OMRON

AC Servomotors / Linear Motors / Servo Drives

G5 Series

Extreme mechatronics meets X-Stream Automation



» Sub micron precision and ms settling time

» Motion network and safety built-in

» Double registration and full closed loop

SYSMAC always in control

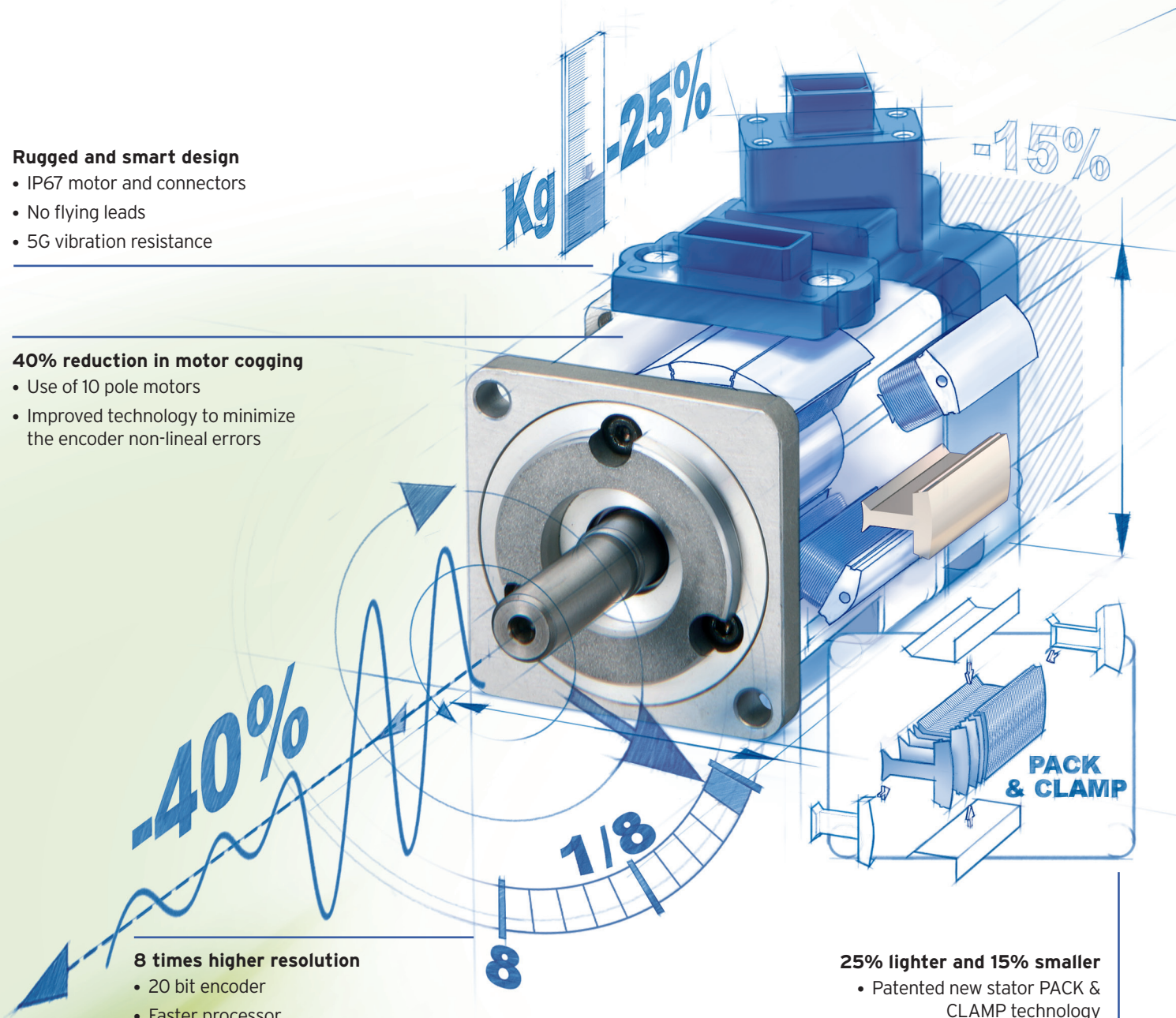
Extreme mechatronics...
At the heart of every great machine

Great machines are born from a perfect match between control and mechanics. G5 gives you the extra edge to build more accurate, faster, smaller and safer machines. You will benefit from an almost 25% reduction in motor weight, and gain 50% cabinet space.
You will achieve sub micron precision and ms settling time. Some might call it perfection, we just call it tireless innovation to help you build great machines.

Panel operator functions
- Display shows user selected data
- Keys for setting/ monitoring parameters
- 2 configurable analog outputs for monitoring

Rugged and smart design
- IP67 motor and connectors
- No flying leads
- 5G vibration resistance

40% reduction in motor cogging
- Use of 10 pole motors
- Improved technology to minimize the encoder non-lineal errors



8 times higher resolution
- 20 bit encoder
- Faster processor

25% lighter and 15% smaller
- Patented new stator PACK & CLAMP technology
- 40% reduction in iron losses
- 45% smaller encoder

Up to 50% cabinet size reduction

- Up to 40% smaller drive
- Extra 10% saving thanks to side by side mounting

Safety conformance

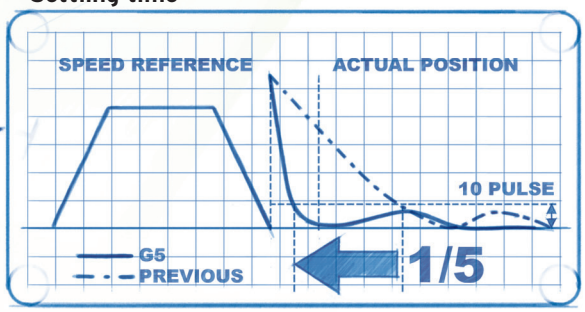
- PL-d according ISO13849-1:2008
- STO: IEC61800-5-2:2007
- SIL2 according to EN61508:2001
- Cat.3: EN954-1:1996

Fast & accurate

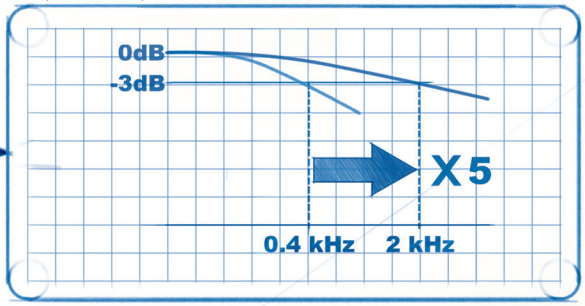
- 5 times faster settling time -0~2 ms
- 2 kHz speed response
- Torque feed forward reduces following error



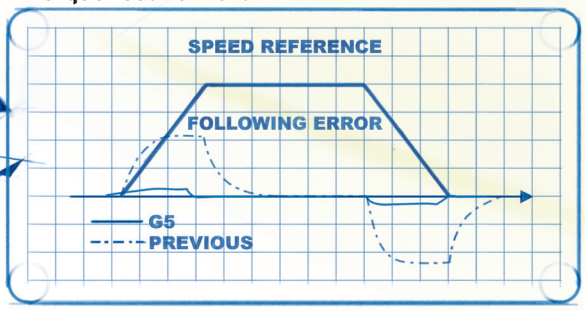
Settling time



Speed response

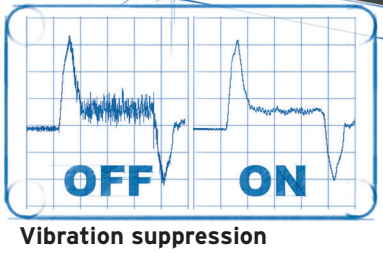


Torque feed forward



100,000 hr operation in rugged industrial conditions

- No fan below 1 kW
- Long life capacitors



Vibration suppression

Load vibration suppression

- Up to 4 preset frequencies
- Setting frequency from 1 to 200Hz



... meets X-Stream Automation

G5 seamlessly integrates into Omron's ONE SOFTWARE - ONE MACHINE CONTROL automation architecture. It utilises Ethernet connectivity and is fully configured through the SYSMAC STUDIO. G5 also simplifies your mechanical and electrical design by including double registration input, full closed loop and multi-drive safety functionality.

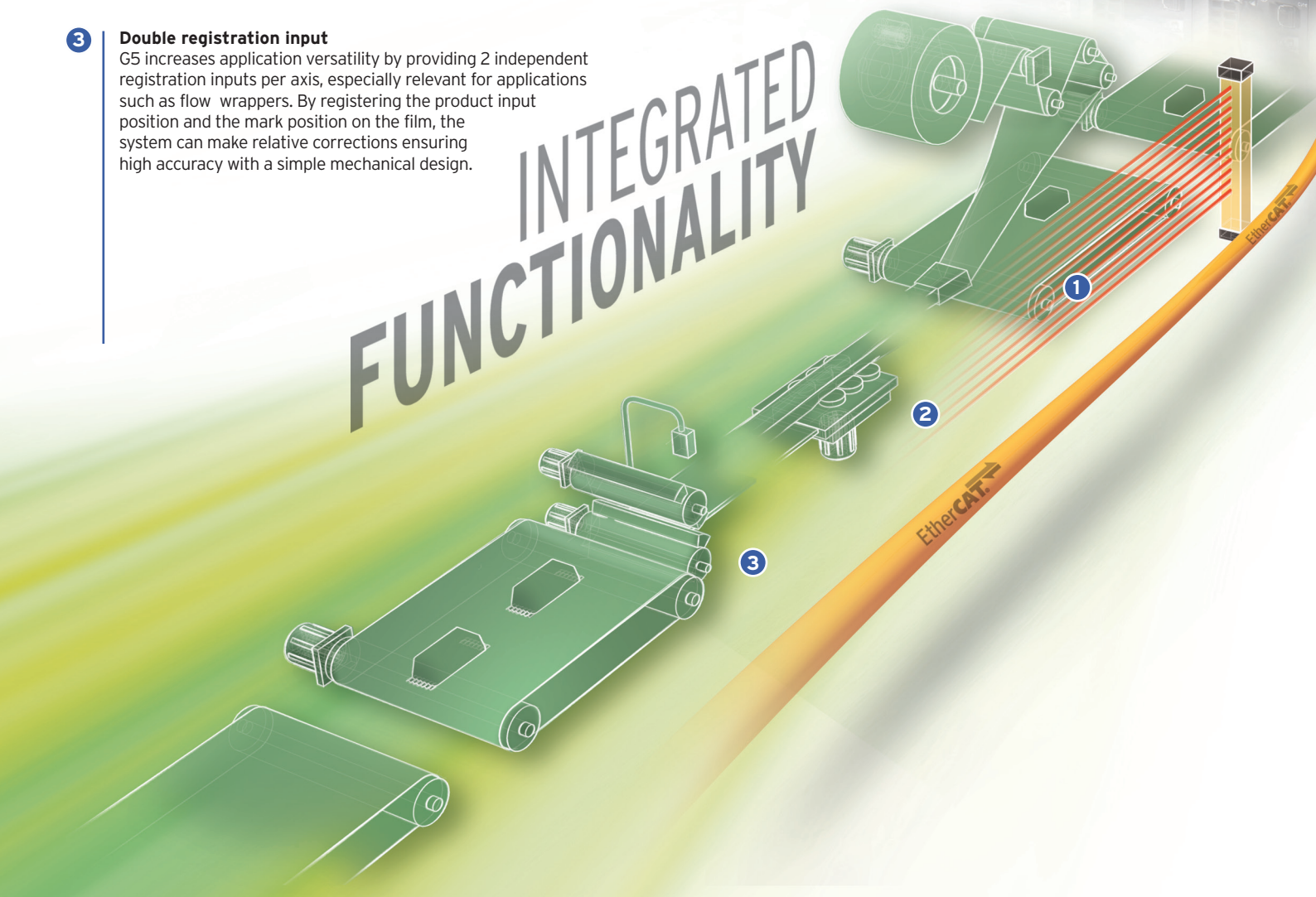


1. **Built-in safety: multi-drives in a single safety relay circuit**
   The two safety inputs and the external device monitoring (EDM) output can be linked from one servo drive to another without using additional safety relays. Up to 8 servo drives can be connected to a single safety relay, saving hardware and wiring costs.

2. **Full closed loop**
   G5 has a built-in external encoder input for full closed loop operation, for when additional accuracy is required. The external encoder input eliminates the errors caused by, for example, slip in the material.

3. **Double registration input**
   G5 increases application versatility by providing 2 independent registration inputs per axis, especially relevant for applications such as flow wrappers. By registering the product input position and the mark position on the film, the system can make relative corrections ensuring high accuracy with a simple mechanical design.

INTEGRATED FUNCTIONALITY



Machine Automation Controller

NS HMI

EtherNet/IP

EtherCAT

Ethernet

ETHERNET CONNECTIVITY

ONE SOFTWARE

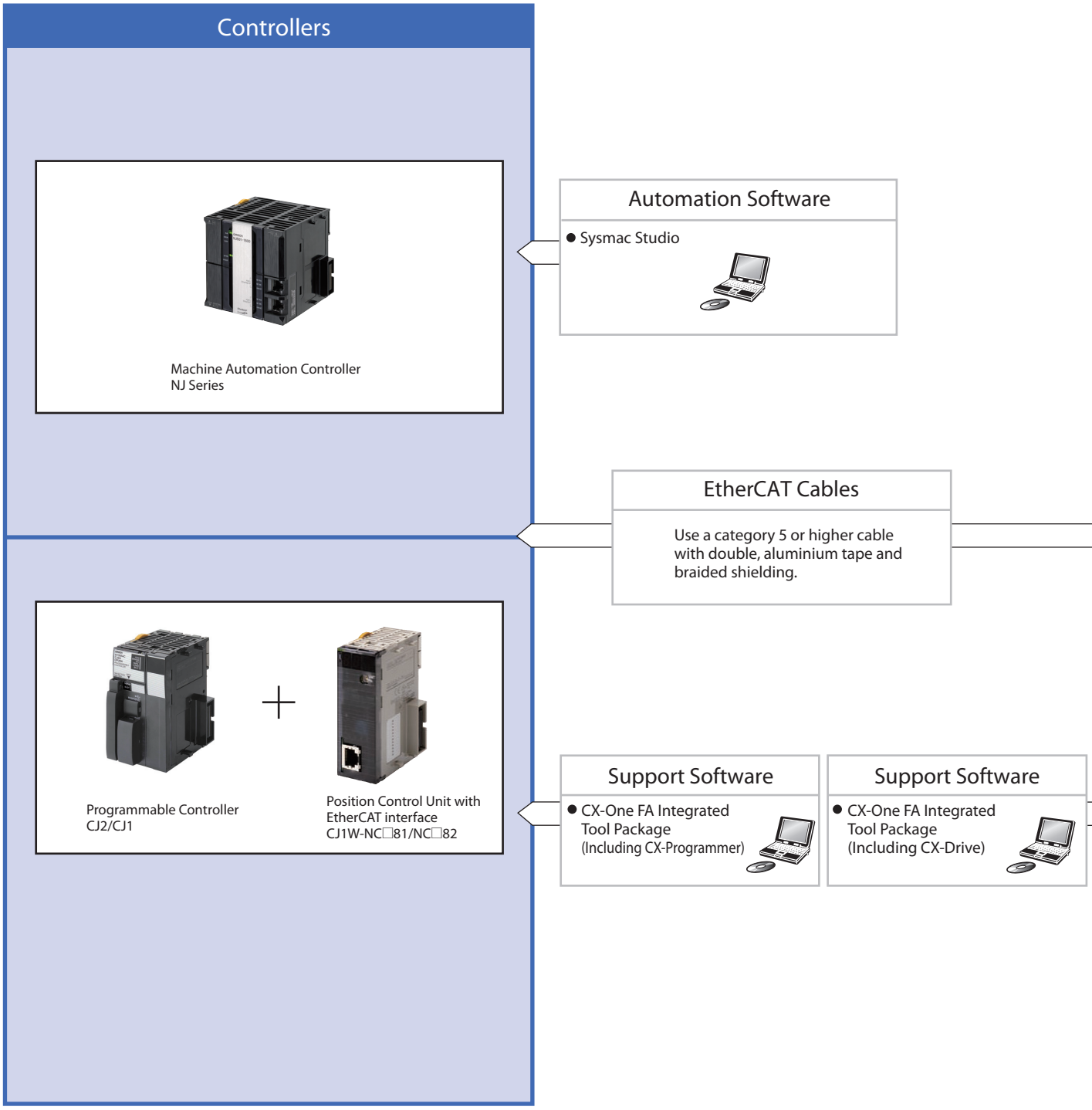
One software - SYSMAC STUDIO

- Full access to all devices from one connection
- One software for machine control programming, configuration simulation and monitoring



R88M-K/R88D-KN□-ECT

System Configuration



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

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



Servo Drive



● G5 Series
Drives with Built-in
EtherCAT Communications
R88D-KN□□-ECT

EtherCAT Communications

USB Communications

External scale

Peripheral Devices

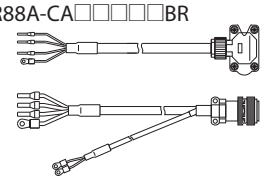
● Reactors
3G3AX-DL
3G3AX-AL

● External Regeneration Resistors
R88A-RR

I/O signals

Power Cables

- Non-Flexible Cables
  - Without Brake
    R88A-CA□□□□□S
  - With Brake
    R88A-CA□□□□□B
- Flexible Cables
  - Without Brake
    R88A-CA□□□□□SR
  - With Brake
    R88A-CA□□□□□BR



Brake Cables (50 to 750 W or less)

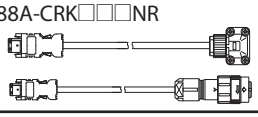
- Non-Flexible Cables
  R88A-CAKA□□□B
- Flexible Cables
  R88A-CAKA□□□BR

Motor power signals

Feedback Signals

Encoder Cables

- Non-Flexible Cables
  - 750W or less
    R88A-CRK□□□□**C**
  - 1.0kW or more
    R88A-CRKC□□□N
- Flexible Cables
  - 750W or less
    R88A-CRK□□□□CR
  - 1.0kW or more
    R88A-CRK□□□NR



Absolute Encoder Battery Cable

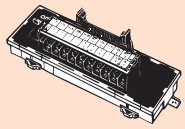
R88A-CRGD0R3C (-BS)
(One Battery is included with model numbers ending in"BS")



Note: Not required if a battery is connected to the control connector (CN1).

Connector-Terminal Block Conversion Units and Cable

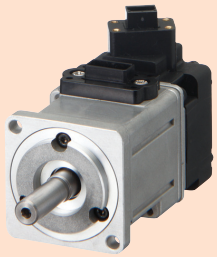
● Connector-Terminal Block Conversion Unit
XW2□-20G□



● Cable
XW2Z-□□□J-B34



AC Servomotors



● G5 Series motor
R88M-K

3000r/min
2000r/min
1500r/min
1000r/min

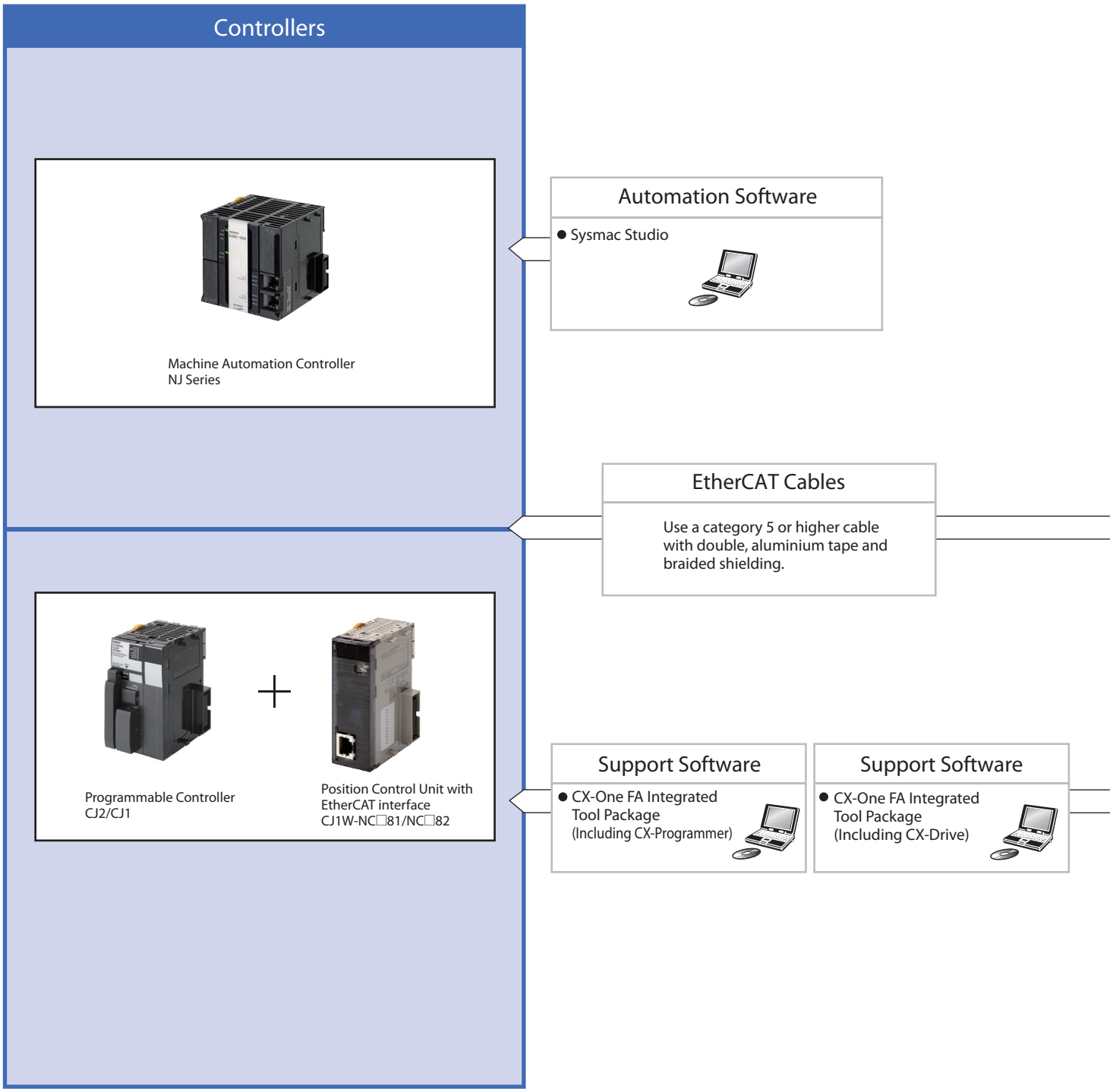
INC ABS INC

Decelerators



R88L-EC/R88D-KN□-ECT-L

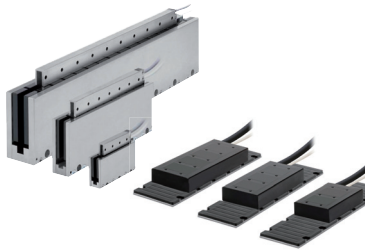
System Configuration



Linear Motor for Higher-speed and Higher-precision

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





Servo Drive



EtherCAT Communications

- G5 Series
  Drives with Built-in EtherCAT Communications
  Linear Motor type
  R88D-KN□□-ECT-L

USB Communications

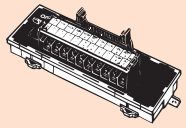
Peripheral Devices

- Reactors
  3G3AX-DL
  3G3AX-AL
- External Regeneration Resistors
  R88A-RR

I/O signals

Connector-Terminal Block Conversion Units and Cable

- Connector-Terminal Block Conversion Unit
  XW2□-20G□



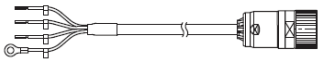
- Cable
  XW2Z-□□□J-B34



Motor power signals

Power Cables

- Power Cable
  R88A-CAW□□□□S-DE



Feedback Signals

Hall Sensor Connection

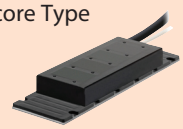
- (Refer to Ordering Information for more details)

Temperature Sensor Connection

- (Refer to Ordering Information for more details)

Linear Moter

- Iron-core Type



Motor Coil Unit : R88L-EC-FW-□
Magnet Trac : R88L-EC-FM-□

- Ironless Type

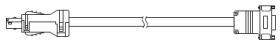


Motor Coil Unit : R88L-EC-GW-□
Magnet Trac : R88L-EC-GM-□

Feedback Signals

Linear Encoder Connection Options

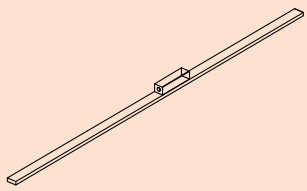
- A/B Pulse Linear Encoder Cable
  R88A-CRKN□□□CR-E



- SinCos Linear Encoder Feedback
  (Refer to Ordering Information for more details)

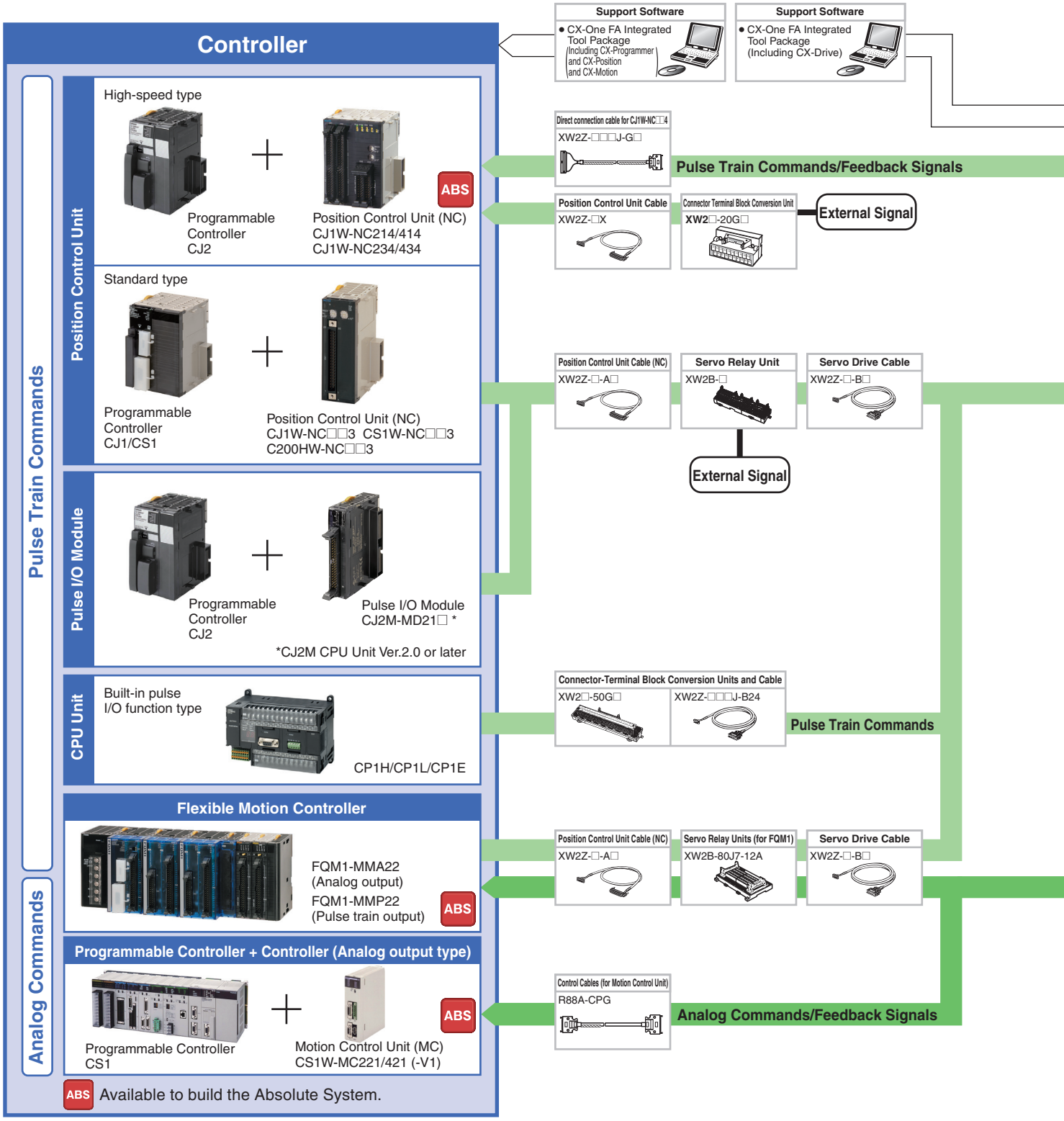
External encoder

- Commercial Product
  Supplied by the user.



R88M-K/R88D-KT

System Configuration



The Preeminent Servo That Revolutionizes Motion Controll

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



USB communications

Servo Drive



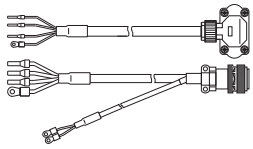
- G5 Series driver
  R88D-KT

100 VAC
200 VAC
400 VAC

Motor power signals

Power Cables

- Non-flexible Cables
  - Without Brake
    R88A-CA□□□□□S
  - With Brake
    R88A-CA□□□□□B
- Flexible Cables
  - Without Brake
    R88A-CA□□□□□SR
  - With Brake
    R88A-CA□□□□□BR



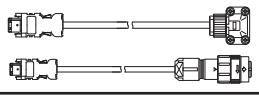
Brake Cables (50 to 750 W or less)

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

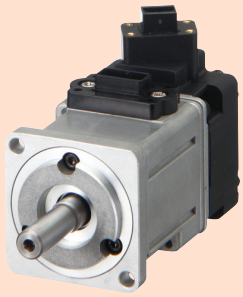
Feedback Signals

Encoder Cables

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



AC Servomotors



- G5 Series motor
  R88M-K

3,000 r/min
2,000 r/min
1,500 r/min
1,000 r/min

INC ABS INC

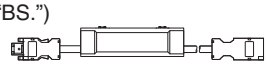
External scale

Peripheral Devices

- Reactors
  3G3AX-DL
  3G3AX-AL
- External Regeneration Resistors
  R88A-RR

Absolute Encoder Battery Cable

R88A-CRGD0R3C (-BS)
(One Battery is included with Servo Drivers with model numbers ending in "BS.")

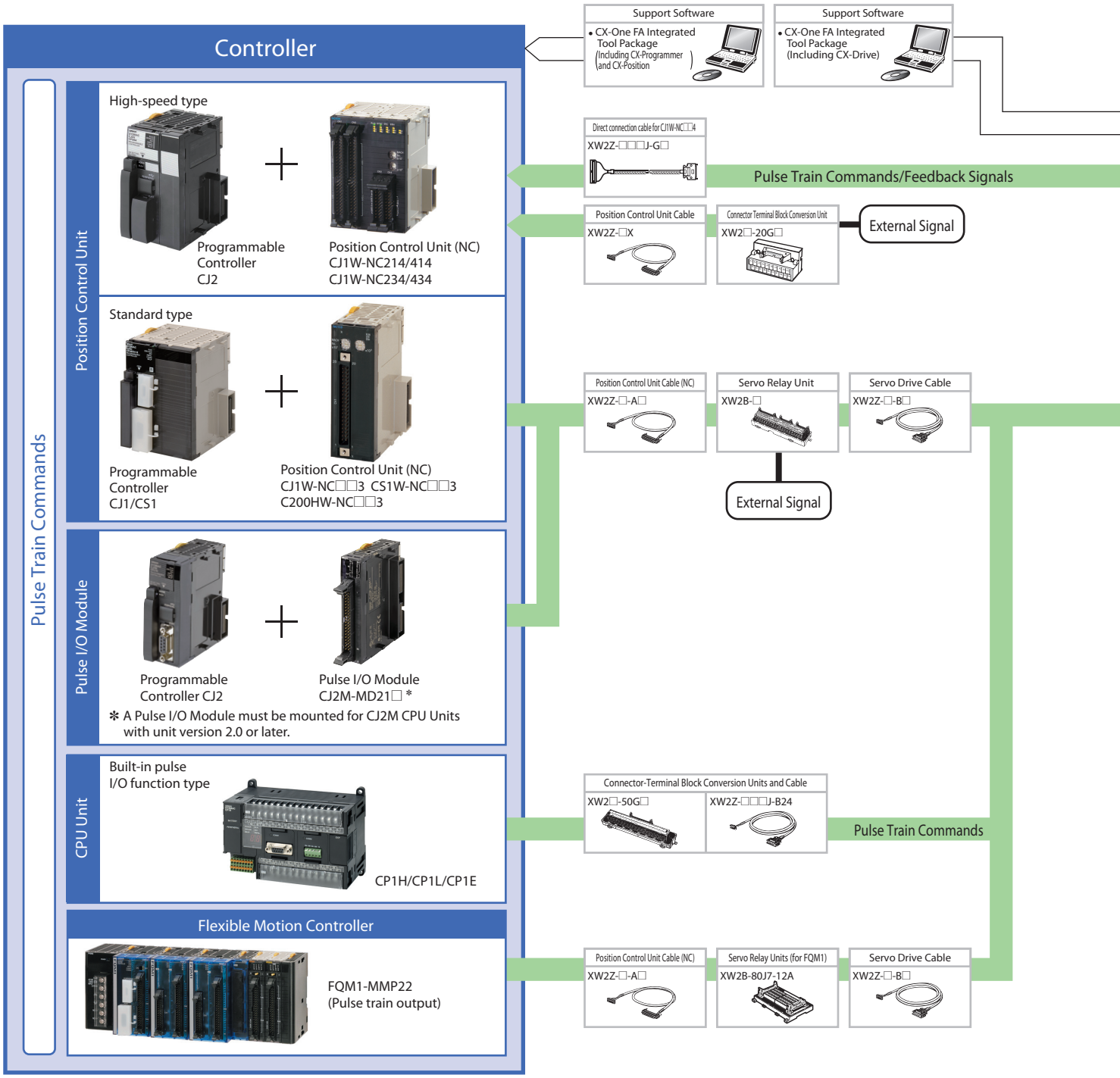


* Not required if a battery is connected to the control connector (CN1).

Decelerators



System Configuration



High-performance Servo Optimal for positioning Application.

- Industry Top-class Tracking Performance.
  Speed Response Frequency of 2 kHz.
- Outstanding Positioning Accuracy.
  Featuring a 20-bit high-resolution incremental encoder.
- Easy Adjustment with Autotuning Function.
- Ideal for Applications That Require High Accuracy.
  Improved vibration control function.



USB communications

Servo Drive

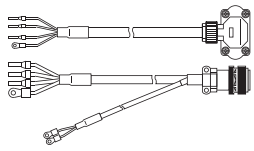


- G5-series Pulse Train Input Type Drives
  R88D-KP
  200 VAC

Motor power signals

Power Cables

- Non-flexible Cables
  - Without Brake
    R88A-CAG□□□□S
  - With Brake
    R88A-CAG□□□□B
- Flexible Cables
  - Without Brake
    R88A-CAG□□□□SR
  - With Brake
    R88A-CAG□□□□BR



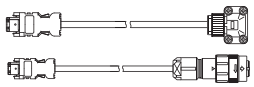
Brake Cables (50 to 750 W max.)

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

Feedback Signals

Encoder Cables

- Non-Flexible Cables
  R88A-CRG□□□□□
- Flexible Cables
  R88A-CRG□□□□□R



AC Servomotors



- G5-series Pulse Train Input Type Motors
  R88M-KE
  3,000 r/min
  2,000 r/min
  1,000 r/min

INC

Peripheral Devices

- Reactors
  3G3AX-DL
  3G3AX-AL
- External Regeneration Resistors
  R88A-RR

Decelerators



R88M-K/R88D-KN□-ML2

System Configuration

Controllers (MECHATROLINK-II type)

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



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





Programmable Controller
CJ1



Position Control Unit
CJ1W-NC□71

MECHATROLINK-II



Programmable Controller
CS1



Position Control Unit
CS1W-NC□71

MECHATROLINK-II Cables

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

MECHATROLINK-II Repeater

		Maximum transmission distance	
		0 to 30 m	30 to 50 m
Number of connected devices	1 to 15	Repeater not required.	Repeater not required.
	16	Repeater not required.	Repeater required.

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

- Data transfer using MECHATROLINK-II Communications:
  All control data that can be interfaced between the Servo Driver and the Controller is transmitted using data communications. This enables maximizing the Servomotor performance without restricting the transmission performance of the control signals.
- Having a communications module built into the Servo Driver significantly saves space in the control panel.



USB communi-cations

Servo Drive

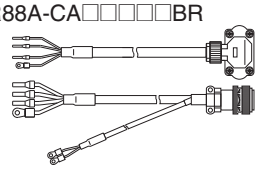


- **G5 Series driver R88D-KN□□-ML2**

I/O signals

Power Cables

- Non-flexible Cables
  - Without Brake R88A-CA□□□□□S
  - With Brake R88A-CA□□□□□B
- Flexible Cables
  - Without Brake R88A-CA□□□□□SR
  - With Brake R88A-CA□□□□□BR



Brake Cables (50 to 750 W or less)

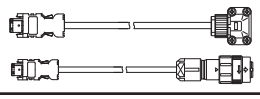
- Non-flexible Cables R88A-CAKA□□□B
- Flexible Cables R88A-CAKA□□□BR

Motor power signals

Feedback Signals

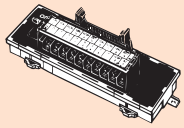
Encoder Cables

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



Connector-Terminal Block Conversion Units and Cable

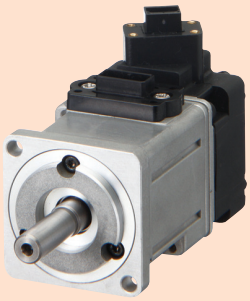
- **Connector-Terminal Block Conversion Unit XW2□-20G□**



- **Cable XW2Z-□□□J-B34**



AC Servomotors



- **G5 Series motor R88M-K**

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

INC ABS INC

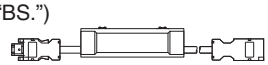
External scale

Peripheral Devices

- Reactors
  3G3AX-DL
  3G3AX-AL
- External Regeneration Resistors
  R88A-RR

Absolute Encoder Battery Cable

R88A-CRGD0R3C (-BS)
(One Battery is included with Servo Drivers with model numbers ending in "BS.")



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

Decelerators



MEMO

Ordering Information

Product name AC Servomotors / Linear Motors / Servo Drives
G5-series

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

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

Interpreting Model Numbers

AC Servo Drive Rotary Motor Type Model Numbers

R88D-K N 01 H -ECT

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

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

AC Servo Drive Linear Motor Type Model Numbers

R88D-K N 01 H -ECT -L

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

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

AC Servomotor Model Numbers

R88M-K □ 750 30 H -BO S2

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

No	Item	Symbol	Specifications
(1)	OMNUC G5-Series Servomotor		
(2)	Motor Type	<Blank>	Standard Cylinder type
		E	Eco 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
		4K5	4.5 kW
		5K0	5 kW
		6K0	6 kW
		7K5	7.5 kW
		11K0	11 kW
		15K0	15 kW
(4)	Rated Rotation Speed	10	1,000 r/min
		15	1,500 r/min
		20	2,000 r/min
		30	3,000 r/min
(5)	Applied Voltage / Encoder Type	L	100 VAC, Incremental Encoder
		H	200 VAC, Incremental Encoder
		F	400 VAC, Incremental Encoder
		S	100 VAC, Absolute Encoder
		T	200 VAC, Absolute Encoder
		C	400 VAC, Absolute Encoder
(6)	Option	<Blank>	Straight shaft
		B	With brake
		O	With oil seal
		S2	With key and tap

Linear Motor

● Iron-core linear motor

Motor Coil Unit

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

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

No	Item	Symbol	Specifications
(1)	G5-series Linear Motor		
(2)	Part Type	FW	Iron-core type Motor Coil Unit
(3)	Magnet Width	03	30mm
		06	60mm
		11	110mm
(4)	Coil Model	03	3-coil
		06	6-coil
		09	9-coil
		12	12-coil
		15	15-coil
(5)	Version	A	Version A
(6)	Connector Options	NP	No Connector
		PL	With Connector
(7)	Type	C	Compact (Iron-core models)

Magnet Track

R88L-EC -FM -03 096 -A

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

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

● Ironless linear motor

Motor Coil Unit

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

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

No	Item	Symbol	Specifications
(1)	G5-series Linear Motor		
(2)	Part Type	GW	Ironless type Motor Coil Unit
(3)	Magnet Width	03	30mm
		06	60mm
		11	110mm
(4)	Coil Model	03	3-coil
		06	6-coil
		09	9-coil
(5)	Version	A	Version A
(6)	Connector Options	NP	No Connector
		PL	With Connector
(7)	Type	S	Standard (Ironless models)

Magnet Track

R88L-EC -GM -03 090 -A

(1) ② ③ ④ ⑤

No	Item	Symbol	Specifications
(1)	G5-series Linear Motor		
(2)	Part Type	GM	Ironless type Magnet Trac
(3)	Magnet Width	03	30mm
		06	60mm
		11	110mm
(4)	Magnet Track Unit Length	090	90mm
		114	114mm
		120	120mm
		126	126mm
		168	168mm
		171	171mm
		210	210mm
		390	390mm
		456	456mm
		546	546mm
(5)	Version	A	Version A

● Hall Sensor

R88L-EC -FH -03 NN -A

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

N	Item	Symbol	Specifications
(1)	G5-series Linear Motor		
(2)	Part Type	FH	Iron-core digital Hall-sensor
		GH	Ironless digital Hall-sensor
(3)	Magnet Width	03	30mm (Ironless models)
		06	60mm (Ironless models)
		11	110mm (Ironless models)
		NN	Placeholder (Iron-core models)
(4)	Placeholder	NN	Placeholder
(5)	Version	A	Version A

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
		45	1/45
(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
		5K0	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 AC 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) Brakes		(8) Oil Seals		(9) Shaft Type	
					INC	INC	INC	ABS	ABS	ABS						
Standard	Eco				400	200	100	400	200	100						
Blank	E✻2				F	H	L	C	T	S	<Blank>	B	<Blank>	O	<Blank>	S2
√	√	50 W	3,000 r/min	R88M-K□05030 ✻1		√			√		√	√	√	√	√	√
√	√	100 W		R88M-K□10030		√	√		√	√	√	√	√	√	√	√
√	√	200 W		R88M-K□20030		√	√		√	√	√	√	√	√	√	√
√	√	400 W		R88M-K□40030		√	√		√	√	√	√	√	√	√	√
√	√	750 W		R88M-K□75030	√	√		√	√		√	√	√	√	√	√
√	√	1.0 kW		R88M-K□1K030	√	√		√	√		√	√	√	√	√	√
√	√	1.5 kW		R88M-K□1K530	√	√		√	√		√	√	√	√	√	√
√	√	2.0 kW		R88M-K□2K030	√	√		√	√		√	√	√	√	√	√
√	√	3.0 kW		R88M-K□3K030	√	√		√	√		√	√	√	√	√	√
√	√	4.0 kW		R88M-K□4K030	√	√		√	√		√	√	√	√	√	√
√	√	5.0 kW		R88M-K□5K030	√	√		√	√		√	√	√	√	√	√
√		400 W	2,000 r/min	R88M-K□40020	√			√			√	√	√	√	√	√
√		600 W		R88M-K□60020	√			√			√	√	√	√	√	√
√	√	1.0 kW		R88M-K□1K020	√	√		√	√		√	√	√	√	√	√
√	√	1.5 kW		R88M-K□1K520	√	√		√	√		√	√	√	√	√	√
√	√	2.0 kW		R88M-K□2K020	√	√		√	√		√	√	√	√	√	√
√	√	3.0 kW		R88M-K□3K020	√	√		√	√		√	√	√	√	√	√
√	√	4.0 kW		R88M-K□4K020	√	√		√	√		√	√	√	√	√	√
√	√	5.0 kW		R88M-K□5K020	√	√		√	√		√	√	√	√	√	√
√		7.5 kW	1,500 r/min	R88M-K□7K515				√	√		√	√	√	√	√	√
√		11.0 kW		R88M-K□11K015				√	√		√	√	√	√	√	√
√		15.0 kW		R88M-K□15K015				√	√		√	√	√	√	√	√
√	√	900 W	1,000 r/min	R88M-K□90010	√	√		√	√		√	√	√	√	√	√
√	√	2.0 kW		R88M-K□2K010	√	√		√	√		√	√	√	√	√	√
√	√	3.0 kW		R88M-K□3K010	√	√		√	√		√	√	√	√	√	√
√		4.5 kW		R88M-K□4K510				√	√		√	√	√	√	√	√
√		6.0 kW		R88M-K□6K010				√	√		√	√	√	√	√	√
<Blank>: **Cylinder Type** **E:** **Eco Type**		example 050: 50W 100: 100W 15K0: 15kW	10: 1,000 r/min 15: 1,500 r/min 20: 2,000 r/min 30: 3,000 r/min		F: 400 VAC (with incremental encoder) H: 200 VAC (with incremental encoder) L: 100 VAC (with incremental encoder) C: 400 VAC (with absolute encoder) T: 200 VAC (with absolute encoder) S: 100 VAC (with absolute encoder)						<Blank>: Without Brake B: With 24VDC Brake		<Blank>: Without Oil Seals B: With Oil Seals		<Blank>: Straight Shaft S2: With key and tap	

✻1. R88M-K□05030H-□, R88M-K□05030T-□, can be used for Power Supply Voltage of 100/200VAC.
✻2. R88M-KE□ servomotors are only available as 200VAC Type with incremental encoders. ie. R88M-KE10030H-□

Ordering Information

AC Servo Drives

EtherCAT Communications

Specifications		Model
Power Model Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	50 W	R88D-KNA5L-ECT
	100 W	R88D-KN01L-ECT
	200 W	R88D-KN02L-ECT
	400 W	R88D-KN04L-ECT
Single-phase/ Three-phase 200 VAC	100 W	R88D-KN01H-ECT
	200 W	R88D-KN02H-ECT
	400 W	R88D-KN04H-ECT
	750 W	R88D-KN08H-ECT
	1.0 kW	R88D-KN10H-ECT
	1.5 kW	R88D-KN15H-ECT
Three-phase 200 VAC	2.0 kW	R88D-KN20H-ECT
	3.0 kW	R88D-KN30H-ECT
	5.0 kW	R88D-KN50H-ECT
	7.5 kW	R88D-KN75H-ECT
	15.0 kW	R88D-KN150H-ECT
Three-phase 400 VAC	600 W	R88D-KN06F-ECT
	1.0 kW	R88D-KN10F-ECT
	1.5 kW	R88D-KN15F-ECT
	2.0kW	R88D-KN20F-ECT
	3.0 kW	R88D-KN30F-ECT
	5.0 kW	R88D-KN50F-ECT
	7.5 kW	R88D-KN75F-ECT
	15.0 kW	R88D-KN150F-ECT

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

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

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
	1.0 kW	R88D-KT10H
	1.5 kW	R88D-KT15H
Three-phase 200 VAC	2.0 kW	R88D-KT20H
	3.0 kW	R88D-KT30H
	5.0 kW	R88D-KT50H
	7.5 kW	R88D-KT75H
	15.0 kW	R88D-KT150H
Three-phase 400 VAC	600 W	R88D-KT06F
	1.0 kW	R88D-KT10F
	1.5 kW	R88D-KT15F
	2.0 kW	R88D-KT20F
	3.0 kW	R88D-KT30F
	5.0 kW	R88D-KT50F
	7.5 kW	R88D-KT75F
	15.0 kW	R88D-KT150F

Linear Motor with built-in EtherCAT communications

NEW

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase 100 VAC	100 W	R88D-KN01L-ECT-L
	200 W	R88D-KN02L-ECT-L
	400 W	R88D-KN04L-ECT-L
Single-phase/ Three-phase 200 VAC	100 W	R88D-KN01H-ECT-L
	200 W	R88D-KN02H-ECT-L
	400 W	R88D-KN04H-ECT-L
	750 W	R88D-KN08H-ECT-L
	1.0 kW	R88D-KN10H-ECT-L
	1.5 kW	R88D-KN15H-ECT-L
Three-phase 400 VAC	600 W	R88D-KN06F-ECT-L
	1.0 kW	R88D-KN10F-ECT-L
	1.5 kW	R88D-KN15F-ECT-L
	2.0 kW	R88D-KN20F-ECT-L
	3.0 kW	R88D-KN30F-ECT-L

MECHATROLINK-II Communications

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
	1.0 kW	R88D-KN10H-ML2
	1.5 kW	R88D-KN15H-ML2
Three-phase 200 VAC	2.0 kW	R88D-KN20H-ML2
	3.0 kW	R88D-KN30H-ML2
	5.0 kW	R88D-KN50H-ML2
Three-phase 400 VAC	600 W	R88D-KN06F-ML2
	1.0 kW	R88D-KN10F-ML2
	1.5 kW	R88D-KN15F-ML2
	2.0 kW	R88D-KN20F-ML2
	3.0 kW	R88D-KN30F-ML2
	5.0 kW	R88D-KN50F-ML2

Pulse Train Input Type

Specifications		Model
Power Supply Voltage	Applicable Servomotor Capacity	
Single-phase/ Three-phase 200 VAC	100 W	R88D-KP01H
	200 W	R88D-KP02H
	400 W	R88D-KP04H
	750 W	R88D-KP08H
	1.0 kW	R88D-KP10H
	1.5 kW	R88D-KP15H
Three-phase 200 VAC	2.0 kW	R88D-KP20H
	3.0 kW	R88D-KP30H
	5.0 kW	R88D-KP50H

AC Servomotors

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

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

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
		1.0 kW	R88M-K1K030H-S2
		1.5 kW	R88M-K1K530H-S2
		2.0 kW	R88M-K2K030H-S2
		3.0 kW	R88M-K3K030H-S2
		4.0 kW	R88M-K4K030H-S2
		5.0 kW	R88M-K5K030H-S2
	400 V	750 W	R88M-K75030F-S2
		1.0 kW	R88M-K1K030F-S2
		1.5 kW	R88M-K1K530F-S2
		2.0 kW	R88M-K2K030F-S2
		3.0 kW	R88M-K3K030F-S2
		4.0 kW	R88M-K4K030F-S2
		5.0 kW	R88M-K5K030F-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
		1.0 kW	R88M-K1K030H-BS2
		1.5 kW	R88M-K1K530H-BS2
		2.0 kW	R88M-K2K030H-BS2
		3.0 kW	R88M-K3K030H-BS2
		4.0 kW	R88M-K4K030H-BS2
		5.0 kW	R88M-K5K030H-BS2
	400 V	750 W	R88M-K75030F-BS2
		1.0 kW	R88M-K1K030F-BS2
		1.5 kW	R88M-K1K530F-BS2
		2.0 kW	R88M-K2K030F-BS2
		3.0 kW	R88M-K3K030F-BS2
		4.0 kW	R88M-K4K030F-BS2
		5.0 kW	R88M-K5K030F-BS2

Note: Models with oil seals are also available.

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

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
		1.0 kW	R88M-K1K030H
		1.5 kW	R88M-K1K530H
		2.0 kW	R88M-K2K030H
		3.0 kW	R88M-K3K030H
		4.0 kW	R88M-K4K030H
		5.0 kW	R88M-K5K030H
	400 V	750 W	R88M-K75030F
		1.0 kW	R88M-K1K030F
		1.5 kW	R88M-K1K530F
		2.0 kW	R88M-K2K030F
		3.0 kW	R88M-K3K030F
		4.0 kW	R88M-K4K030F
		5.0 kW	R88M-K5K030F
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
		1.0 kW	R88M-K1K030H-B
		1.5 kW	R88M-K1K530H-B
		2.0 kW	R88M-K2K030H-B
		3.0 kW	R88M-K3K030H-B
		4.0 kW	R88M-K4K030H-B
		5.0 kW	R88M-K5K030H-B
	400 V	750 W	R88M-K75030F-B
		1.0 kW	R88M-K1K030F-B
		1.5 kW	R88M-K1K530F-B
		2.0 kW	R88M-K2K030F-B
		3.0 kW	R88M-K3K030F-B
		4.0 kW	R88M-K4K030F-B
		5.0 kW	R88M-K5K030F-B

Note: Models with oil seals are also available.

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

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
		1.0 kW	R88M-K1K030T-S2
		1.5 kW	R88M-K1K530T-S2
		2.0 kW	R88M-K2K030T-S2
		3.0 kW	R88M-K3K030T-S2
		4.0 kW	R88M-K4K030T-S2
		5.0 kW	R88M-K5K030T-S2
	400 V	750 W	R88M-K75030C-S2
		1.0 kW	R88M-K1K030C-S2
		1.5 kW	R88M-K1K530C-S2
		2.0 kW	R88M-K2K030C-S2
		3.0 kW	R88M-K3K030C-S2
		4.0 kW	R88M-K4K030C-S2
		5.0 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
		1.0 kW	R88M-K1K030T-BS2
		1.5 kW	R88M-K1K530T-BS2
		2.0 kW	R88M-K2K030T-BS2
		3.0 kW	R88M-K3K030T-BS2
		4.0 kW	R88M-K4K030T-BS2
		5.0 kW	R88M-K5K030T-BS2
	400 V	750 W	R88M-K75030C-BS2
		1.0 kW	R88M-K1K030C-BS2
		1.5 kW	R88M-K1K530C-BS2
		2.0 kW	R88M-K2K030C-BS2
		3.0 kW	R88M-K3K030C-BS2
		4.0 kW	R88M-K4K030C-BS2
		5.0 kW	R88M-K5K030C-BS2

Note: Models with oil seals are also available.

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

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
		1.0 kW	R88M-K1K030T
		1.5 kW	R88M-K1K530T
		2.0 kW	R88M-K2K030T
		3.0 kW	R88M-K3K030T
		4.0 kW	R88M-K4K030T
		5.0 kW	R88M-K5K030T
	400 V	750 W	R88M-K75030C
		1.0 kW	R88M-K1K030C
		1.5 kW	R88M-K1K530C
		2.0 kW	R88M-K2K030C
		3.0 kW	R88M-K3K030C
		4.0 kW	R88M-K4K030C
		5.0 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
		1.0 kW	R88M-K1K030T-B
		1.5 kW	R88M-K1K530T-B
		2.0 kW	R88M-K2K030T-B
		3.0 kW	R88M-K3K030T-B
		4.0 kW	R88M-K4K030T-B
		5.0 kW	R88M-K5K030T-B
	400 V	750 W	R88M-K75030C-B
		1.0 kW	R88M-K1K030C-B
		1.5 kW	R88M-K1K530C-B
		2.0 kW	R88M-K2K030C-B
		3.0 kW	R88M-K3K030C-B
		4.0 kW	R88M-K4K030C-B
		5.0 kW	R88M-K5K030C-B

Note: Models with oil seals are also available.

2,000-r/min servomotors

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

Specifications			Model
			With incremental encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1.0 kW	R88M-K1K020H-S2
		1.5 kW	R88M-K1K520H-S2
		2.0 kW	R88M-K2K020H-S2
		3.0 kW	R88M-K3K020H-S2
		4.0 kW	R88M-K4K020H-S2
		5.0 kW	R88M-K5K020H-S2
	400 V	400 W	R88M-K40020F-S2
		600 W	R88M-K60020F-S2
		1.0 kW	R88M-K1K020F-S2
		1.5 kW	R88M-K1K520F-S2
		2.0 kW	R88M-K2K020F-S2
		3.0 kW	R88M-K3K020F-S2
		4.0 kW	R88M-K4K020F-S2
		5.0 kW	R88M-K5K020F-S2
With brake	200 V	1.0 kW	R88M-K1K020H-BS2
		1.5 kW	R88M-K1K520H-BS2
		2.0 kW	R88M-K2K020H-BS2
		3.0 kW	R88M-K3K020H-BS2
		4.0 kW	R88M-K4K020H-BS2
		5.0 kW	R88M-K5K020H-BS2
	400 V	400 W	R88M-K40020F-BS2
		600 W	R88M-K60020F-BS2
		1.0 kW	R88M-K1K020F-BS2
		1.5 kW	R88M-K1K520F-BS2
		2.0 kW	R88M-K2K020F-BS2
		3.0 kW	R88M-K3K020F-BS2
		4.0 kW	R88M-K4K020F-BS2
		5.0 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

Specifications			Model
			With incremental encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1.0 kW	R88M-K1K020H
		1.5 kW	R88M-K1K520H
		2.0 kW	R88M-K2K020H
		3.0 kW	R88M-K3K020H
		4.0 kW	R88M-K4K020H
		5.0 kW	R88M-K5K020H
	400 V	400 W	R88M-K40020F
		600 W	R88M-K60020F
		1.0 kW	R88M-K1K020F
		1.5 kW	R88M-K1K520F
		2.0 kW	R88M-K2K020F
		3.0 kW	R88M-K3K020F
		4.0 kW	R88M-K4K020F
		5.0 kW	R88M-K5K020F
With brake	200 V	1.0 kW	R88M-K1K020H-B
		1.5 kW	R88M-K1K520H-B
		2.0 kW	R88M-K2K020H-B
		3.0 kW	R88M-K3K020H-B
		4 .0 kW	R88M-K4K020H-B
		5.0 kW	R88M-K5K020H-B
	400 V	400 W	R88M-K40020F-B
		600 W	R88M-K60020F-B
		1.0 kW	R88M-K1K020F-B
		1.5 kW	R88M-K1K520F-B
		2.0 kW	R88M-K2K020F-B
		3.0 kW	R88M-K3K020F-B
		4.0 kW	R88M-K4K020F-B
		5.0 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

Specifications			Model
			With absolute encoder
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1.0 kW	R88M-K1K020T-S2
		1.5 kW	R88M-K1K520T-S2
		2.0 kW	R88M-K2K020T-S2
		3.0 kW	R88M-K3K020T-S2
		4.0 kW	R88M-K4K020T-S2
		5.0 kW	R88M-K5K020T-S2
		7.5 kW	R88M-K7K515T-S2 ✻
		11.0 kW	R88M-K11K015T-S2 ✻
		15.0 kW	R88M-K15K015T-S2 ✻
	400 V	400 W	R88M-K40020C-S2
		600 W	R88M-K60020C-S2
		1.0 kW	R88M-K1K020C-S2
		1.5 kW	R88M-K1K520C-S2
		2.0 kW	R88M-K2K020C-S2
		3.0 kW	R88M-K3K020C-S2
		4.0 kW	R88M-K4K020C-S2
		5.0 kW	R88M-K5K020C-S2
		7.5 kW	R88M-K7K515C -S2 ✻
		11.0 kW	R88M-K11K015C-S2 ✻
		15.0 kW	R88M-K15K015C-S2 ✻
With brake	200 V	1.0 kW	R88M-K1K020T-BS2
		1.5 kW	R88M-K1K520T-BS2
		2.0 kW	R88M-K2K020T-BS2
		3.0 kW	R88M-K3K020T-BS2
		4.0 kW	R88M-K4K020T-BS2
		5.0 kW	R88M-K5K020T-BS2
		7.5 kW	R88M-K7K515T-BS2 ✻
		11.0 kW	R88M-K11K015T-BS2 ✻
		15.0 kW	R88M-K15K015T-BS2 ✻
	400 V	400 W	R88M-K40020C-BS2
		600 W	R88M-K60020C-BS2
		1.0 kW	R88M-K1K020C-BS2
		1.5 kW	R88M-K1K520C-BS2
		2.0 kW	R88M-K2K020C-BS2
		3.0 kW	R88M-K3K020C-BS2
		4.0 kW	R88M-K4K020C-BS2
		5.0 kW	R88M-K5K020C-BS2
		7.5 kW	R88M-K7K515C-BS2 ✻
		11.0 kW	R88M-K11K015C-BS2 ✻
		15.0 kW	R88M-K15K015C-BS2 ✻

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

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

Specifications			Model
			With absolute encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1.0 kW	R88M-K1K020T
		1.5 kW	R88M-K1K520T
		2.0 kW	R88M-K2K020T
		3.0 kW	R88M-K3K020T
		4.0 kW	R88M-K4K020T
		5.0 kW	R88M-K5K020T
		7.5 kW	R88M-K7K515T ✻
		11.0 kW	R88M-K11K015T ✻
		15.0 kW	R88M-K15K015T ✻
	400 V	400 W	R88M-K40020C
		600 W	R88M-K60020C
		1.0 kW	R88M-K1K020C
		1.5 kW	R88M-K1K520C
		2.0 kW	R88M-K2K020C
		3.0 kW	R88M-K3K020C
		4.0 kW	R88M-K4K020C
		5.0 kW	R88M-K5K020C
		7.5 kW	R88M-K7K515C ✻
		11.0 kW	R88M-K11K015C ✻
		15.0 kW	R88M-K15K015C ✻
With brake	200 V	1.0 kW	R88M-K1K020T-B
		1.5 kW	R88M-K1K520T-B
		2.0 kW	R88M-K2K020T-B
		3.0 kW	R88M-K3K020T-B
		4.0 kW	R88M-K4K020T-B
		5.0 kW	R88M-K5K020T-B
		7.5 kW	R88M-K7K515T-B ✻
		11.0 kW	R88M-K11K015T-B ✻
		15.0 kW	R88M-K15K015T-B ✻
	400 V	400 W	R88M-K40020C-B
		600 W	R88M-K60020C-B
		1.0 kW	R88M-K1K020C-B
		1.5 kW	R88M-K1K520C-B
		2.0 kW	R88M-K2K020C-B
		3.0 kW	R88M-K3K020C-B
		4.0 kW	R88M-K4K020C-B
		5.0 kW	R88M-K5K020C-B
		7.5 kW	R88M-K7K515C-B ✻
		11.0 kW	R88M-K11K015C-B ✻
		15.0 kW	R88M-K15K015C-B ✻

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

1,000-r/min servomotors

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

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
		2.0 kW	R88M-K2K010H-S2
		3.0 kW	R88M-K3K010H-S2
	400 V	900 W	R88M-K90010F-S2
		2.0 kW	R88M-K2K010F-S2
		3.0 kW	R88M-K3K010F-S2
With brake	200 V	900 W	R88M-K90010H-BS2
		2.0 kW	R88M-K2K010H-BS2
		3.0 kW	R88M-K3K010H-BS2
	400 V	900 W	R88M-K90010F-BS2
		2.0 kW	R88M-K2K010F-BS2
		3.0 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

Specifications			Model
			With incremental encoder
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-K90010H
		2.0 kW	R88M-K2K010H
		3.0 kW	R88M-K3K010H
	400 V	900 W	R88M-K90010F
		2.0 kW	R88M-K2K010F
		3.0 kW	R88M-K3K010F
With brake	200 V	900 W	R88M-K90010H-B
		2.0 kW	R88M-K2K010H-B
		3.0 kW	R88M-K3K010H-B
	400 V	900 W	R88M-K90010F-B
		2.0 kW	R88M-K2K010F-B
		3.0 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

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
		2.0 kW	R88M-K2K010T-S2
		3.0 kW	R88M-K3K010T-S2
		4.5 kW	R88M-K4K510T-S2
		6.0 kW	R88M-K6K010T-S2
	400 V	900 W	R88M-K90010C-S2
		2.0 kW	R88M-K2K010C-S2
		3.0 kW	R88M-K3K010C-S2
		4.5 kW	R88M-K4K510C-S2
		6.0 kW	R88M-K6K010C-S2
With brake	200 V	900 W	R88M-K90010T-BS2
		2.0 kW	R88M-K2K010T-BS2
		3.0 kW	R88M-K3K010T-BS2
		4.5 kW	R88M-K4K510T-BS2
		6.0 kW	R88M-K6K010T-BS2
	400 V	900 W	R88M-K90010C-BS2
		2.0 kW	R88M-K2K010C-BS2
		3.0 kW	R88M-K3K010C-BS2
		4.5 kW	R88M-K4K510C-BS2
		6.0 kW	R88M-K6K010C-BS2

Note: Models with oil seals are also available.

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

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

Note: Models with oil seals are also available.

G5-series Pluse Train Input type AC Servomotors

<Eco Cylinder Type>

3,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	50 W	R88M-KE05030H-S2
		100 W	R88M-KE10030H-S2
		200 W	R88M-KE20030H-S2
		400 W	R88M-KE40030H-S2
		750 W	R88M-KE75030H-S2
		1 kW	R88M-KE1K030H-S2
		1.5 kW	R88M-KE1K530H-S2
		2 kW	R88M-KE2K030H-S2
		3 kW	R88M-KE3K030H-S2
		4 kW	R88M-KE4K030H-S2
		5 kW	R88M-KE5K030H-S2
With brake	200 V	50 W	R88M-KE05030H-BS2
		100 W	R88M-KE10030H-BS2
		200 W	R88M-KE20030H-BS2
		400 W	R88M-KE40030H-BS2
		750 W	R88M-KE75030H-BS2
		1 kW	R88M-KE1K030H-BS2
		1.5 kW	R88M-KE1K530H-BS2
		2 kW	R88M-KE2K030H-BS2
		3 kW	R88M-KE3K030H-BS2
		4 kW	R88M-KE4K030H-BS2
		5 kW	R88M-KE5K030H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	50 W	R88M-KE05030H
		100 W	R88M-KE10030H
		200 W	R88M-KE20030H
		400 W	R88M-KE40030H
		750 W	R88M-KE75030H
		1 kW	R88M-KE1K030H
		1.5 kW	R88M-KE1K530H
		2 kW	R88M-KE2K030H
		3 kW	R88M-KE3K030H
		4 kW	R88M-KE4K030H
		5 kW	R88M-KE5K030H
With brake	200 V	50 W	R88M-KE05030H-B
		100 W	R88M-KE10030H-B
		200 W	R88M-KE20030H-B
		400 W	R88M-KE40030H-B
		750 W	R88M-KE75030H-B
		1 kW	R88M-KE1K030H-B
		1.5 kW	R88M-KE1K530H-B
		2 kW	R88M-KE2K030H-B
		3 kW	R88M-KE3K030H-B
		4 kW	R88M-KE4K030H-B
		5 kW	R88M-KE5K030H-B

Note: Models with oil seals are also available.

2,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	1kW	R88M-KE1K020H-S2
		1.5kW	R88M-KE1K520H-S2
		2kW	R88M-KE2K020H-S2
		3kW	R88M-KE3K020H-S2
		4kW	R88M-KE4K020H-S2
		5kW	R88M-KE5K020H-S2
With brake	200 V	1kW	R88M-KE1K020H-BS2
		1.5kW	R88M-KE1K520H-BS2
		2kW	R88M-KE2K020H-BS2
		3kW	R88M-KE3K020H-BS2
		4kW	R88M-KE4K020H-BS2
		5kW	R88M-KE5K020H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	1kW	R88M-KE1K020H
		1.5kW	R88M-KE1K520H
		2kW	R88M-KE2K020H
		3kW	R88M-KE3K020H
		4kW	R88M-KE4K020H
		5kW	R88M-KE5K020H
With brake	200 V	1kW	R88M-KE1K020H-B
		1.5kW	R88M-KE1K520H-B
		2kW	R88M-KE2K020H-B
		3kW	R88M-KE3K020H-B
		4kW	R88M-KE4K020H-B
		5kW	R88M-KE5K020H-B

Note: Models with oil seals are also available.

1,000-r/min servomotor

Specifications			Model
			Straight shaft with key and tap
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-KE90010H-S2
		2 kW	R88M-KE2K010H-S2
		3 kW	R88M-KE3K010H-S2
With brake	200 V	900 W	R88M-KE90010H-BS2
		2 kW	R88M-KE2K010H-BS2
		3 kW	R88M-KE3K010H-BS2

Note: Models with oil seals are also available.

Specifications			Model
			Straight shaft without key
	Voltage	Rated output	Without oil seals
Without brake	200 V	900 W	R88M-KE90010H
		2 kW	R88M-KE2K010H
		3 kW	R88M-KE3K010H
With brake	200 V	900 W	R88M-KE90010H-B
		2 kW	R88M-KE2K010H-B
		3 kW	R88M-KE3K010H-B

Note: Models with oil seals are also available.

Linear Motors

● Iron-core linear motor

Type		Continuous force [N]	Momentary maximum force [N]	Motor Coil Unit model
Motor Coil Unit	Coil without Connectors	48	105	R88L-EC-FW-0303-ANPC
		96	210	R88L-EC-FW-0306-ANPC
		160	400	R88L-EC-FW-0606-ANPC
		240	600	R88L-EC-FW-0609-ANPC
		320	800	R88L-EC-FW-0612-ANPC
		608	1600	R88L-EC-FW-1112-ANPC
		760	2000	R88L-EC-FW-1115-ANPC
	Coil with Connectors	48	105	R88L-EC-FW-0303-APLC
		96	210	R88L-EC-FW-0306-APLC
		160	400	R88L-EC-FW-0606-APLC
		240	600	R88L-EC-FW-0609-APLC
		320	800	R88L-EC-FW-0612-APLC
		608	1600	R88L-EC-FW-1112-APLC
		760	2000	R88L-EC-FW-1115-APLC

Type	Applicable Active Magnet Width / Motor Coil Unit	Magnet Track Length [mm]	Model
Magnet Track	30 mm R88L-EC-FW-03□	96	R88L-EC-FM-03096-A
		144	R88L-EC-FM-03144-A
		384	R88L-EC-FM-03384-A
	60 mm R88L-EC-FW-06□	192	R88L-EC-FM-06192-A
		288	R88L-EC-FM-06288-A
	110 mm R88L-EC-FW-11□	192	R88L-EC-FM-11192-A
		288	R88L-EC-FM-11288-A

Type	Applicable Active Magnet Width / Motor Coil Unit	Model
Hall Sensor	30 mm: R88L-EC-FW-03□ 60 mm: R88L-EC-FW-06□ 110 mm: R88L-EC-FW-11□	R88L-EC-FH-NNNN-A

● Ironless linear motor

Type		Continuous force [N]	Momentary maximum force [N]	Model
Motor Coil Unit	Coil without Connectors	26.5	96	R88L-EC-GW-0303-ANPS
		53	200	R88L-EC-GW-0306-ANPS
		80	300	R88L-EC-GW-0309-ANPS
		58	240	R88L-EC-GW-0503-ANPS
		117	480	R88L-EC-GW-0506-ANPS
		175	720	R88L-EC-GW-0509-ANPS
		117	552	R88L-EC-GW-0703-ANPS
		232	1110	R88L-EC-GW-0706-ANPS
		348	1730	R88L-EC-GW-0709-ANPS
	Coil with Connectors	26.5	96	R88L-EC-GW-0303-APLS
		53	200	R88L-EC-GW-0306-APLS
		80	300	R88L-EC-GW-0309-APLS
		58	240	R88L-EC-GW-0503-APLS
		117	480	R88L-EC-GW-0506-APLS
		175	720	R88L-EC-GW-0509-APLS
		117	552	R88L-EC-GW-0703-APLS
		232	1110	R88L-EC-GW-0706-APLS
		348	1730	R88L-EC-GW-0709-APLS

Type	Applicable Active Magnet Width / Motor Coil Unit	Magnet Trac Unit Length (mm)	Model
Magnet Track	30 mm R88L-EC-GW-03□	90	R88L-EC-GM-03090-A
		120	R88L-EC-GM-03120-A
		390	R88L-EC-GM-03390-A
	50 mm R88L-EC-GW-05□	126	R88L-EC-GM-05126-A
		168	R88L-EC-GM-05168-A
		210	R88L-EC-GM-05210-A
		546	R88L-EC-GM-05546-A
	70 mm R88L-EC-GW-07□	114	R88L-EC-GM-07114-A
		171	R88L-EC-GM-07171-A
		456	R88L-EC-GM-07456-A

Type	Applicable Active Magnet Width / Motor Coil Unit	Model
Hall Sensor	30 mm: R88L-EC-GW-03□	R88L-EC-GH-03NN-A
	50 mm: R88L-EC-GW-05□	R88L-EC-GH-05NN-A
	70 mm: R88L-EC-GW-07□	R88L-EC-GH-07NN-A

Combination table

Motor Coil Unit and Magnet Track Combinations

● Iron-core motor type

Active Magnet Width	Type	Motor Coil Unit model	Hall Sensor Model	Hall Sensor Model
30 mm	Coil without Connectors	R88L-EC-FW-0303-ANPC R88L-EC-FW-0306-ANPC	R88L-EC-FM-03096-A R88L-EC-FM-03144-A R88L-EC-FM-03384-A	R88L-EC-FH-NNNN-A
	Coil with Connectors	R88L-EC-FW-0303-APLC R88L-EC-FW-0306-APLC		
60 mm	Coil without Connectors	R88L-EC-FW-0606-ANPC R88L-EC-FW-0609-ANPC R88L-EC-FW-0612-ANPC	R88L-EC-FM-06192-A R88L-EC-FM-06288-A	
	Coil with Connectors	R88L-EC-FW-0606-APLC R88L-EC-FW-0609-APLC R88L-EC-FW-0612-APLC		
110 mm	Coil without Connectors	R88L-EC-FW-1112-ANPC R88L-EC-FW-1115-ANPC	R88L-EC-FM-11192-A R88L-EC-FM-11288-A	
	Coil with Connectors	R88L-EC-FW-1112-APLC R88L-EC-FW-1115-APLC		

● Ironless linear motor

Active Magnet Width	Type	Motor Coil Unit model	Hall Sensor Model	Hall Sensor Model
30 mm	Coil without Connectors	R88L-EC-GW-0303-ANPS R88L-EC-GW-0306-ANPS R88L-EC-GW-0309-ANPS	R88L-EC-GM-03090-A R88L-EC-GM-03120-A R88L-EC-GM-03390-A	R88L-EC-GH-03NN-A
	Coil with Connectors	R88L-EC-GW-0303-APLS R88L-EC-GW-0306-APLS R88L-EC-GW-0309-APLS		
50 mm	Coil without Connectors	R88L-EC-GW-0503-ANPS R88L-EC-GW-0506-ANPS R88L-EC-GW-0509-ANPS	R88L-EC-GM-05126-A R88L-EC-GM-05168-A R88L-EC-GM-05210-A R88L-EC-GM-05546-A	R88L-EC-GH-05NN-A
	Coil with Connectors	R88L-EC-GW-0503-APLS R88L-EC-GW-0506-APLS R88L-EC-GW-0509-APLS		
70 mm	Coil without Connectors	R88L-EC-GW-0703-ANPS R88L-EC-GW-0706-ANPS R88L-EC-GW-0709-ANPS	R88L-EC-GM-07114-A R88L-EC-GM-07171-A R88L-EC-GM-07456-A	R88L-EC-GH-07NN-A
	Coil with Connectors	R88L-EC-GW-0703-APLS R88L-EC-GW-0706-APLS R88L-EC-GW-0709-APLS		

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
	1/45	R88G-HPG50A451K5B
1kW	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG50A332K0B
	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
	1/21	R88G-HPG50A213K0B
4kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
5kW	1/5	R88G-HPG50A055K0B
	1/11	R88G-HPG50A115K0B

Note: 1. The standard models have a straight shaft.
2. 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
	1/45	R88G-HPG32A45400SB
600 W	1/5	R88G-HPG32A052K0B
	1/11	R88G-HPG32A112K0B
	1/21	R88G-HPG32A211K5B
	1/33	R88G-HPG32A33600SB
	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
2 kW	1/5	R88G-HPG32A053K0B
	1/11	R88G-HPG32A112K0SB
	1/21	R88G-HPG50A213K0B
	1/33	R88G-HPG50A332K0SB
3 kW	1/5	R88G-HPG32A054K0B
	1/11	R88G-HPG50A115K0B
	1/21	R88G-HPG50A213K0SB
	1/25	R88G-HPG65A253K0SB
4 kW	1/5	R88G-HPG50A055K0SB
	1/11	R88G-HPG50A115K0SB
	1/20	R88G-HPG65A205K0SB
	1/25	R88G-HPG65A255K0SB
5 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.

● 1,000-r/min servomotors

Straight shaft without key

Motor capacity	Gear Ratio	Model (Straight shaft)
900 W	1/5	R88G-HPG32A05900TB
	1/11	R88G-HPG32A11900TB
	1/21	R88G-HPG50A21900TB
	1/33	R88G-HPG50A33900TB
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
100 W	1/5	R88G-VRSF05B100CJ
	1/9	R88G-VRSF09B100CJ
	1/15	R88G-VRSF15B100CJ
	1/25	R88G-VRSF25B100CJ
200 W	1/5	R88G-VRSF05B200CJ
	1/9	R88G-VRSF09C200CJ
	1/15	R88G-VRSF15C200CJ
	1/25	R88G-VRSF25C200CJ
400 W	1/5	R88G-VRSF05C400CJ
	1/9	R88G-VRSF09C400CJ
	1/15	R88G-VRSF15C400CJ
	1/25	R88G-VRSF25C400CJ
750 W	1/5	R88G-VRSF05C750CJ
	1/9	R88G-VRSF09D750CJ
	1/15	R88G-VRSF15D750CJ
	1/25	R88G-VRSF25D750CJ

Accessories and Cables

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

<Non-flexible Cables>

Power cable

Specifications		Model	
		Without brake	With brake
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W for	3 m	R88A-CAGA003S	**Note:** 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-CAGA005S	
	10 m	R88A-CAGA010S	
	15 m	R88A-CAGA015S	
	20 m	R88A-CAGA020S	
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003S	**Note:** 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	
	10 m	R88A-CAKA010S	
	15 m	R88A-CAKA015S	
	20 m	R88A-CAKA020S	
	30 m	R88A-CAKA030S	
	40 m	R88A-CAKA040S	
	50 m	R88A-CAKA050S	
[200 V] Standard & Eco Cylinder Type 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 (-APE)	R88A-CAGB003B
	5 m	R88A-CAGB005S (-APE)	R88A-CAGB005B
	10 m	R88A-CAGB010S (-APE)	R88A-CAGB010B
	15 m	R88A-CAGB015S (-APE)	R88A-CAGB015B
	20 m	R88A-CAGB020S (-APE)	R88A-CAGB020B
	30 m *3	R88A-CAGB030S	R88A-CAGB030B
	40 m *3	R88A-CAGB040S	R88A-CAGB040B
	50 m *3	R88A-CAGB050S	R88A-CAGB050B
[400 V] Standard Cylinder Type 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 (-APE)	R88A-CAKF003B
	5 m	R88A-CAGB005S (-APE)	R88A-CAKF005B
	10 m	R88A-CAGB010S (-APE)	R88A-CAKF010B
	15 m	R88A-CAGB015S (-APE)	R88A-CAKF015B
	20 m	R88A-CAGB020S (-APE)	R88A-CAKF020B
	30 m	R88A-CAGB030S	R88A-CAKF030B
	40 m	R88A-CAGB040S	R88A-CAKF040B
	50 m	R88A-CAGB050S	R88A-CAKF050B
[200 V and 400 V] Standard Cylinder Type 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 4.5 Kw [200 V] Eco Cylinder Type 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 *3	R88A-CAGD030S	R88A-CAGD030B
	40 m *3	R88A-CAGD040S	R88A-CAGD040B
	50 m *3	R88A-CAGD050S	R88A-CAGD050B
[200 V and 400 V] Standard Cylinder Type 1,500-r/min Servomotors of 7.5 kW 1,000-r/min Servomotors of 6 kW	3 m	R88A-CAGE003S	**Note:** Separate connectors for power and brakes for 1,500-r/min Servomotors of 7.5kW and 1,000-r/min Servomotors of 6.0kW. When a Servomotor with a brake is used, it is necessary to use both a Power Cable for Servomotors without brakes and Brake cable.
	5 m	R88A-CAGE005S	
	10 m	R88A-CAGE010S	
	15 m	R88A-CAGE015S	
	20 m	R88A-CAGE020S	
	30 m	R88A-CAGE030S	
	40 m	R88A-CAGE040S	
	50 m	R88A-CAGE050S	
[200 V and 400 V] Standard Cylinder Type 1,500-r/min Servomotors of 11 to 15 kW	3 m	R88A-CAKG003S-AP	**Note:** Separate connectors for power and brakes for 1,500-r/min Servomotors of 11.0 to 15.0kW. When a Servomotor with a brake is used, it is necessary to use both a Power Cable for Servomotors without brakes and Brake cable.
	5 m	R88A-CAKG005S-AP	
	10 m	R88A-CAKG010S-AP	
	15 m	R88A-CAKG015S-AP	
	20 m	R88A-CAKG020S-AP	

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

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

3. Cables lengths of 30m to 50m are not recommended for Eco Type Servos. ie. R88M-KE˝˝˝˝ servomotors and R88D-KP˝˝H servodrive.

Brake Cable

Specifications		Model
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003B
	5 m	R88A-CAGA005B
	10 m	R88A-CAGA010B
	15 m	R88A-CAGA015B
	20 m	R88A-CAGA020B
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003B
	5 m	R88A-CAKA005B
	10 m	R88A-CAKA010B
	15 m	R88A-CAKA015B
	20 m	R88A-CAKA020B
	30 m	R88A-CAKA030B
	40 m	R88A-CAKA040B
	50 m	R88A-CAKA050B
[200 V/400 V] Standard Cylinder Type 1,500-r/min Servomotors of 7.5 to 15 kW 1,500-r/min Servomotors of 6 kW	3 m	R88A-CAGE003B
	5 m	R88A-CAGE005B
	10 m	R88A-CAGE010B
	15 m	R88A-CAGE015B
	20 m	R88A-CAGE020B
	30 m	R88A-CAGE030B
	40 m	R88A-CAGE040B
	50 m	R88A-CAGE050B

Encoder Cable

Specifications		Model
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRGB003C
	5 m	R88A-CRGB005C
	10 m	R88A-CRGB010C
	15 m	R88A-CRGB015C
	20 m	R88A-CRGB020C
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 1 to 5kW 2,000-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRGC003N (-APE)
	5 m	R88A-CRGC005N (-APE)
	10 m	R88A-CRGC010N (-APE)
	15 m	R88A-CRGC015N (-APE)
	20 m	R88A-CRGC020N (-APE)
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003C
	5 m	R88A-CRKA005C
	10 m	R88A-CRKA010C
	15 m	R88A-CRKA015C
	20 m	R88A-CRKA020C
	30 m	R88A-CRKA030C
	40 m	R88A-CRKA040C
	50 m	R88A-CRKA050C
[200 V] Standard Cylinder Type 3,000-r/min Servomotors of 1.0kW and above 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors [400 V] Standard Cylinder Type 3,000-r/min Servomotors 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003N
	5 m	R88A-CRKC005N
	10 m	R88A-CRKC010N
	15 m	R88A-CRKC015N
	20 m	R88A-CRKC020N
	30 m	R88A-CRKC030N
	40 m	R88A-CRKC040N
	50 m	R88A-CRKC050N

<Flexible Cables>

Power cable

Specifications		Model	
		Without brake	With brake
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W for	3 m	R88A-CAGA003SR (-E)	**Note:** 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-CAGA005SR (-E)	
	10 m	R88A-CAGA010SR (-E)	
	15 m	R88A-CAGA015SR (-E)	
	20 m	R88A-CAGA020SR (-E)	
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003SR (-E)	**Note:** 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 (-E)	
	10 m	R88A-CAKA010SR (-E)	
	15 m	R88A-CAKA015SR (-E)	
	20 m	R88A-CAKA020SR (-E)	
	30 m	R88A-CAKA030SR (-E)	
	40 m	R88A-CAKA040SR (-E)	
	50 m	R88A-CAKA050SR (-E)	
[200 V] Standard & Eco Cylinder Type 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 (-E)	R88A-CAGB003BR (-E)
	5 m	R88A-CAGB005SR (-E)	R88A-CAGB005BR (-E)
	10 m	R88A-CAGB010SR (-E)	R88A-CAGB010BR (-E)
	15 m	R88A-CAGB015SR (-E)	R88A-CAGB015BR (-E)
	20 m	R88A-CAGB020SR (-E)	R88A-CAGB020BR (-E)
	30 m *3	R88A-CAGB030SR (-E)	R88A-CAGB030BR (-E)
	40 m *3	R88A-CAGB040SR (-E)	R88A-CAGB040BR (-E)
	50 m *3	R88A-CAGB050SR (-E)	R88A-CAGB050BR (-E)
[400 V] Standard Cylinder Type 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 (-E)	R88A-CAKF003BR (-E)
	5 m	R88A-CAGB005SR (-E)	R88A-CAKF005BR (-E)
	10 m	R88A-CAGB010SR (-E)	R88A-CAKF010BR (-E)
	15 m	R88A-CAGB015SR (-E)	R88A-CAKF015BR (-E)
	20 m	R88A-CAGB020SR (-E)	R88A-CAKF020BR (-E)
	30 m	R88A-CAGB030SR (-E)	R88A-CAKF030BR (-E)
	40 m	R88A-CAGB040SR (-E)	R88A-CAKF040BR (-E)
	50 m	R88A-CAGB050SR (-E)	R88A-CAKF050BR (-E)
[200 V and 400 V] Standard Cylinder Type 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 4.5 Kw [200 V] Eco Cylinder Type 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 (-E)	R88A-CAGD003BR (-E)
	5 m	R88A-CAGD005SR (-E)	R88A-CAGD005BR (-E)
	10 m	R88A-CAGD010SR (-E)	R88A-CAGD010BR (-E)
	15 m	R88A-CAGD015SR (-E)	R88A-CAGD015BR (-E)
	20 m	R88A-CAGD020SR (-E)	R88A-CAGD020BR (-E)
	30 m *3	R88A-CAGD030SR (-E)	R88A-CAGD030BR (-E)
	40 m *3	R88A-CAGD040SR (-E)	R88A-CAGD040BR (-E)
	50 m *3	R88A-CAGD050SR (-E)	R88A-CAGD050BR (-E)
[200 V and 400 V] Standard Cylinder Type 1,500-r/min Servomotors of 7.5 kW 1,000-r/min Servomotors of 6 kW	3 m	R88A-CAGE003SR (-E)	**Note:** Separate connectors for power and brakes for 1,500-r/min Servomotors of 7.5kW and 1,000-r/min Servomotors of 6.0kW. When a Servomotor with a brake is used, it is necessary to use both a Power Cable for Servomotors without brakes and Brake cable.
	5 m	R88A-CAGE005SR (-E)	
	10 m	R88A-CAGE010SR (-E)	
	15 m	R88A-CAGE015SR (-E)	
	20 m	R88A-CAGE020SR (-E)	
	30 m	R88A-CAGD030SR	
	40 m	R88A-CAGD040SR	
	50 m	R88A-CAGD050SR	
[200 V and 400 V] Standard Cylinder Type 1,500-r/min Servomotors of 11 to 15 kW	3 m	R88A-CAKG003SR-E	**Note:** Separate connectors for power and brakes for 1,500-r/min Servomotors of 11.0 to 15.0kW. When a Servomotor with a brake is used, it is necessary to use both a Power Cable for Servomotors without brakes and Brake cable.
	5 m	R88A-CAKG005SR-E	
	10 m	R88A-CAKG010SR-E	
	15 m	R88A-CAKG015SR-E	
	20 m	R88A-CAKG020SR-E	

Note: 1. Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.
2. For non-flexible power cables for Servomotors of 11 to 15 kW, refer to the relevant manuals of G5-Series and make your own cable.
3. Cables lengths of 30m to 50m are not recommended for Eco Type Servos. ie. R88M-KE˝˝˝˝ servomotors and R88D-KP˝˝˝H servodrive.
4. Cables Models Ending with "-E" are with Right-Angle connector on Servomotor Side.

Brake Cable

Specifications		Model
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAGA003BR (-E)
	5 m	R88A-CAGA005BR (-E)
	10 m	R88A-CAGA010BR (-E)
	15 m	R88A-CAGA015BR (-E)
	20 m	R88A-CAGA020BR (-E)
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CAKA003BR (-E)
	5 m	R88A-CAKA005BR (-E)
	10 m	R88A-CAKA010BR (-E)
	15 m	R88A-CAKA015BR (-E)
	20 m	R88A-CAKA020BR (-E)
	30 m	R88A-CAKA030BR (-E)
	40 m	R88A-CAKA040BR (-E)
	50 m	R88A-CAKA050BR (-E)
[200 V/400 V] Standard Cylinder Type 1,500-r/min Servomotors of 7.5 to 15 kW 1,500-r/min Servomotors of 6 kW	3 m	R88A-CAGE003BR (-E)
	5 m	R88A-CAGE005BR (-E)
	10 m	R88A-CAGE010BR (-E)
	15 m	R88A-CAGE015BR (-E)
	20 m	R88A-CAGE020BR (-E)
	30 m	R88A-CAGE030B
	40 m	R88A-CAGE040B
	50 m	R88A-CAGE050B

Note: Cables Models Ending with "-E" are with Right-Angle connector on Servomotor Side.

Encoder Cable

Specifications		Model
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRGB003CR (-E)
	5 m	R88A-CRGB005CR (-E)
	10 m	R88A-CRGB010CR (-E)
	15 m	R88A-CRGB015CR (-E)
	20 m	R88A-CRGB020CR (-E)
[200 V] Eco Cylinder Type 3,000-r/min Servomotors of 1 to 5kW 2,000-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRGC003NR (-E)
	5 m	R88A-CRGC005NR (-E)
	10 m	R88A-CRGC010NR (-E)
	15 m	R88A-CRGC015NR (-E)
	20 m	R88A-CRGC020NR (-E)
[100 V/200 V] Standard Cylinder Type 3,000-r/min Servomotors of 50 to 750 W	3 m	R88A-CRKA003CR (-E)
	5 m	R88A-CRKA005CR (-E)
	10 m	R88A-CRKA010CR (-E)
	15 m	R88A-CRKA015CR (-E)
	20 m	R88A-CRKA020CR (-E)
	30 m	R88A-CRKA030CR (-E)
	40 m	R88A-CRKA040CR (-E)
	50 m	R88A-CRKA050CR (-E)
[200 V] Standard Cylinder Type 3,000-r/min Servomotors of 1.0kW and above 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors [400 V] Standard Cylinder Type 3,000-r/min Servomotors 2,000-r/min Servomotors 1,500-r/min Servomotors 1,000-r/min Servomotors	3 m	R88A-CRKC003NR (-E)
	5 m	R88A-CRKC005NR (-E)
	10 m	R88A-CRKC010NR (-E)
	15 m	R88A-CRKC015NR (-E)
	20 m	R88A-CRKC020NR (-E)
	30 m	R88A-CRKC030NR (-E)
	40 m	R88A-CRKC040NR (-E)
	50 m	R88A-CRKC050NR (-E)

Note: Cables Models Ending with "-E" are with Right-Angle connector on Servomotor Side.

■ Cable/Connector

Absolute Encoder Backup Battery & Absolute Encoder Battery Cable

Description		Length	Model
Absolute Encoder Battery Cable	Without Backup Battery	0.3 m	**R88A-CRGD0R3C**
	With Backup Battery	0.3 m	**R88A-CRGD0R3C-BS**
Absolute Encoder Backup Battery (2,000 mA ·3.6 V)		-	**R88A-BAT01G**

Cables

Description		Length	Model
Analog Monitor Cables		1 m	**R88A-CMK001S**
General Purpose Control I/O Cables (CN1)	Analog/Pulse Train Input Servodrive (R88D-KT□ / R88D-KP□)	1 m	**R88A-CPG001S**
		2 m	**R88A-CPG002S**
	Network Communications Servodrive (R88D-KN□)	1 m	**R88A-CPKB001S-AP**
		2 m	**R88A-CPKB002S-AP**
External encoder cable (CN4)		5 m	**R88A-CRKM005SR-E**
		10 m	**R88A-CRKM010SR-E**
		20 m	**R88A-CRKM020SR-E**
Safety Connecting Cable (CN8)		3 m	**R88A-CSK003S-E**

Servo Drive Connectors

Description		Connects To	Model
Control I/O Connector	Analog/Pulse Train Input Servodrive (R88D-KT□ / R88D-KP□)	CN1	**R88A-CNU11C**
	Network Communications Servodrive (R88D-KN□)	CN1	**R88A-CNW01C**
Main Circuit Power Supply Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW	CNA	**R88A-CNA02G-AP**
	[400VAC] 600W-1.5kW	CNA	**R88A-CNA01K-AP**
	[200VAC] 2.0kW	CNA	**R88A-CNA02K-AP**
	[400VAC] 2.0kW	CNA	**R88A-CNA03K-AP**
Servomotor Power Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW	CNB	**R88A-CNB01G-AP**
	[400VAC] 600W-1.5kW	CNB	**R88A-CNB01K-AP**
	[200VAC] 2.0kW [400VAC] 2.0kW	CNB	**R88A-CNB02K-AP**
24VDC Control Circuit Connector	[400VAC] 600W-2.0kW	CNC	**R88A-CNC01K-AP**
Regenerative Resistor Connector	[400VAC] 600W-1.5kW	CND	**R88A-CND01K-AP**
	[200VAC] 2.0kW [400VAC] 2.0kW	CND	**R88A-CND02K-AP**
Servomotor Encoder Connector		CN2	**R88A-CNW01R**
External Encoder Connector		CN4	**R88A-CNK41L**
Safety I/O Signal Connector		CN8	**R88A-CNK81S**

Servomotor Connectors

Description	Applicable Servomotor Capacity	Model
Servomotor Encoder Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	**R88A-CNK02R**
	[100 V/200 V] 3,000 r/min (1 to 5 kW), 2,000 r/min, 1,000 r/min [400 V] 3,000 r/min, 2,000 r/min, 1,000 r/min	**R88A-CNK04R**
Power Cable Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	**R88A-CNK11A**
	[200 V] [400V] 1,500 r/min (11 to 15kW)	**R88A-CNK21A-AP**
Brake Cable Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	**R88A-CNK11B**
	[200 V] [400V] 1,500 r/min (7.5 to 15kW), 1,000 r/min (6.0kW)	**R88A-CNK21B-AP**

■ Control Cables

Control Cables (for Connector Terminal Block/CN1)

Name	Specifications			Model
Connector Terminal Block Cables	General-purpose/Pulse Train Input		Length 1.0 m	**XW2Z-100J-B24**
			Length 2.0 m	**XW2Z-200J-B24**
	MECHATROLINK-II Communications EtherCAT Communications		Length 1.0 m	**XW2Z-100J-B34**
			Length 2.0 m	**XW2Z-200J-B34**
Connector Terminal Block Conversion Unit	General-purpose/ Pulse Train input	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**
	MECHATROLINK-II Communications EtherCAT Communications	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**

● General-purpose/Pulse Train Inputs

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 *1	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**

∗1. Applicable to General-purpose Input Servo Drives only. (i.e. R88D-KT□□□)

Device for External Signal Connection / Connecting Cables (for CJ1W-NC□□4)*1

Name		Specifications		Model
Connector Terminal Block Cables	**Connection 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**

∗1. Applicable to General-purpose Input Servo Drives only. (i.e. R88D-KT□□□)

Servo Relay Units (for CN1)

Specifications	The number of axes	Model
Position Control Unit: For CJ1W-NC113/NC133 For CS1W-NC113/NC133 For C200HW-NC113	for 1 axis	**XW2B-20J6-1B**
Position Control Unit: For CJ1W-NC213/NC233/NC413/NC433 For CS1W-NC213/NC233/NC413/NC433 For C200HW-NC213/NC413	for 2 axis	**XW2B-40J6-2B**
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15	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**

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)	1 m	**XW2Z-100J-B25**
	2 m	**XW2Z-200J-B25**
For CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15 (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**

Note: You cannot use a Servo Relay Unit Cable for line-receiver inputs (+CWLD: CN1 pin 44, -CWLD: CN1 pin 45, +CCWLD: CN1 pin 46, -CCWLD: CN1 pin 47).
Use a General-purpose Control Cable and wire the connector to match the controller.

Servo Relay Unit cable (Position Control Unit)

Specifications		The number of axes	Length	Model
CJ1W line-driver output type For 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 CJ2M-CPU31/CPU32/CPU33/CPU34/CPU35 For CJ2M-CPU11/CPU12/CPU13/CPU14/CPU15 (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**

■ Communication Cables

● MECHATROLINK-II Communications

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

Name	Length	Model (OMRON model number)	Yaskawa model number
MECHATROLINK-II Cables (without ring core and USB connector on both ends) ✻ Can be connected to R88D-GN and R88D-KN only.	0.5 m	**FNY-W6002-A5**	**JEPMC-W6002-A5-E**
	1.0 m	**FNY-W6002-01**	**JEPMC-W6002-01-E**
	3.0 m	**FNY-W6002-03**	**JEPMC-W6002-03-E**
	5.0 m	**FNY-W6002-05**	**JEPMC-W6002-05-E**
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.)

● Recommended EtherCAT Communications Cables

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

Cabel with Connectors
Wire Gauge and Number of Pairs: AWG22, 2-pair Cable

Item	Appearance	Recommended manufacturer	Cable length(m)	Model
Cable with Connectors on Both Ends (RJ45/RJ45)		OMRON	0.3	**XS5W-T421-AMD-K**
			0.5	**XS5W-T421-BMD-K**
			1	**XS5W-T421-CMD-K**
			2	**XS5W-T421-DMD-K**
			5	**XS5W-T421-GMD-K**
			10	**XS5W-T421-JMD-K**
Cable with Connectors on Both Ends (M12/RJ45)		OMRON	0.3	**XS5W-T421-AMC-K**
			0.5	**XS5W-T421-BMC-K**
			1	**XS5W-T421-CMC-K**
			2	**XS5W-T421-DMC-K**
			5	**XS5W-T421-GMC-K**
			10	**XS5W-T421-JMC-K**

Note: The cable length 0.3, 0.5, 1, 2, 3, 5, 10 and 15m are available. For details, refer to Cat.No.G019.

Cables / Connectors
Wire Gauge and Number of Pairs: AWG24, 4-pair Cable

Item	Appearance	Recommended manufacturer	Model
Cables	–	Hitachi Cable, Ltd.	**NETSTAR-C5E SAB ✻ 0.5 x 4P**
	–	Kuramo Electric Co.	**KETH-SB ✻**
	–	SWCC Showa Cable Systems Co.	**FAE-5004 ✻**
RJ45 Connectors	–	Panduit Corporation	**MPS588 ✻**

✻ We recommend you to use above cable and connector together.

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

Item	Appearance	Recommended manufacturer	Model
Cables	–	Kuramo Electric Co.	**KETH-PSB-OMR ✻**
RJ45 Assembly Connector		OMRON	**XS6G-T421-1 ✻**

✻ We recommend you to use above cable and connector together.
Note: Connect both ends of cable shielded wires to the connector hoods.

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

External Regeneration Resistors

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

Reactors

Specifications				Model
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	Linear Motor with built-in EtherCAT communications	
R88D-KTA5L/-K□01H (For single-phase input)	R88D-KNA5L-ML2/-KN01H-ML2 (For single-phase input)	R88D-KNA5L-ECT/-KN01H-ECT (For single-phase input)	R88D-KN01H-ECT-L (For single-phase input)	**3G3AX-DL2002**
R88D-KT01L/-K□02H (For single-phase input)	R88D-KN01L-ML2/-KN02H-ML2 (For single-phase input)	R88D-KN01L-ECT/-KN02H-ECT (For single-phase input)	R88D-KN01L-ECT-L/-KN02H-ECT-L (For single-phase input)	**3G3AX-DL2004**
R88D-KT02L/-K□04H (For single-phase input)	R88D-KN02L-ML2/-KN04H-ML2 (For single-phase input)	R88D-KN02L-ECT/-KN04H-ECT (For single-phase input)	R88D-KN02L-ECT-L/-KN04H-ECT-L (For single-phase input)	**3G3AX-DL2007**
R88D-KT04L/-K□08H/ -K□10H (For single-phase input)	R88D-KN04L-ML2/-KN08H-ML2/ -KN10H-ML2 (For single-phase input)	R88D-KN04L-ECT/-KN08H-ECT/ -KN10H-ECT (For single-phase input)	R88D-KN04L-ECT-L/-KN08H-ECT-L/ -KN10H-ECT-L (For single-phase input)	**3G3AX-DL2015**
R88D-K□15H (For single-phase input)	R88D-KN15H-ML2 (For single-phase input)	R88D-KN15H-ECT (For single-phase input)	R88D-KN15H-ECT-L (For single-phase input)	**3G3AX-DL2022**
R88D-K□01H/-K□02H/ -K□04H/-K□08H/ -K□10H/-K□15H (For three-phase input)	R88D-KN01H-ML2/-KN02H-ML2/ -KN04H-ML2/-KN08H-ML2/ -KN10H-ML2/-KN15H-ML2 (For three-phase input)	R88D-KN01H-ECT/-KN02H-ECT/ -KN04H-ECT/KN08H-ECT/ -KN10H-ECT/-KN15H-ECT (For three-phase input)	R88D-KN01H-ECT-L/-KN02H-ECT-L/ -KN04H-ECT-L/-KN08H-ECT-L/ -KN10H-ECT-L/-KN15H-ECT-L (For three-phase input)	**3G3AX-AL2025**
R88D-K□20H/-K□30H	R88D-KN20H-ML2/-KN30H-ML2	R88D-KN20H-ECT/-KN30H-ECT	–	**3G3AX-AL2055**
R88D-K□50H	R88D-KN50H-ML2	R88D-KN50H-ECT	–	**3G3AX-AL2110**
R88D-KT06F/-KT10F/-KT15F	R88D-KN06F-ML2/-KN10F-ML2/ -KN15F-ML2	R88D-KN06F-ECT/-KN10F-ECT/ -KN15F-ECT	R88D-KN06F-ECT-L/-KN10F-ECT-L/ -KN15F-ECT-L	**3G3AX-AL4025**
R88D-KT20F/-KT30F	R88D-KN20F-ML2/-KN30F-ML2	R88D-KN20F-ECT/-KN30F-ECT	R88D-KN20F-ECT-L/-KN30F-ECT-L	**3G3AX-AL4055**
R88D-KT50F	R88D-KN50F-ML2	R88D-KN50F-ECT	–	**3G3AX-AL4110**
R88D-KT75H/-KT150F	–	R88D-KT75H-ECT/-KT150F-ECT	–	**3G3AX-AL4220**

Mounting Brackets (L Brackets for Rack Mounting)

Specifications				Model
General-purpose Inputs	MECHATROLINK-II Communications	EtherCAT Communications	Linear Motor with built-in EtherCAT communications	
R88D-KTA5L/-KT01L/ -K□01H/-K□02H	R88D-KNA5L-ML2/-KN01L-ML2/ -KN01H-ML2/-KN02H-ML2	R88D-KNA5L-ECT/-KN01L-ECT/ -KN01H-ECT/-KN02H-ECT	R88D-KN01L-ECT-L/-KN01H-ECT-L/ -KN02H-ECT-L	**R88A-TK01K**
R88D-KT02L/-K□04H	R88D-KN02L-ML2/-KN04H-ML2	R88D-KN02L-ECT/-KN04H-ECT	R88D-KN02L-ECT-L/-KN04H-ECT-L	**R88A-TK02K**
R88D-KT04L/-K□08H	R88D-KN04L-ML2/-KN08H-ML2	R88D-KN04L-ECT/-KN08H-ECT	R88D-KN04L-ECT-L/-KN08H-ECT-L	**R88A-TK03K**
R88D-K□10H/K□15H/ -KT06F/-KT10F/-KT15F	R88D-KN10H-ML2/-KN15H-ML2/ -KN06F-ML2/-KN10F-ML2/ -KN15F-ML2	R88D-KN10H-ECT/-KN15H-ECT/ -KN06F-ECT/-KN10F-ECT/ -KN15F-ECT	R88D-KN10H-ECT-L/-KN15H-ECT-L/ -KN06F-ECT-L/-KN10F-ECT-L/ -KN15F-ECT-L	**R88A-TK04K**

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

■ Software

How to Select Required Support Software for Your Controller

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

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

■ Automation Software Sysmac Studio

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

Product name	Specifications	Number of licenses	Media	Model	Standards
Sysmac Studio Standard Edition Ver.1.□□	The Sysmac Studio provides an integrated development environment to set up, program, debug, and maintain NJ-series Controllers and other Machine Automation Controllers, as well as EtherCAT slaves. Sysmac Studio runs on the following OS. Windows XP (Service Pack 3 or higher, 32-bit version)/ Vista (32-bit version) / 7 (32-bit/64-bit version)	– (Media only)	DVD	**SYSMAC-SE200D**	–
	The Sysmac Studio Standard Edition DVD includes Support Software to set up EtherNet/IP Units, DeviceNet slaves, Serial Communications Units, and Support Software for creating screens on HMIs (CX-Designer). For details, refer to the Sysmac Integrated Catalogue (P072).	1 license ✻	–	**SYSMAC-SE201L**	–

✻ Multi licenses are available for the Sysmac Studio (3, 10, 30, or 50 licenses).

■ FA Integrated Tool Package CX-One

Product name	Specifications	Number of licenses	Media	Model	Standards
FA Integrated Tool Package CX-One Ver. 4.□	The CX-One is a comprehensive software package that integrates Support Software for OMRON PLCs and components. CX-One runs on following OS. OS: Windows XP (Service Pack 3 or higher), Vista or 7 **Note:** Except for Windows XP 64-bit version. CX-One Version.4.□ includes CX-Drive Ver.2.□.	1 license ✻1	DVD ✻2	**CXONE-AL01D-V4**	–

✻1. Multi licenses are available for the CX-One (3, 10, 30, or 50 licenses).
✻2. The CX-One is also available on CD (CXONE-AL□□C-V4).

Combination table (General-purpose Inputs/MECHATROLINK-II/EtherCAT)

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

<Cylinder Type>

● 3,000-r/min servomotors

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

● 1,500r/min, 2,000-r/min servomotors

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

✻ Please use the Servo Drive and Servomotor in this combination although their capacity is not same.

● 1,000-r/min servomotors

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

✻ Please use the Servo Drive and Servomotor in this combination although their capacity is not same.

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

<Cylinder Type>

● 3,000-r/min servomotors

Motor model	1/5	1/11 (1/9 for flange size No.11)	1/21	1/33	1/45
R88M-K05030□	R88G-HPG11B05100B□ (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-HPG32A33600SB□ (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-HPG32A33600SB□	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-HPG32A05900TB□	R88G-HPG32A11900TB□	R88G-HPG50A21900TB□	R88G-HPG50A33900TB□
R88M-K2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG50A212K0TB□ (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□)

Combination table (Pulse Train Input Type)

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	
		Output	With incremental encoder
Single-phase/three-phase 200VAC	R88D-KP01H ✻	50 W ✻	R88M-KE05030H-□ ✻
	R88D-KP01H	100 W	R88M-KE10030H-□
	R88D-KP02H	200 W	R88M-KE20030H-□
	R88D-KP04H	400 W	R88M-KE40030H-□
	R88D-KP08H	750 W	R88M-KE75030H-□
	R88D-KP15H ✻	1 kW ✻	R88M-KE1K030H-□ ✻
	R88D-KP15H	1.5 kW	R88M-KE1K530H-□
Three-phase 200VAC	R88D-KP20H	2 kW	R88M-KE2K030H-□
	R88D-KP30H	3 kW	R88M-KE3K030H-□
	R88D-KP50H✻	4 kW ✻	R88M-KE4K030H-□ ✻
	R88D-KP50H	5 kW	R88M-KE5K030H-□

✻ Please note the capacity of Servo Drive and Servomotor are not same in this combination.

● 2,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers	Servomotor Model Numbers	
		Output	With incremental encoder
Single-phase/three-phase 200VAC	R88D-KP10H	1 kW	R88M-KE1K020H-□
	R88D-KP15H	1.5 kW	R88M-KE1K520H-□
Three-phase 200VAC	R88D-KP20H	2 kW	R88M-KE2K020H-□
	R88D-KP30H	3 kW	R88M-KE3K020H-□
	R88D-KP50H ✻	4 kW ✻	R88M-KE4K020H-□ ✻
	R88D-KP50H	5 kW	R88M-KE5K020H-□

✻ Please note the capacity of Servo Drive and Servomotor are not same in this combination.

● 1,000-r/min servomotors

Power Supply Voltage	Servo Drive Model Numbers	Servomotor Model Numbers	
		Output	With incremental encoder
Single-phase/three-phase 200VAC	R88D-KP15H ✻	900 W ✻	R88M-KE90010H-□ ✻
Three-phase 200VAC	R88D-KP30H ✻	2 kW ✻	R88M-KE2K010H-□ ✻
	R88D-KP50H ✻	3 kW ✻	R88M-KE3K010H-□ ✻

✻ Please note the capacity of Servo Drive and Servomotor are not same in this combination.

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-KE05030□	R88G-HPG11B05100B□ (Also used with R88M-KE10030□)	R88G-HPG11B09050B□ (Gear ratio 1/9)	R88G-HPG14A21100B□ (Also used with R88M-KE10030□)	R88G-HPG14A33050B□	R88G-HPG14A45050B□
R88M-KE10030□	R88G-HPG11B05100B□	R88G-HPG14A11100B□	R88G-HPG14A21100B□	R88G-HPG20A33100B□	R88G-HPG20A45100B□
R88M-KE20030□	R88G-HPG14A05200B□	R88G-HPG14A11200B□	R88G-HPG20A21200B□	R88G-HPG20A33200B□	R88G-HPG20A45200B□
R88M-KE40030□	R88G-HPG14A05400B□	R88G-HPG20A11400B□	R88G-HPG20A21400B□	R88G-HPG32A33400B□	R88G-HPG32A45400B□
R88M-KE75030□	R88G-HPG20A05750B□	R88G-HPG20A11750B□	R88G-HPG32A21750B□	R88G-HPG32A33750B□	R88G-HPG32A45750B□
R88M-KE1K030□	R88G-HPG32A052K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A211K5B□ (Also used with R88M-KE1K5030□)	R88G-HPG50A332K0B□ (Also used with R88M-KE2K030□)	R88G-HPG50A451K5B□ Also used with R88M-KE1K530□)
R88M-KE1K530□	R88G-HPG32A052K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A112K0B□ (Also used with R88M-KE2K030□)	R88G-HPG32A211K5B□	R88G-HPG50A332K0B□ (Also used with R88M-KE2K030□)	R88G-HPG50A451K5B□
R88M-KE2K030□	R88G-HPG32A052K0B□	R88G-HPG32A112K0B□	R88G-HPG50A212K0B□	R88G-HPG50A332K0B□	–
R88M-KE3K030□	R88G-HPG32A053K0B□	R88G-HPG50A113K0B□	R88G-HPG50A213K0B□	–	–
R88M-KE4K030□	R88G-HPG32A054K0B□	R88G-HPG50A115K0B□ (Also used with R88M-KE5K030□)	–	–	–
R88M-KE5K030□	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-KE1K020□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG32A211K0SB□	R88G-HPG50A332K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG50A451K0SB□
R88M-KE1K520□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□ (Also used with R88M-KE2K020□)	R88G-HPG50A213K0B□ (Also used with R88M-KE3K030□)	R88G-HPG50A332K0SB□ (Also used with R88M-KE2K020□)	–
R88M-KE2K020□	R88G-HPG32A053K0B□ (Also used with R88M-KE3K030□)	R88G-HPG32A112K0SB□	R88G-HPG50A213K0B□ (Also used with R88M-KE3K030□)	R88G-HPG50A332K0SB□	–
R88M-KE3K020□	R88G-HPG32A054K0B□ (Also used with R88M-KE4K030□)	R88G-HPG50A115K0B□ (Also used with R88M-KE5K030□)	R88G-HPG50A213K0SB□	R88G-HPG65A253K0SB□	–
R88M-KE4K020□	R88GHPG50A055K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-KE3K030□)	R88G-HPG65A205K0SB□ (Also used with R88M-KE3K030□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)	–
R88M-KE5K020□	R88GHPG50A055K0SB□	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-KE90010□	R88G-HPG32A05900TB□	R88G-HPG32A11900TB□	R88G-HPG50A21900TB□	R88G-HPG50A33900TB□
R88M-KE2K010□	R88G-HPG32A052K0TB□	R88G-HPG50A112K0TB□	R88G-HPG50A212K0TB□ (Also used with R88M-KE5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)
R88M-KE3K010□	R88G-HPG50A055K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG50A115K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG65A205K0SB□ (Also used with R88M-KE5K020□)	R88G-HPG65A255K0SB□ (Also used with R88M-KE5K020□)

Linear Motor and AC Servo Drive Linear Motor Type Combinations

● Iron-core Linear Motor type

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

● Ironless Linear Motor type

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

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

Controller Combinations

● Position Control unit ,Servo Relay Units and Cables

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

Position Control Unit	Position Control Unit Cable		Servo Relay Unit		Servo Drive Cable
CS1W-NC113	XW2Z-□□□J-A6		XW2B-20J6-1B		XW2Z-□□□J-B25
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					
CJ2M-CPU31 CJ2M-CPU32 CJ2M-CPU33 CJ2M-CPU34 CJ2M-CPU35 CJ2M-CPU11 CJ2M-CPU12 CJ2M-CPU13 CJ2M-CPU14 CJ2M-CPU15	XW2Z-□□□J-A33		For 1 axis	XW2B-20J6-8A	XW2Z-□□□J-B31
			For 2 axis	XW2B-40J6-9A	
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

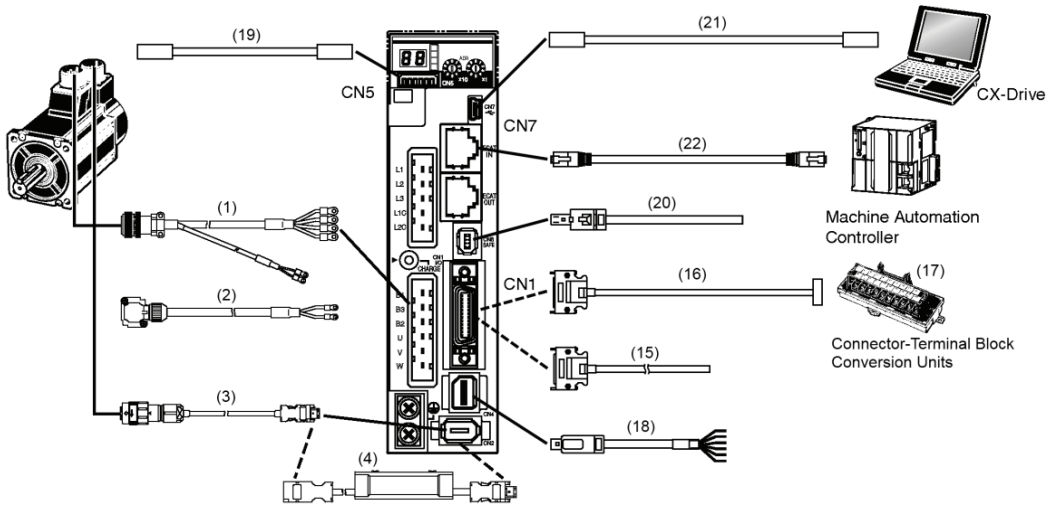
● Motion Control Unit Cables

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.

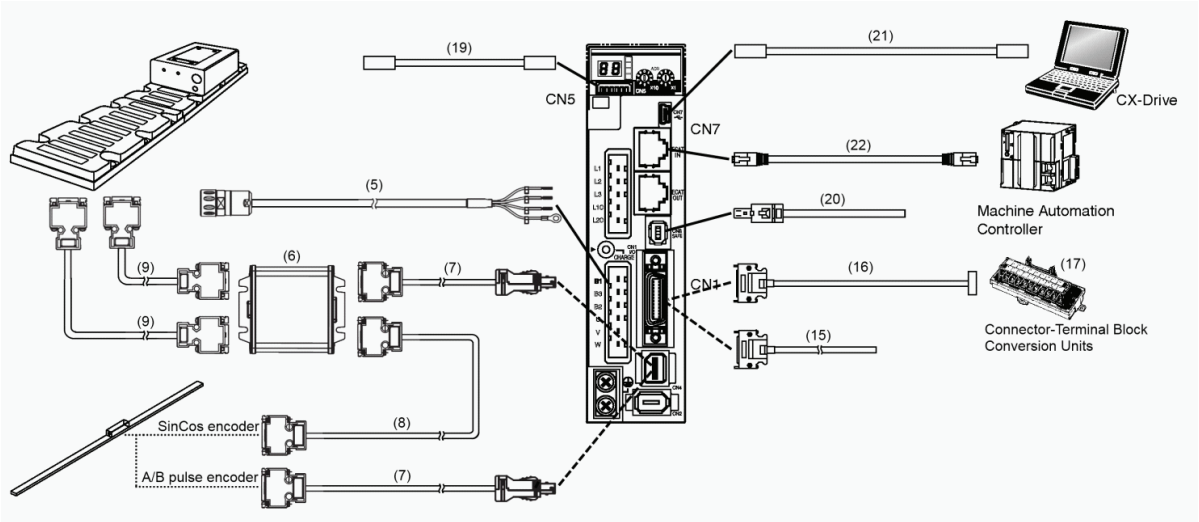
Motion Control Unit	Cable		Remarks
CS1W-MC221-V1 CS1W-MC421-V1	For 1 axis	R88A-CPG□□□M1	The □□□ digits in the model number indicate the cable length. Motion Control Unit Cables come in four lengths: 1 m, 2 m, 3 m, and 5 m. Example model number for 2-m 1-axis cable: R88A-CPG002M1
	For 2 axis	R88A-CPG□□□M2	

Accessories and Cables

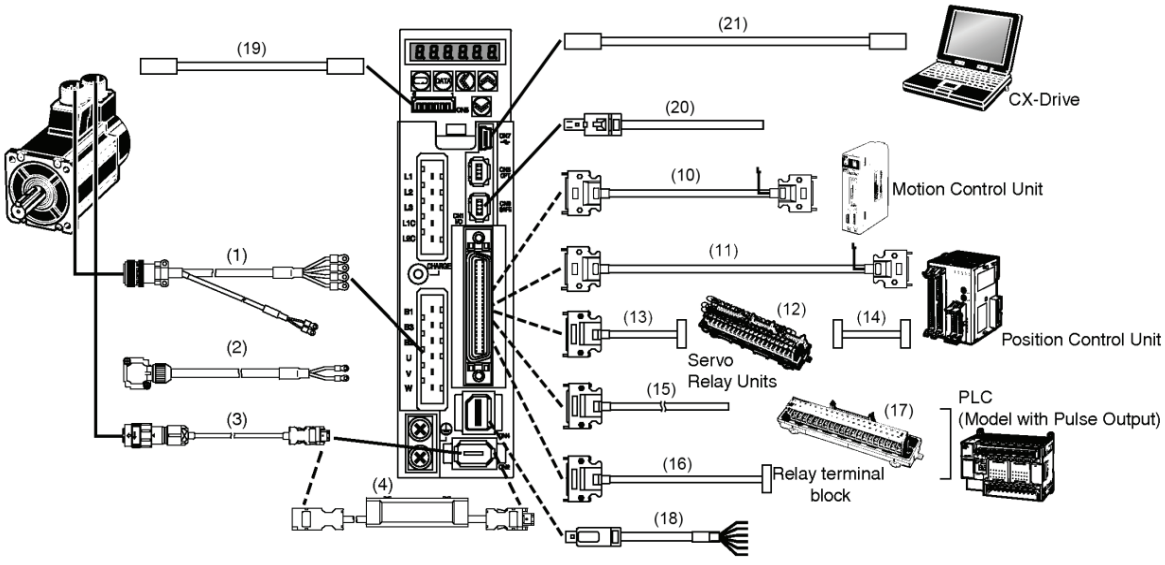
● EtherCAT Communications



● EtherCAT Communications Linear Motor Type

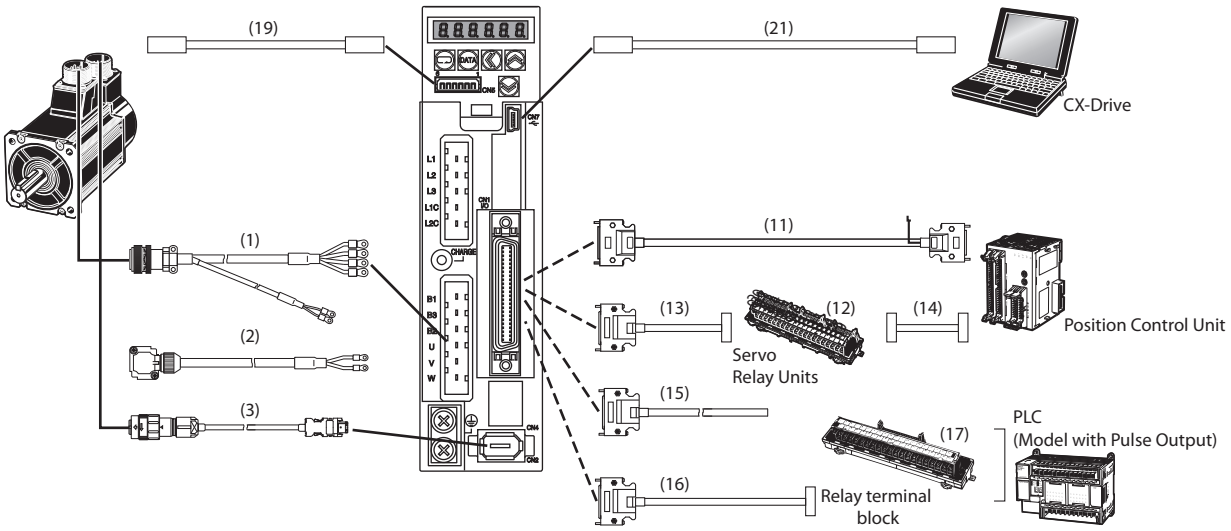


● General-purpose Input

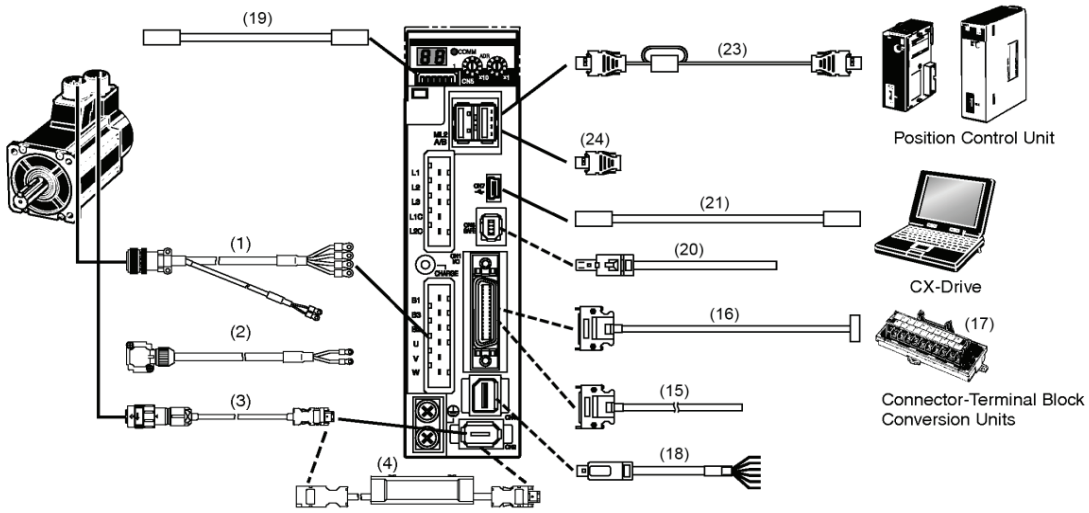


Accessories and Cables

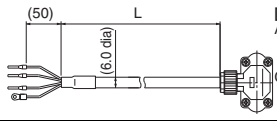
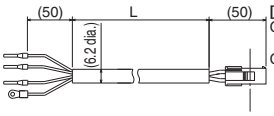
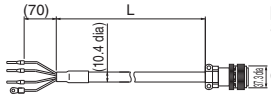
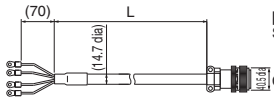
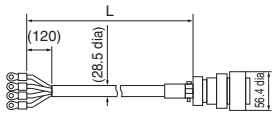
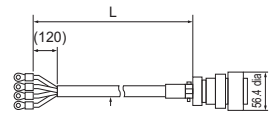
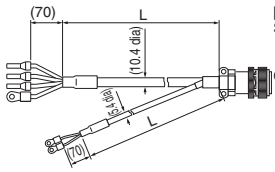
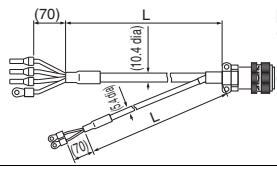
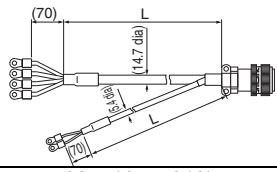
● Pulse Train Input



● MECHATROLINK-II Communications

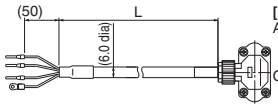
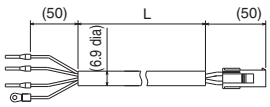
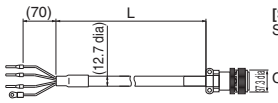
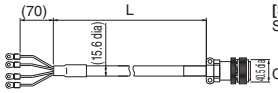
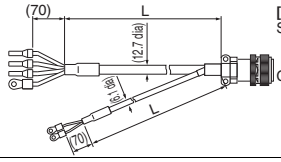
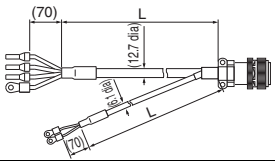
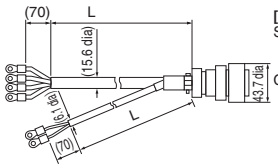


Servomotor Power Cables (For CNB)

Symbol			Applicable Motor Type	Connected to	Model	Description
(1)	Non-flexible Cables	Without Brakes	Standard Cylinder	[100 V] [200 V] 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.)
			Eco Cylinder	[200 V] 3,000 r/min, 50 to 750 W	R88A-CAGA□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 **[Servomotor Connector]** Connector: 172159-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)
			Standard & Eco Cylinder	[200 V] 3,000 r/min, 1 to 2 kW 2,000 r/min, 1 to 2 kW 1,000 r/min, 900 W [400 V] 3,000 r/min, 750 W to 2 kW 2,000 r/min, 400 W to 2 kW 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.)
			Standard & Eco Cylinder	[200 V] [400 V] 3,000 r/min, 3 to 5 kW 2,000 r/min, 3 to 5 kW 1,000 r/min, 2 to 4.5 kW	R88A-CAGD□□□S The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long.	 **[Servomotor Connector]** Straight plug: N/MS3106B22-22S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			Standard Cylinder	[200 V] [400 V] 1,500 r/min, 7.5 kW 1,000 r/min, 6 kW	R88A-CAGE□□□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/MS3106B32-17S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-20A (Japan Aviation Electronics Industry, Ltd.)
			Standard Cylinder	[200 V] [400 V] 1,500 r/min, 11.0 to 15.0 kW	R88A-CAKG□□□S-AP The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15 or 20 m long.	 **[Servomotor Connector]** Straight plug: N/MS3106B32-17S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-20A (Japan Aviation Electronics Industry, Ltd.)
		With Brakes		**Note:** Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.		
			Standard & Eco Cylinder	[200 V] 3,000 r/min, 1 to 2 kW 2,000 r/min, 1 to 2 kW 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.)
			Standard Cylinder	[400 V] 3,000 r/min, 750W to 2 kW 2,000 r/min, 400 W to 2 kW 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.)
			Standard & Eco Cylinder	[200 V] [400 V] 3,000 r/min, 3 to 5 kW 2,000 r/min, 3 to 5 kW 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.)

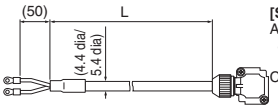
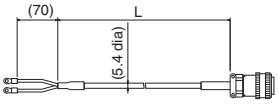
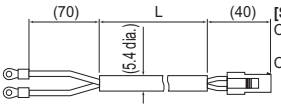
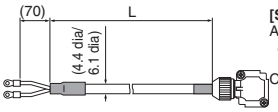
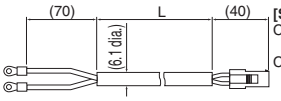
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Servomotor Power Cables (For CNB)

Symbol			Applicable Motor Type	Connected to	Model	Description
(1)	Flexible Cables	Without Brakes	Standard Cylinder	[100 V] [200 V] 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.)
			Eco Cylinder	[200 V] 3,000 r/min, 50 to 750 W	R88A-CAGA□□□SR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 **[Servomotor Connector]** Connector: 172159-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)
			Standard & Eco Cylinder	[200 V] 3,000 r/min, 1 to 2 kW 2,000 r/min, 1 to 2 kW 1,000 r/min, 900 W [400 V] 3,000 r/min, 750 W to 2 kW 2,000 r/min, 400 W to 2 kW 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.)
			Standard & Eco Cylinder	[200 V] [400 V] 3,000 r/min, 3 to 5 kW 2,000 r/min, 3 to 5 kW 1,000 r/min, 2 to 4.5 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		**Note:** Different connectors are used for the motor power and the brake on 100-V and 200-V, 3,000-r/min Servomotors of 50 to 750 W and Servomotors of 6 to 15 kW. When using a Servomotor with a brake, two cables are required: a Power Cable without Brake and a Brake Cable.		
			Standard & Eco Cylinder	[200 V] 3,000 r/min, 1 to 2 kW 2,000 r/min, 1 to 2 kW 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/MS3106B20-18S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)
			Standard Cylinder	[400 V] 3,000 r/min, 750W to 2 kW 2,000 r/min, 400 W to 2 kW 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.)
			Standard & Eco Cylinder	[200 V] [400 V] 3,000 r/min, 3 to 5 kW 2,000 r/min, 3 to 5 kW 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.)

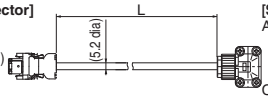
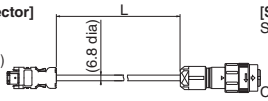
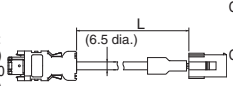
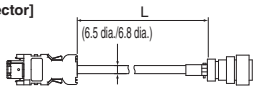
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Brake Cables

Symbol		Applicable Motor Type	Connected to	Model	Description
(2)	Non-flexible Cables	Standard Cylinder	[100 V] [200 V] 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.)
			[200 V] [400 V] 1,500 r/min, 7.5 to 15 kW 1,000 r/min, 6 kW	R88A-CAGE□□□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. (5.4 dia)	 **[Servomotor Connector]** Angle plug: N/MS3106B14S-2S (Japan Aviation Electronics Industry, Ltd.) Connector pins: N/MS3057-6A (Japan Aviation Electronics Industry, Ltd.)
		Eco Cylinder	[200 V] 3,000 r/min, 50 to 750 W	R88A-CAGA□□□B The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 **[Servomotor Connector]** Connector: 172157-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)
	Flexible Cables	Standard Cylinder	[100 V] [200 V] 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.)
		Eco Cylinder	[200 V] 3,000 r/min, 50 to 750 W	R88A-CAGA□□□BR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	 **[Servomotor Connector]** Connector: 172157-1 (Tyco Electronics AMP KK) Connector pins: 170362-1 (Tyco Electronics AMP KK) 170366-1 (Tyco Electronics AMP KK)

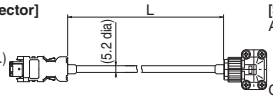
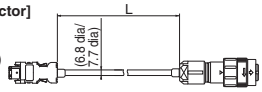
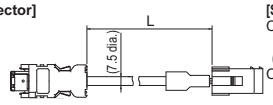
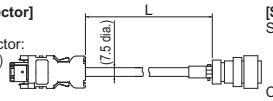
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Encoder Cables (for CN2)

Symbol		Applicable Motor Type	Connected to	Model	Description
(3)	Non-flexible Cables	Standard Cylinder	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)	**[Servo Drive Connector]** Connector: 55100-0670 (Molex Japan Co., Ltd.)  **[Servomotor Connector]** Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)
			3,000 r/min, [200 V] For 1.0 kW and above [400 V] For 750 W and above 2,000 r/min, 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.	**[Servo Drive Connector]** Connector: 55100-0670 (Molex Japan Co., Ltd.)  **[Servomotor Connector]** Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Contact: JN1-22-20S-10000 (Japan Aviation Electronics Industry, Ltd.)
		Eco Cylinder	[200 V] 3,000 r/min, 50 to 750 W (Incremental encoder)	R88A-CRGB□□□C The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	**[Servo Drive Connector]** Connector: 3 to 20 m: Crimped I/O connector: (Molex Japan Co., Ltd.) 30 to 50 m: 55100-0670 (Molex Japan Co., Ltd.) Connector pins: 50639-8028 (Molex Japan Co., Ltd.)  **[Servomotor Connector]** Connector: 172160 (Tyco Electronics AMP KK) Connector pins: 170365-1 (Tyco Electronics AMP KK) 171639-1 (Tyco Electronics AMP KK)
			[200 V] 3,000 r/min, 1kW to 5kW 2,000 r/min, 1kW to 5kW 1,000 r/min, 900W to 3kW	R88A-CRGC□□□N The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	**[Servo Drive Connector]** Connector: Crimped I/O connector: (Molex Japan Co., Ltd.) 30 to 50 m: 55100-0670 (Molex Japan Co., Ltd.) Connector pins: 50639-8028 (Molex Japan Co., Ltd.)  **[Servomotor Connector]** Straight plug: N/MS3106B20-29S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)

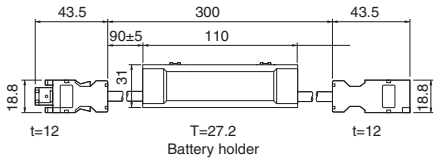
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Encoder Cables (for CN2)

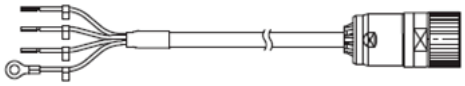
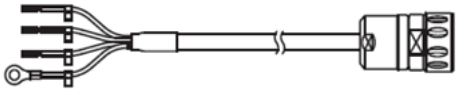
Symbol		Applicable Motor Type	Connected to	Model	Description
(3)	Flexible Cables	Standard Cylinder	3,000 r/min, 50 to 750 W (Absolute encoder/ Incremental encoder)	R88A-CRKA□□□CR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)  [Servomotor Connector] Angle clamp: JN6FR07SM1 (Japan Aviation Electronics Industry, Ltd.) Connector pins: LY10-C1-A1-10000 (Japan Aviation Electronics Industry, Ltd.)
			3,000 r/min, [200 V] For 1.0 kW and above [400 V] For 750 W and above 2,000 r/min, 1,000 r/min, (Absolute encoder/ Incremental encoder)	R88A-CRKC□□□NR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, 20, 30, 40, or 50 m long. (3 to 20 m: 6.8 dia 30 to 50 m: 7.7 dia)	[Servo Drive Connector] Connector: 55100-0670 (Molex Japan Co., Ltd.)  [Servomotor Connector] Straight plug: JN2DS10SL2-R (Japan Aviation Electronics Industry, Ltd.) Cable clamp: JN1-22-22S-10000 (Japan Aviation Electronics Industry, Ltd.)
		Eco Cylinder	3,000 r/min, 50 to 750 W	R88A-CRGB□□□CR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long. (3 to 20 m: 5.2 dia 30 to 50 m: 6.8 dia)	[Servo Drive Connector] Connector: Crimped I/O connector: (Molex Japan Co., Ltd.) Connector pins: 50639-8028 (Molex Japan Co., Ltd.)  [Servomotor Connector] Connector: 172160-1 (Tyco Electronics AMP KK) Connector pins: 170365-1 (Tyco Electronics AMP KK)
			3,000 r/min, 1kW to 5kW 2,000 r/min, 1kW to 5kW 1,000 r/min, 900W to 3kW	R88A-CRGC□□□NR The empty boxes in the model number are for the cable length. The cable can be 3, 5, 10, 15, or 20 m long.	[Servo Drive Connector] Connector: Crimped I/O connector: (Molex Japan Co., Ltd.) Connector pins: 50639-8028 (Molex Japan Co., Ltd.)  [Servomotor Connector] Straight plug: N/MS3106B20-29S (Japan Aviation Electronics Industry, Ltd.) Cable clamp: N/MS3057-12A (Japan Aviation Electronics Industry, Ltd.)

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

Absolute Encoder Backup Battery and Absolute Encoder Battery Cable

Symbol	Name	Specifications		Model	Description
(4)	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	–

Linear Motor Power Cable

Symbol		Applicable Linear Motor Type	Model	Description
(5)	Flexible Cable	Iron-core Motor Coil R88L-EC-FW-0303-□ R88L-EC-FW-0306-□	R88A-CAWK□□□S-DE The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10, 15 or 20 m long.	 Plug type: LPRA06BFRBN170 (Hypertac) Pin No. / Function 1 Phase U 2 Phase V 3 Ground 4 Phase W 5 - 6 -
		Iron-core Motor Coil R88L-EC-FW-0606-□ R88L-EC-FW-0609-□ R88L-EC-FW-0612-□ R88L-EC-FW-1112-□ R88L-EC-FW-1115-□	R88A-CAWL□□□S-DE The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10, 15 or 20 m long.	 Plug type: LPRA06BFRBN170 (Hypertac) Pin No. / Function 1 Phase U 2 Phase V 3 Ground 4 Phase W 5 - 6 -
		Ironless Motor Coil R88L-EC-GW-□	R88A-CAWB□□□S-DE The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10, 15 or 20 m long.	 Plug type: SPOC06KFSDN169 (Hypertac) Pin No. / Function 1 Phase U 2 Phase V 3 Phase W 4 - 5 - 6 Ground

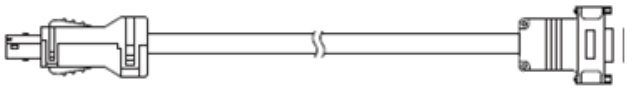
Note: Insert the cable length into the boxess in the model number of cables (1.5 m: 001-5, 3 m: 003, 5 m: 005, 10 m: 010)

Serial Converter Unit

Symbol		Applicable Linear Motor Type	Model	Description
(6)	Flexible Cable	Iron-core Motor Coil R88L-EC-FW-□	R88A-SC01K-E	Serial converter unit from 1 Vpp to G5 serial data transmission (with KTY sensor detection of iron-core motor coil)
		Ironless Motor Coil R88L-EC-GW-□	R88A-SC02K-E	Serial converter unit from 1 Vpp to G5 serial data transmission (with NTC sensor detection of ironless motor coil)

Note: If no temperature sensor is needed, then it does not matter which converter is used.

Serial Converter Cable to Servo Drive

Symbol		Applicable Linear Motor Type	Model	Description
(7)	Flexible Cable	Iron-core Motor Coil R88L-EC-FW-□ Ironless Motor Coil R88L-EC-GW-□	R88A-CRKN□□□CR-E The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10, 15 or 20 m long.	**Servodrive Connector:** MUF-PK10K-X (J.S.T. Mfg. Co., Ltd.)  Serial Converter Unit Connector:DB15

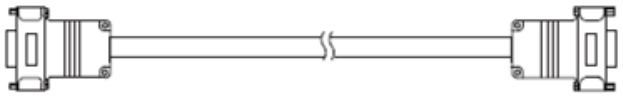
Note: Insert the cable length into the boxess in the model number of cables (1.5 m: 001-5, 3 m: 003, 5 m: 005, 10 m: 010)
This cable can be used for A/B pulse encoder Numerik Jena standard pinout.

Linear Encoder Cable to Serial Converter

Symbol		Applicable Linear Motor Type	Model	Description
(8)	Flexible Cable	**Numerik Jena** SinCos 1Vp-p linear encoder	R88A-CFKA□□□CR-E The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10 or 15 m long.	Extension cable for linear encoder to R88A-SC0oK-E serial converter unit  Connector: DB-9
		Renishaw SinCos 1Vp-p linear encoder	R88A-CFKC□□□CR-E The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10 or 15 m long.	
		Heidenhain SinCos 1Vp-p linear encoder	R88A-CFKD□□□CR-E The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10 or 15 m long.	

Note: Insert the cable length into the boxes in the model number of cables (1.5 m: 001-5, 3 m: 003, 5 m: 005, 10 m: 010)
This extension cable is optional.

Hall and Temperature Sensor Cable to Serial Converter

Symbol		Applicable Linear Motor Type	Model	Description
(9)	Flexible Cable	Iron-core Motor Coil R88L-EC-FW-□ Ironless Motor Coil R88L-EC-GW-□	R88A-CFKB□□□CR-E The empty boxes in the model number are for the cable length. The cable can be 1.5, 3, 5, 10 or 15 m long.	Extension cable from hall and temperature sensors to R88A-SC0oK-E serial  Connector: DB-9

Note: Insert the cable length into the boxes in the model number of cables (1.5 m: 001-5, 3 m: 003, 5 m: 005, 10 m: 010)

Control Cables (for CN1)

Symbol		Name		Connected to		Model
(10)	Control Cables	Control Cables for Motion Control Units		Motion Control Units (for all SYSMAC CS1/C200H)	For 1 axis/ For 2 axis	R88A-CPG□□□M◇ The empty boxes in the model number are for the cable length. The cable can be 1, 2, 3, or 5 m long. The empty diamond in the model number is for the number of axes. One axis: 1, Two axes: 2
(11)		Direct connection cable for Position Control Unit (High-speed type)		Line-driver output type (High-speed type) for CJ1W-NC234/434	For 1 axis	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	For 2 axis	XW2Z-□□□J-G1 The empty boxes in the model number are for the cable length. The cable can be 1, 5, or 10 m long.
				Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 1 axis	XW2Z-□□□J-G13 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.
				Open collector output type (High-speed type) for CJ1W-NC214/NC414	For 2 axis	XW2Z-□□□J-G5 The empty boxes in the model number are for the cable length. The cable can be 1, or 3 m long.
(12)	Servo Relay Units/Connection Cables	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
(13)		Connection Cables	Servo Relay Unit Cables for Servo Drives	Position Control Unit: For CJ1W-NC□□3, CS1W/C200HW-NC□□□ (XW2B-20J6-1B, XW2B-40J6-2B)		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.
(14)			Servo Relay Unit Cables for Position Control Units	CJ1W line-driver output type for CJ1W-NC133	For 1 axis	XW2Z-□□□J-A18 The empty boxes in the model number are for the cable length. The cable can be 0.5, or 1 m long.
				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.
				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.

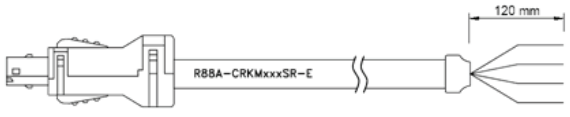
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

Control Cables (for CN1)

Symbol		Name		Connected to			Model
(14)	Servo Relay Units/Connection Cables	Connection Cables	Servo Relay Unit Cables for Position Control Units	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.
				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 FQM1HPLB21		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 1m long.
(15)	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 1 or 2m long.
				Cables for General-purpose Connection (Network Communication Type)			R88A-CPKB□□□S-AP The empty boxes in the model number are for the cable length. The cable can be 1 or 2m long.
(16)	For Connector Terminal Block		Connector Terminal Block Cables	Cable for General-purpose Controllers			XW2Z-□□□J-B24 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
				Cable for MECHATROLINK-II / EtherCAT Communications			XW2Z-□□□J-B34 The empty boxes in the model number are for the cable length. The cable can be 1, or 2 m long.
(17)			Connector-Terminal Block Conversion Units	Cable for General-purpose Controllers		M3 screws	XW2B-50G4
						M3.5 screws	XW2B-50G5
						M3 screws	XW2D-50G6
				Cable for MECHATROLINK-II / EtherCAT Communications		M3 screws	XW2B-20G4
						M3.5 screws	XW2B-20G5
						M3 screws	XW2D-20G6

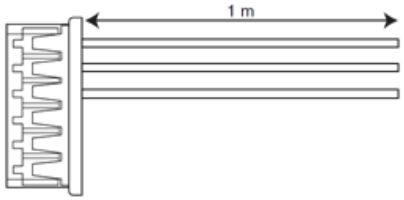
Note: Insert the cable length into the boxes in the model number of cables. (3 m: 003, 5 m: 005, 10 m: 010)

External Encoder Cable (for CN4)

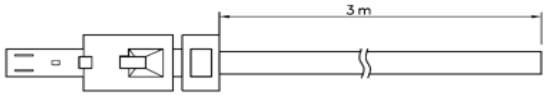
Symbol		Name	Model	Description
(18)	Flexible Cable	External Encoder Cable	R88A-CRKM□□□SR-E The empty boxes in the model number are for the cable length. The cable can be 5, 10 or 20 m long.	**Connector plug model:** MUF-PK10K-X (J.S.T. Mfg. Co., Ltd.) 

Note: Insert the cable length into the boxess in the model number of cables (5 m: 005, 10 m: 010, 20 m: 020)

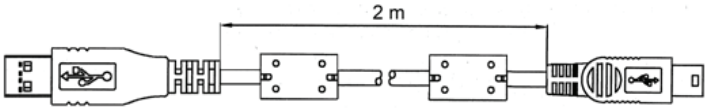
Analog Monitor Cable (for CN5)

Symbol		Name	Model	Description
(19)	Non-Flexible Cable	Analog Monitor Cable	R88A-CMK001S	**Connector housing:** 51004-0600 (Molex Japan) **Connector terminal:** 50011-8000 (Molex Japan) 

Safety Cable (for CN8)

Symbol		Name	Model	Description
(20)	Non-Flexible Cable	Safety Cable	R88A-CSK003S-E R88A-CSK003S-AP	**Connector:** 2013595-1 (Tyco Electronics) 

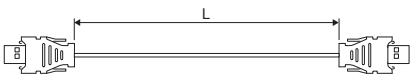
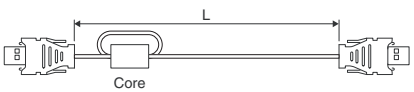
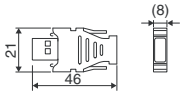
USB Communication Cable (for CN7)

Symbol		Name	Model	Description
(21)	Non-Flexible Cable	PC USB to Mini USB Connecting Cable with Ferrite	AX-CUSBM002-E	

EtherCAT Communication Cable

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

MECHATROLINK-II Communication Cable

Symbol	Name	Length (L)	Model (OMRON model number)	Yaskawa model number	Description
(23)	MECHATROLINK-II Communication Cable ✻ Can be connected to R88D-GN and R88D-KN only.	0.5m	FNY-W6002-A5	JEPMC-W6002-A5-E	(without ring core and USB connector on both ends) 
		1m	FNY-W6002-01	JEPMC-W6002-01-E	
		3m	FNY-W6002-03	JEPMC-W6002-03-E	
		5m	FNY-W6002-05	JEPMC-W6002-05-E	
	MECHATROLINK-II Communication Cable	0.5m	FNY-W6003-A5	JEPMC-W6003-A5	(with ring core and USB connector on both ends) 
		1m	FNY-W6003-01	JEPMC-W6003-01	
		3m	FNY-W6003-03	JEPMC-W6003-03	
		5m	FNY-W6003-05	JEPMC-W6003-05	
		10m	FNY-W6003-10	JEPMC-W6003-10	
		20m	FNY-W6003-20	JEPMC-W6003-20	
		30m	FNY-W6003-30	JEPMC-W6003-30	
(24)	MECHATROLINK-II Terminating resistance	–	FNY-W6022	JEPMC-W6022	

Servo Drive Connectors

Connectors	Description		Model
CN1	Control I/O Connector	Analog/Pulse Train Input Servodrive (R88D-KT□)	R88A-CNU11C
		Network Communications Servodrive (R88D-KN□)	R88A-CNW01C
CN2	Encoder Connector		R88A-CNW01R
CN4	External Encoder connector		R88A-CNK41L
CN8	Safety I/O Signal Connector		R88A-CNK81S
CNA	Main Circuit Power Supply Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW	R88A-CNA02G-AP
		[200VAC] 2.0kW	R88A-CNA02K-AP
		[400VAC] 600W-1.5kW	R88A-CNA01K-AP
		[400VAC] 2.0kW	R88A-CNA03K-AP
CNB	Servomotor Power Connector	[100VAC] 50W-400W [200VAC] 100W-1.5kW	R88A-CNB01G-AP
		[400VAC] 600W-1.5kW	R88A-CNB01K-AP
		[200VAC] 2.0kW [400VAC] 2.0kW	R88A-CNB02K-AP
CNC	24VDC Control Circuit Connector	[400VAC] 600W-2.0kW	R88A-CNC01K-AP
CND	Regenerative Resistor Connector	[400VAC] 600W-1.5kW	R88A-CND01K-AP
		[200VAC] 2.0kW [400VAC] 2.0kW	R88A-CND02K-AP

Servomotor Connector

Description	Applicable Servomotor Capacity	Model
Servomotor Encoder Connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK02R
	[100 V/200 V] 3,000 r/min (1 to 5 kW), 2,000 r/min, 1,000 r/min [400 V] 3,000 r/min, 2,000 r/min, 1,000 r/min	R88A-CNK04R
Power cable connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11A
	[200 V] [400V] 1,500 r/min (7.5 to 15kW) 1,000 r/min (6.0kW)	R88A-CNK21A-AP
Brake cable connector	[100 V/200 V] 3,000 r/min (50 to 750 W)	R88A-CNK11B
	[200 V] [400V] 1,500 r/min (7.5 to 15kW) 1,000 r/min (6.0kW)	R88A-CNK21B-AP

Related Manuals

Please read the relevant manuals of G5-Series

English Cat. No.	Japanese Cat. No.	Type	Name
I571	SBCE-357	R88D-KT/R88M-K	G5-SERIES AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
I572	SBCE-358	R88D-KN□-ML2/R88M-K	G5-SERIES MECHATROLINK-II Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
I576	SBCE-365	R88D-KN□-ECT/R88M-K	G5-SERIES EtherCAT Communications AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
I577	SBCE-366	R88D-KN□-ECT-L/R88L-EC	G5-SERIES EtherCAT Communications Linear Motor Type LINEARMOTOR AND DRIVE USER'S MANUAL
I584	-	R88D-KP/R88M-KE	G5-SERIES Pulse Train Input Type AC SERVOMOTOR AND SERVO DRIVE USER'S MANUAL
W487	SBCE-359	CJ1W-NC□81/CJ1W-NC□82	CJ-series Position Control Unit Operation Manual
W446	SBCA-337	CXONE-AL□□C-V□/-AL□□D-V□	CX-Programmer Operation Manual
W453	SBCE-375	CXONE-□□□□C-V□/□□□□D-V□	CX-Drive OPERATION MANUAL
W504	SBCA-362	SYSMAC-SE2□□□	Sysmac Studio Version 1 Operation Manual

Read and Understand this Catalog

Please read and understand this catalog before purchasing the product. Please consult your OMRON representative if you have any questions or comments.

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Related Product Catalog



SYSMAC Catalogue
One Machine Control

NJ501 / NJ301

Cat. No. P072



Programmable Controller
SYSMAC CJ Series
Position Control Units (High-Speed type)

CJ1W-NC214/414
CJ1W-NC234/434

Cat. No. R156



AC Servomotors /
Servo Drives

SMARTSTEP 2

Cat. No. I813



AC Servomotors /
Servo Drives

G Series

Cat. No. I814



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