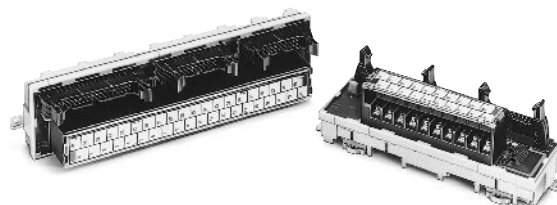


Servo Relay Units

XW2B

Connectors and terminal block in a single unit reduces wiring between Servo Drivers and Position Control Units.

- Simplifies control signal wiring between Servo Drivers and Position Control Units.
- With no soldering connections, a screwdriver is all you need.
- Special cables available for between Units.
- Only a 24-VDC power supply is required for control signals.
- Space-saving terminals blocks with M3 screws.
- Mount to DIN Track or via screws.



■ Ordering Information

Servo Relay Units

Name	Applicable Units	Model
One-axis Servo Relay Unit	CJ1W-NC1□3 CS1W-NC1□3 C200HW-NC113 C200H-NC112 3F88M-DRT141	XW2B-20J6-1B
Two-axis Servo Relay Unit	CJ1W-NC2□3/NC4□3 CS1W-NC2□3/NC4□3 C200HW-NC213/NC413 C200H-NC211	XW2B-40J6-2B
CQM1 Relay Unit (for one-/two-axis Servos)	CQM1-CPU43-V1 CQM1H-PLB21 CS1WS-HCP22	XW2B-20J6-3B
Two-axis Servo Relay Unit (with communications support)	CS1W-NC2□3/NC4□3 CJ1W-NC2□3/NC4□3	XW2B-40J6-4A
Servo Relay Unit for the CJ1M-CPU Unit (for 1 axis)	CJ1M-CPU22 CJ1M-CPU23	XW2B-20J6-8A
Servo Relay Unit for the CJ1M-CPU Unit (for 2 axes)	CJ1M-CPU22 CJ1M-CPU23	XW2B-40J6-9A

Servo Driver Connecting Cables

Name	Applicable Servo Driver	Model
30- to 750-W U-series Connecting Cables	R88D-UP	1 m XW2Z-100J-B1
		2 m XW2Z-200J-B1
M-series Connecting Cables	R88D-MT	1 m XW2Z-100J-B2
		2 m XW2Z-200J-B2
H-series Connecting Cables	R88D-H	1 m XW2Z-100J-B3
		2 m XW2Z-200J-B3
1-kW min. W- and U-series Connecting Cables	R88D-WT R88D-UT	1 m XW2Z-100J-B4
		2 m XW2Z-200J-B4
SMARTSTEP/UE-series Connecting Cables	R7D-AP R88D-UEP	1 m XW2Z-100J-B5
		2 m XW2Z-200J-B5
SMARTSTEP Cable with Communications Support	R7D-AP	1 m XW2Z-100J-B7
		2 m XW2Z-200J-B7

Connecting Cables for Serial Communications Units and Boards

Name	Applicable Serial Communications Units and Boards	Model
SMARTSTEP Connecting Cables	CJ1W-SCU41 CS1W-SCB41	1 m XW2Z-100J-C1
		2 m XW2Z-200J-C1

Position Control Unit Connecting Cables

Name	Applicable Units		Model
One-axis W-, U-, H-, and M-series Connecting Cables	C200H-NC112	0.5 m	XW2Z-050J-A1
		1 m	XW2Z-100J-A1
Two-axis W-, U-, H-, and M-series Connecting Cables	C200H-NC211	0.5 m	XW2Z-050J-A2
		1 m	XW2Z-100J-A2
One-axis W-, U-, H-, M-, SMART-STEP, and UE-series Connecting Cables	CQM1-CPU43-V1 CQM1H-PLB21	0.5 m	XW2Z-050J-A3
		1 m	XW2Z-100J-A3
One-axis SMARTSTEP and UE-series Connecting Cables	C200H-NC112	0.5 m	XW2Z-050J-A4
		1 m	XW2Z-100J-A4
Two-axis SMARTSTEP and UE-series Connecting Cables	C200H-NC211	0.5 m	XW2Z-050J-A5
		1 m	XW2Z-100J-A5
One-axis W-, U-, H-, and M-series Connecting Cables	CS1W-NC113 C200HW-NC113	0.5 m	XW2Z-050J-A6
		1 m	XW2Z-100J-A6
Two-axis W-, U-, H-, and M-series Connecting Cables	CS1W-NC213/NC413 C200HW-NC213/NC413	0.5 m	XW2Z-050J-A7
		1 m	XW2Z-100J-A7
One-axis SMARTSTEP and UE-series Connecting Cables	CS1W-NC113 C200HW-NC113	0.5 m	XW2Z-050J-A8
		1 m	XW2Z-100J-A8
Two-axis SMARTSTEP and UE-series Connecting Cables	CS1W-NC213/NC413 C200HW-NC213/NC413	0.5 m	XW2Z-050J-A9
		1 m	XW2Z-100J-A9
One-axis W-, U-, H-, and M-series Connecting Cables	CS1W-NC133	0.5 m	XW2Z-050J-A10
		1 m	XW2Z-100J-A10
Two-axis W-, U-, H-, and M-series Connecting Cables	CS1W-NC233/NC433	0.5 m	XW2Z-050J-A11
		1 m	XW2Z-100J-A11
One-axis SMARTSTEP and UE-series Connecting Cables	CS1W-NC133	0.5 m	XW2Z-050J-A12
		1 m	XW2Z-100J-A12
Two-axis SMARTSTEP and UE-series Connecting Cables	CS1W-NC233/NC433	0.5 m	XW2Z-050J-A13
		1 m	XW2Z-100J-A13
One-axis W-, U-, H-, and M-series Connecting Cables	CJ1W-NC113	0.5 m	XW2Z-050J-A14
		1 m	XW2Z-100J-A14
Two-axis W-, U-, H-, and M-series Connecting Cables	CJ1W-NC213/NC413	0.5 m	XW2Z-050J-A15
		1 m	XW2Z-100J-A15
One-axis SMARTSTEP and UE-series Connecting Cables	CJ1W-NC113	0.5 m	XW2Z-050J-A16
		1 m	XW2Z-100J-A16
Two-axis SMARTSTEP and UE-series Connecting Cables	CJ1W-NC213/NC413	0.5 m	XW2Z-050J-A17
		1 m	XW2Z-100J-A17
One-axis W-, U-, H-, and M-series Connecting Cables	CJ1W-NC133	0.5 m	XW2Z-050J-A18
		1 m	XW2Z-100J-A18
Two-axis W-, U-, H-, and M-series Connecting Cables	CJ1W-NC233/NC433	0.5 m	XW2Z-050J-A19
		1 m	XW2Z-100J-A19
One-axis SMARTSTEP and UE-series Connecting Cables	CJ1W-NC133	0.5 m	XW2Z-050J-A20
		1 m	XW2Z-100J-A20
Two-axis SMARTSTEP and UE-series Connecting Cables	CJ1W-NC233/NC433	0.5 m	XW2Z-050J-A21
		1 m	XW2Z-100J-A21
One-axis W-, U-, H-, M-, SMART-STEP, and UE-series Connecting Cables	CS1W-HCP22 (for 1 axis)	0.5 m	XW2Z-050J-A22
		1 m	XW2Z-100J-A22
	CS1W-HCP22 (for 2 axes)	0.5 m	XW2Z-050J-A23
		1 m	XW2Z-100J-A23
One-axis W-, U-, H-, and M-series Connecting Cables	3F88M-DRT141	0.5 m	XW2Z-050J-A24
		1 m	XW2Z-100J-A24
One-axis SMARTSTEP and UE-series Connecting Cables		0.5 m	XW2Z-050J-A25
		1 m	XW2Z-100J-A25
Two-axis SMARTSTEP Connecting Cables	CJ1M-CPU22 CJ1M-CPU23	1 m	XW2Z-100J-A26
Two-axis SMARTSTEP Connecting Cables		1 m	XW2Z-100J-A27

■ Servo Relay Unit Specifications

Ratings and Characteristics

Item	XW2B-□□J6-□
Rated current	1 A (temperature rise plus 30°C max.)
Rated voltage	24 VDC
Insulation resistance	5 MΩ min. (at 500 VDC)
Dielectric strength	500 VAC for 1 min (leakage current: 1 mA max.)
Degree of protection	IP00 IEC standard
Electrical protection class	Class 0
Operating temperature	0 to 55°C

Materials and Finish

Item	Part name	Materials and finish
Units	Main Unit/Expansion Unit	PBT resin (UL94V-0)/gray
	DIN Track lock	POM resin (UL94HB)/yellow
Flat Cable Connectors	Housing	PBT resin (UL94V-0)/black
	Contacts	Brass/gold plated
Terminal Block	Main Unit	PBT resin (UL94V-0)/black
	Connecting screw	Steel/nickel plated
	Cover	PC resin (UL94V-0)/transparent
PCB	---	FCL-GE4 Glass-epoxy Board

■ Position Control Unit and Servo Driver Connecting Cable Specifications

Ratings and Characteristics

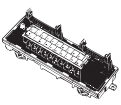
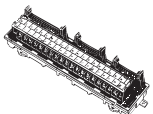
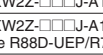
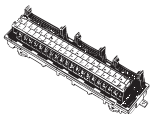
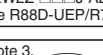
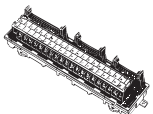
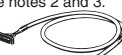
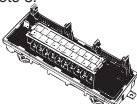
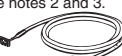
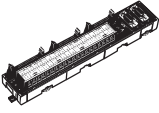
Item	Specifications
Rated current	1 A (temperature rise plus 30°C max.)
Rated voltage	24 VDC
Contact resistance	20 mΩ max. (at 20 mV, 100 mA max.) (See note 1.)
Insulation resistance	5 MΩ min. (at 500 VDC)
Dielectric strength	500 VAC for 1 min (leakage current: 1 mA max.) (See note 2.)
Degree of protection	IP00 IEC standard
Electrical protection class	Class 0
Operating temperature	0 to 55°C

Note: 1. Contact resistance of the Connector.
2. Dielectric strength of the Connector.

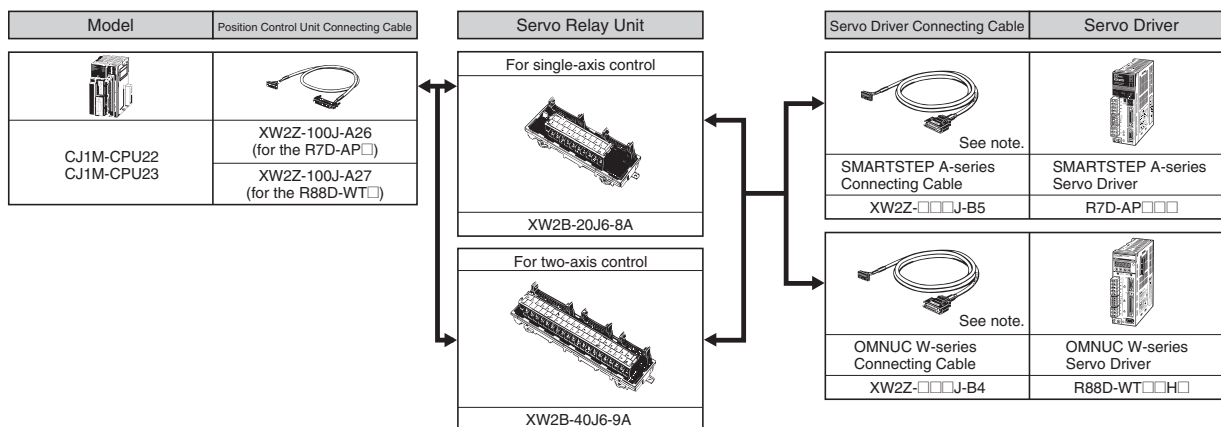
Materials and Finish

Item	Part name			Materials and Finish
Connectors	XG4M-1630 XG4M-2030 XG4M-3430	Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black
		Cover		
		Contacts	Mating end	Phosphor bronze/nickel base, 0.15-μm gold plating
			Press-fit end	Phosphor bronze/nickel base, 2.0-μm tin plating
	XG4T-1604/2004/3404		Strain Relief	Fiber-glass reinforced PBT resin (UL94V-0)/black
	XM2A-1501 XM2D-1501	Housing		Polyamide resin (UL94V-0)/milky white
		Contact terminals	Mating end	Brass/nickel base, 0.2-μm gold plating
			Press-fit end	
		Shell		Steel/nickel plated
	XM2S-1511/3711	Housing		ABS resin/nickel plated
	FCN-367J040-AU/F	Housing		PBT resin (UL94V-0)/black
		Contacts	Mating end	Phosphor bronze/gold plated
			Press-fit end	Phosphor bronze/tin plated
		Connecting screw		Steel/nickel plated
MR-34LF MR-50LF	Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black	
	Contacts	Mating end	Brass/nickel base, silver plated	
		Cover		ABS resin (UL94-HB)
10136-3000VE 10150-3000VE	Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black	
	Contacts		Copper alloy/nickel base, 0.5-μm gold plating	
10136-52A0-008 10130-52A0-008	Housing		Fiber-glass reinforced PBT resin (UL94V-0)/black	
Cable	UL2464 Interface Cable			AWG28 or the equivalent

Servo Relay Unit, Servo Driver and Position Control Unit Combinations

Model	Position Control Unit Connecting Cable	Servo Relay Unit	Servo Driver Connecting Cable	Servo Driver
 C200H-NC112 C200HW-NC113 CS1W-NC113	 XW2Z-□□□J-A1 XW2Z-□□□J-A4 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A6 XW2Z-□□□J-A8 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A10 XW2Z-□□□J-A12 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A14 XW2Z-□□□J-A16 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A18 XW2Z-□□□J-A20 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A24 XW2Z-□□□J-A25 (for the R88D-UEP/R7D-AP)	 XW2B-20J6-1B (See note 1.)	See notes 2 and 3.  SMARTSTEP A-series Connecting Cable XW2Z-□□□J-B5 with no communications support (for the XW2B-□□J6-□B)	 SMARTSTEP A-series Servo Driver R7D-AP□□□
 C200H-NC211 C200HW-NC213/413 CS1W-NC213/413	 XW2Z-□□□J-A2 XW2Z-□□□J-A5 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A7 XW2Z-□□□J-A9 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A11 XW2Z-□□□J-A13 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A15 XW2Z-□□□J-A17 (for the R88D-UEP/R7D-AP) XW2Z-□□□J-A19 XW2Z-□□□J-A21 (for the R88D-UEP/R7D-AP)	 XW2B-40J6-2B (See note 1.)	See notes 2 and 3.  OMNUC W-series Connecting Cable XW2Z-□□□J-B4	 OMNUC W-series Servo Driver R88D-WT□□□□
 C200H-NC233/433 C200HW-NC213/413 CS1W-NC233/433	 XW2Z-□□□J-A21 (for the R88D-UEP/R7D-AP)	 XW2B-40J6-2B (See note 1.)	See notes 2 and 3.  OMNUC U-series Connecting Cable XW2Z-□□□J-B1 XW2Z-□□□J-B4 XW2Z-□□□J-B5	 OMNUC U-series Servo Driver R88D-UP□□□ R88D-UT□□□ R88D-UEP□□□ (See note 4.)
 C200H-NC233/433 C200HW-NC213/413 CS1W-NC233/433	 XW2Z-□□□J-A21 (for the R88D-UEP/R7D-AP)	 XW2B-40J6-2B (See note 1.)	See notes 2 and 3.  OMNUC M-series Connecting Cable XW2Z-□□□J-B2	 OMNUC M-series Servo Driver R88D-MT□□
 CQM1-CPU43-V1 CQM1H-PLB21	 XW2Z-□□□J-A3 XW2Z-□□□J-A22 XW2Z-□□□J-A23	 XW2B-20J6-3B (See note 1.)	See notes 2 and 3.  OMNUC H-series Connecting Cable XW2Z-□□□J-B3	 OMNUC H-series Servo Driver R88D-H□□□
 CS1W-NC113/213/413 CS1W-NC133/233/433 CJ1W-NC113/213/413 CJ1W-NC133/233/433	 XW2Z-□□□J-A9 XW2Z-□□□J-A13 XW2Z-□□□J-A17 XW2Z-□□□J-A21	 XW2B-40J6-4A	See notes 2 and 3.  SMARTSTEP A-series Connecting Cable XW2Z-□□□J-B7 with communications support (for the XW2B-40J6-4A)	 SMARTSTEP A-series Servo Driver R7D-AP□□□
Serial Communications Units and Boards	Connecting Cables for Serial Communications Units and Boards			
 CS1W-SCB41 CJ1W-SCU41	 XW2Z-□□□J-C1			

- Note:**
1. Same functions as conventional models, such as the XW2B-20J6-2, XW2B-40J6-2, and XW2B-20J6-3, and connects to the R88D-UEP□□□.
 2. Two Servo Driver Connecting Cables are required per Relay Unit when using the C200H-NC211, C200HW-NC213/413, or CS1W-NC213/233/413/433.
 3. Two Relay Units, two Position Control Connecting Cables, and two Servo Driver Connecting Cables are required when using the CQM1-CPU43-V1 for 2-axis control.
 4. Use the XW2Z-□□□J-A4 Connecting Cable for the C200H-NC112, the XW2Z-□□□J-A8 Connecting Cable for the C200HW-NC113 and CS1W-NC113, the XW2Z-□□□J-A5 Connecting Cable for the C200H-NC211, and the XW2Z-□□□J-A9 Connecting Cable for the C200HW-NC213/413 and CS1W-NC213.
 5. Do not connect a signal lines to the Y-axis terminals on the XW2B-40J6-4A when connected to a Position Control Unit used for one-axis control.
 6. Use this cable between XW2B-40J6-4A communications connectors to control two or more axes.



Note: For 2-axis control, two Servo Driver Connecting Cables are required for each Relay Unit.