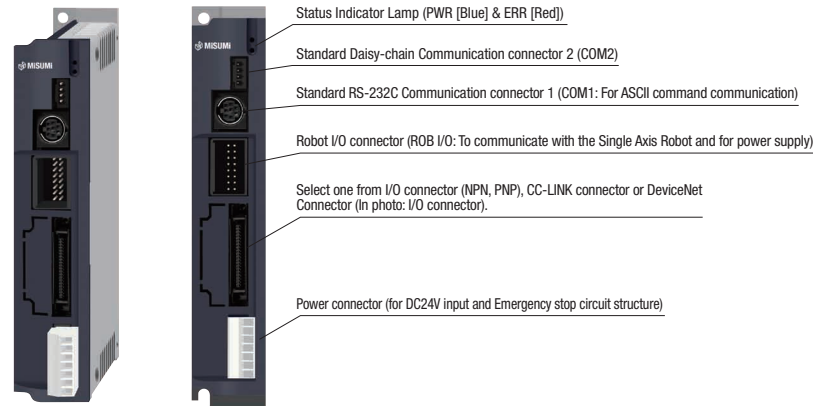## EXRS-C1

Dedicated position controller for RS/RSD/RSDG series with Stepping Motors

Newly Equipped as Standard Daisy-chain Function

Irrespective of controller types, up to 16 controllers can be line connected via Daisy Chaining!

- Status Indicator Lamp (PWR [Blue] & ERR [Red])
- Standard Daisy-chain Communication connector 2 (COM2)
- Standard RS-232C Communication connector 1 (COM1: For ASCII command communication)
- Robot I/O connector (ROB I/O: To communicate with the Single Axis Robot and for power supply)
- Select one from I/O connector (NPN, PNP), CC-LINK connector or DeviceNet Connector (In photo: I/O connector).
- Power connector (for DC24V input and Emergency stop circuit structure)

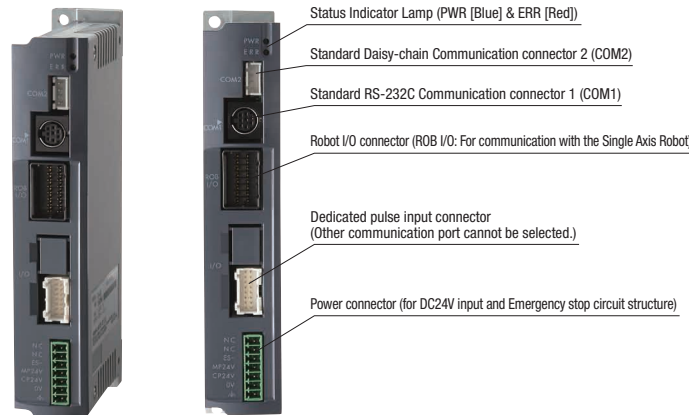**Position Controller EXRS-C1**

EXRS-P1

Pulse Input Controller exclusively for RS/RSD/RSDG series with Stepping Motor

NEW Pulse Input Type

MISUMI's existing Single Axis Robots can be operated using pulse signal input!

Standard Feature Daisy-chain Function

For details, see ☞ P.505.

- Status Indicator Lamp (PWR [Blue] & ERR [Red])
- Standard Daisy-chain Communication connector 2 (COM2)
- Standard RS-232C Communication connector 1 (COM1)
- Robot I/O connector (ROB I/O: For communication with the Single Axis Robot)
- Dedicated pulse input connector (Other communication port cannot be selected.)
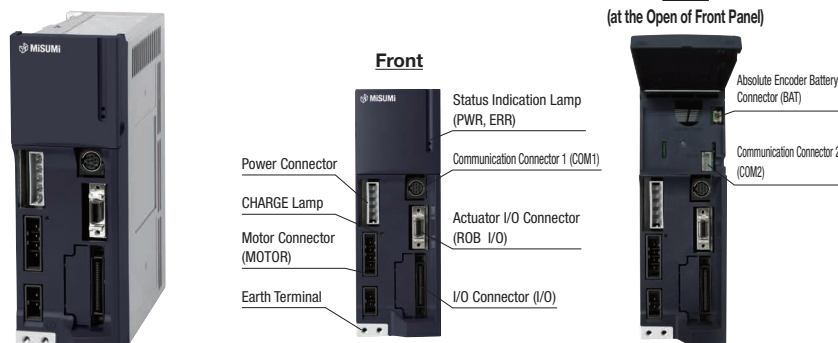- Power connector (for DC24V input and Emergency stop circuit structure)

Controller EXRS-P1 for Pulse input

EXRS-C2

Dedicated position controller for RSH/RSF/RSB series with AC Servo Motor

Newly Equipped as Standard Daisy-chain Function

Irrespective of controller types, up to 16 controllers can be line connected via Daisy Chaining!

Front

- Power Connector
- CHARGE Lamp
- Motor Connector (MOTOR)
- Earth Terminal
- Status Indication Lamp (PWR, ERR)
- Communication Connector 1 (COM1)
- Actuator I/O Connector (ROB I/O)
- I/O Connector (I/O)

Front (at the Open of Front Panel)

- Absolute Encoder Battery Connector (BAT)
- Communication Connector 2 (COM2)

EXRS-C2 Position Controller

■ EXRS-C1/EXRS-P1 Common Basic Information

Number of Controlled Axes	1 Axis (Points: 225 points)
Controllable Robots	RSDG Series with Stepping Motors, RSD Series, RSDG Series, for control of RS Clean Type robot main body [WEB listed].
Max. Power Consumption	70VA~110VA
Input Power Supply	Recommended DC24V±10% (External power source required) external power source: MISUMI part number ESP20-100-24
External Dimension / Body Mass	W 30 (Width) mm x H 162 (Height) mm x D 82 (Depth) mm / Approx. 200g
Control Method	Closed Loop Vector Control Method
Position Detection Method	Resolver type rotary/angle sensor (Resolution 20480 pulse/rotation)
Homing Method	Hard Stop Method (No other homing method available)
External Communication Method	COM1 is equipped with RS-232C communication port. COM2 is equipped with Daisy-chain communication port.
Operating Temp. / Humidity	0~40°C / 35~85%RH (No Condensation)
Storage Temp. / Humidity	-10~65°C / 10~85%RH (No Condensation)
Ambience	Indoors without direct sunlight. No corrosive and flammable gases, oil mist and dust.
Vibration Resistance	In each X, Y and Z direction 10 ~ 57Hz Half amplitude 0.075mm 57 ~ 150Hz 9.8m/s²
Point/Trace Edit/Execute method	RS-Manager : MISUMI part number EXRS-ST1 or EXRS-ST2 Handset terminal : MISUMI part number EXRS-H1 or EXRS-HD1

■ EXRS-P1 Specifications

RS-P1 Pulse Command Input	Line Driver: 500kpps or less
	Open-Collector: 100kpps or less (DC5~24V±10%)
Point/Trace Edit/Execute Method	RS-Manager: MISUMI part number EXRS-ST1 or EXRS-ST2
	☞ EXRS-P1 cannot be used in handset terminal.

■ EXRS-C2 Basic Information

Number of Controlled Axes	1 Axis (Points: 225 points)
Controllable Robots	AC Servo Motor RSH Series, RSF Series, RSB Series, for control of RSH Clean Type main body [WEB listed]
Internal Power Capacity	400VA
Input Power Supply	Single-phase AC100~115V±10%(50/60Hz): Applicable Part number EXRS-C21A/B Single-phase AC200~220V±10%(50/60Hz): Applicable Part number EXRS-C22A/B (A separate external DC24V power supply is required for Single Axis Robot equipped with breaks.)
External Dimension / Body Mass	W 58 (Width) mm x H 162 (Height) mm x D 131 (Depth) mm / Approx. 900g
Control Method	Closed Loop Vector Control Method
Position Detection Method	Resolver type rotary/angle sensor (Resolution 16384 pulse/rotation)
Homing Method	Hard Stop Method (Sensor method available as special option)
External Communication Method	COM1 is equipped with RS-232C communication port. COM2 is equipped with Daisy-chain communication port. Dedicated port can be selected from I/O parallel communication, CC-LINK or DeviceNet.
Operating Temp. / Humidity	0~40°C / 35~85%RH (No Condensation)
Storage Temp. / Humidity	-10~65°C / 10~85%RH (No Condensation)
Ambience	Indoors without direct sunlight. No corrosive and flammable gases, oil mist and dust.
Vibration Resistance	In each X, Y and Z direction 10 ~ 57Hz Half amplitude 0.075mm 57 ~ 150Hz 9.8m/s²
Point/Trace Edit/Execute Method	RS-Manager : MISUMI part number EXRS-ST1 or EXRS-ST2 Handset Terminal : MISUMI part number EXRS-H1 or EXRS-HD1

■ Robot Model Support Table

EXRS-C1 **EXRS-P1**	RS1	RS2	RS3	RSD1	RSD2	RSD3	RSDG1	RSDG2	RSDG3
	(Supports all models of RS series with Stepping Motor and Motor folded type)							
EXRS-C21A/B **EXRS-C22A/B**	RSH1	RSH2	RSH3	RSH4	RSH5	RSF4	RSB1	RSB2
	(100V or 200V controller models are compatible with Single Axis Robots with AC Servo Motors)							

■ Cautions

The default settings of the controllers can be changed to make controllers compatible with various Single Axis Robots. Support software is required to change the default settings.
Parameters of CC-LINK such as address change required for field network settings can be changed only through support software or handy terminal.
Robots with AC Servo Motor cannot be controlled using controllers for Stepping Motor (EXRS-C1 and EXRS-P1).
Robots with Stepping Motor cannot be controlled using controllers for AC Servo Motor (all types of EXRS-C2).