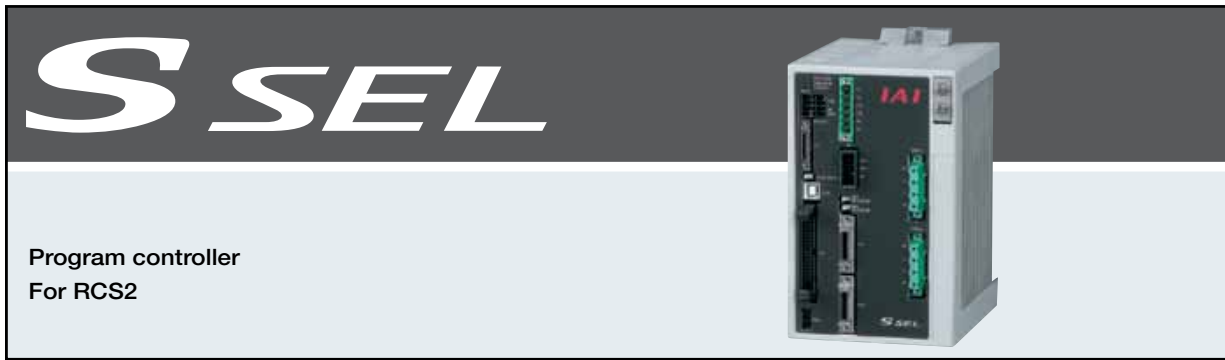


- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor



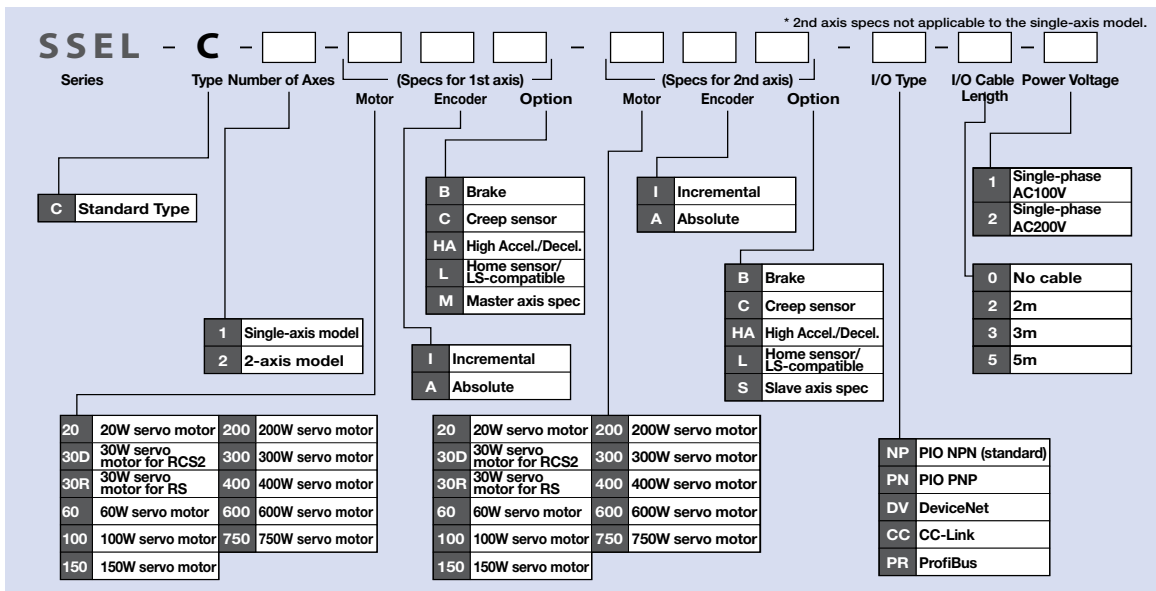
**Program controller  
For RCS2**

## List of models

Program controller for operating RCS2 Series actuators. One unit can handle various controls.

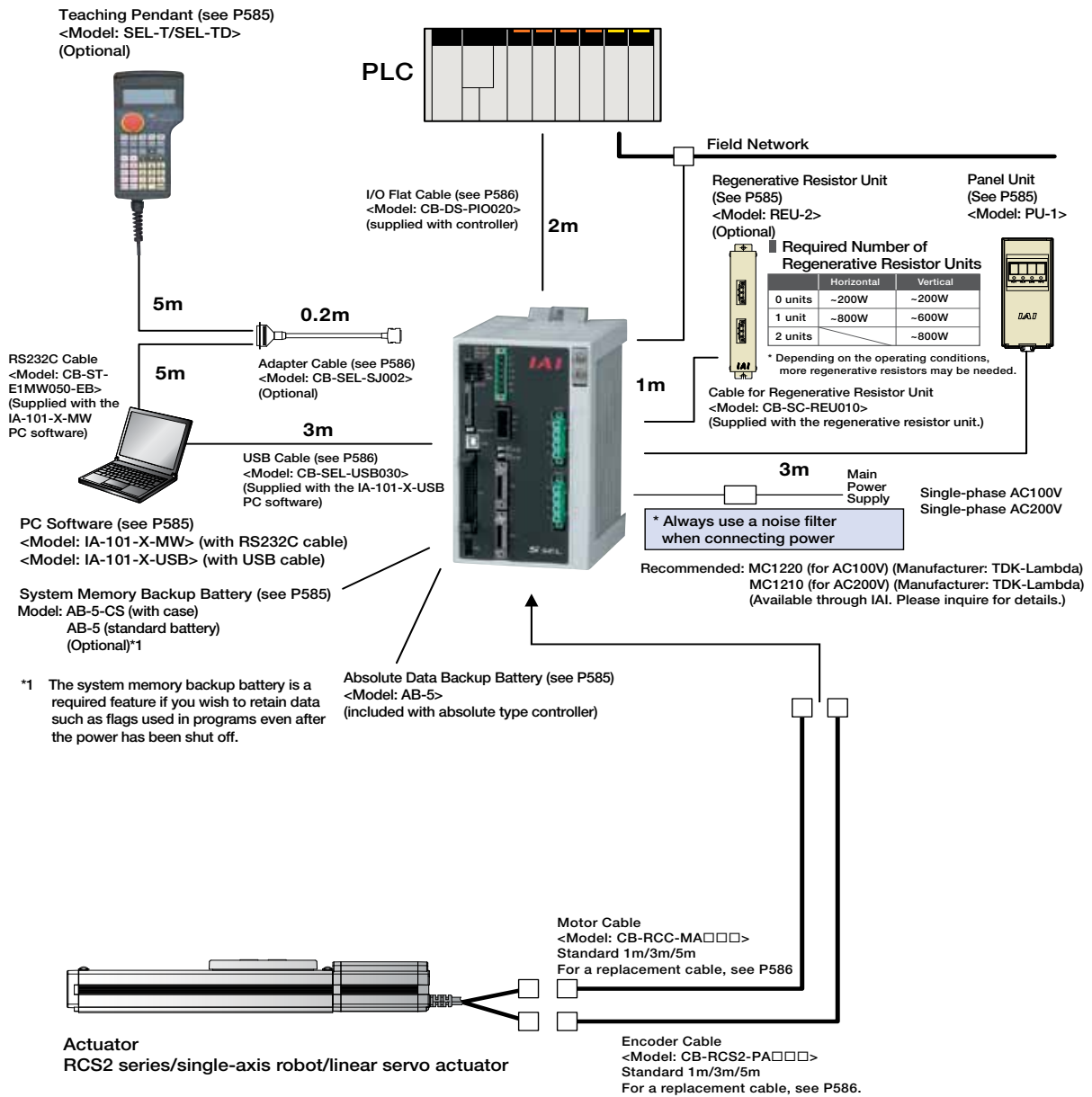
Type	C	
Name	Program mode	Positioner Mode
External View		
Description	Both the actuator operation and communication with external equipment can be handled by a single controller. When two axes are connected, arc interpolation, path operations, and synchronization can be performed.	Up to 20000 positioning points are supported. Push-motion operation and teaching operation are also possible.
Position points	20000 points	
Number of control axes:	2 axes max.	

## Model



# 577 SSEL

System configuration



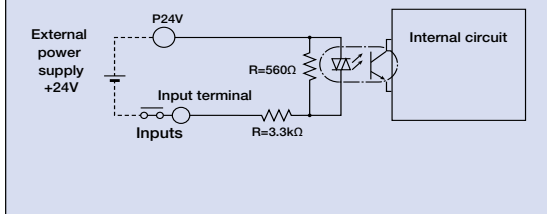
- Slider Type
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- Linear Servo Motor

## I/O Specifications

### Input section External input specifications

Item	Specifications
Input voltage	DC24V ±10%
Input current	7mA / circuit
ON/OFF voltage	ON voltage (min.) NPN : DC16V / PNP : DC8V OFF voltage (max.) NPN : DC5V / PNP : DC19V
Isolation method	Photocoupler

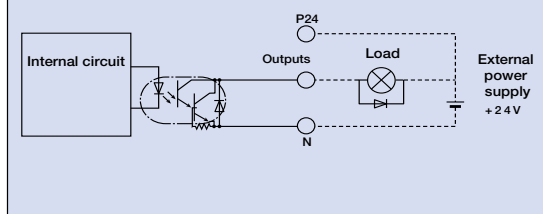
#### NPN Specifications



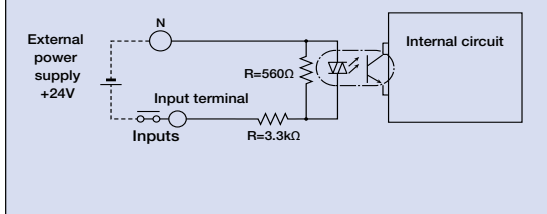
### Output section External output specifications

Item	Specifications
Load Voltage	DC24V
Max. load current	100mA / 1point 400mA / 8 points in total
Residual voltage (Max.)	Max 0.1mA / 1 point
Isolation method	Photocoupler

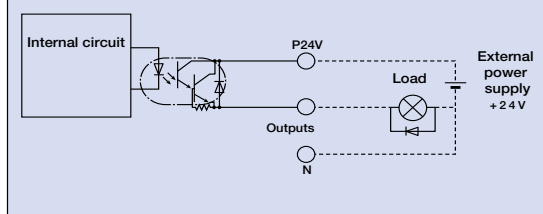
#### NPN Specifications



#### PNP Specifications



#### PNP Specifications



## Explanation of I/O Signal Functions

Two modes can be selected for the SSEL controller: "Program Mode," in which the actuator is operated by entering a program, and "Positioner Mode," in which PLC signals are received and the actuator is moved to designated positions. The Positioner Mode has the five input patterns listed below to enable various applications.

### Control Function by Type

Operation mode	Features
Program mode	Various operations including linear/arc interpolation operation, path operation ideal for coating processes, etc., arch-motion operation and palletizing operation can be performed using the Super SEL language that lets you program complex control actions using simple commands.
Positioner mode	Standard mode This is the basic mode from which operations can be conducted by designating position numbers and inputting the start signal. Push-motion operation and teaching operation are also possible.
	Product change mode Multiple parts of the same shape with slightly different hole positions can be handled using movement commands to the same position numbers by simply changing the product type number.
	2-axis independent mode With a 2-axis controller, each axis can be commanded and operated separately.
	Teaching mode In this mode, the slider (rod) moves based on an external signal, when the actuator is stopped, the current position can be registered as position data.
	DS-S-C1 Compatible mode If you were using a DS-S-C1 controller, you can replace it with a SSEL controller without having to change the host programs. *This mode does not ensure actuator compatibility.

# 579 SSEL

Explanation of I/O Signal Functions

Program mode

Pin Number	Category	Port No.	Program Mode	Functions	Wiring Diagram			
1A	P24	016-022	24V input	Connect 24V.				
1B			Select Program No. 1	Selects the program number to start. (Input as BCD values to ports 016 to 022)				
2A			Select Program No. 2					
2B			Select Program No. 4					
3A			Select Program No. 8					
3B			Select Program No. 10					
4A			Select Program No. 20					
4B			Select Program No. 40					
5A			CPU reset		Resets the system to the same state as when the power is turned on.			
5B			Start		Starts the programs selected by ports 016 to 022.			
6A			Input		001-015		General-purpose input	Waits for external input via program instructions.
6B							General-purpose input	
7A							General-purpose input	
7B							General-purpose input	
8A	General-purpose input							
8B	General-purpose input							
9A	General-purpose input							
9B	General-purpose input							
10A	General-purpose input							
10B	General-purpose input							
11A	Output	300-307	Alarm	Turns off when an alarm occurs. (Contact B)				
13B			Ready	Turns on when the controller starts up normally and is in an operable state.				
14A			General-purpose output	These outputs can be turned ON/OFF as desired via program instructions.				
14B			General-purpose output					
15A			General-purpose output					
15B			General-purpose output					
16A			General-purpose output					
16B	General-purpose output							
17A	General-purpose output							
17B	N	0V input	Connect 0V.					

Note: This is for NPN. PNP will be different.

Positioner mode

Pin Number	Category	Port No.	Positioner Standard Mode	Functions	Wiring Diagram			
1A	P24	016-022	24V input	Connect 24V.				
1B			Position input 10	Specifies the position numbers to move to, using port number 007 to 019. The number can be specified either as BCD or binary.				
2A			Position input 11					
2B			Position input 12					
3A			Position input 13					
3B			Position input 14					
4A			Position input 15					
4B			Position input 16					
5A			Error reset		Resets minor errors. (Severe errors require a restart.)			
5B			Start		Starts moving to selected position.			
6A			Input		001-015		Home Return	Performs home return.
6B							Servo ON	Switches between Servo ON and OFF.
7A							Push	Performs a push motion.
7B							Pause	Pauses the motion when turned OFF, and resumes motion when turned ON.
8A	Cancel	Stops the motion when turned OFF. The remaining motion is canceled.						
8B	Interpolation setting	When this signal is turned ON for a 2-axis model, the actuator moves by linear interpolation.						
9A	Output	300-307		Position input 1		Specifies the position numbers to move to, using ports 007 to 019. The number can be specified either as BCD or binary.		
9B				Position input 2				
10A				Position input 3				
10B				Position input 4				
11A			Position input 5					
11B	Output	300-307	Position input 6	Turns on when the controller starts up normally and is in an operable state.				
12A			Position input 7					
12B			Position input 8					
13A			Position input 9					
13B	Positioning complete	Turns on when the movement to the destination is complete.						
14A	Home Return complete	Turns on when the home return operation is complete.						
14B	Servo ON output	Turns on when servo is ON.						
15A	Pushing complete	Turns on when a push motion is complete.						
15B	System battery error	Turns on when the system battery runs low (warning level).						
16A	Output	300-307	Absolute encoder battery error	Turns on when the battery for the absolute encoder runs low (warning level).				
16B			0V input	Connect 0V.				
17A	N	300-307	0V input	Connect 0V.				
17B			0V input					

Note: This is for NPN. PNP will be different.

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- Standard
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- Servo Motor (24V)
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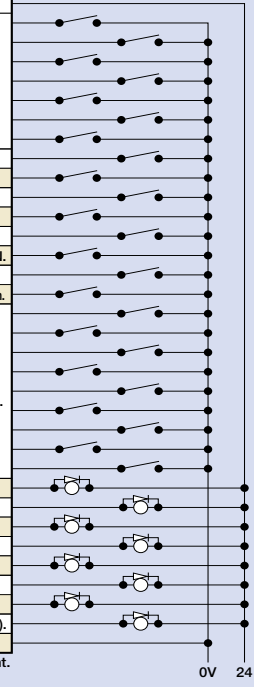
SSEL 580

Explanation of I/O Signal Functions

Positioner, Product-Type Change Mode

Pin Number	Category	Port No.	Positioner Product Type Change Mode	Functions		
1A	P24		24V input	Connect 24V.		
1B		016	Position/Product Type Input 10	Specifies the position numbers to move to, and the product type numbers, using ports 007 to 022. The position and product type numbers are assigned by parameter settings. The number can be specified either as BCD or binary.		
2A		017	Position/Product Type Input 11			
2B		018	Position/Product Type Input 12			
3A		019	Position/Product Type Input 13			
3B		020	Position/Product Type Input 14			
4A		021	Position/Product Type Input 15			
4B		022	Position/Product Type Input 16			
5A		023	Error reset		Resets minor errors. (Severe errors require a restart.)	
5B		000	Start		Starts moving to selected position.	
6A		001	Home Return		Performs home return.	
6B		002	Servo ON		Switches between Servo ON and OFF.	
7A		003	Push		Performs a push motion.	
7B		004	Pause		Pauses the motion when turned OFF, and resumes motion when turned ON.	
8A		005	Cancel		Stops the motion when turned OFF. The remaining motion is canceled.	
8B		006	Interpolation setting		When this signal is turned ON for a 2-axis model, the actuator moves by linear interpolation.	
9A	Input	007	Position/Product Type Input 1		Specifies the position numbers to move to, and the product type numbers, using ports 007 to 022. The position and product type numbers are assigned by parameter settings. The number can be specified either as BCD or binary.	
9B		008	Position/Product Type Input 2			
10A		009	Position/Product Type Input 3			
10B		010	Position/Product Type Input 4			
11A		011	Position/Product Type Input 5			
11B		012	Position/Product Type Input 6			
12A		013	Position/Product Type Input 7			
12B		014	Position/Product Type Input 8			
13A		015	Position/Product Type Input 9			
13B		300	Alarm	Turns off when an alarm occurs. (Contact B)		
14A		301	Ready	Turns on when the controller starts up normally and is in an operable state.		
14B		302	Positioning complete	Turns on when the movement to the destination is complete.		
15A		Output	303	Home Return complete		Turns on when the home return operation is complete.
15B			304	Servo ON output		Turns on when servo is ON.
16A			305	Pushing complete		Turns on when a push motion is complete.
16B			306	System battery error		Turns on when the system battery runs low (warning level).
17A	307		Absolute encoder battery error	Turns on when the battery for the absolute encoder runs low (warning level).		
17B	N		0V input	Connect 0V.		

Wiring Diagram

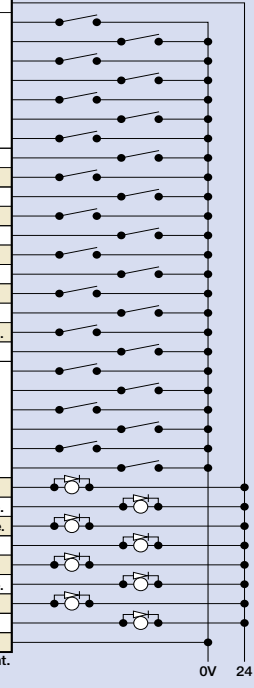


Note: This is for NPN. PNP will be different.

Positioner, 2-axis Independent Mode

Pin Number	Category	Port No.	Positioner Independent Mode	Functions	
1A	P24		24V input	Connect 24V.	
1B		016	Position input 7	Specifies the position numbers to move to, using ports 010 to 022. The position numbers on the 1st and 2nd axes are assigned by parameter settings. The number can be specified either as BCD or binary.	
2A		017	Position input 8		
2B		018	Position input 9		
3A		019	Position input 10		
3B		020	Position input 11		
4A		021	Position input 12		
4B		022	Position input 13		
5A		023	Error reset		Resets minor errors. (Severe errors require a restart.)
5B		000	Start 1		Starts the movement to the selected position number on the 1st axis.
6A		001	Home Return 1		Performs Home Return on the 1st axis.
6B		002	Servo ON 1		Switches between servo ON and OFF for the 1st axis.
7A		003	Pause 1		Pauses the motion on 1st axis when turned OFF, and resumes when turned ON.
7B	004	Cancel 1	Cancels the movement on the 1st axis.		
8A	Input	005	Start 2	Starts the movement to the selected position number on the 2nd axis.	
8B		006	Home Return 2	Performs Home Return on the 2nd axis.	
9A		007	Servo ON 2	Switches between servo ON and OFF for the 2nd axis.	
9B		008	Pause 2	Pauses the motion on 2nd axis when turned OFF, and resumes when turned ON.	
10A		009	Cancel 2	Cancels the movement on the 2nd axis.	
10B		010	Position input 1	Specifies the position numbers to move to, using ports 010 to 022. The position numbers on the 1st and 2nd axes are assigned by parameter settings. The number can be specified either as BCD or binary.	
11A	011	Position input 2			
11B	012	Position input 3			
12A	013	Position input 4			
12B	014	Position input 5			
13A	015	Position input 6			
13B	Output	300	Alarm	Turns off when an alarm occurs. (Contact B)	
14A		301	Ready	Turns on when the controller starts up normally and is in an operable state.	
14B		302	Positioning complete 1	Turns on when the movement to the specified position on the 1st axis is complete.	
15A		303	Home Return complete 1	Turns on when home return on the 1st axis is complete.	
15B		304	Servo ON output 1	Turns on when the 1st axis is in a servo ON state.	
16A		305	Positioning complete 2	Turns on when the movement to the specified position on the 2nd axis is complete.	
16B	306	Home Return complete 2	Turns on when home return on the 2nd axis is complete.		
17A		307	Servo ON output 2	Turns on when the 2nd axis is in a servo ON state.	
17B	N		0V input	Connect 0V.	

Wiring Diagram



Note: This is for NPN. PNP will be different.

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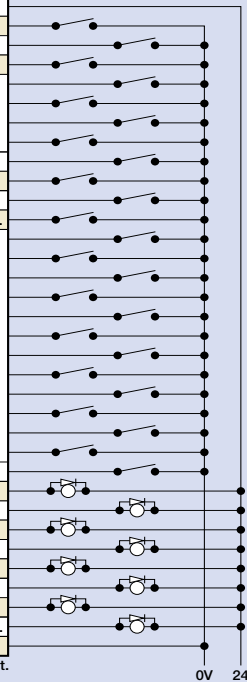
- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
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- Servo Motor (200V)
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Explanation of I/O Signal Functions

Positioner, Teaching Mode

Pin Number	Category	Port No.	Positioner Teaching Mode	Functions	
1A	P24		24V input	Connect 24V.	
1B		016	JOG- on 1st axis	While the signal is input, the 1st axis is moved in the - (negative) direction.	
2A		017	JOG+ on 2nd axis	While the signal is input, the 2nd axis is moved in the + (positive) direction.	
2B		018	JOG- on 2nd axis	While the signal is input, the 2nd axis is moved in the - (negative) direction.	
3A		019	Specify inching (0.01mm)	Specifies how much to move during inching. (Total of the values specified for ports 019 to 022)	
3B		020			
4A		021			
4B		022			
5A		023	Error reset	Resets minor errors. (Severe errors require a restart.)	
5B		000	Start	Starts moving to selected position.	
6A		001	Servo ON	Switches between Servo ON and OFF.	
6B		002	Pause	Pauses the motion when turned OFF, and resumes motion when turned ON.	
7A		Input	003	Position input 1	Ports 003 to 013 are used to specify the position number to move, and the position number for inputting the current position. When the teaching mode setting on port 014 is in the ON state, the current value is written to the specified position number.
7B			004	Position input 2	
8A			005	Position input 3	
8B			006	Position input 4	
9A			007	Position input 5	
9B	008		Position input 6		
10A	009		Position input 7		
10B	010		Position input 8		
11A	011		Position input 9		
11B	012		Position input 10		
12A	013		Position input 11		
12B	014	Teaching mode setting			
13A	015	JOG+ on 1st axis	While the signal is input, the 1st axis is moved in the plus direction.		
13B	300	Alarm	Turns off when an alarm occurs. (Contact B)		
14A	301	Ready	Turns on when the controller starts up normally and is in an operable state.		
14B	302	Positioning complete	Turns on when the movement to the destination is complete.		
15A	Output	303	Home Return complete	Turns on when the home return operation is complete.	
15B		304	Servo ON output	Turns on when servo is ON.	
16A		305	-	-	
16B		306	System battery error	Turns on when the system battery runs low (warning level).	
17A		307	Absolute encoder battery error	Turns on when the battery for the absolute encoder runs low (warning level).	
17B		N	0V input	Connect 0V.	

Wiring Diagram

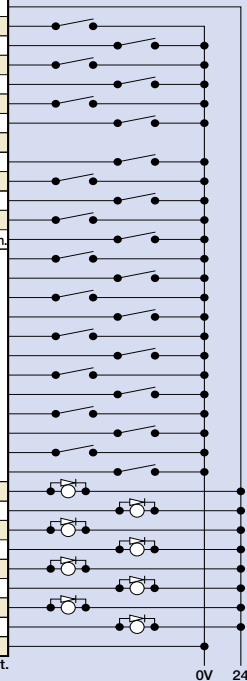


Note: This is for NPN. PNP will be different.

Positioner, DS-S-C1 Compatible Mode

Pin Number	Category	Port No.	Positioner DS-S-C1 Compatible Mode	Functions	
1A	P24		24V input	Connect 24V.	
1B		016	Position No. 1000	(Same as ports 004 through 015)	
2A		017	Position No. 2000	-	
2B		018	Position No. 4000	-	
3A		019	Position No. 8000	-	
3B		020	Position No. 10000	-	
4A		021	Position No. 20000	-	
4B		022	NC (*1)	-	
5A		023	CPU reset	Resets the system to the same state as when the power is turned on.	
5B		000	Start	Starts moving to selected position.	
6A		001	Hold (Pause)	Pauses the motion when turned ON, and resumes motion when turned OFF.	
6B		002	Cancel	Stops the motion when turned ON. The remaining motion is canceled.	
7A		Input	003	Interpolation setting	Ports 004 through 016 are used to specify the position number to move. The numbers are specified as BCD.
7B			004	Position No. 1	
8A			005	Position No. 2	
8B			006	Position No. 4	
9A			007	Position No. 8	
9B	008		Position No. 10		
10A	009		Position No. 20		
10B	010		Position No. 40		
11A	011		Position No. 80		
11B	012		Position No. 100		
12A	013		Position No. 200		
12B	014	Position No. 400			
13A	015	Position No. 800			
13B	300	Alarm	Turns off when an alarm occurs. (Contact A)		
14A	301	Ready	Turns on when the controller starts up normally and is in an operable state.		
14B	302	Positioning complete	Turns on when the movement to the destination is complete.		
15A	Output	303	-	-	
15B		304	-	-	
16A		305	-	-	
16B		306	System battery error	Turns on when the system battery runs low (warning level).	
17A		307	Absolute encoder battery error	Turns on when the battery for the absolute encoder runs low (warning level).	
17B		N	0V input	Connect 0V.	

Wiring Diagram



Note: This is for NPN. PNP will be different.

(\*1) The input needs to be set to OFF. Be sure to leave this disconnected.

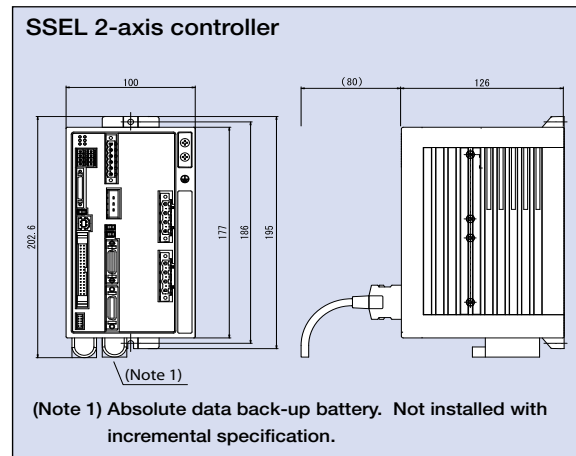
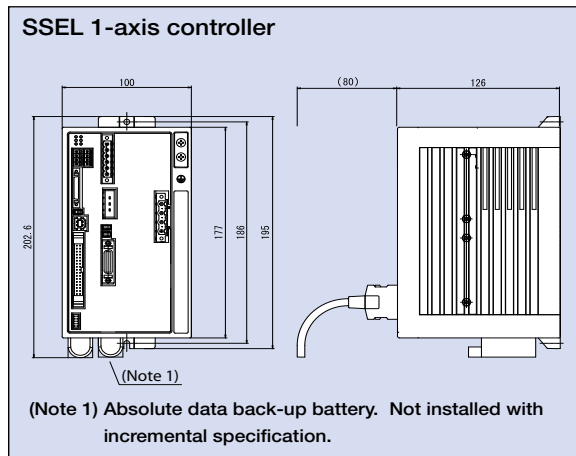
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## Table of specifications

Item		Specifications	
Basic Specifications	Connected actuator	RCS2 series actuator / single axis robot / linear servo actuator	
	Input Voltage	Single-phase AC90V to AC126.5V	Single-phase AC180V to AC253V
	Power Supply Capacity	Max. 1660VA (for 400W, 2-axis operation)	
	Dielectric strength voltage	DC500V 10MΩ or higher	
	Withstand voltage	AC500V 1 min.	
	Rush current	Control Power 15A / Motor Power 37.5A	Control Power 30A / Motor Power 75A
	Vibration resistance	XYZ directions 10 to 57Hz, One side amplitude: 0.035mm (continuous), 0.075mm (intermittent) 58 to 150 Hz 4.9 m/s <sup>2</sup> (continuous), 9.8 m/s <sup>2</sup> (intermittent)	
Control specification	Number of control axes	1 axis / 2 axis	
	Maximum total output of connected axis	400W	800W
	Position detection method	Incremental encoder / Absolute encoder	
	Speed setting	1mm/sec and up, the maximum depends on actuator specifications	
	Acceleration setting	0.01G and up, the maximum depends on the actuator	
	Operating method	Program operation / Positioner operation (switchable)	
Program	Programming language	Super SEL language	
	Number of programs	128 programs	
	Number of program steps	9999 steps	
	Number of multi-tasking programs	8 programs	
	Positioning Points	20000 points	
	Data memory device	FLASHROM (A system-memory backup battery can be added as an option)	
Communication	Data input method	Teaching pendant or PC software	
	Number of I/O	24 input points / 8 output points (NPN or PNP selectable)	
	I/O power	Externally supplied 24VDC ± 10%	
	PIO cable	CB-DS-PIO □□□ (supplied with the controller)	
	Serial communications function	RS232C (D-Sub Half-pitch connector) / USB connector	
	Field Network	DeviceNet, CC-Link, ProfiBus	
	Motor Cable	CB-ACS-MA □□□ (Max. 20m)	
Encoder cable	CB-RCP2-PA □□□ (Max. 20m)		
General specifications	Protection function	Motor overcurrent, Motor driver temperature check, Overload check, Encoder open-circuit check Soft limit over, system error, battery error, etc.	
	Ambient operating humidity and temperature	0 to 40°C 10 to 95% (non-condensing)	
	Ambient atmosphere	Free from corrosive gases. In particular, there shall be no significant dust.	
	Protection class	IP20	
	Weight	1.4kg	
External dimensions	100mm (W) x 202.6mm (H) x 126mm (D)		

## External Dimensions



# 583

SSEL

Sold & Serviced By:

**ELECTROMATE**

Toll Free Phone (877) SERV098

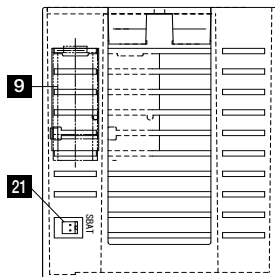
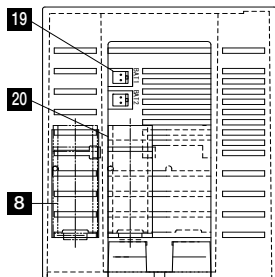
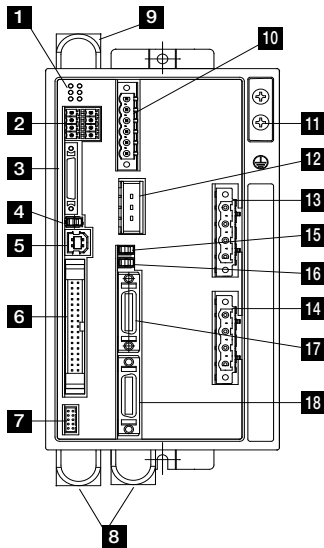
Toll Free Fax (877) SERV099

www.electromate.com

sales@electromate.com



Name of Each Part



**1 Status indicator LEDs**

These LEDs are used to indicate the operating condition of the controller.

The LED status indicators are as follows:

- PWR : Power is input to controller.
- RDY : The controller is ready to perform program operation.
- ALM : The controller is abnormal.
- EMG : An emergency stop is actuated and the drive source is cut off.
- SV1 : The axis 1 actuator servo is on.
- SV2 : The axis 2 actuator servo is on.

**2 System I/O connector**

Connector for emergency stop / enable input / brake power input, etc.

**3 Teaching pendant connector**

A half-pitch I/O 26-pin connector that connects a teaching pendant when the running mode is MANU. A special conversion cable is needed to connect a conventional Dsub, 25-pin connector.

**4 Mode switch**

This switch is used to specify the running mode of the controller. The left position indicates the MANU (manual operation) mode, while the right position indicates the AUTO (automatic operation) mode. Teaching can only be performed as manual operation, and automatic operation using external I/Os is not possible in the MANU mode.

**5 USB connector**

A connector for PC connection via USB. If the USB connector is connected, the TP connector is disabled and all communication inputs to the TP connector are cut off.

**6 I/O Connector**

A connector for interface I/Os.

34-pin flat cable connector for DIO (24IN/8OUT) interface.

I/O power is also supplied to the controller via this connector (Pin No. 1 and No. 34).

**7 Panel unit connector**

A connector for the panel unit (optional) that displays the controller status and error numbers.

**8 Absolute data backup battery**

When an absolute-type axis is operated, this battery retains position data even after the power is cut off.

**9 System memory backup battery (Option)**

This battery is needed if you wish to retain various data recorded in the SRAM of the controller even after the power is cut off.

This battery is optional. Specify it if necessary.

**10 Power supply connector**

AC power connector. Divided into the control power input and motor power input.

**11 Grounding screw**

Protective grounding screw. Always ground this screw.

**12 External regenerative resistor connector**

A connector for the regenerative resistor that must be connected when the built-in regenerative resistor alone does not offer sufficient capacity in high-acceleration/high-load operation, etc.

Whether or not an external regenerative resistor is necessary depends on the conditions of your specific application such as the axis configuration.

**13 Motor connector for axis 1**

Connects the motor cable of the axis 1 actuator.

**14 Motor connector for axis 2**

Connects the motor cable of the axis 2 actuator.

**15 Brake switch for axis 1**

This switch is used to release the axis brake. Setting it to the left position (RLS side) forcibly releases the brake, while setting it to the right position (NOM side) causes the controller to automatically control the brake.

**16 Brake switch for axis 2**

This switch is used to release the axis brake. Setting it to the left position (RLS side) forcibly releases the brake, while setting it to the right position (NOM side) causes the controller to automatically control the brake.

**17 Encoder connector for axis 1**

Connect the encoder cable of the axis 1 actuator.

**18 Encoder connector for axis 2**

Connect the encoder cable of the axis 2 actuator.

**19 Absolute-data backup battery connector for axis 1**

A connector for the battery that backs up absolute data for axis 1 when the actuator uses an absolute encoder.

**20 Absolute-data backup battery connector for axis 2**

A connector for the battery that backs up absolute data for axis 2 when the actuator uses an absolute encoder.

**21 System-memory backup battery connector**

A connector for the system-memory backup battery.

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Cripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor



- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
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- PSEL
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- Pulse Motor
- Servo Motor (24V)
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- Linear Servo Motor

## Option

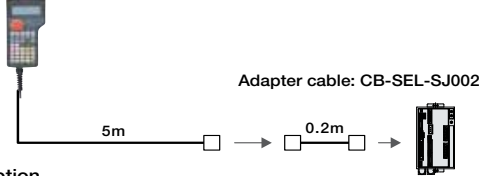
### Teaching Pendant

**Features** A teaching device for entering programs and positions, test runs, and monitoring.

**Model/Price**

Model	Description
SEL-T-J	Standard type with adapter cable
SEL-TD-J	Deadman's switch type and adapter cable

**Configuration**



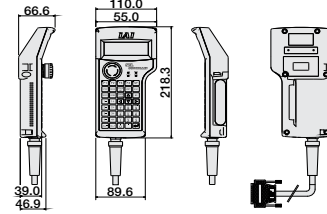
**SEL-T option**

- Wall-mounting hook Model HK-1

- Strap Model STR-1

**Specifications**

Item	SEL-T-J	SEL-TD-J
3-position Enable Switch	No	Yes
ANSI/UL standards	Non-compliant	Compliant
CE mark	Compliant	
Display	20 char. x 4 lines	
Ambient Operating Temp./Humidity	0~40°C 10~90% RH (non-condensing)	
Protective structure	IP54	
Weight	Approx. 0.4kg (not incl. cable)	

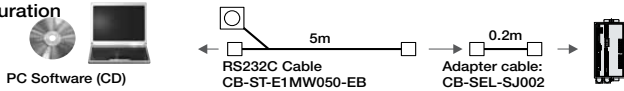


### PC Software (Windows Only)

**Features** A startup support software for entering programs/positions, performing test runs, and monitoring. More functions have been added for debugging, and improvements have been made to shorten the start-up time.

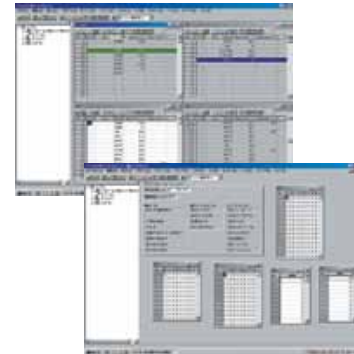
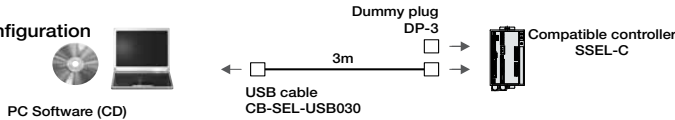
**Model** IA-101-X-MW-J (with RS232C cable + adapter cable)  
IA-101-X-MW (with RS232C cable)

**Configuration**



**Model** IA-101-X-USB (with USB cable)

**Configuration**



**Note:**  
Only versions 6.0.0.0 and later can be used with the SSEL controller.

### Regenerative Resistor Unit

**Features** A unit that converts the regenerative current, generated during the acceleration/deceleration of the motor, into heat. In the table on the right, check the total power output of the actuator to see if a regenerative resistor is needed.

**Model** REU-2 (for SCON/SSEL) Standard Price

**Specifications**

Weight of main unit	0.9kg
Internal regenerative resistance	220Ω 80W
Main unit-Controller	
Connection Cable (included)	CB-SC-REU010 (for SSEL)

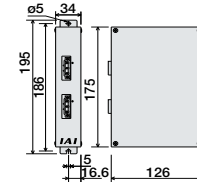
\* If 2 regenerative units are needed, acquire one REU-2 and one REU-1 (See P596).

**Required Number of Units**

	Horizontal	Vertical
0 units	~200W	~200W
1 unit	~800W	~600W
2 units	~800W	~800W

\* Depending on the operating conditions, more regenerative resistors may be needed.

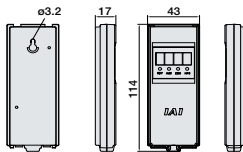
**Exterior Dimensions**



### Panel Unit

**Features** Display device that shows the error code from the controller or the currently running program number.

**Model** PU-1 (Cable length: 3m)



### Absolute Data Backup Battery

**Features** Battery for saving absolute data, when operating an actuator with an absolute encoder. Same as the battery used for system memory backup.

**Model** AB-5



### System Memory Backup Battery

**Features** This battery is required, for example, when you are using global flags in the program and you want to retain your data even after the power has been turned OFF.

**Model** AB-5-CS (with case)  
AB-5 (Standalone battery)



# 585 SSEL

## Option

### Dummy Plug

- Features** When connecting the SSEL controller to a computer with a USB cable, this plug is inserted in the teaching port to shut off the enable circuit.  
(Supplied with the PC software IA-101-X-USB)

**Model DP-3**



### USB Cable

- Features** A cable for connecting the controller to the USB port to a computer. A controller with no USB port (e.g. XSEL) can be connected to the USB port of a computer by connecting an RS232C cable to the USB cable via a USB adapter.  
(See PC software IA-101-X-USBMW)

**Model CB-SEL-USB030** (Cable length: 3m)



### Adapter Cable

- Features** An adapter cable to connect the D-sub 25-pin connector from the teaching pendant or a PC to the teaching connector (half-pitch) of the SSEL controller.

**Model CB-SEL-SJ002** (Cable length: 0.2m)



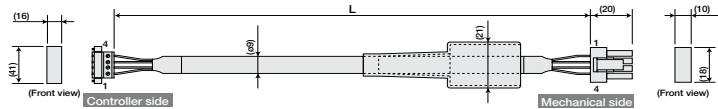
## Spare parts

When you need spare parts after purchasing the product, such as when replacing a cable, refer to the list of models below.

### Motor cable/Motor robot cable

**Model CB-RCC-MA**    / **CB-RCC-MA**    **-RB**

\* Enter the cable length (L) into   . Compatible to a maximum of 30 meters.  
Ex.: 080 = 8 m



Min. bend radius  $r = 50$  mm or larger (when movable type is used)  
\* Only the robot cable is to be used in a cable track.

Wire	Color	Signal	No.
Green	PE	1	1
Red	U	2	2
White	V	3	3
Black	W	4	4

Signal	Color	Wire
1	U	Red
2	V	White
3	W	Black
4	PE	Green

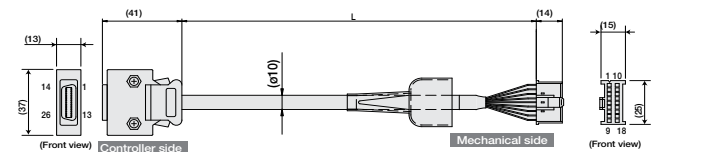
0.75sq (crimped)

### Encoder cable/Encoder robot cable

**Model CB-RCS2-PA**    / **CB-X3-PA**

\* Enter the cable length (L) into   . Compatible to a maximum of 30 meters.  
Ex.: 080 = 8 m

Min. bend radius  $r = 50$  mm or larger (when movable type is used)  
\* Only the robot cable is to be used in a cable track.



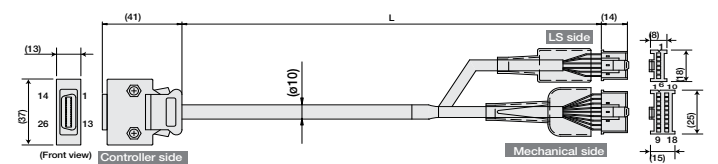
Wire	Color	Signal	No.
Black	PE	1	1
Gray/White	Eddy	12	2
Brown/White	V	13	3
Brown/Black	W	25	4
Blue	CMRSP	26	5
White	OT	24	6
Red	NOV	23	7
Green	SRP+	7	8
Orange	SRP-	8	9
Black	BAT+	14	10
Yellow	BAT-	15	11
Green	VCC	16	12
Brown	GND	17	13
Gray	SRP	20	14
Red	BK0+	21	15
Blue	BK0-	22	16
White	SRP	9	17
Black	SRP	10	18
Purple	A	2	19
White	B	3	20
Blue/Red	B	4	21
Brown/White	Z	3	22
Green/White	Z	6	23
Orange	SRP+	7	24
Black	SRP-	8	25
White/Blue	A	2	26
White/White	B	3	27
White/Black	B	4	28
White/Purple	Z	3	29
White/Gray	Z	6	30
Orange	SRP+	7	31
Purple	SRP-	8	32
Green	BAT+	14	33
Red	VCC	16	34
Blue	VCC	17	35
Black	BK0+	20	36
Yellow	BK0-	21	37
White	SRP	9	38
Black	SRP	10	39
White/Blue	A	2	40
White/White	B	3	41
White/Black	B	4	42
White/Purple	Z	3	43
White/Gray	Z	6	44
Orange	SRP+	7	45
Purple	SRP-	8	46
Green	BAT+	14	47
Red	VCC	16	48
Blue	VCC	17	49
Black	BK0+	20	50
Yellow	BK0-	21	51
White	SRP	9	52
Black	SRP	10	53
White/Blue	A	2	54
White/White	B	3	55
White/Black	B	4	56
White/Purple	Z	3	57
White/Gray	Z	6	58
Orange	SRP+	7	59
Purple	SRP-	8	60
Green	BAT+	14	61
Red	VCC	16	62
Blue	VCC	17	63
Black	BK0+	20	64
Yellow	BK0-	21	65
White	SRP	9	66
Black	SRP	10	67
White/Blue	A	2	68
White/White	B	3	69
White/Black	B	4	70
White/Purple	Z	3	71
White/Gray	Z	6	72
Orange	SRP+	7	73
Purple	SRP-	8	74
Green	BAT+	14	75
Red	VCC	16	76
Blue	VCC	17	77
Black	BK0+	20	78
Yellow	BK0-	21	79
White	SRP	9	80
Black	SRP	10	81
White/Blue	A	2	82
White/White	B	3	83
White/Black	B	4	84
White/Purple	Z	3	85
White/Gray	Z	6	86
Orange	SRP+	7	87
Purple	SRP-	8	88
Green	BAT+	14	89
Red	VCC	16	90
Blue	VCC	17	91
Black	BK0+	20	92
Yellow	BK0-	21	93
White	SRP	9	94
Black	SRP	10	95
White/Blue	A	2	96
White/White	B	3	97
White/Black	B	4	98
White/Purple	Z	3	99
White/Gray	Z	6	100
Orange	SRP+	7	101
Purple	SRP-	8	102
Green	BAT+	14	103
Red	VCC	16	104
Blue	VCC	17	105
Black	BK0+	20	106
Yellow	BK0-	21	107
White	SRP	9	108
Black	SRP	10	109
White/Blue	A	2	110
White/White	B	3	111
White/Black	B	4	112
White/Purple	Z	3	113
White/Gray	Z	6	114
Orange	SRP+	7	115
Purple	SRP-	8	116
Green	BAT+	14	117
Red	VCC	16	118
Blue	VCC	17	119
Black	BK0+	20	120
Yellow	BK0-	21	121
White	SRP	9	122
Black	SRP	10	123
White/Blue	A	2	124
White/White	B	3	125
White/Black	B	4	126
White/Purple	Z	3	127
White/Gray	Z	6	128
Orange	SRP+	7	129
Purple	SRP-	8	130
Green	BAT+	14	131
Red	VCC	16	132
Blue	VCC	17	133
Black	BK0+	20	134
Yellow	BK0-	21	135
White	SRP	9	136
Black	SRP	10	137
White/Blue	A	2	138
White/White	B	3	139
White/Black	B	4	140
White/Purple	Z	3	141
White/Gray	Z	6	142
Orange	SRP+	7	143
Purple	SRP-	8	144
Green	BAT+	14	145
Red	VCC	16	146
Blue	VCC	17	147
Black	BK0+	20	148
Yellow	BK0-	21	149
White	SRP	9	150
Black	SRP	10	151
White/Blue	A	2	152
White/White	B	3	153
White/Black	B	4	154
White/Purple	Z	3	155
White/Gray	Z	6	156
Orange	SRP+	7	157
Purple	SRP-	8	158
Green	BAT+	14	159
Red	VCC	16	160
Blue	VCC	17	161
Black	BK0+	20	162
Yellow	BK0-	21	163
White	SRP	9	164
Black	SRP	10	165
White/Blue	A	2	166
White/White	B	3	167
White/Black	B	4	168
White/Purple	Z	3	169
White/Gray	Z	6	170
Orange	SRP+	7	171
Purple	SRP-	8	172
Green	BAT+	14	173
Red	VCC	16	174
Blue	VCC	17	175
Black	BK0+	20	176
Yellow	BK0-	21	177
White	SRP	9	178
Black	SRP	10	179
White/Blue	A	2	180
White/White	B	3	181
White/Black	B	4	182
White/Purple	Z	3	183
White/Gray	Z	6	184
Orange	SRP+	7	185
Purple	SRP-	8	186
Green	BAT+	14	187
Red	VCC	16	188
Blue	VCC	17	189
Black	BK0+	20	190
Yellow	BK0-	21	191
White	SRP	9	192
Black	SRP	10	193
White/Blue	A	2	194
White/White	B	3	195
White/Black	B	4	196
White/Purple	Z	3	197
White/Gray	Z	6	198
Orange	SRP+	7	199
Purple	SRP-	8	200

### Encoder cable/Encoder robot cable for RCS2-RT6/RT6R/RT7R/RA13R

**Model CB-RCS2-PLA**    / **CB-X2-PLA**

\* Enter the cable length (L) into   . Compatible to a maximum of 30 meters.  
Ex.: 080 = 8 m

Min. bend radius  $r = 50$  mm or larger (when movable type is used)  
\* Only the robot cable is to be used in a cable track.

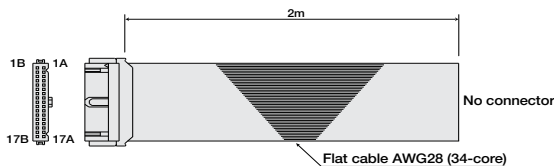


Wire	Color	Signal	No.
Black	PE	1	1
White/Orange	E2V	12	2
White/Gray	V	13	3
Brown/Black	W	25	4
Brown/White	CMRSP	26	5
Brown/Red	OT	24	6
Brown/Black	RSV	24	7
Green	SRP+	7	8
Orange	SRP-	8	9
White/Blue	A	2	10
White/White	B	3	11
White/Black	B	4	12
White/Purple	Z	3	13
White/Gray	Z	6	14
Orange	SRP+	7	15
Purple	SRP-	8	16
Green	BAT+	14	17
Red	VCC	16	18
Blue	VCC	17	19
Black	BK0+	20	20
Yellow	BK0-	21	21
White	SRP	9	22
Black	SRP	10	23
White/Blue	A	2	24
White/White	B	3	25
White/Black	B	4	26
White/Purple	Z	3	27
White/Gray	Z	6	28
Orange	SRP+	7	29
Purple	SRP-	8	30
Green	BAT+	14	31
Red	VCC	16	32
Blue	VCC	17	33
Black	BK0+	20	34
Yellow	BK0-	21	35
White	SRP	9	36
Black	SRP	10	37
White/Blue	A	2	38
White/White	B	3	39
White/Black	B	4	40
White/Purple	Z	3	41
White/Gray	Z	6	42
Orange	SRP+	7	43
Purple	SRP-	8	44
Green	BAT+	14	45
Red	VCC	16	46
Blue	VCC	17	47
Black	BK0+	20	48
Yellow	BK0-	21	49
White	SRP	9	50
Black	SRP	10	51
White/Blue	A	2	52
White/White	B	3	53
White/Black	B	4	54
White/Purple	Z	3	55
White/Gray	Z	6	56
Orange	SRP+	7	57
Purple	SRP-	8	58
Green	BAT+	14	59
Red	VCC	16	60
Blue	VCC	17	61
Black	BK0+	20	62
Yellow	BK0-	21	63
White	SRP	9	64
Black	SRP	10	65
White/Blue	A	2	66
White/White	B	3	67
White/Black	B	4	68
White/Purple	Z	3	69
White/Gray	Z	6	70
Orange	SRP+	7	71
Purple	SRP-	8	72
Green	BAT+	14	73
Red	VCC	16	74
Blue	VCC	17	75
Black	BK0+	20	76
Yellow	BK0-	21	77
White	SRP	9	78
Black	SRP	10	79
White/Blue	A	2	80
White/White	B	3	81
White/Black	B	4	82
White/Purple	Z	3	83
White/Gray	Z	6	84
Orange	SRP+	7	85
Purple	SRP-	8	86
Green	BAT+	14	87
Red	VCC	16	88
Blue	VCC	17	89
Black	BK0+	20	90
Yellow	BK0-	21	91
White	SRP	9	92
Black	SRP	10	93
White/Blue	A	2	94
White/White	B	3	95
White/Black	B	4	96
White/Purple	Z	3	97
White/Gray	Z	6	98
Orange	SRP+	7	99
Purple	SRP-	8	100

### I/O Flat Cable

**Model CB-DS-PIO**

\* Enter the cable length (L) into   . Compatible to a maximum of 10 meters.  
Ex.: 080 = 8 m



Pin No.	Color	Wire	Pin No.	Color	Wire
---------	-------	------	---------	-------	------