

OMRON

NEW

AC Servomotors / Servo Drives

OMNUC **G5** Series

R88D-KT

R88D-KN□-ML2 Coming Soon

R88M-K

The Preeminent Servo That Revolutionizes Motion Control



Premium Servo

100V/200V/400V/
50W~5kW

OMNUC **G5** Series

realizing

Higher Throughput and Shorter Tact Time, Plus Improved Machine Safety



High Speed and High Precision

Fastest speed response frequency in industry at 2 kHz

Safety

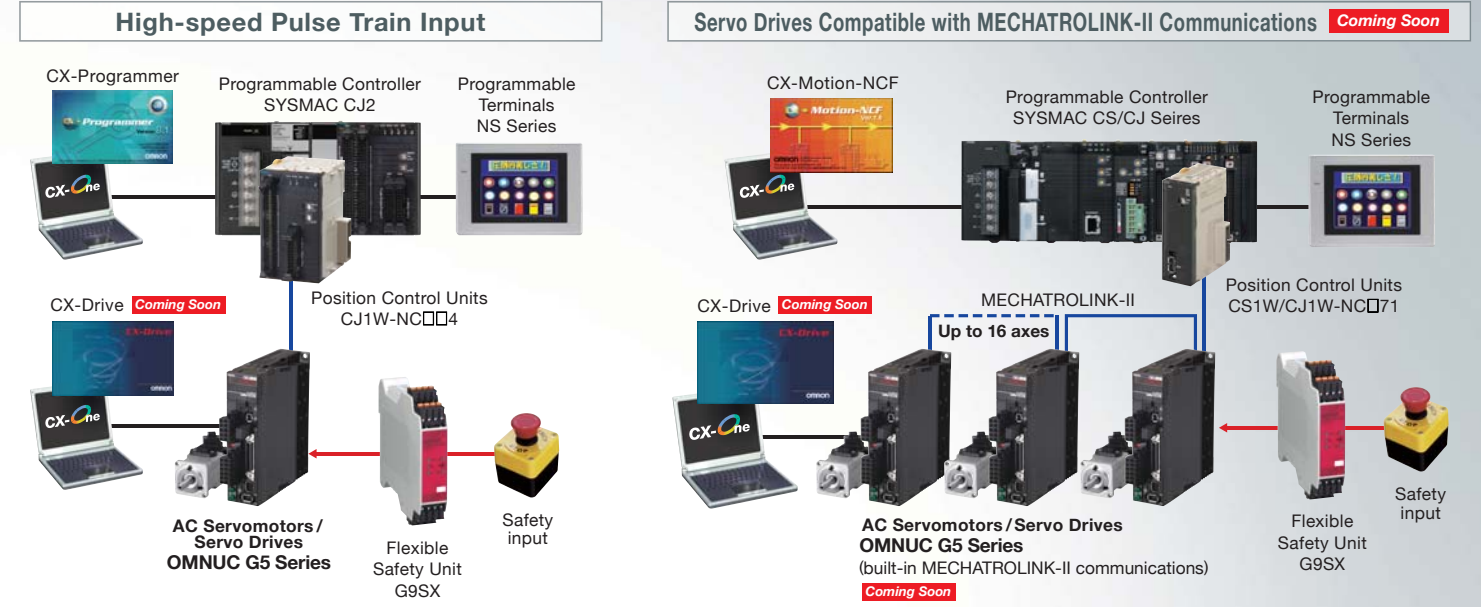
Conforms to the latest international safety standards

Reduced TCO

Advanced autotuning

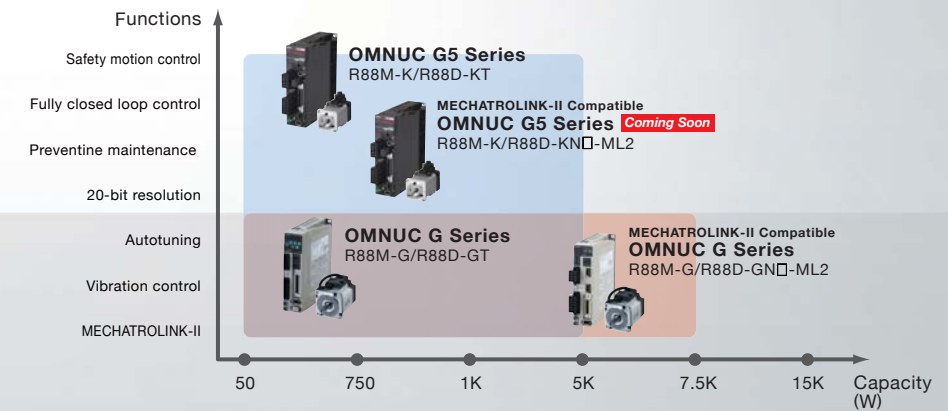
Achieve the fastest position control in the industry by combining the OMNUC G5 with an OMRON Position Control Unit.

System Configuration Example



Evolution of the G Series

Achieve high-speed, high-precision positioning and safety motion.



OMNUC G5 Series

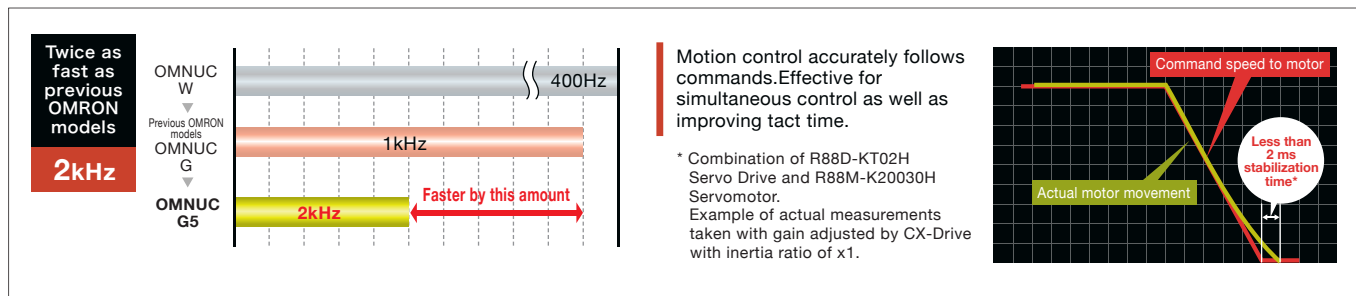
Provide Tact Time Improvement and High Accuracy

Safety Motion Control That Provides Safety and Reliability

Industry Top-class Tracking Performance

Speed Response Frequency of 2 kHz

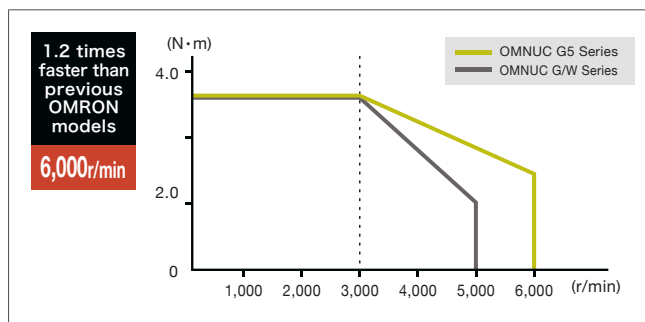
Speed response is representative of servo system characteristics. In the OMNUC G5, the industry's fastest response has been achieved at 2 kHz. By improving the speed response by twice compared to previous OMRON models, the stabilization time has been shortened and this contributes to tact time reduction.



Reduced Tact Time with Higher Speed

Maximum rotation speed : 6,000 r/min*

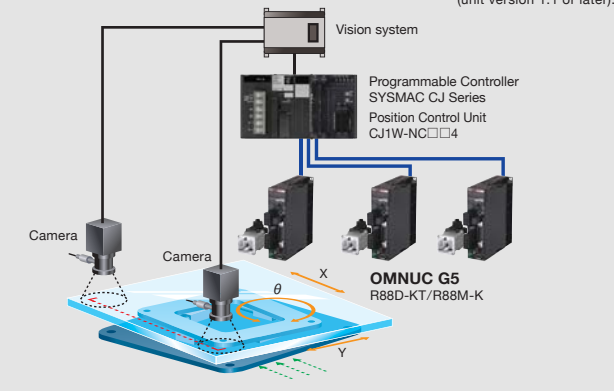
The maximum rotation speed of R88M-series Servomotors has increased to 6,000 r/min, resulting in high-speed positioning that can reduce tact time. *Applicable to 100 V/200 V models with 750 W or less.



Example of High-speed/High-precision Application

- High-Speed and, High-Precision Position Control Using Camera Compensation
- The pulse output startup time of 0.1 ms enables High-Speed camera compensation.

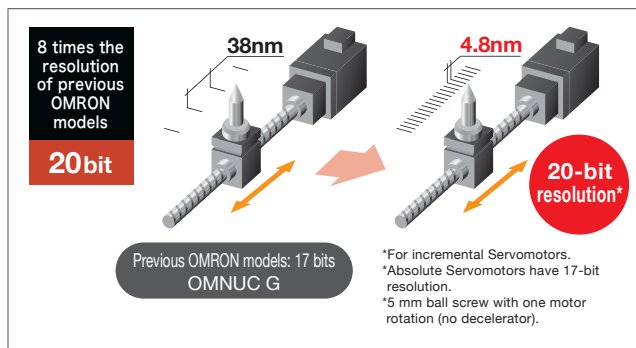
Note: Using a CJ2 CPU Unit (unit version 1.1 or later).



Best Positioning Accuracy

Featuring a 20-bit high-resolution incremental encoder

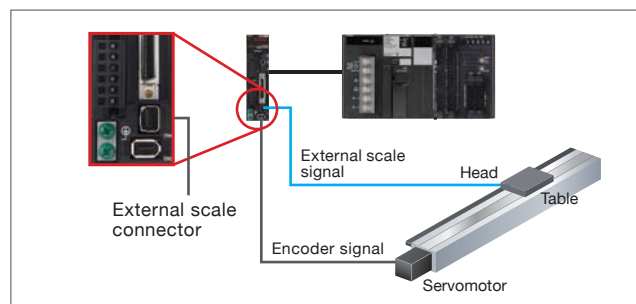
High-precision positioning can be achieved with the built-in encoder, 8 times the resolution of previous OMRON models at 20 bits.



High-precision Positioning

Fully Closed Loop Control Is a Standard Feature

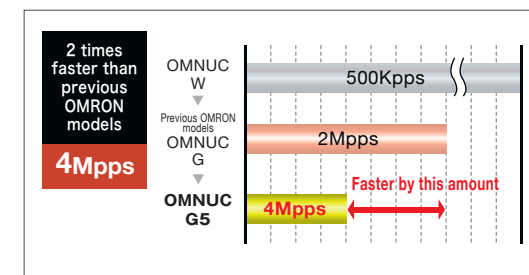
High-precision and high-response positioning can be realized without being affected by temperature changes by determining the position using direct feedback of the control position from the external scale, to enable using fully closed loop control without options. (The external scale connector terminal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



High-speed and High-precision Positioning

Pulse input response frequency: 4 Mpps

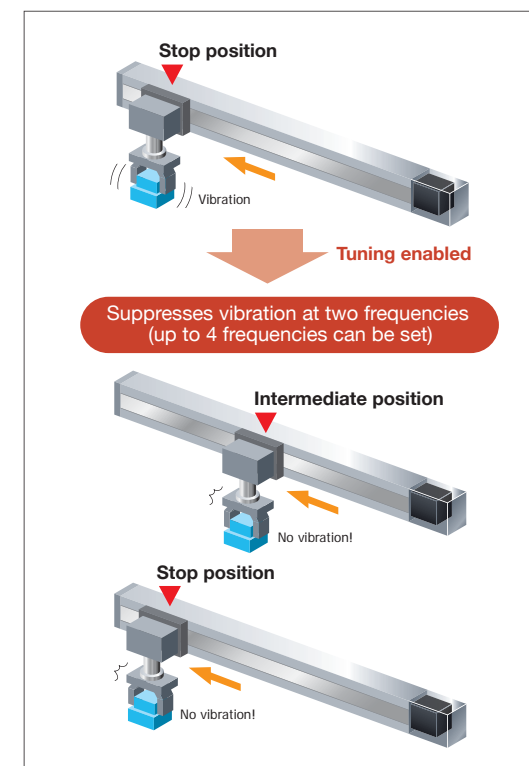
The Servo Drive response to command pulses is 4 Mpps, twice that of previous OMRON models. Response delays are thus reduced enabling high-speed and high-precision positioning.



Ideal for Applications That Require High Accuracy

Improved vibration control function

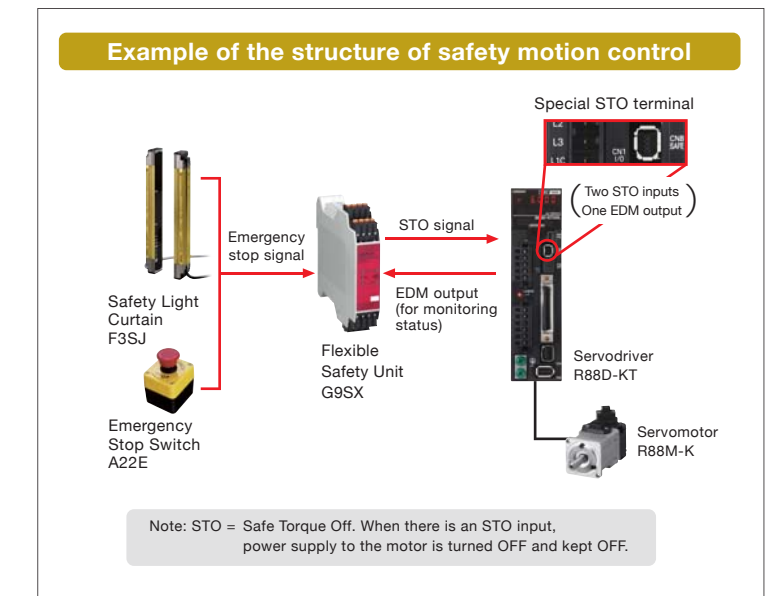
With the vibration control function, if the tip of the device is vibrating, the vibration frequency can be automatically set to remove the vibration. It can also be used to suppress vibration resulting from starting and stopping the device, allowing precise movement.



Conforms to the Latest International Standards

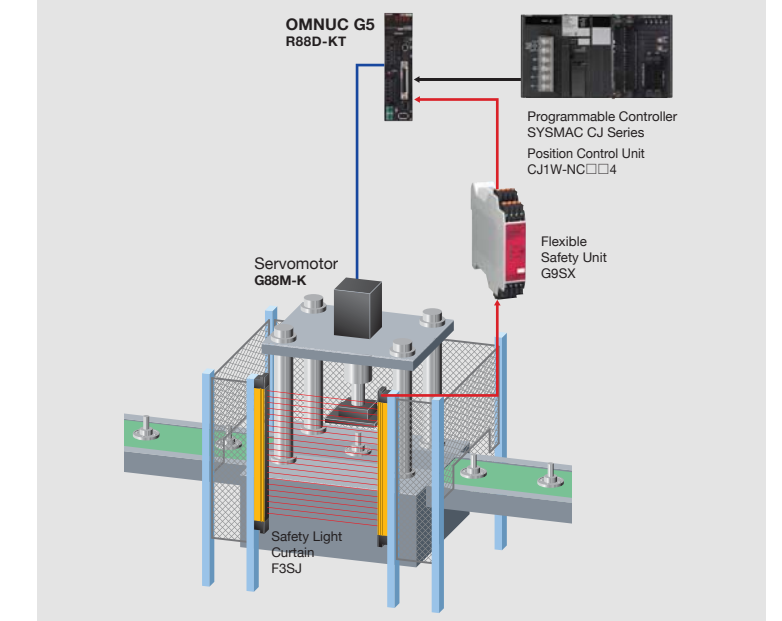
Safety and Productivity

The OMNUC 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: 2600 (PL d) and EN 61508 (SIL2). Safety control circuits can be constructed with the Servo Drive, delivering both safety and productivity.



Safety Motion Application Example

- Safety interlocks can be controlled by combining a Safety Light Curtain and Safety Motion Control.

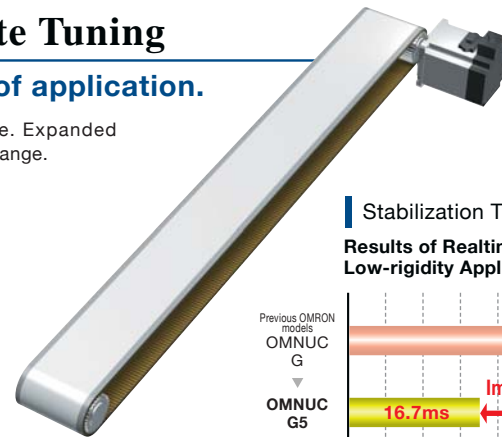
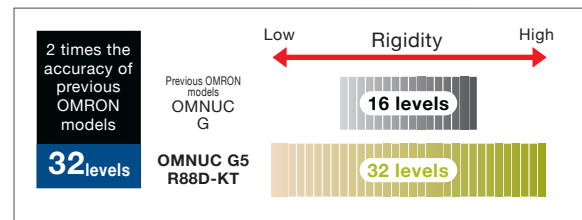


Easy Adjustment and Reduce works to System Start-up

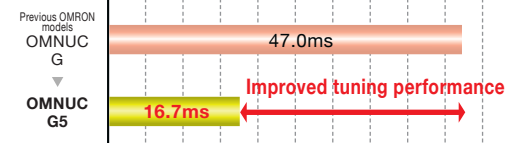
Easily Adjust Gain with Complete Tuning

Realtime autotuning doubles the range of application.

Estimating the machine load inertia ratio is now more accurate. Expanded rigidity settings from low to high rigidity increases the application range.

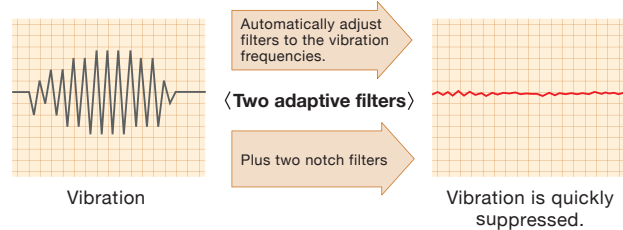


Stabilization Time
Results of Realtime Autotuning for Low-rigidity Applications, Such as Belt Drives

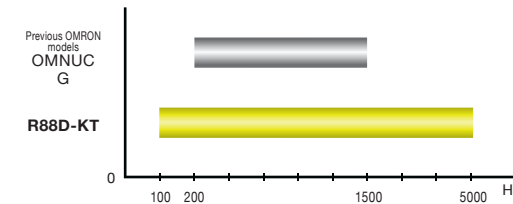


A wide range of rigidity can be handled by expanding the adaptive filter

The filter is automatically set to the resonance frequency while multiple adaptive filters reduce vibration. With an even wider frequency range, vibration can be reduced from drive shafts with low rigidity such as conveyor belts, to drive shafts with high rigidity.



2 times the number of adaptive filters
3.8 times the frequency range
Adaptive Filter



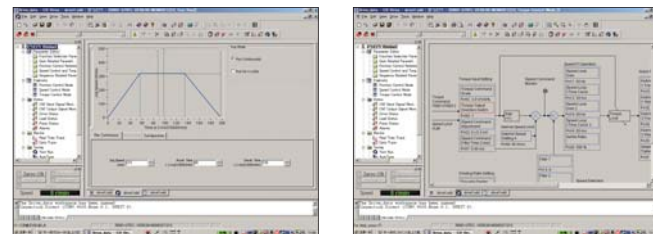
Complete Support from Setup to Maintenance

CX-Drive version 1.8 Support Software **Coming Soon**

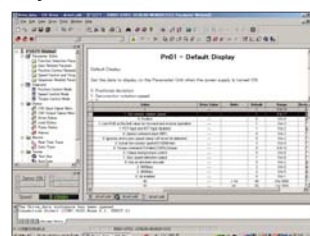
The CX-Drive support software helps reduce work with a complete range of features from Servo parameter setting, transfer, and comparison to test operation, adjustments, monitoring, and tracing.



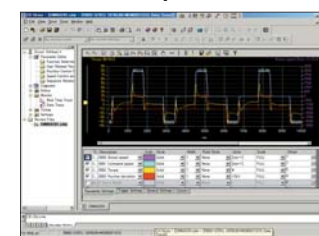
Setup Edit parameters just like using a Digital Operator.



Adjustment Each parameter can be adjusted and tested.



Status Monitoring Data can be traced just like on an oscilloscope.

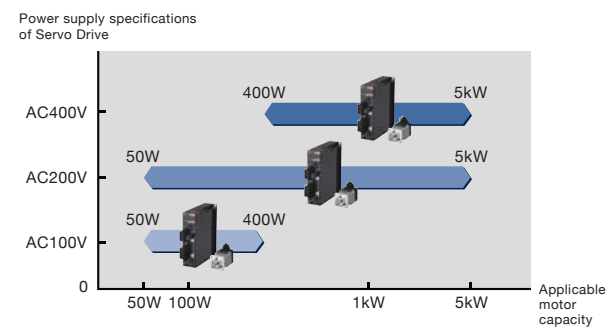


Globalization

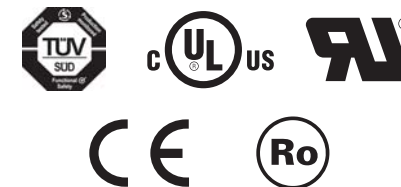
Lineup of 400VAC Servomotors

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

Variations



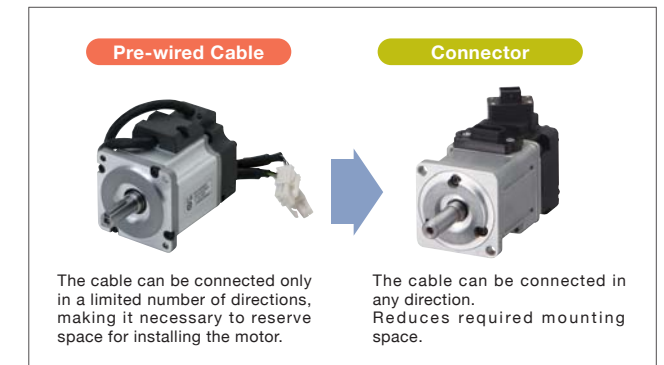
Certified Standards



Connect the Servomotor Cable with Ease

The direct connection method has been used for power, encoder, and brake.

Due to the direct connection method between the Servomotor, encoder, and brake, the cable can be connected in any direction, reducing cable stress.



Servomotors Conform to IP67 (Excluding Through-shaft Parts)

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 OMNUC G models)

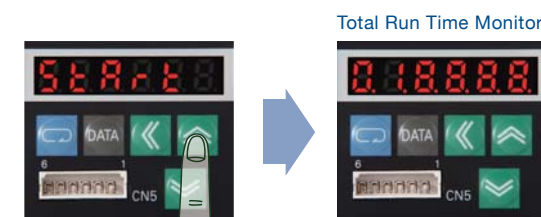
Motor torque variation is reduced due to a 60% reduction in the cogging torque, resulting in high-precision positioning. This enables smooth operation at low speeds.

Reduced Work with Increased Monitor Functions

Monitoring for preventive maintenance have been improved.

Example of easier operation with improved monitoring.

Monitoring the Total Run Time When the Main Circuit Is ON



Monitoring the Causes of why the servo motor does not rotate

A function has been provided that monitors the causes of why the Servo motor does not move even though a rotation command has been sent.

The optimum combination can be found from a variety of functions and model variations to handle various applications.

Servo Drive Variations

		OMNUC G5 Series				OMNUC G Series				SMARTSTEP2 Series					
		Servo Drives with General-purpose Inputs		MECHATROLINK-II Compatible Servo Drives		Servo Drives with General-purpose Inputs		MECHATROLINK-II Compatible Servo Drives		Pulse train input					
		R88D-KT	R88D-KN-ML2	R88D-GT	R88D-GN-ML2	R7D-BP									
Power supply	AC100V	Single-phase		Single-phase		Single-phase		Single-phase		Single-phase					
	AC200V	Single/Three-phase	Three-phase	Single/Three-phase	Three-phase	Single-phase	Single/Three-phase	Three-phase	Single-phase	Single/Three-phase					
	AC400V	Three-phase		Three-phase		—		—		—					
Motor capacity	AC100V	50 W	100 W	200 W	400 W	50 W	100 W	200 W	400 W	50 W	100 W	200 W			
	AC200V	Single-phase	—				—				—				
		Single/Three-phase	50 W	100 W	200 W	400 W	750 W	900 W	1 kW	1.5 kW	750 W	900 W	1 kW	1.5 kW	
AC400V	Three-phase	2 kW	3 kW	4 kW	5 kW	2 kW	3 kW	4 kW	5 kW	2 kW	3 kW	4 kW	5 kW		
	Three-phase	400 W	600 W	750 W	900 W	1 kW	400 W	600 W	750 W	900 W	1 kW	1.5 kW	2 kW	3 kW	4 kW
Interface	Command type	Pulse train Analog		ML2		Pulse train Analog		ML2		Pulse train					
Control modes	Control modes	Position control	Speed control	Torque control	Position control	Speed control	Torque control	Position control	Speed control	Torque control	Position control				
	Control mode switching	Mode switching		Mode switching		Mode switching		Mode switching		—					
Tuning functions	Vibration control	Vibration control ^{*1}		Vibration control ^{*1}		Vibration control ^{*1}		Vibration control ^{*1}		Vibration control					
	Autotuning	AUTO 32		AUTO 32		AUTO 16		AUTO 16		AUTO 16					
	Realtime autotuning	FIT GAIN Adaptive filter ^{*4}		Adaptive filter ^{*4}		FIT GAIN Adaptive filter ^{*2}		Adaptive filter ^{*2}		Adaptive filter ^{*3}					
Safety	Conforms to international safety standards	Safety		Safety		—		—		—					
	Fully closed	Fully closed		Fully closed		—		—		—					
Servo Drive functions	Torque limits	Torque limit ^{*1}		Torque limit ^{*1}		Torque limit ^{*1}		Torque limit ^{*1}		Torque limit ^{*1}					
	Encoder output	ABS INC 20		ABS INC 20		ABS INC 17		ABS INC 17		INC 17					
	Internal set speeds	8 speeds		—		8 speeds		—		4 speeds					

Refer to Ordering Information for details on combining Drives and Servomotors. *1. Two limits. *2. One adaptive filter and two notch filters. *3. One adaptive filter and one notch filter. *4. Two adaptive filters and two notch filters.

Functions

- Pulse train:** The speed and travel distance are input to the Servo as pulse trains.
- Analog:** The speed and torque are input to the Servo as analog signals.
- ML2:** MECHATROLINK-II high-speed Servo communications motion network. (See note.)
- Position control:** Control is applied to move to the target position and then stop at the target position.
- Speed control:** Control is applied to change the linear or rotational speed. For example, speed control is used for applications such as turning grindingstones, controlling welding speeds, and controlling feeding speeds.
- Torque control:** Control is applied to adjust the rotational force. Torque control is suitable for applications such as parts insertion, pressing, and screw tightening.
- Mode switching:** Switching is possible between any two of the three control modes: position control, speed control, and torque control.
- Vibration control function:** Vibration is suppressed by automatically setting a filter for the vibration frequency.
- AUTO 32:** Autotuning: This function automatically sets an appropriate gain based on the rigidity setting of the machine load; 32 levels of rigidity settings are possible.
- AUTO 16:** Autotuning: This function automatically sets an appropriate gain based on the rigidity setting of the machine load; 16 levels of rigidity settings are possible.
- FIT GAIN:** The rigidity for the realtime autotuning for position control is set automatically. By repeatedly inputting a specific operation pattern, the optimum rigidity is set automatically.
- ABS:** Absolute output: When the Controller power supply is turned ON, the Controller reads the Servo absolute position data to restore the absolute position.
- INC 20:** 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.
- INC 17:** Incremental output: When the controller power supply is turned ON, operation is always started from the origin. A 17-bit resolution is provided on models with incremental outputs.
- Adaptive filter:** The machine load inertia is calculated in realtime and the result is used to automatically set the optimum gain.
- Safety:** Safety function: Conforms to IEC 61800-5-2 (STO), ISO 13849-1: 2006 (PL d), and EN 61508 (SIL2).
- Fully closed:** Fully closed (fully closed loop control): Positioning using direct feedback of the current position from the external scale.
- Torque limit:** Switching is possible between the first torque limit and the second torque limit to limit the Servomotor output torque.

*MECHATROLINK-II is a registered trademark of the MECHATROLINK Members Association

Servomotor Variations

		OMNUC G5 Series			OMNUC G Series			SMARTSTEP2 Series	
		Servomotors with General-purpose inputs and MECHATROLINK-II Compatible Servomotors			Servomotors with General-purpose inputs and MECHATROLINK-II Compatible Servomotors			Pulse train input	
		R88M-K			R88M-G			R88M-G	
Motor type	Cylinder type	Cylinder type			Cylinder type	Cylinder type	Flat type	Cylinder type	Flat type
	Rated speed	1000r/min	2000r/min	3000r/min	1000r/min	2000r/min	3000r/min	3000r/min	3000r/min
Servomotor capacity	50W			ABS INC 20			ABS INC 17	INC 17	
	100W			ABS INC 20			ABS INC 17	ABS INC 17	INC 17
	200W			ABS INC 20			ABS INC 17	ABS INC 17	INC 17
	400W		ABS INC 20	ABS INC 20			ABS INC 17	ABS INC 17	INC 17
	600W		ABS INC 20						
	750W			ABS INC 20			ABS INC 17		
	900W	ABS INC 20			ABS INC				
	1kW		ABS INC 20	ABS INC 20			ABS INC		
	1.5kW		ABS INC 20	ABS INC 20			ABS INC		
	2kW	ABS INC 20	ABS INC 20	ABS INC 20	ABS INC	ABS INC		ABS INC	
	3kW	ABS INC 20	ABS INC 20	ABS INC 20	ABS INC	ABS INC		ABS INC	
	4kW		ABS INC 20	ABS INC 20			ABS INC		ABS INC
	4.5kW				ABS INC				
	5kW		ABS INC 20	ABS INC 20			ABS INC		ABS INC
6kW				ABS INC					
7.5kW						ABS INC			

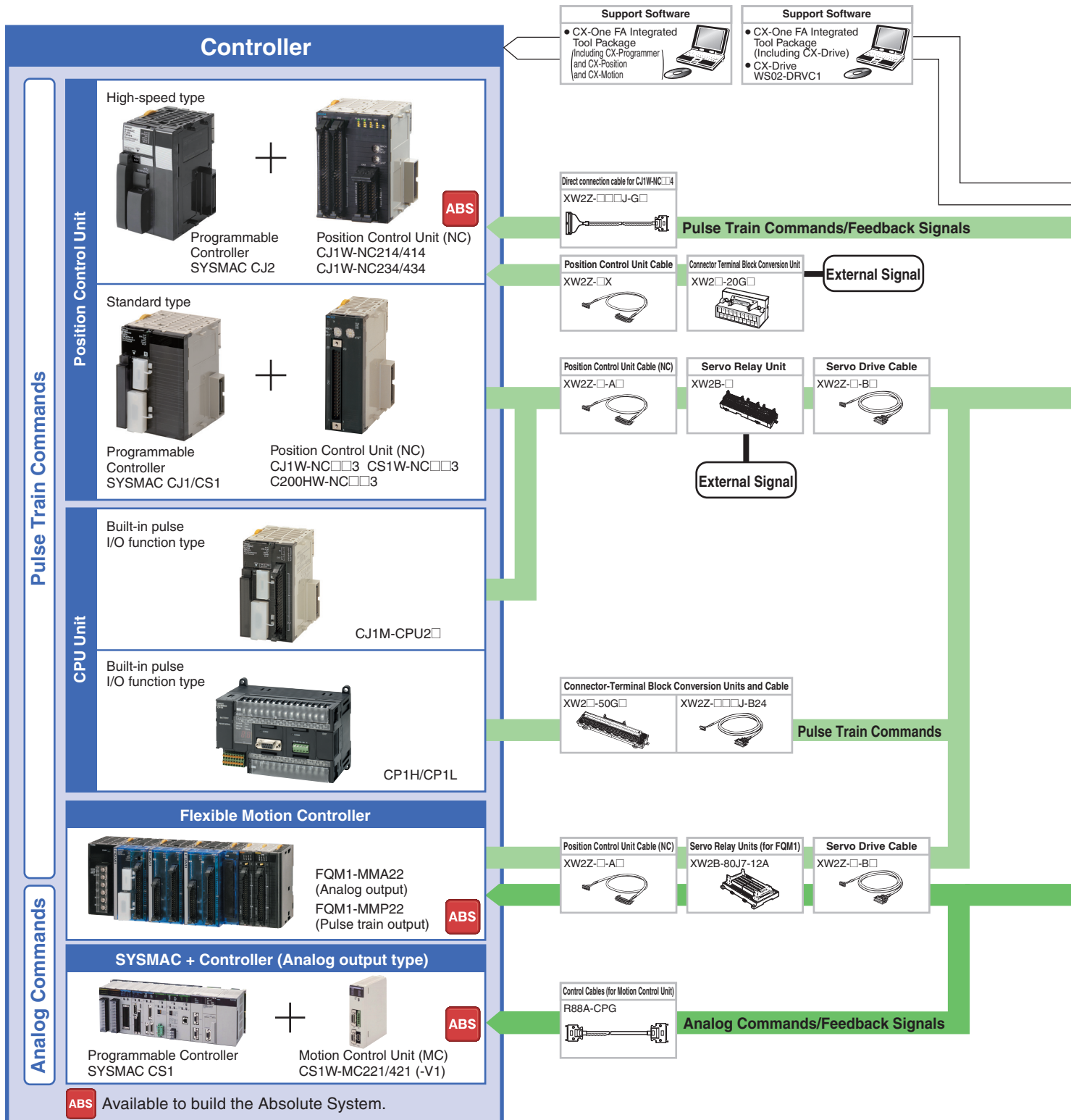
*The rated speed is 1,500 r/min for 7.5 kW Servomotors only

Functions

- ABS INC:** 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.
- INC 20:** 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.
- INC 17:** Incremental output: When the controller power supply is turned ON, operation is always started from the origin. A 17-bit resolution is provided on models with incremental outputs.

R88M-K/R88D-KT

System Configuration



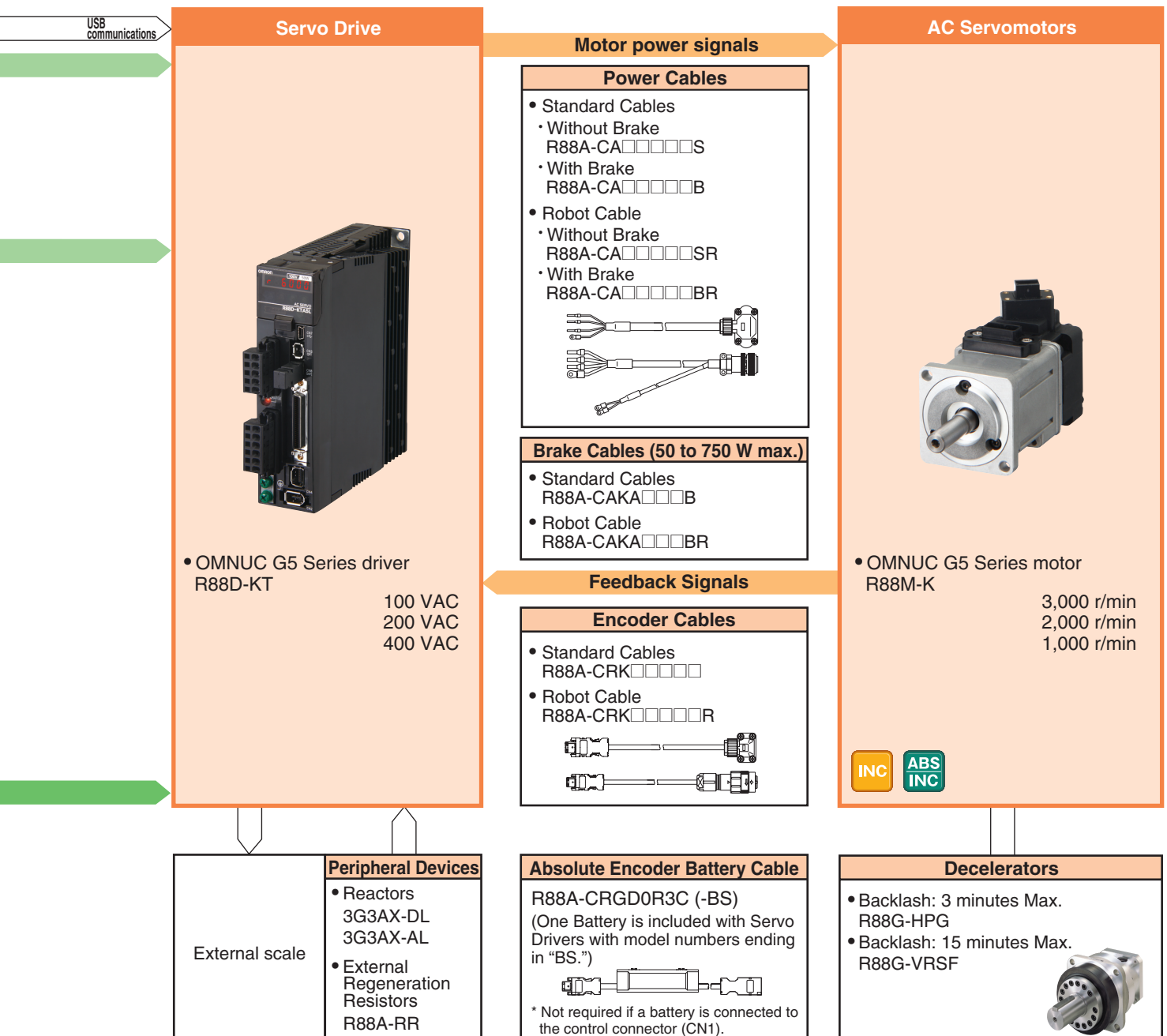
The Preeminent Servo That Revolutionizes Motion Control

- Industry Top-class Tracking Performance.
Speed Response Frequency of 2 kHz.
- Best Positioning Accuracy.
Featuring a 20-bit high-resolution incremental encoder.
- 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.



Product configuration list

Refer to the Ordering Information.



General-purpose Inputs
System Configuration

ML-II Type
System Configuration

General-purpose Inputs
Servo Drive

ML-II Type
Servo Drive

Servomotors

Decelerators

Ordering Information

Ordering Information

Product name AC Servomotor/Drive
 OMNUC G5-series

Interpreting Model Numbers..... B-2

- Servo Drive Model Numbers
- Servomotor Model Numbers
- Understanding Decelerator Model Numbers
(Backlash = 3' Max./Backlash = 15' Max.)

Table of Servomotor Variations B-4

Ordering Information B-5

AC Servo Drives B-5

- General-purpose Inputs
- MECHATROLINK-II Communications

Servomotors B-6

Decelerators (Backlash = 3' Max./Backlash = 15' Max.)..... B-11

Accessories and Cables..... B-13

- Connection Cables (Power Cables§Brake Cables§Encoder Cables)
(Standard Cables)
(Robot Cables)
- Cable/Connector
- Control Cables
 - For General-purpose Inputs
 - For MECHATROLINK-II Communications
- Peripheral Devices
(External Regeneration Resistors§Reactors§Mounting Brackets)
- Support Software (CX-One/CX-Drive)

Combination table B-20

- Servo Drive and Servomotor Combinations
- Servomotor and Decelerator Combinations
- Controller Combinations
- Cable Combinations

About Manuals B-28

Read and Understand this Catalog

* MECHATROLINK-II is a registered trademark of the MECHATROLINK Members Association.

Interpreting Model Numbers

Servo Drive Model Numbers

R88D-K N 01 H -ML2

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

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

Servomotor Model Numbers

R88M-K □ 750 30 H -BO S2

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

No	Item	Symbol	Specifications
(1)	OMNUC G5-series Servomotor		
(2)	Motor Type	Blank	Cylinder type
		—	—
(3)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		600	600 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
(4)	Rated Rotation Speed	10	1,000 r/min
		20	2,000 r/min
		30	3,000 r/min
(5)	Applied Voltage	F	400 VAC (with incremental encoder specifications) INC
		H	200 VAC (with incremental encoder specifications) INC
		L	100 VAC (with incremental encoder specifications) INC
		C	400 VAC (with absolute encoder specifications) ABS/INC
		T	200VAC (with absolute encoder specifications) ABS/INC
		S	100 VAC (with absolute encoder specifications) ABS/INC
(6)	Option	Blank	Straight shaft
		B	With brake
		O	With oil seal
		S2	With key and tap

Note: **INC** incremental encoder: 20bit
ABS/INC incremental encoder: 17bit, absolute encoder: 17bit

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

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 G□-Series Servomotors Backlash = 3' Max.		
(2)	Flange Size Number	11B	□40
		14A	□60
		20A	□90
		32A	□120
		50A	□170
		65A	□230
(3)	Gear Ratio	05	1/5
		09	1/9 (only frame number 11B)
		11	1/11 (except frame number 65A)
		12	1/12 (only frame number 65A)
		20	1/20 (only frame number 65A)
		21	1/21 (except frame number 65A)
		25	1/25 (only frame number 65A)
		33	1/33
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
		900	900 W
		1K0	1 kW
		1K5	1.5 kW
		2K0	2 kW
		3K0	3 kW
		4K0	4 kW
		4K5	4.5 kW
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		-	-
		S	2,000-r/min cylindrical servomotors
		T	1,000-r/min cylindrical servomotors
(6)	Backlash	B	Backlash = 3' Max
(7)	Option	Blank	Straight shaft
		J	With key and tap

Backlash = 15' Max.

R88G-VRSF 09 B 100 C J

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

No	Item	Symbol	Specifications
(1)	Decelerator for G□-Series Servomotors Backlash = 15' Max.		
(2)	Gear Ratio	05	1/5
		09	1/9
		15	1/15
		25	1/25
(3)	Flange Size Number	B	□52
		C	□78
		D	□98
(4)	Applicable Servomotor Capacity	050	50 W
		100	100 W
		200	200 W
		400	400 W
		750	750 W
(5)	Motor Type	Blank	3,000-r/min cylindrical servomotors
		-	-
(6)	Backlash	C	Backlash = 15' Max
(7)	Option	J	With key (without tap)

Table of Servomotor Variations

R88M-K□□□□□□□-□□□□
(3) (4) (5) (6) (7) (8) (9)

(3) Type	(4) Applicable Servomotor Capacity	(5) Rotation speed	Model	(6) Applied Voltage						(7) With brake / Without brake		(8) Models with oil seals		(9) Shaft type		
				INC	INC	INC	ABS	ABS	ABS	With brake / Without brake	Blank	O	Blank	S2		
				400	200	100	400	200	100	-					B	
				F	H	L	C	T	S	Blank					With brake	
Cylinder	50 W	3,000 r/min	R88M-K05030 *		√			√		√	√	√	√	√	√	
	100 W		R88M-K10030		√	√		√	√	√	√	√	√	√	√	√
	200 W		R88M-K20030		√	√		√	√	√	√	√	√	√	√	√
	400 W		R88M-K40030		√	√		√	√	√	√	√	√	√	√	√
	750 W		R88M-K75030	√	√		√	√		√	√	√	√	√	√	√
	1 kW		R88M-K1K030	√	√		√	√		√	√	√	√	√	√	√
	1.5 kW		R88M-K1K530	√	√		√	√		√	√	√	√	√	√	√
	2 kW		R88M-K2K030	√	√		√	√		√	√	√	√	√	√	√
	3 kW		R88M-K3K030	√	√		√	√		√	√	√	√	√	√	√
	4 kW		R88M-K4K030	√	√		√	√		√	√	√	√	√	√	√
	5 kW		R88M-K5K030	√	√		√	√		√	√	√	√	√	√	√
	400 W	2,000 r/min	R88M-K40020	√			√			√	√	√	√	√	√	√
	600 W		R88M-K60020	√			√			√	√	√	√	√	√	√
	1 kW		R88M-K1K020	√	√		√	√		√	√	√	√	√	√	√
	1.5 kW		R88M-K1K520	√	√		√	√		√	√	√	√	√	√	√
	2 kW		R88M-K2K020	√	√		√	√		√	√	√	√	√	√	√
	3 kW		R88M-K3K020	√	√		√	√		√	√	√	√	√	√	√
	4 kW		R88M-K4K020	√	√		√	√		√	√	√	√	√	√	√
	5 kW		R88M-K5K020	√	√		√	√		√	√	√	√	√	√	√
	900 W	1,000 r/min	R88M-K90010	√	√		√	√		√	√	√	√	√	√	√
	2 kW		R88M-K2K010	√	√		√	√		√	√	√	√	√	√	√
3 kW	R88M-K3K010		√	√		√	√		√	√	√	√	√	√	√	
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		F: 400 VAC (with incremental encoder) INC H: 200 VAC (with incremental encoder) INC L: 100 VAC (with incremental encoder) INC C: 400 VAC (with absolute encoder) ABS/INC T: 200 VAC (with absolute encoder) ABS/INC S: 100 VAC (with absolute encoder) ABS/INC						Blank: Without brake B: 24 VDC With brake		Blank: Without oil seals O: With oil seals		Blank: Straight shaft S2: With key and tap		

* R88M-K05030H-□, R88M-K05030T-□, can be used for Power Supply Voltage of 100/200VAC.

Ordering Information

AC Servo Drives

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

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KTA5L
	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
Three-phase 200 VAC	2 kW	R88D-KT20H
	3 kW	R88D-KT30H
	5 kW	R88D-KT50H
Three-phase 400 VAC	600 W	R88D-KT06F
	1 kW	R88D-KT10F
	1.5 kW	R88D-KT15F
	2 kW	R88D-KT20F
	3 kW	R88D-KT30F
	5 kW	R88D-KT50F

MECHATROLINK-II Communications **Coming Soon**

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KNA5L-ML2
	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
Three-phase 200 VAC	2 kW	R88D-KN20H-ML2
	3 kW	R88D-KN30H-ML2
	5 kW	R88D-KN50H-ML2
	600 W	R88D-KN06F-ML2
Three-phase 400 VAC	1 kW	R88D-KN10F-ML2
	1.5 kW	R88D-KN15F-ML2
	2 kW	R88D-KN20F-ML2
	3 kW	R88D-KN30F-ML2
	5 kW	R88D-KN50F-ML2

AC Servomotor/Drive OMNUC G5-series

Servomotors

<Cylinder Type>

● 3,000-r/min servomotors

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

NEW

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

Note: Models with oil seals are also available.

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

NEW

Specifications			Model	
			With incremental encoder	
			Straight shaft with key and tap	
	Voltage	Rated output	Without oil seals	
Without brake	100 V	50 W	R88M-K05030H-S2	
		100 W	R88M-K10030L-S2	
		200 W	R88M-K20030L-S2	
		400 W	R88M-K40030L-S2	
	200 V	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	
		1 kW	R88M-K1K030H-S2	
		1.5 kW	R88M-K1K530H-S2	
		2 kW	R88M-K2K030H-S2	
		3 kW	R88M-K3K030H-S2	
		4 kW	R88M-K4K030H-S2	
	5 kW	R88M-K5K030H-S2		
	400 V	750 W	R88M-K75030F-S2	
		1 kW	R88M-K1K030F-S2	
		1.5 kW	R88M-K1K530F-S2	
2 kW		R88M-K2K030F-S2		
3 kW		R88M-K3K030F-S2		
4 kW		R88M-K4K030F-S2		
With brake	100 V	50 W	R88M-K05030H-BS2	
		100 W	R88M-K10030L-BS2	
		200 W	R88M-K20030L-BS2	
		400 W	R88M-K40030L-BS2	
	200 V	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	
		1 kW	R88M-K1K030H-BS2	
		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		
	400 V	750 W	R88M-K75030F-BS2	
		1 kW	R88M-K1K030F-BS2	
		1.5 kW	R88M-K1K530F-BS2	
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

NEW

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

NEW

Specifications			Model	
			With absolute encoder	
			Straight shaft without key	
Voltage	Rated output	Without oil seals		
Without brake	100 V	50 W	R88M-K05030T	
		100 W	R88M-K10030S	
		200 W	R88M-K20030S	
		400 W	R88M-K40030S	
	200 V	50 W	R88M-K05030T	
		100 W	R88M-K10030T	
		200 W	R88M-K20030T	
		400 W	R88M-K40030T	
		750 W	R88M-K75030T	
		1 kW	R88M-K1K030T	
		1.5 kW	R88M-K1K530T	
		2 kW	R88M-K2K030T	
400 V	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		
With brake	100 V	50 W	R88M-K05030T-B	
		100 W	R88M-K10030S-B	
		200 W	R88M-K20030S-B	
		400 W	R88M-K40030S-B	
	200 V	50 W	R88M-K05030T-B	
		100 W	R88M-K10030T-B	
		200 W	R88M-K20030T-B	
		400 W	R88M-K40030T-B	
		750 W	R88M-K75030T-B	
		1 kW	R88M-K1K030T-B	
		1.5 kW	R88M-K1K530T-B	
		2 kW	R88M-K2K030T-B	
	400 V	3 kW	R88M-K3K030T-B	
		4 kW	R88M-K4K030T-B	
		5 kW	R88M-K5K030T-B	
		750 W	R88M-K75030C-B	
		1 kW	R88M-K1K030C-B	
	400 V	1.5 kW	R88M-K1K530C-B	
		2 kW	R88M-K2K030C-B	
		3 kW	R88M-K3K030C-B	
		4 kW	R88M-K4K030C-B	
		5 kW	R88M-K5K030C-B	

Note: Models with oil seals are also available.

Specifications			Model	
			With absolute encoder	
			Straight shaft withkey and tap	
Voltage	Rated output	Without oil seals		
Without brake	100 V	50 W	R88M-K05030T-S2	
		100 W	R88M-K10030S-S2	
		200 W	R88M-K20030S-S2	
		400 W	R88M-K40030S-S2	
	200 V	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	
		1 kW	R88M-K1K030T-S2	
		1.5 kW	R88M-K1K530T-S2	
		2 kW	R88M-K2K030T-S2	
400 V	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		
With brake	100 V	50 W	R88M-K05030T-BS2	
		100 W	R88M-K10030S-BS2	
		200 W	R88M-K20030S-BS2	
		400 W	R88M-K40030S-BS2	
	200 V	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	
		1 kW	R88M-K1K030T-BS2	
		1.5 kW	R88M-K1K530T-BS2	
		2 kW	R88M-K2K030T-BS2	
	400 V	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	
	400 V	1.5 kW	R88M-K1K530C-BS2	
		2 kW	R88M-K2K030C-BS2	
		3 kW	R88M-K3K030C-BS2	
		4 kW	R88M-K4K030C-BS2	
		5 kW	R88M-K5K030C-BS2	

Note: Models with oil seals are also available.

AC Servomotor/Drive OMNUC G5-series

● 2,000-r/min servomotors

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

NEW

Specifications			Model		
			With incremental encoder		
			Straight shaft without key		
	Voltage	Rated output	Without oil seals		
Without brake	200 V	1 kW	R88M-K1K020H		
		1.5 kW	R88M-K1K520H		
		2 kW	R88M-K2K020H		
		3 kW	R88M-K3K020H		
		4 kW	R88M-K4K020H		
	5 kW	R88M-K5K020H			
	400 V	400 W	R88M-K40020F		
		600 W	R88M-K60020F		
		1 kW	R88M-K1K020F		
		1.5 kW	R88M-K1K520F		
2 kW		R88M-K2K020F			
	3 kW	R88M-K3K020F			
	4 kW	R88M-K4K020F			
	5 kW	R88M-K5K020F			
	With brake	200 V	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		
5 kW		R88M-K5K020H-B			
400 V		400 W	R88M-K40020F-B		
		600 W	R88M-K60020F-B		
		1 kW	R88M-K1K020F-B		
		1.5 kW	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.

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

NEW

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

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

NEW

Specifications			Model	
			With absolute encoder	
			Straight shaft without key	
	Voltage	Rated output	Without oil seals	
Without brake	200 V	1 kW	R88M-K1K020T	
		1.5 kW	R88M-K1K520T	
		2 kW	R88M-K2K020T	
		3 kW	R88M-K3K020T	
		4 kW	R88M-K4K020T	
	5 kW	R88M-K5K020T		
	400 V	400 W	R88M-K40020C	
		600 W	R88M-K60020C	
		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		
	200 V	1 kW	R88M-K1K020T-B	
		1.5 kW	R88M-K1K520T-B	
2 kW		R88M-K2K020T-B		
3 kW		R88M-K3K020T-B		
4 kW		R88M-K4K020T-B		
400 V	5 kW	R88M-K5K020T-B		
	400 W	R88M-K40020C-B		
	600 W	R88M-K60020C-B		
	1 kW	R88M-K1K020C-B		
	1.5 kW	R88M-K1K520C-B		
400 V	2 kW	R88M-K2K020C-B		
	3 kW	R88M-K3K020C-B		
	4 kW	R88M-K4K020C-B		
	5 kW	R88M-K5K020C-B		

Note: Models with oil seals are also available.

Rotation speed	Encoder	Option
2,000 r/min	INC	Without key
	ABS/INC	With key

NEW

Specifications			Model	
			With absolute encoder	
			Straight shaft with key and tap	
	Voltage	Rated output	Without oil seals	
Without brake	200 V	1 kW	R88M-K1K020T-S2	
		1.5 kW	R88M-K1K520T-S2	
		2 kW	R88M-K2K020T-S2	
		3 kW	R88M-K3K020T-S2	
		4 kW	R88M-K4K020T-S2	
	5 kW	R88M-K5K020T-S2		
	400 V	400 W	R88M-K40020C-S2	
		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		
	200 V	1 kW	R88M-K1K020T-BS2	
		1.5 kW	R88M-K1K520T-BS2	
2 kW		R88M-K2K020T-BS2		
3 kW		R88M-K3K020T-BS2		
4 kW		R88M-K4K020T-BS2		
400 V	5 kW	R88M-K5K020T-BS2		
	400 W	R88M-K40020C-BS2		
	600 W	R88M-K60020C-BS2		
	1 kW	R88M-K1K020C-BS2		
	1.5 kW	R88M-K1K520C-BS2		
400 V	2 kW	R88M-K2K020C-BS2		
	3 kW	R88M-K3K020C-BS2		
	4 kW	R88M-K4K020C-BS2		
	5 kW	R88M-K5K020C-BS2		

Note: Models with oil seals are also available.

AC Servomotor/Drive OMNUC G5-series

● 1,000-r/min servomotors

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

NEW

Specifications			Model	
			With incremental encoder	
			Straight shaft without key	
	Voltage	Rated output	Without oil seals	
Without brake	200 V	900 W	R88M-K90010H	
		2 kW	R88M-K2K010H	
		3 kW	R88M-K3K010H	
	400 V	900 W	R88M-K90010F	
		2 kW	R88M-K2K010F	
		3 kW	R88M-K3K010F	
With brake	200 V	900 W	R88M-K90010H-B	
		2 kW	R88M-K2K010H-B	
		3 kW	R88M-K3K010H-B	
	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
1,000 r/min	INC	Without key
	ABS/INC	With key

NEW

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

Note: Models with oil seals are also available.

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

NEW

Specifications			Model	
			With absolute encoder	
			Straight shaft without key	
	Voltage	Rated output	Without oil seals	
Without brake	200 V	900 W	R88M-K90010T	
		2 kW	R88M-K2K010T	
		3 kW	R88M-K3K010T	
	400 V	900 W	R88M-K90010C	
		2 kW	R88M-K2K010C	
		3 kW	R88M-K3K010C	
With brake	200 V	900 W	R88M-K90010T-B	
		2 kW	R88M-K2K010T-B	
		3 kW	R88M-K3K010T-B	
	400 V	900 W	R88M-K90010C-B	
		2 kW	R88M-K2K010C-B	
		3 kW	R88M-K3K010C-B	

Note: Models with oil seals are also available.

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

NEW

Specifications			Model	
			With absolute encoder	
			Straight shaft with key and tap	
	Voltage	Rated output	Without oil seals	
Without brake	200 V	900 W	R88M-K90010T-S2	
		2 kW	R88M-K2K010T-S2	
		3 kW	R88M-K3K010T-S2	
	400 V	900 W	R88M-K90010C-S2	
		2 kW	R88M-K2K010C-S2	
		3 kW	R88M-K3K010C-S2	
With brake	200 V	900 W	R88M-K90010T-BS2	
		2 kW	R88M-K2K010T-BS2	
		3 kW	R88M-K3K010T-BS2	
	400 V	900 W	R88M-K90010C-BS2	
		2 kW	R88M-K2K010C-BS2	
		3 kW	R88M-K3K010C-BS2	

Note: Models with oil seals are also available.

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

Backlash = 3' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-HPG11B05100B
	1/9	R88G-HPG11B09050B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG14A33050B
	1/45	R88G-HPG14A45050B
100 W	1/5	R88G-HPG11B05100B
	1/11	R88G-HPG14A11100B
	1/21	R88G-HPG14A21100B
	1/33	R88G-HPG20A33100B
	1/45	R88G-HPG20A45100B
200 W	1/5	R88G-HPG14A05200B
	1/11	R88G-HPG14A11200B
	1/21	R88G-HPG20A21200B
	1/33	R88G-HPG20A33200B
	1/45	R88G-HPG20A45200B
400 W	1/5	R88G-HPG14A05400B
	1/11	R88G-HPG20A11400B
	1/21	R88G-HPG20A21400B
	1/33	R88G-HPG32A33400B
	1/45	R88G-HPG32A45400B
750 W (200 V)	1/5	R88G-HPG20A05750B
	1/11	R88G-HPG20A11750B
	1/21	R88G-HPG32A21750B
	1/33	R88G-HPG32A33750B
	1/45	R88G-HPG32A45750B
750W (400 V)	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB <i>NEW</i>
	1/45	R88G-HPG50A451K5B
1kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB <i>NEW</i>
	1/45	R88G-HPG50A451K5B
1.5kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	1/45	R88G-HPG50A451K5B
2kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG50A212K0B
	1/33	R88G-HPG50A332K0B
3kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG50A113K0B
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. 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.

● 2,000-r/min servomotors

Straight shaft without key

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

● 1,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
900 W	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
2 kW	1/5	R88G-HPG32A052K0TB
	1/11	R88G-HPG50A112K0TB
	1/21	R88G-HPG50A212K0TB
	1/25	R88G-HPG65A255K0SB
3 kW	1/5	R88G-HPG50A055K0SB
	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 box.

Backlash = 15' Max
<Cylinder Type>

● 3,000-r/min servomotors

Straight shaft with key

Motor capacity	Gear Ratio	Model (Straight shaft)
50 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
	1/5	R88G-VRSF05B100CJ
100 W	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
	1/5	R88G-VRSF05B200CJ
200 W	1/9	R88G-VRSF09C200CJ
	1/15	R88G-VRSF15C200CJ
	1/25	R88G-VRSF25C200CJ
	1/5	R88G-VRSF05C400CJ
400 W	1/9	R88G-VRSF09C400CJ
	1/15	R88G-VRSF15C400CJ
	1/25	R88G-VRSF25C400CJ
	1/5	R88G-VRSF05C750CJ
750 W	1/9	R88G-VRSF09D750CJ
	1/15	R88G-VRSF15D750CJ
	1/25	R88G-VRSF25D750CJ
	1/5	R88G-VRSF05D750CJ

Accessories and Cables

■ Connection Cables (Power Cables, Brake Cables, Encoder Cables)

<Standard Cables>

Power cable

Specifications		Without brake		With brake	
		Model		Model	
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003S	<i>NEW</i>	Note: There are separate connectors for power and brakes for 3,000-r/min Servomotors of 50 to 750W. When a Servomotor with a brake is used, it is necessary to use both a PowerCable for Servomotors without brakes and Power cable.	
	5 m	R88A-CAKA005S	<i>NEW</i>		
	10 m	R88A-CAKA010S	<i>NEW</i>		
	15m	R88A-CAKA015S	<i>NEW</i>		
	20 m	R88A-CAKA020S	<i>NEW</i>		
	30 m	R88A-CAKA030S	<i>NEW</i>		
	40 m	R88A-CAKA040S	<i>NEW</i>		
	50 m	R88A-CAKA050S	<i>NEW</i>		
[200 V] 3,000-r/min Servomotors of 1 to 2 kW 2,000-r/min Servomotors of 1 to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003S		R88A-CAGB003B	
	5 m	R88A-CAGB005S		R88A-CAGB005B	
	10 m	R88A-CAGB010S		R88A-CAGB010B	
	15 m	R88A-CAGB015S		R88A-CAGB015B	
	20 m	R88A-CAGB020S		R88A-CAGB020B	
	30 m	R88A-CAGB030S		R88A-CAGB030B	
	40 m	R88A-CAGB040S		R88A-CAGB040B	
	50 m	R88A-CAGB050S		R88A-CAGB050B	
[400 V] 3,000-r/min Servomotors of 750 W to 2 kW 2,000-r/min Servomotors of 400 W to 2 kW 1,000-r/min Servomotors of 900 W	3 m	R88A-CAGB003S		R88A-CAKF003B	<i>NEW</i>
	5 m	R88A-CAGB005S		R88A-CAKF005B	<i>NEW</i>
	10 m	R88A-CAGB010S		R88A-CAKF010B	<i>NEW</i>
	15 m	R88A-CAGB015S		R88A-CAKF015B	<i>NEW</i>
	20 m	R88A-CAGB020S		R88A-CAKF020B	<i>NEW</i>
	30 m	R88A-CAGB030S		R88A-CAKF030B	<i>NEW</i>
	40 m	R88A-CAGB040S		R88A-CAKF040B	<i>NEW</i>
	50 m	R88A-CAGB050S		R88A-CAKF050B	<i>NEW</i>
[200 V] [400 V] 3,000-r/min Servomotors of 3 to 5 kW 2,000-r/min Servomotors of 3 to 5 kW 1,000-r/min Servomotors of 2 to 3 kW	3 m	R88A-CAGD003S		R88A-CAGD003B	
	5 m	R88A-CAGD005S		R88A-CAGD005B	
	10 m	R88A-CAGD010S		R88A-CAGD010B	
	15 m	R88A-CAGD015S		R88A-CAGD015B	
	20 m	R88A-CAGD020S		R88A-CAGD020B	
	30 m	R88A-CAGD030S		R88A-CAGD030B	
	40 m	R88A-CAGD040S		R88A-CAGD040B	
	50 m	R88A-CAGD050S		R88A-CAGD050B	

Brake Cable

Specifications		Standard Cables	
		Model	
[100 V][200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003B	<i>NEW</i>
	5 m	R88A-CAKA005B	<i>NEW</i>
	10 m	R88A-CAKA010B	<i>NEW</i>
	15 m	R88A-CAKA015B	<i>NEW</i>
	20 m	R88A-CAKA020B	<i>NEW</i>
	30 m	R88A-CAKA030B	<i>NEW</i>
	40 m	R88A-CAKA040B	<i>NEW</i>
	50 m	R88A-CAKA050B	<i>NEW</i>

Encoder Cable

Specifications		Standard Cables	
		Model	
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003C	<i>NEW</i>
	5 m	R88A-CRKA005C	<i>NEW</i>
	10 m	R88A-CRKA010C	<i>NEW</i>
	15 m	R88A-CRKA015C	<i>NEW</i>
	20 m	R88A-CRKA020C	<i>NEW</i>
	30 m	R88A-CRKA030C	<i>NEW</i>
	40 m	R88A-CRKA040C	<i>NEW</i>
	50 m	R88A-CRKA050C	<i>NEW</i>
[200 V] 3,000-r/min Servomotors of 1 to 5 kW [400 V] 3,000-r/min Servomotors of 750 W to 5 kW [200 V] [400 V] 2,000-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003N	<i>NEW</i>
	5 m	R88A-CRKC005N	<i>NEW</i>
	10 m	R88A-CRKC010N	<i>NEW</i>
	15 m	R88A-CRKC015N	<i>NEW</i>
	20 m	R88A-CRKC020N	<i>NEW</i>
	30 m	R88A-CRKC030N	<i>NEW</i>
	40 m	R88A-CRKC040N	<i>NEW</i>
	50 m	R88A-CRKC050N	<i>NEW</i>

AC Servomotor/Drive OMNUC G5-series

<Robot Cables>

Power cable

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

Brake Cable

Specifications		Robot Cables	
		Model	
[100 V] [200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003BR	<i>NEW</i>
	5 m	R88A-CAKA005BR	<i>NEW</i>
	10 m	R88A-CAKA010BR	<i>NEW</i>
	15 m	R88A-CAKA015BR	<i>NEW</i>
	20 m	R88A-CAKA020BR	<i>NEW</i>
	30 m	R88A-CAKA030BR	<i>NEW</i>
	40 m	R88A-CAKA040BR	<i>NEW</i>
	50 m	R88A-CAKA050BR	<i>NEW</i>

Encoder Cable

Specifications		Robot Cables	
		Model	
[100 V/200 V] 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003CR	<i>NEW</i>
	5 m	R88A-CRKA005CR	<i>NEW</i>
	10 m	R88A-CRKA010CR	<i>NEW</i>
	15 m	R88A-CRKA015CR	<i>NEW</i>
	20 m	R88A-CRKA020CR	<i>NEW</i>
	30 m	R88A-CRKA030CR	<i>NEW</i>
	40 m	R88A-CRKA040CR	<i>NEW</i>
	50 m	R88A-CRKA050CR	<i>NEW</i>
[200 V] 3,000-r/min Servomotors of 1 to 5 kW [400 V] 3,000-r/min Servomotors of 750 W to 5 kW [200 V] [400 V] 2,000-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003NR	<i>NEW</i>
	5 m	R88A-CRKC005NR	<i>NEW</i>
	10 m	R88A-CRKC010NR	<i>NEW</i>
	15 m	R88A-CRKC015NR	<i>NEW</i>
	20 m	R88A-CRKC020NR	<i>NEW</i>
	30 m	R88A-CRKC030NR	<i>NEW</i>
	40 m	R88A-CRKC040NR	<i>NEW</i>
	50 m	R88A-CRKC050NR	<i>NEW</i>

■ 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 • 3.6 V	R88A-BAT01G

Analog Monitor Cable

Name	Length	Model
Analog Monitor Cable	1 m	R88A-CMK001S <i>NEW</i>

Servo Drive Connectors (common)

Name	Connects to	Model
Encoder Connector	CN2	R88A-CNW01R
External Scale Connector	CN4	R88A-CNK41L <i>NEW</i>
Safety Connector	CN8	R88A-CNK81S <i>NEW</i>

Servo Drive Connectors (General-purpose Input)

Name	Connects to	Model
Control I/O Connector	CN1	R88A-CNU11C

Servo Drive Connectors (MECHATROLINK-II Communications)

Name	Connects to	Model
Control I/O Connector	CN1	R88A-CNU01C

Servomotor Connector

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

■ Control Cables

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

Connection Cables (for CN1)

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

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

Name	Specifications	Model	
Connector Terminal Block Cables	Normal wiring	Length 0.5 m	XW2Z-C50X
		Length 1.0 m	XW2Z-100X
		Length 2.0 m	XW2Z-200X
		Length 3.0 m	XW2Z-300X
		Length 5.0 m	XW2Z-500X
		Length 10.0 m	XW2Z-010X
Connector Terminal Block Conversion Unit	20 pin M2.4 screw Terminal Block type	Through type	XW2B-20G4
	20 pin M3.5 screw Terminal Block type	Through type	XW2B-20G5
	20 pin M3 screw Terminal Block type	Slim type	XW2D-20G6

Control Cables (for Connector Terminal Block/CN1)

Name	Specifications	Model	
Connector Terminal Block Cables	Length 1.0 m	XW2Z-100J-B24	
	Length 2.0 m	XW2Z-200J-B24	
Connector Terminal Block Conversion Unit	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-50G4
	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

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 CJ1M-CPU21/CPU22/CPU23	for 1 axis	XW2B-20J6-8A
	for 2 axis	XW2B-40J6-9A
For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	for 2 axis	XW2B-80J7-12A
For CQM1H-PLB21	for 1 axis	XW2B-20J6-3B

Servo Relay Unit cable (for Servo Drive/CN1)

Specifications	Length	Model
Position Control Unit: For CJ1W-NC□□3□ For CS1W/C200HW-NC□□□□ (XW2B-20J6-1B, XW2B-40J6-2B) For CQM1H-PLB21 (XW2B-20J6-3B)	1 m	XW2Z-100J-B25
	2 m	XW2Z-200J-B25
For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)	1 m	XW2Z-100J-B31
	2 m	XW2Z-200J-B31
For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)	1 m	XW2Z-100J-B27
	2 m	XW2Z-200J-B27
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	1 m	XW2Z-100J-B26
	2 m	XW2Z-200J-B26

Servo Relay Unit cable (Position Control Unit)

Specifications	The number of axes	Length	Model	
CJ1W line-driver output type For CJ1W-NC133 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A18	
		1 m	XW2Z-100J-A18	
CJ1W line-driver output type For CJ1W-NC233/NC433 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A19	
		1 m	XW2Z-100J-A19	
CS1W line-driver output type For CS1W-NC133 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A10	
		1 m	XW2Z-100J-A10	
CS1W line-driver output type For CS1W-NC233/NC433 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A11	
		1 m	XW2Z-100J-A11	
CJ1W open collector output type For CJ1W-NC113 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A14	
		1 m	XW2Z-100J-A14	
CJ1W open collector output type For CJ1W-NC213/NC413 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A15	
		1 m	XW2Z-100J-A15	
CS1W/C200HW open collector output type For CS1W-NC113 For C200HW-NC113 (XW2B-20J6-1B)	for 1 axis	0.5 m	XW2Z-050J-A6	
		1 m	XW2Z-100J-A6	
CS1W/C200HW open collector output type For CS1W-NC213/NC413 For C200HW-NC213/NC413 (XW2B-40J6-2B)	for 2 axis	0.5 m	XW2Z-050J-A7	
		1 m	XW2Z-100J-A7	
CJ1M open collector output type For CJ1M-CPU21/CPU22/CPU23 (XW2B-20J6-8A, XW2B-40J6-9A)	for 1 axis	0.5 m	XW2Z-050J-A33	
		1 m	XW2Z-100J-A33	
For FQM1-MMA22 (Analog output) (XW2B-80J7-12A)	General-purpose I/O (26 pin)	for 2 axis	0.5 m	XW2Z-050J-A28
			1 m	XW2Z-100J-A28
			2 m	XW2Z-200J-A28
	Special I/O (40 pin)	for 2 axis	0.5 m	XW2Z-050J-A31
			1 m	XW2Z-100J-A31
			2 m	XW2Z-200J-A31
For FQM1-MMP22 (Pulse train output) (XW2B-80J7-12A)	General-purpose I/O (26 pin)	for 2 axis	0.5 m	XW2Z-050J-A28
			1 m	XW2Z-100J-A28
			2 m	XW2Z-200J-A28
	Special I/O (40 pin)	for 2 axis	0.5 m	XW2Z-050J-A30
			1 m	XW2Z-100J-A30
			2 m	XW2Z-200J-A30
For CQM1H-PLB21 (XW2B-20J6-3B)	for 1 axis	0.5 m	XW2Z-050J-A3	
		1 m	XW2Z-100J-A3	

● MECHATROLINK-II Communications

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

Name	Length	Model (OMRON model number)	Yaskawa model number
		MECHATROLINK-II Cables (with ring core and USB connector on both ends)	
	0.5 m	FNY-W6003-A5	JEPMC-W6003-A5
	1.0 m	FNY-W6003-01	JEPMC-W6003-01
	3.0 m	FNY-W6003-03	JEPMC-W6003-03
	5.0 m	FNY-W6003-05	JEPMC-W6003-05
	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 resistance	FNY-W6022	JEPMC-W6022
MECHATROLINK-II Repeater	Communications Repeater	FNY-REP2000	JEPMC-REP2000

- 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.)

Control Cables

Name	Specifications		Model
	Connector Terminal Block Cables		Length 1.0 m
		Length 2.0 m	XW2Z-200J-B33
Connector Terminal Block	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-20G4
	Conversion Unit for General-purpose Controllers (M3.5 screws)	Through type	XW2B-20G5
	Conversion Unit for General-purpose Controllers (M3 screws)	Slim type	XW2D-20G6

■ 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-RR22047S
500 W 20 Ω	R88A-RR50020S

Reactors

Specifications		Model
General-purpose Inputs	MECHATROLINK-II Communications	
R88D-KTA5L/-KT01H	R88D-KNA5L-ML2/-KN01H-ML2	3G3AX-DL2002
R88D-KT01L/-KT02H	R88D-KN01L-ML2/-KN02H-ML2	3G3AX-DL2004
R88D-KT02L/-KT04H	R88D-KN02L-ML2/-KN04H-ML2	3G3AX-DL2007
R88D-KT04L/-KT08H/-KT10H	R88D-KN04L-ML2/-KN08H-ML2/ -KN10H-ML2	3G3AX-DL2015
R88D-KT15H	R88D-KN15H-ML2	3G3AX-DL2022
R88D-KT08H/-KT10H/-KT15H/-KT06F/ -KT10F/-KT15F	R88D-KN08H-ML2/-KN10H-ML2/ -KN15H-ML2	3G3AX-DL2025
R88D-KT20H/-KT30H/-KT20F/-KT30F	R88D-KN20H-ML2/-KN30H-ML2	3G3AX-AL2055
R88D-KT50H/-KT50F	R88D-KN50H-ML2	3G3AX-AL2110

Mounting Brackets (L Brackets for Rack Mounting)

Specifications		Model
General-purpose Inputs	MECHATROLINK-II Communications	
R88D-KTA5L/-KT01L/-KT01H/-KT02H	R88D-KNA5L-ML2/-KN01L-ML2/ -KN01H-ML2/-KN02H-ML2	R88A-TK01K <i>NEW</i>
R88D-KT02L/-KT04H	R88D-KN02L-ML2/-KN04H-ML2	R88A-TK02K <i>NEW</i>
R88D-KT04L/-KT08H	R88D-KN04L-ML2/-KN08H-ML2	R88A-TK03K <i>NEW</i>
R88D-KT10H/KT15H	R88D-KN10H-ML2/-KN15H-ML2	R88A-TK04K <i>NEW</i>

■ Support Software (CX-One/CX-Drive)

Product name	Specifications	Number of licenses	Media		Model
			CD	DVD	
CX-One FA Integrated Tool Package Ver. 3.□	The CX-One is a package that integrates Support Software for OMRON PLCs and components. CX-One runs on the following OS. OS: Windows 2000 (Service Pack 3 or higher), XP, or Vista CX-One Ver.3.□ includes CX-Drive Ver.1.□. For details, refer to the CX-One catalog (Cat. No. R134).	1 license	CD		CXONE-AL01C-V3
				DVD	CXONE-AL01D-V3
	CX-Drive can still be ordered individually in the following model numbers.				
CX-Drive Ver.1.□	Application software to set and control data for Inverters and Servos. OS: Windows 2000 (Service Pack 3 or higher), XP, or Vista	1 license	CD		WS02-DRVC1

*1. Site licenses are available for the CX-One (3, 10, 30, or 50 licenses).

*2. Before ordering the software on a DVD, be sure that your computer and drive are compatible with the DVD format.

Combination table

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

<Cylinder Type>

● 3,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers	
	General-purpose Inputs	MECHATROLINK-II	Output	With incremental encoder	With absolute encoder
Single-phase 100 to 115 VAC	R88D-KTA5L	R88D-KNA5L-ML2	50 W	R88M-K05030H-□	R88M-K05030T-□
	R88D-KT01L	R88D-KN01L-ML2	100 W	R88M-K10030L-□	R88M-K10030S-□
	R88D-KT02L	R88D-KN02L-ML2	200 W	R88M-K20030L-□	R88M-K20030S-□
	R88D-KT04L	R88D-KN04L-ML2	400 W	R88M-K40030L-□	R88M-K40030S-□
Single-phase/ three-phase 200 to 240 VAC	R88D-KT01H	R88D-KN01H-ML2	50 W	R88M-K05030H-□	R88M-K05030T-□
	R88D-KT01H	R88D-KN01H-ML2	100 W	R88M-K10030H-□	R88M-K10030T-□
	R88D-KT02H	R88D-KN02H-ML2	200 W	R88M-K20030H-□	R88M-K20030T-□
	R88D-KT04H	R88D-KN04H-ML2	400 W	R88M-K40030H-□	R88M-K40030T-□
	R88D-KT08H	R88D-KN08H-ML2	750 W	R88M-K75030H-□	R88M-K75030T-□
	R88D-KT15H	R88D-KN15H-ML2	1 kW	R88M-K1K030H-□	R88M-K1K030T-□
Three-phase 200 to 240 VAC	R88D-KT15H	R88D-KN15H-ML2	1.5 kW	R88M-K1K530H-□	R88M-K1K530T-□
	R88D-KT20H	R88D-KN20H-ML2	2 kW	R88M-K2K030H-□	R88M-K2K030T-□
	R88D-KT30H	R88D-KN30H-ML2	3 kW	R88M-K3K030H-□	R88M-K3K030T-□
	R88D-KT50H	R88D-KN50H-ML2	4 kW	R88M-K4K030H-□	R88M-K4K030T-□
Three-phase 400 to 480 VAC	R88D-KT50H	R88D-KN50H-ML2	5 kW	R88M-K5K030H-□	R88M-K5K030T-□
	R88D-KT10F	R88D-KN10F-ML2	750 W	R88M-K75030F-□	R88M-K75030C-□
	R88D-KT15F	R88D-KN15F-ML2	1 kW	R88M-K1K030F-□	R88M-K1K030C-□
	R88D-KT15F	R88D-KN15F-ML2	1.5 kW	R88M-K1K530F-□	R88M-K1K530C-□
	R88D-KT20F	R88D-KN20F-ML2	2 kW	R88M-K2K030F-□	R88M-K2K030C-□
	R88D-KT30F	R88D-KN30F-ML2	3 kW	R88M-K3K030F-□	R88M-K3K030C-□
Three-phase 400 to 480 VAC	R88D-KT50F	R88D-KN50F-ML2	4 kW	R88M-K4K030F-□	R88M-K4K030C-□
	R88D-KT50F	R88D-KN50F-ML2	5 kW	R88M-K5K030F-□	R88M-K5K030C-□

● 2,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers	
	General-purpose Inputs	MECHATROLINK-II	Output	With incremental encoder	With absolute encoder
Single-phase/ three-phase 200 to 240 VAC	R88D-KT10H	R88D-KN10H-ML2	1 kW	R88M-K1K020H-□	R88M-K1K020T-□
	R88D-KT15H	R88D-KN15H-ML2	1.5 kW	R88M-K1K520H-□	R88M-K1K520T-□
Three-phase 200 to 240 VAC	R88D-KT20H	R88D-KN20H-ML2	2 kW	R88M-K2K020H-□	R88M-K2K020T-□
	R88D-KT30H	R88D-KN30H-ML2	3 kW	R88M-K3K020H-□	R88M-K3K020T-□
	R88D-KT50H	R88D-KN50H-ML2	4 kW	R88M-K4K020H-□	R88M-K4K020T-□
	R88D-KT50H	R88D-KN50H-ML2	5 kW	R88M-K5K020H-□	R88M-K5K020T-□
Three-phase 400 to 480 VAC	R88D-KT06F	R88D-KN06F-ML2	400 W	R88M-K40020F-□	R88M-K40020C-□
	R88D-KT06F	R88D-KN06F-ML2	600 W	R88M-K60020F-□	R88M-K60020C-□
	R88D-KT10F	R88D-KN10F-ML2	1 kW	R88M-K1K020F-□	R88M-K1K020C-□
	R88D-KT15F	R88D-KN15F-ML2	1.5 kW	R88M-K1K520F-□	R88M-K1K520C-□
	R88D-KT20F	R88D-KN20F-ML2	2 kW	R88M-K2K020F-□	R88M-K2K020C-□
	R88D-KT30F	R88D-KN30F-ML2	3 kW	R88M-K3K020F-□	R88M-K3K020C-□
	R88D-KT50F	R88D-KN50F-ML2	4 kW	R88M-K4K020F-□	R88M-K4K020C-□
Three-phase 400 to 480 VAC	R88D-KT50F	R88D-KN50F-ML2	5 kW	R88M-K5K020F-□	R88M-K5K020C-□

● 1,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers			Servomotor Model Numbers	
	General-purpose Inputs	MECHATROLINK-II	Output	With incremental encoder	With absolute encoder
Single-phase/	R88D-KT15H	R88D-KN15H-ML2	900 W	R88M-K90010H-□	R88M-K90010T-□
Three-phase 200 to 240 VAC	R88D-KT30H	R88D-KN30H-ML2	2 kW	R88M-K2K010H-□	R88M-K2K010T-□
	R88D-KT50H	R88D-KN50H-ML2	3 kW	R88M-K3K010H-□	R88M-K3K010T-□
Three-phase 400 to 480 VAC	R88D-KT15F	R88D-KN15F-ML2	900 W	R88M-K90010F-□	R88M-K90010C-□
	R88D-KT30F	R88D-KN30F-ML2	2 kW	R88M-K2K010F-□	R88M-K2K010C-□
	R88D-KT50F	R88D-KN50F-ML2	3 kW	R88M-K3K010F-□	R88M-K3K010C-□

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□ (Also used with R88M-K10030□)	R88G-HPG11B09050B□ (Gear ratio 1/9)	R88G-HPG14A21100B□ (Also used with R88M-K10030□)	R88G-HPG14A33050B□	R88G-HPG14A45050B□
R88M-K10030□	R88G-HPG11B05100B□	R88G-HPG14A11100B□	R88G-HPG14A21100B□	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□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33600SB□ (Also used with R88M-K60020□)	R88G-HPG50A451K5B□ (Also used with R88M-K1K530□)
R88M-K1K030□	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG50A332K0B□ (Also used with R88M-K2K030□)	R88G-HPG50A451K5B□ (Also used with R88M-K1K530□)
R88M-K1K530□	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□	R88G-HPG50A332K0B□ (Also used with R88M-K2K030□)	R88G-HPG50A451K5B□
R88M-K2K030□	R88G-HPG32A052K0B□	R88G-HPG32A112K0B□	R88G-HPG50A212K0B□	R88G-HPG50A332K0B□	-
R88M-K3K030□	R88G-HPG32A053K0B□	R88G-HPG50A113K0B□	R88G-HPG50A213K0B□	-	-
R88M-K4K030□	R88G-HPG32A054K0B□	R88G-HPG50A115K0B□ (Also used with R88M-K5K030□)	-	-	-
R88M-K5K030□	R88G-HPG50A055K0B□	R88G-HPG50A115K0B□	-	-	-

● 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-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33750FB□ (Also used with R88M-K60020□)	R88G-HPG32A45400SB□
R88M-K60020□ (Only 400 V)	R88G-HPG32A052K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-K2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-K1K5030□)	R88G-HPG32A33750FB□	R88G-HPG50A451K5B□ (R88M-K1K530□)
R88M-K1K020□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG32A211K0SB□	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A451K0SB□
R88M-K1K520□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)	-
R88M-K2K020□	R88G-HPG32A053K0B□ (Also used with R88M-K3K030□)	R88G-HPG32A112K0SB□	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□	-
R88M-K3K020□	R88G-HPG32A054K0B□ (Also used with R88M-K4K030□)	R88G-HPG50A115K0B□ (Also used with R88M-K5K030□)	R88G-HPG50A213K0SB□	R88G-HPG65A253K0SB□	-
R88M-K4K020□	R88G-HPG50A055K0SB□ (Also used with R88M-K5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-K3K030□)	R88G-HPG65A205K0SB□ (Also used with R88M-K3K030□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)	-
R88M-K5K020□	R88G-HPG50A055K0SB□	R88G-HPG50A115K0SB□	R88G-HPG65A205K0SB□	R88G-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-HPG32A053K0B□ (Also used with R88M-K5K020□)	R88G-HPG32A112K0SB□ (Also used with R88M-K2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-K3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-K2K020□)
R88M-K2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG65A205K0SB□ (Also used with R88M-K5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)
R88M-K3K010□	R88G-HPG50A055K0SB□ (Also used with R88M-K5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-K5K020□)	R88G-HPG65A205K0SB□ (Also used with R88M-K5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-K5K020□)

Controller Combinations

● 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		Servo Relay Unit		Servo Drive Cable	
CQM1H-PLB21	XW2Z-□□□J-A3		XW2B-20J6-3B		XW2Z-□□□J-B25	
CS1W-NC113	XW2Z-□□□J-A6		XW2B-20J6-1B			
C200HW-NC113						
CS1W-NC213	XW2Z-□□□J-A7		XW2B-40J6-2B			
CS1W-NC413						
C200HW-NC213						
C200HW-NC413						
CS1W-NC133	XW2Z-□□□J-A10		XW2B-20J6-1B			
CS1W-NC233	XW2Z-□□□J-A11		XW2B-40J6-2B			
CS1W-NC433						
CJ1W-NC113	XW2Z-□□□J-A14		XW2B-20J6-1B			
CJ1W-NC213	XW2Z-□□□J-A15		XW2B-40J6-2B			
CJ1W-NC413						
CJ1W-NC133	XW2Z-□□□J-A18		XW2B-20J6-1B			
CJ1W-NC233	XW2Z-□□□J-A19		XW2B-40J6-2B			
CJ1W-NC433						
CJ1M-CPU21	XW2Z-□□□J-A33		For 1 axis	XW2B-20J6-8A	XW2Z-□□□J-B31	
CJ1M-CPU22			For 2 axis	XW2B-40J6-9A		
CJ1M-CPU23						
FQM1-MMP22	General-purpose I/O	XW2Z-□□□J-A28	XW2B-80J7-12A		XW2Z-□□□J-B26	
	Special I/O	XW2Z-□□□J-A30				
FQM1-MMA22	General-purpose I/O	XW2Z-□□□J-A28			XW2Z-□□□J-B27	
	Special I/O	XW2Z-□□□J-A31				

Note: 1. Insert the cable length into the boxes in the model number (□□□). 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.

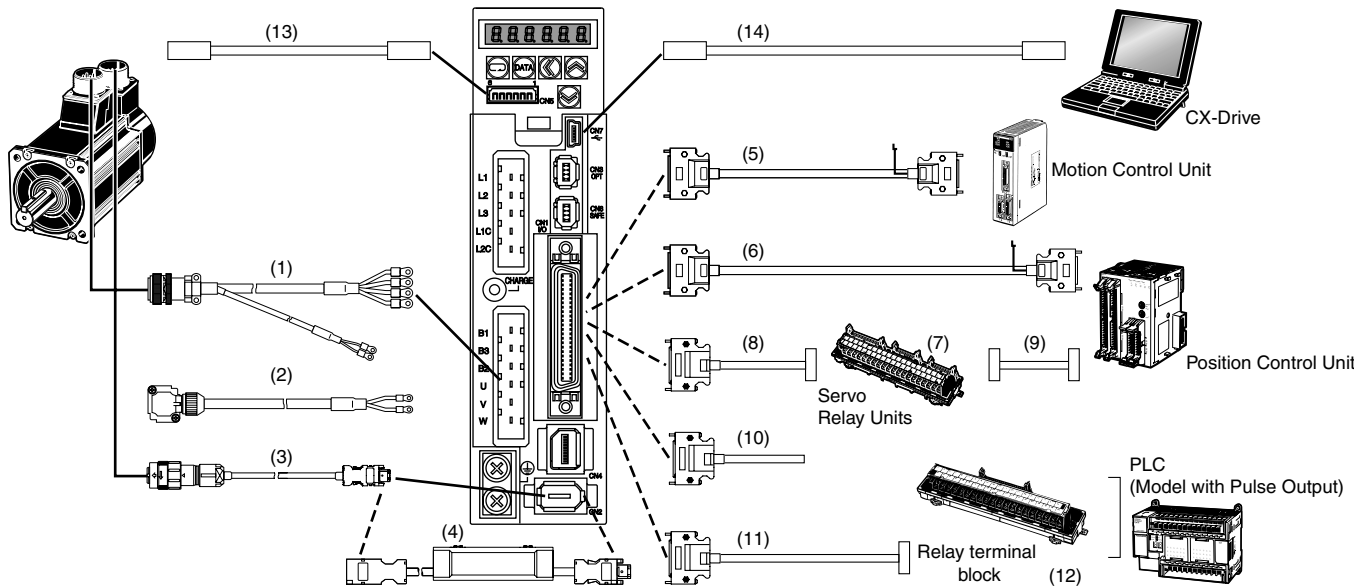
Motion Control Unit	Cable		Remarks
CS1W-MC221-V1	For 1 axis	R88A-CPG□□□M1	The □□□ digits in the model number indicate the cable length. Motion Control Unit Cables come in four lengths: 1 m, 2 m, 3 m, and 5 m. Example model number for 2-m 1-axis cable: R88A-CPG002M1
CS1W-MC421-V1	For 2 axis	R88A-CPG□□□M2	

MEMO

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Ordering Information

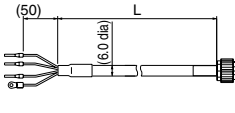
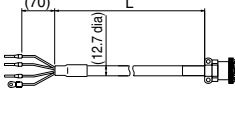
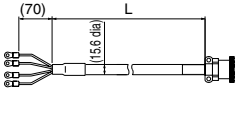
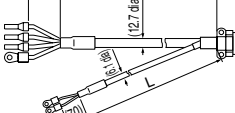
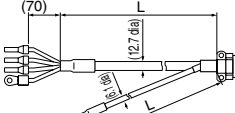
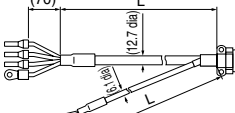
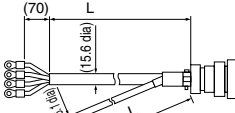
Cable Combinations



Servomotor Power Cables (For CNB)

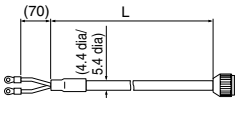
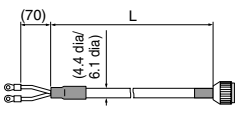
Symbol	Name	Connected to	Model	Description	
(1)	Without Brakes	Standard Servomotor Power Cables for Servomotors without Brakes	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 [Servomotor Connector] Angle plug: JN8FT04SJ1 (Japan Aviation Electronics Industry, Ltd.) Contact pins: ST-TMH-S-C1B-3500-A534G (Japan Aviation Electronics Industry, Ltd.)
			[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□□□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.	 [Servomotor Connector] Straight plug: N/MS3106B20-4S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			[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-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.	 [Servomotor Connector] Straight plug: N/MS3106B22-22S (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 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.	 [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (Japan Aviation Electronics Industry, Ltd.)
	With Brakes	Standard Servomotor Power Cables for Servomotors with Brakes	Note: There are separate connectors for power and brakes for 100 V and 200 V 3,000-r/min motors of 50 to 750 W. Therefore, when a motor with a brake is used, it will require both a power cable for a motor without a brake and a brake cable.		
			[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.	 [Servomotor Connector] 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, 1 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.	 [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.	 [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (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)

Symbol	Name	Connected to	Model	Description	
(1)	Without Brakes Robot Servomotor Power Cables for Servomotors without Brakes	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□SR 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.	 [Servomotor Connector] Angle plug: JN8FT04SJ1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: ST-TMH-S-C1B-3500-A534G (Japan Aviation Electronics Industry, Ltd.)	
		[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□□□SR 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.	 [Servomotor Connector] Straight plug: N/MS3106B20-4S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
		[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-CAGD□□□SR 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.	 [Servomotor Connector] Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
		[200 V] [400 V] Cylindrical Servomotors, 1,000 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□□□SR 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.	 [Servomotor Connector] Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
	With Brakes Robot Servomotor Power Cables for Servomotors with Brakes	Note: There are separate connectors for power and brakes for 100 V and 200 V 3,000-r/min motors of 50 to 750 W. Therefore, when a motor with a brake is used, it will require both a power cable for a motor without a brake and a brake cable.			
		[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□□□BR 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.	 [Servomotor Connector] Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)	
		[400 V] Cylindrical Servomotors, 3,000 r/min, 1 to 2 kW Cylindrical Servomotors, 2,000 r/min, 400 W to 2 kW Cylindrical Servomotors, 1,000 r/min, 900 W	R88A-CAKF□□□BR 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.	 [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, 1,000 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□□□BR 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.	 [Servomotor Connector] Straight plug: N/MS3106B24-11S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-16A (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)

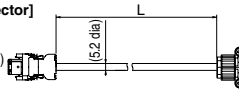
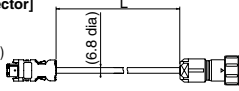
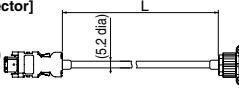
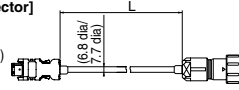
Brake Cables

Symbol	Name	Connected to	Model	Description
(2)	Standard Cables Brake Cables (Standard Cables)	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□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)	 [Servomotor Connector] Angle plug: JN4FT02SJ1-R (Japan Aviation Electronics Industry, Ltd.) Connector pins: ST-TMH-S-C1B-3500-(A534G) (Japan Aviation Electronics Industry, Ltd.)
	Robot Cables Brake Cables (Robot Cables)	[100 V] [200 V] Cylindrical Servomotors, 3,000 r/min, 50 to 750 W	R88A-CAKA□□□BR 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)	 [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)

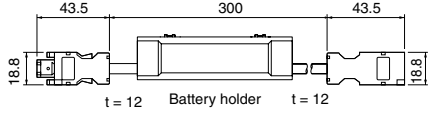
AC Servomotor/Drive OMNUC G5-series

Encoder Cables (for CN2)

Symbol	Name	Connected to	Model	Description
(3)	Standard Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA□□□C 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)	<p>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</p>  <p>[Servomotor Connector] Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)</p>
		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□□□N 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.	<p>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</p>  <p>[Servomotor Connector] Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Contact: JN1-22-20S-10000 (Japan Aviation Electronics Industry, Ltd.)</p>
(3)	Robot Encoder Cables with Connectors	Cylindrical Servomotors, 3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA□□□CR 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)	<p>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</p>  <p>[Servomotor Connector] Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)</p>
		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)	<p>[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)</p>  <p>[Servomotor Connector] Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Cable clamp: JN1-22-22S-10000 (Japan Aviation Electronics Industry, Ltd.)</p>

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)	Absolute Encoder Battery Cable	Battery not included	0.3 m R88A-CRGD0R3C	
		One R88A-BAT01G Battery included.	0.3 m R88A-CRGD0R3C-BS	
	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)	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
(6)	Control Cables Direct connection cable for Position Control Unit (High-speed type)	Line-driver output type (High-speed type) for CJ1W-NC234/434	XW2Z-□□□J-G9 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.
		Line-driver output type (High-speed type) for CJ1W-NC234/434	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.
		Open collector output type (High-speed type) for CJ1W-NC214/D88NC414	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/D88NC414	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: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Symbol	Name		Connected to	Model
(7)	Servo Relay Units		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 CJ1M-CPU21/CPU22/CPU23	For 1 axis XW2B-20J6-8A For 2 axis XW2B-40J6-9A
			For FQM1-MMA22 (Analog output) For FQM1-MMP22 (Pulse train output)	For 2 axis XW2B-80J7-12A
			For CQM1H-PLB21	For 1 axis XW2B-20J6-3B
(8)	Servo Relay Unit Cables for Servo Drives		Position Control Unit: For CJ1W-NC□□3, CS1W/C200HW-NC□□□ (XW2B-20J6-1B, XW2B-40J6-2B) For CQM1H-PLB21 (XW2B-20J6-3B)	XW2Z-□□□J-B25 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
			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.
			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.
			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.
(9)	Servo Relay Unit Cables for Servo Drives	Connection Cables	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.
			CJ1W line-driver output type for CJ1W-NC233/NC433	For 2 axis XW2Z-□□□J-A19 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W line-driver output type for CS1W-NC133	For 1 axis XW2Z-□□□J-A10 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CS1W line-driver output type for CS1W-NC233/NC433	For 2 axis XW2Z-□□□J-A11 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
	Servo Relay Unit Cables for Position Control Units	Connection Cables	CJ1W open collector output type for CJ1W-NC113	For 1 axis XW2Z-□□□J-A14 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			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-□□□J-A6 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-NC213/NC413 for C200HW-NC213/NC413	For 2 axis XW2Z-□□□J-A7 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
			CSW/C200HW open collector output type for CJ1M-CPU21/CPU22/CPU23	For 1 axis XW2Z-□□□J-A33 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.

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

AC Servomotor/Drive OMNUC G5-series

Symbol	Name		Connected to			Model	
(9)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Position Control Units	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.
				For FQM1-MMA22 (Analog output)	Special I/O (40 pin)	For 2 axis	XW2Z-□□□J-A31 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For FQM1-MMP22 (Pulse train output)	Special I/O (40 pin)	For 2 axis	XW2Z-□□□J-A30 The empty boxes in the model number are for the cable length. The cable can be 0.5, 1, or 2 m long.
				For CQM1H-PLB21		For 1 axis	XW2Z-□□□J-A3 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 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)	For Connector Terminal Block	Connector Terminal Block Cables	Cables 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.	
(12)		Connector-Terminal Block Conversion Units	Conversion Unit for General-purpose Controllers (M3 screws)	Through type	XW2B-50G4		
			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			

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

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

Connectors

Connectors	Name	Model
CN1	Control I/O Connector	R88A-CNU11C
CN2	Encoder Connector	R88A-CNW01R
CN4	External scale connector	R88A-CNK41L
CN8	Safety connector	R88A-CNK81S

Servomotor Connector

Connectors	Name	Connected to	Model
-	Motor connector for encoder cable	3,000 r/min, 50 to 750 W	R88A-CNK02R
		3,000 r/min, 50 to 750 W (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

About Manuals

Please read the relevant manuals of OMNUC G5-Series

English Cat. No.	Japanese Cat. No.	Type	Name
I571	SBCE-357	R88D-KT/R88M-K	OMNUC G5-SERIES AC SERVO MOTOR AND SERVO DRIVE USER'S MANUAL
W453	SBCE-337	CXONE-AL□C/D-V□ WS02-DRVC01	CX-Drive OPERATION MANUAL

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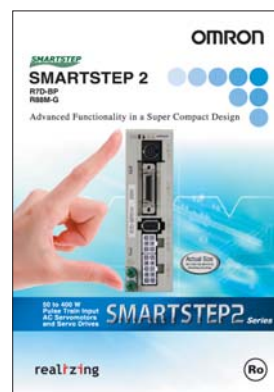
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