A11900TB□	R88G-HPG50A21900TB□	R88G-HPG50A33900TB□
R88M-K2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG50A212K0TB□	- R88G-HPG65A255K0SB□
R88M-K3K010□	R88G-HPG50A055K0SB  (Also used with R88M-K5K020  )	R88G-HPG50A115K0SB  (Also used with R88M-K5K020  )	R88G-HPG65A205K0SB  (Also used with R88M-K5K020  )	(Also used with R88M- K5K020□)

## **Linear Motor and AC Servo Drive Linear Motor Type Combinations**

## ● Iron-core Linear Motor type

Linear Motor Model Numbers	Power Supply Voltage (V)	Servo Drive Model Numbers	Maximum speed (m/s)
	100	R88D-KN01L-ECT-L	2.5
R88L-EC-FW-0303-ANPC	200	R88D-KN02H-ECT-L	5
	400	R88D-KN06F-ECT-L	10
	100	R88D-KN02L-ECT-L	2.5
R88L-EC-FW-0306-ANPC	200	R88D-KN04H-ECT-L	5
	400	R88D-KN10F-ECT-L	10
	100	R88D-KN04L-ECT-L	2
R88L-EC-FW-0606-ANPC	200	R88D-KN08H-ECT-L	4
	400	R88D-KN15F-ECT-L	8
R88L-EC-FW-0609-ANPC	200	R88D-KN10H-ECT-L	4
R86L-EC-FW-0609-ANPC	400	R88D-KN20F-ECT-L	8
R88L-EC-FW-0612-ANPC	200	R88D-KN15H-ECT-L	4
ROOL-EC-FW-0012-ANFC	400	R88D-KN30F-ECT-L	8
R88L-EC-FW-1112-ANPC	200	R88D-KN15H-ECT-L	2
R88L-EC-FW-1112-ANPC	400	R88D-KN30F-ECT-L	4
R88L-EC-FW-1115-ANPC	200	R88D-KN15H-ECT-L	2
ROOL-EC-FW-1113-ANPC	400	R88D-KN30F-ECT-L	4

#### ● Ironless Linear Motor type

Linear Motor Model Numbers	Power Supply Voltage (V)	Servo Drive Model Numbers	Maximum speed (m/s)
R88L-EC-GW-0303-ANPS	100	R88D-KN01L-ECT-L	8
Rool-EC-GW-0303-ANF3	200	R88D-KN02H-ECT-L	16
R88L-EC-GW-0306-ANPS	100	R88D-KN04L-ECT-L	8
R66L-EC-GW-0306-ANPS	200	R88D-KN08H-ECT-L	16
R88L-EC-GW-0309-ANPS	200	R88D-KN10H-ECT-L	16
R88L-EC-GW-0503-ANPS	100	R88D-KN01L-ECT-L	2.2
Rool-EC-GW-0503-ANPS	200	R88D-KN01H-ECT-L	4.4
R88L-EC-GW-0506-ANPS	100	R88D-KN02L-ECT-L	2.2
Rool-EC-GW-0506-ANPS	200	R88D-KN04H-ECT-L	4.4
DOOL FO CAN OFOO ANDS	100	R88D-KN04L-ECT-L	2.2
R88L-EC-GW-0509-ANPS	200	R88D-KN08H-ECT-L	4.4
DOOL FO CW 0702 ANDS	100	R88D-KN02L-ECT-L	1.2
R88L-EC-GW-0703-ANPS	200	R88D-KN04H-ECT-L	2.4
DOOL FO CAN 0700 ANDS	100	R88D-KN04L-ECT-L	1.2
R88L-EC-GW-0706-ANPS	200	R88D-KN08H-ECT-L	2.4
R88L-EC-GW-0709-ANPS	200	R88D-KN10H-ECT-L	2.4

Note: The maximum operation speed is limited by considering the guide mechanism, encoder, and other aspects. If it is 5 m/s or higher, please consult with your OMRON representative.

#### **Controller Combinations**

#### Position Control unit ,Servo Relay Units and Cables

Select the Servo Relay Unit and Cable according to the model number of the Position Control Unit being used.

Position Control Unit	Position Control Unit Cable		Se	ervo Relay Unit	Servo Drive Cable	
CS1W-NC113	YW27 □□□ I A6		,	(11/00, 00 10 40		
C200HW-NC113 *	- XW2Z-□□□J-A6		/	(W2B-20J6-1B		
CS1W-NC213		XW2Z-□□□J-A7 XW2B-				
CS1W-NC413				(W2B-40J6-2B		
C200HW-NC213 *				(VV2D-4UJ0-2D		
C200HW-NC413 *						
CS1W-NC133	>	⟨W2Z-□□□J-A10	>	(W2B-20J6-1B		
CS1W-NC233		< W2Z-□□□J-A11		(W2B-40J6-2B	XW2Z-□□□J-B25	
CS1W-NC433	7	VVZZ-LLLJ-ATT		(VV2D-40J0-2D		
CJ1W-NC113		⟨W2Z-□□□J-A14	>	(W2B-20J6-1B		
CJ1W-NC213		(W2Z-□□□J-A15		(W2B-40J6-2B		
CJ1W-NC413	7	XW2Z-□□□J-A18  XW2Z-□□□J-A19		(VV2D-4030-2D		
CJ1W-NC133				(W2B-20J6-1B		
CJ1W-NC233				(W2B-40J6-2B		
CJ1W-NC433	7	(VVZZ-11115-A 19		(VV2D-4030-2D		
CJ2M-CPU31 CJ2M-CPU32 CJ2M-CPU33 CJ2M-CPU34 CJ2M-CPU35		440 <b>7</b> 5551 400	For 1 axis	XW2B-20J6-8A	MANON EFFE LINE	
CJ2M-CPU11 CJ2M-CPU12 CJ2M-CPU13 CJ2M-CPU14 CJ2M-CPU15		(W2Z-□□□J-A33	For 2 axis	XW2B-40J6-9A	- XW2Z-□□□J-B31	
FQM1-MMP22	General- purpose I/O	ΥΙΛΙΌΤ-Ι ΙΙ ΙΙ-ΔΟΒ			XW2Z-□□□J-B26	
	Special I/O			W2B-80J7-12A		
FQM1-MMA22	General-purpose I/O XW2Z-□□□J-A28		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	W∠D-0UJ <i>I</i> -1∠A	XW2Z-□□□J-B27	
	Special I/O	XW2Z-□□□J-A31				

<sup>\*</sup> C200HW-NC was discontinued.

Note: 1. Insert the cable length into the boxes in the model number ( $\square\square$ ). Position Control Unit cables come in two lengths: 0.5 m and 1 m (some are also available in lengths of 2 m). Servo Driver Cables also come in two lengths: 1 m and 2 m.

- 2. Two Servo Driver Cables are required if 2-axis control is performed using one Position Control Unit.
- 3. Direct cable is available for CJ1W-NC□□4 Position Control Unit (High-Speed type).

Specifications	The number of axes	Model
For CJ1W-NC214/-NC414 (open collector output type)	1 axis	XW2Z-□□□J-G13
For CJ1W-NC214/-NC414 (open collector output type)	2 axis	XW2Z-□□□J-G5
For CJ1W-NC234/-NC434 (line-driver output type)	1 axis	XW2Z-□□□J-G9
For CJ1W-NC234/-NC434 (line-driver output type)	2 axis	XW2Z-□□□J-G1

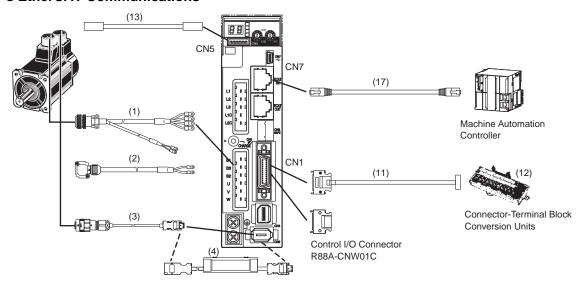
#### Motion Control Unit Cables

There are special cables for 1-axis and 2-axis Motion Control Unit operation. Select the appropriate cable for the number of axes to be connected.

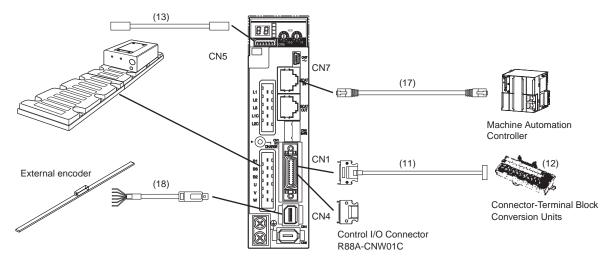
Motion Control Unit	Cable		Remarks	
CS1W-MC221-V1	For 1 axis	R88A-CPG□□□M1	The DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD	
CS1W-MC421-V1	For 2 axis		Example model number for 2-m 1-axis cable: R88A-CPG002M1	

#### **Cable Combinations**

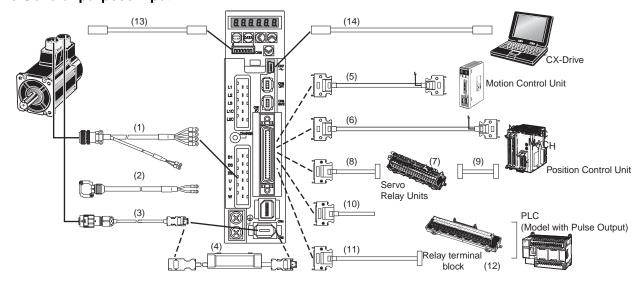
#### EtherCAT Communications



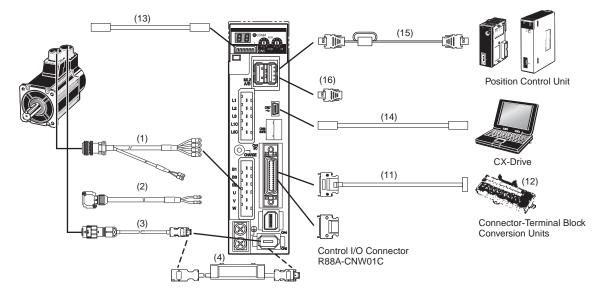
#### EtherCAT Communications Linear Motor Type



#### General-purpose Input



#### MECHATROLINK-II Communications

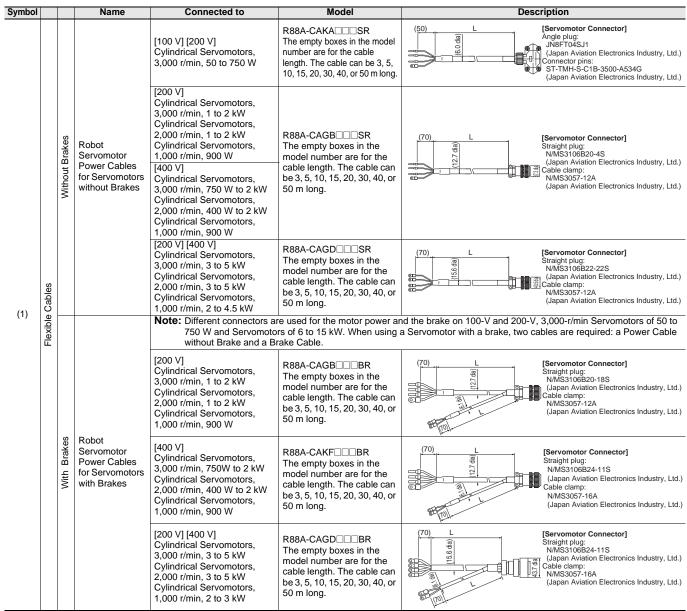


# AC Servomotor/Drive G5-series

#### Servomotor Power Cables (For CNB)

Symbol			Name	Connected to	Model	Description	
				[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKADDS The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	(50) L [Servomotor Connector] Angle plug: JNBFT045J (Japan Aviation Electronics Industry, Ltd.) ST-TMH-S-C1B-3500-A534G (Japan Aviation Electronics Industry, Ltd.)	
		Without Brakes	Standard Servomotor Power Cables for Servomotors without Brakes	[200 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W [400 V] Cylindrical Servomotors, 3,000 r/min, 750 W to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	(70) L [Servomotor Connector] Straight plug: N/MS3106B20-4S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
					[200 V] [400 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 4.5 kW	R88A-CAGD S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	(70) L [Servomotor Connector] Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.)
(1)	Non-flexible Cables			[200 V] [400 V] Cylindrical Servomotors, 1,500 r/min, 7.5 kW Cylindrical Servomotors, 1,000 r/min, 6 kW	R88A-CAGEUUUS The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	L [Servomotor Connector] Straight plug: N/MS3106B32-17S (Japan Aviation Electronics Industry, Ltd.) M/MS3057-20A (Japan Aviation Electronics Industry, Ltd.)	
	ž				rs of 6 to 15 kW. When using	nd the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to a Servomotor with a brake, two cables are required: a Power Cable	
		ith Brake		[200 V]  Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW  Cylindrical Servomotors, 2,000 r/min, 1 to 2 kW  Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAGB B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	Straight plug: N/MS3106B20-18S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
				[400 V] Cylindrical Servomotors, 3,000 r/min, 750W to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAKF B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	(70) L [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (Japan Aviation Electronics Industry, Ltd.)	
				[200 V] [400 V] Cylindrical Servomotors, 3,000 r/min, 3 to 5 kW Cylindrical Servomotors, 2,000 r/min, 3 to 5 kW Cylindrical Servomotors, 1,000 r/min, 2 to 3 kW	R88A-CAGD B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.)	

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)



Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

#### **Brake Cables**

Symbol		Name	Connected to	Model	Description
	ole Cables	Brake Cables	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA D B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 4.4 dia 30 to 50 m: 5.4 dia)	(50) L [Servomotor Connector]  Angle plug: JN4FT02SJ1-R (Japan Aviation Electronics Industry, Ltd.)  Connector pins: ST-TMH-S-C1B-3500-(A534G) (Japan Aviation Electronics Industry, Ltd.)
(2)	Non-flexible	(Non-flexible Cables)	[200 V] [400 V] Cylindrical Servomotors, 1,500 r/min, 7.5 to 15 kW 1,000 r/min, 6 kW	R88A-CAGE DB The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (5.4 dia)	(70) L [Servomotor Connector]  Angle plug: N/MS3106B14S-2S (Japan Aviation Electronics Industry, Ltd.) Connector pins: N/MS3057-6A (Japan Aviation Electronics Industry, Ltd.)
	Flexible Cables	Brake Cables (Flexible Cables)	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA DEBR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 4.4 dia 30 to 50 m: 6.1 dia)	(70) L [Servomotor Connector] Angle plug: JN4FT02SJ1-R (Japan Aviation Electronics Industry, Ltd.) (Connector pins: ST-TMH-S-C1B-3500-(A534G) (Japan Aviation Electronics Industry, Ltd.)

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

#### **Encoder Cables (for CN2)**

Symbol		Name	Connected to	Model	Description
	Non-flexible Cables	Standard Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA CTC The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.) (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.)
(3)			Cylindrical Servomotors, 3,000 r/min, For 1 kW (200 V) For 750 W (400 V) Cylindrical Servomotors, 2,000 r/min, Cylindrical Servomotors, 1,000 r/min, (Absolute encoder/ Incremental encoder)	R88A-CRKC \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)
(6)	Cables	Robot Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA CREATHE model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.) (Japan Aviation Electronics Industry, Ltd.)
;	Flexible Ca		Cylindrical Servomotors, 3,000 r/min, For 1 kW (200 V) For 750 W (400 V) Cylindrical Servomotors, 2,000 r/min, Cylindrical Servomotors, 1,000 r/min, (Absolute encoder/ Incremental encoder)	R88A-CRKC□□□NR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 6.8 dia 30 to 50 m: 7.7 dia)	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.) (Molex Japan Co., Ltd.) (Molex Japan Co., Ltd.) (Molex Japan Co., Ltd.) (Japan Aviation Electronics Industry, Ltd.) (Japan Aviation Electronics Industry, Ltd.)

Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

#### Absolute Encoder Backup Battery and Absolute Encoder Battery Cable

Symbol	Name	Specifications		Model	Description
(4)		Battery not included	0.3 m	R88A-CRGD0R3C	43.5 300 43.5 90±5 110
	Absolute Encoder Battery Cable	One R88A-BAT01G Battery included.	0.3 m	R88A-CRGD0R3C-BS	8.8.
		included.			t=12 T=27.2 t=12 Battery holder
	Absolute Encoder Backup Battery	-		R88A-BAT01G	-

#### Control Cables (for CN1)

Symbol		Name	Connected to		Model
(5)		Control Cables for Motion Control Units	Motion Control Units (for all SYSMAC CS1/C200H)	For 1 axis/ For 2 axis	R88A-CPG□□□M♦ The empty boxes in the model number are for the cable length. The cable can be 1, 2, 3, or 5 m long. The empty diamond in the model number is for the number of axes. One axis: 1, Two axes: 2
	Cables		Line-driver output type (High-speed type) for CJ1W-NC234/434	For 1 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
(6)	Control C	Direct connection cable	Line-driver output type (High-speed type) for CJ1W-NC234/434	For 2 axis	XW2Z-□□□J-G1 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.
(6)		for Position Control Unit (High-speed type)	Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 1 axis	XW2Z-□□□J-G13 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.
			Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 2 axis	XW2Z-□□□J-G5 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.

Note: Use the following codes in  $\square$  for the cable length: 0.5 m: 050, 1 m: 100, 2 m: 200, 3 m: 300, 5 m: 500, and 10 m:10M. However, for General-purpose Control Cables, use "001" for a 1-m cable.

Symbol		Na	me	Connected to		Model
				Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 (For C200HW-NC113 *)	For 1 axis	XW2B-20J6-1B
(7)		Servo Relay Units		Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 (For C200HW-NC213/NC413 *)	For 2 axis	XW2B-40J6-2B
				For C I4M CDI 124/CDI 122/CDI 122	For 1 axis	XW2B-20J6-8A
				For CJ1M-CPU21/CPU22/CPU23	For 2 axis	XW2B-40J6-9A
				For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	For 2 axis	XW2B-80J7-12A
				Position Control Unit: For CJ1W-NC□□3, CS1W/C200HW-NC□□□ * (XW2B-20J6-1B, XW2B-40J6-2B)		XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
(8)			Servo Relay Unit	For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)		XW2Z-□□□J-B31 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(0)			Servo Drives	For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)		XW2Z-□□□J-B27 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
	n Cables	Cables		For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)		XW2Z-□□□J-B26 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
	Connection		Servo Relay Unit Cables for Position Control Units	CJ1W line-driver output type for CJ1W-NC133	For 1 axis	XW2Z-□□□J-A18 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
	Servo Relay Units/Connection			CJ1W line-driver output type for CJ1W-NC233/NC433	For 2 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	Servo	Connection Cables		CS1W line-driver output type for CS1W-NC133	For 1 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
				CS1W line-driver output type for CS1W-NC233/NC433	For 2 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
(9)				CJ1W open collector output type for CJ1W-NC113	For 1 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
				CJ1W open collector output type for CJ1W-NC213/NC413	For 2 axis	XW2Z-□□J-A15 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				CS1W/C200HW open collector output type for CS1W-NC113 for C200HW-NC113 *	For 1 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
				CS1W/C200HW open collector output type for CS1W-NC213/NC413 for C200HW-NC213/NC413 *	For 2 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
				CSW/C200HW open collector output type for CJ1M-CPU21/CPU22/CPU23	For 1 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

 $\star$  C200HW-NC was discontinued. **Note:** Use the following codes in  $\square\square\square$  for the cable length: 0.5 m: 050, 1 m: 100, 2 m: 200, 3 m: 300, 5 m: 500, and 10 m:10M.

# AC Servomotor/Drive G5-series

Symbol		Nar	ne		Connected to		Model
	ion Cables			For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	General-purpose I/O (26 pin)	For 2 axis	XW2Z-□□J-A28 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
(9)	Units/Connection	Connection Cables	Servo Relay Unit Cables for Position Control Units	For FQM1-MMA22 (Analog output)	Special I/O (40 pin)	For 2 axis	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	Servo Relay Uni			For FQM1-MMP22 (Pulse train output)	Special I/O (40 pin)	For 2 axis	XW2Z-DDJ-A30 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
(10)	General-purpose Control Cables with Connector on One End			Cables for General-purpose Controllers			R88A-CPG□□□S  The empty boxes in the model number are for the cable length.  The cable can be 0.5, or 1 m long.
(11)		Connector		Cable for General-purpose Controllers			XW2Z-□□□J-B24 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(11)		Connector Terminal	Terminal Block Cables		INK-II Communications	XW2Z-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	Blo	ck			M3 screws		XW2B-50G4
				Cable for General- purpose Controllers	M3.5 screws		XW2B-50G5
(12)			Connector- Terminal Block	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	M3 screws		XW2D-50G6
(12)			Conversion Units	Cable for	M3 screws		XW2B-20G4
				MECHATROLINK-II	M3.5 screws		XW2B-20G5
				Communications	M3 screws		XW2D-20G6

Note: Use the following codes in  $\square\square\square$  for the cable length: 0.5 m: 050, 1 m: 100, 2 m: 200, 3 m: 300, 5 m: 500, and 10 m:10M. However, for General-purpose Control Cables, use "001" for a 1-m cable.

#### **Monitor Connector (for CN5)**

Symbol	Name	Lengths	Model
(13)	Analog Monitor Cable	1 m	R88A-CMK001S

#### **Communications Connector (for CN7)**

Symbol	Name	Description
(14)	USB communications cable	General purpose USB cable can be used

Note: Use a commercially available USB cable that is shield, equipped with a ferrite core for noise immunity, and Supporting for USB2.0. The Mini B type USB cable can be used.

#### **MECHATROLINK-II Communication Cable**

Symbol	Name	Length (L)	Model (OMRON model number)	Yaskawa model number	Description
	MECHATROLINK-II Communication Cable * Can be connected to R88D-GN and R88D-KN only.	0.5m	FNY-W6002-A5	JEPMC-W6002-A5-E	(without ring core and USB connector on both ends)
		1m	FNY-W6002-01	JEPMC-W6002-01-E	(without fing core and OSD connector on both ends)
		3m	FNY-W6002-03	JEPMC-W6002-03-E	
		5m	FNY-W6002-05	JEPMC-W6002-05-E	
	MECHATROLINK-II Communication Cable	0.5m	FNY-W6003-A5	JEPMC-W6003-A5	
(15)		1m	FNY-W6003-01	JEPMC-W6003-01	
		3m	FNY-W6003-03	JEPMC-W6003-03	(with ring core and USB connector on both ends)
		5m	FNY-W6003-05	JEPMC-W6003-05	<u>L</u>
		10m	FNY-W6003-10	JEPMC-W6003-10	
		20m	FNY-W6003-20	JEPMC-W6003-20	Core
		30m	FNY-W6003-30	JEPMC-W6003-30	
(16)	MECHATROLINK-II Terminating resistance	-	FNY-W6022	JEPMC-W6022	2 46 (8) (8) (8) (8) (8) (8) (8) (8) (8) (8)

#### **EtherCAT Communication Cable**

Symbol	Name	Description
(17)	Ethernet Cable	EtherCAT Communication Cables  Use a category 5 or higher cable with double, aluminum tape and braided shielding.  Connector (Modular Plug) Specifications  Use a category 5 or higher, shielded connector.

#### **External encoder Cables**

Symbol	Name	Length (L)	Model	Description
				CN4 with Connectors
(18)	Serial Communications Cable	10m	R88A-CRKE010SR	

#### Connectors

Connectors	Name	Model
CN1	Control I/O Connector (General-purpose Input)	R88A-CNU11C
	Control I/O Connector (MECHATROLINK-II Communications) (EtherCAT Communications)	R88A-CNW01C
CN2	Encoder Connector	R88A-CNW01R
CN4	External scale connector	R88A-CNK41L
CN8	Safety connector	R88A-CNK81S

#### **Servomotor Connector**

Connectors	Name	Connected to	Model
-		3,000 r/min, 50 to 750 W	R88A-CNK02R
	Motor connector for encoder cable	3,000 r/min, 1 to 5 kW (200 V)/750 W to 5 kW (400 V) 2,000 r/min, 1,000 r/min	R88A-CNK04R
_	Power cable connector	750 W max. (100 V/200 V)	R88A-CNK11A
_	Brake cable connector	750 W max. (100 V/200 V)	R88A-CNK11B

# **Related Manuals**

Please read the relevant manuals of G5-Series

English Cat. No.	Japanese Cat. No.	Туре	Name
1571	SBCE-357	R88D-KT/R88M-K	G5-SERIES AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
1572	SBCE-358	R88D-KN□-ML2/R88M-K	G5-SERIES MECHATROLINK-II Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
1573	SBCE-360	R88D-KN□-ECT-R/R88M-K	G5-SERIES EtherCAT Communications for Position Control AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
1576	SBCE-365	R88D-KN□-ECT/R88M-K	G5-SERIES EtherCAT Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
1577	SBCE-366	R88D-KN□-ECT-L/R88L-EC	G5-SERIES EtherCAT Communications Linear Motor Type LINEARMOTOR AND DRIVE USER'S MANUAL
W487	SBCE-359	CJ1W-NC□81/CJ1W-NC□82	CJ-series Position Control Unit Operation Manual
W446	SBCA-337	CXONE-AL D-V	CX-Programmer Operation Manual
W453	SBCE-375	CXONE-AL□□D-V□	CX-Drive OPERATION MANUAL
W504	SBCA-470	SYSMAC-SE2□□□	Sysmac Studio Version 1 Operation Manual

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#### Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

#### **Programmable Products.**

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

#### Performance Data.

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#### Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

#### **Errors and Omissions.**

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

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