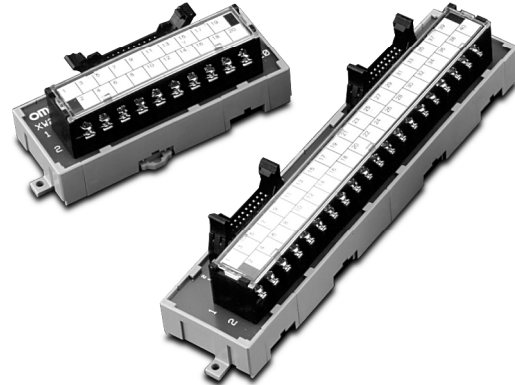


## Position Control Terminal Block

## XW2B

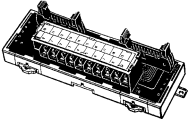
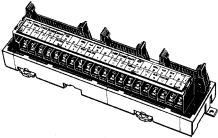
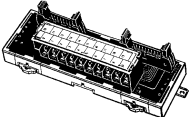
Simplify Wiring between Motor Controls and Omron's Position Control PLC Modules

- Relays control signals between a servo driver and the PLC position control module or CQM1H PLC with pulse I/O capability
- Connectors are wired with a single screwdriver and no soldering is required
- Dedicated cables connect terminal blocks to position control modules
- Requires 24 VDC for control signal use
- Terminal block organizes wiring and saves space; uses M3 screws
- Mounts to DIN track or with screws for panel mounting




## Ordering Information

### ■ POSITION CONTROL TERMINAL BLOCKS

| Appearance  | Applicable servo driver                        | Applicable position control module/CQM1H Pulse I/O Board | Part number         |
|---|--|--|---------------------|
|  | U-series: R88D-UP□□□□<br>W-series: R88D-WT□□□□ | C200H-NC112<br>C200HW-NC113                              | <b>XW2B-20J6-1B</b> |
|  |  | C200H-NC211<br>C200HW-NC213<br>C200HW-NC413              | <b>XW2B-40J6-2B</b> |
|  |  | CQM1H-PLB21  | <b>XW2B-20J6-3B</b> |


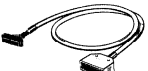



### ■ CABLES

#### Cables Between Servo Driver and Terminal Block

| Appearance  | Position control terminal block                             | Applicable servo driver | Cable length   | Part number         |
|---|---|-------------------------|----------------|---------------------|
|  | XW2B-20J6-1B,<br>XW2B-40J6-2B<br>(See Note)<br>XW2B-20J6-3B | R88D-UP□□□□             | 1 m (3.28 ft)  | <b>XW2Z-100J-B1</b> |
|   |   |                         | 2 m (6.56 ft)  | <b>XW2Z-200J-B1</b> |
|   |   | R88D-WT□□□□             | 1 m (3.28 ft)  | <b>XW2Z-100J-B4</b> |
|   |   |                         | 2 m (6.56 ft.) | <b>XW2Z-200J-B4</b> |

Note: Two cables will be required on the Servo Driver side if the XW2B-40J6-2B Terminal Block is used for two-axis control.

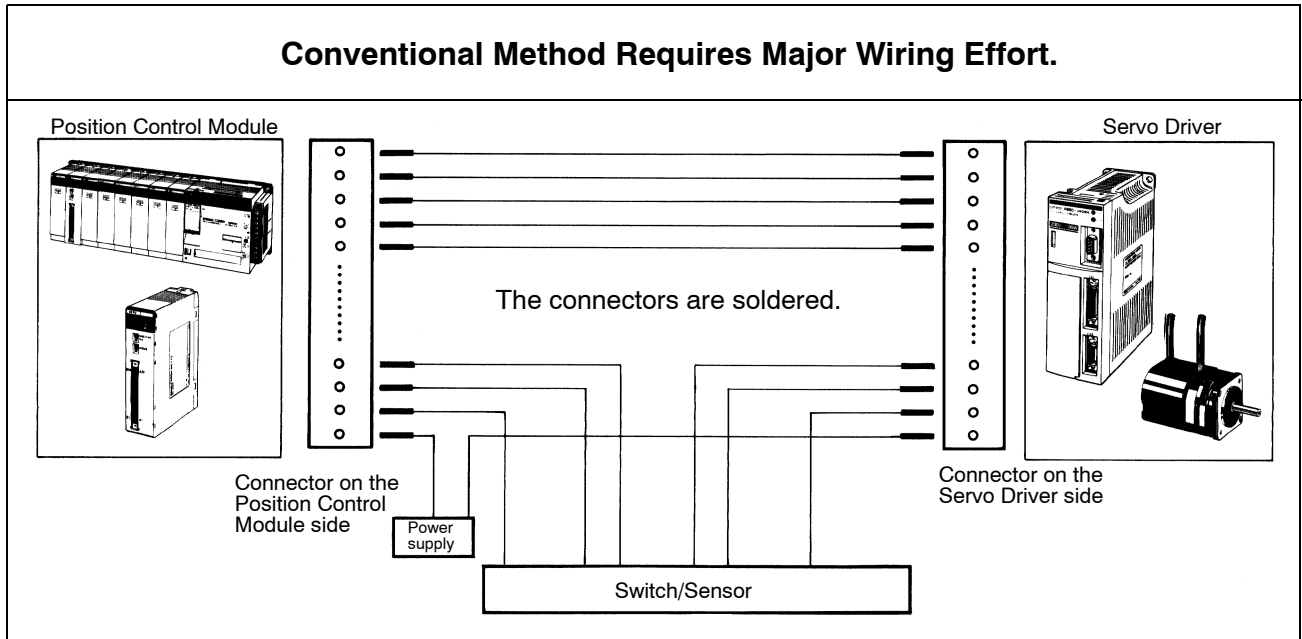
**Cables Between PLC Position Control Module and Terminal Block**

| Appearance  | Position control terminal block | Applicable position control module                          | Cable length    | Part number         |
|---|---------------------------------|---|-----------------|---------------------|
|  | XW2B-20J6-1B                    | C200H-NC112 (for one axis)                                  | 0.5 m (1.64 ft) | <b>XW2Z-050J-A1</b> |
|   |                                 |   | 1 m (3.28 ft)   | <b>XW2Z-100J-A1</b> |
|  | XW2B-40J6-2B                    | C200H-NC211 (for two axes)                                  | 0.5 m (1.64 ft) | <b>XW2Z-050J-A2</b> |
|   |                                 |   | 1 m (3.28 ft)   | <b>XW2Z-100J-A2</b> |
|  | XW2B-20J6-3B<br>(See Note 1)    | CQM1H-PLB21 (for one or two axes)                           | 0.5 m (1.64 ft) | <b>XW2Z-050J-A3</b> |
|   |                                 |   | 1 m (3.28 ft)   | <b>XW2Z-100J-A3</b> |
|  | XW2B-20J6-1B                    | C200H-NC113 (for one axis)                                  | 0.5 m (1.64 ft) | <b>XW2Z-050J-A6</b> |
|   |                                 |   | 1 m (3.28 ft)   | <b>XW2Z-100J-A6</b> |
|  | XW2B-40J6-2B<br>(See Note 2)    | C200HW-NC213 (for two axes)<br>C200HW-NC413 (for four axes) | 0.5 m (1.64 ft) | <b>XW2Z-050J-A7</b> |
|   |                                 |   | 1 m (3.28 ft)   | <b>XW2Z-100J-A7</b> |

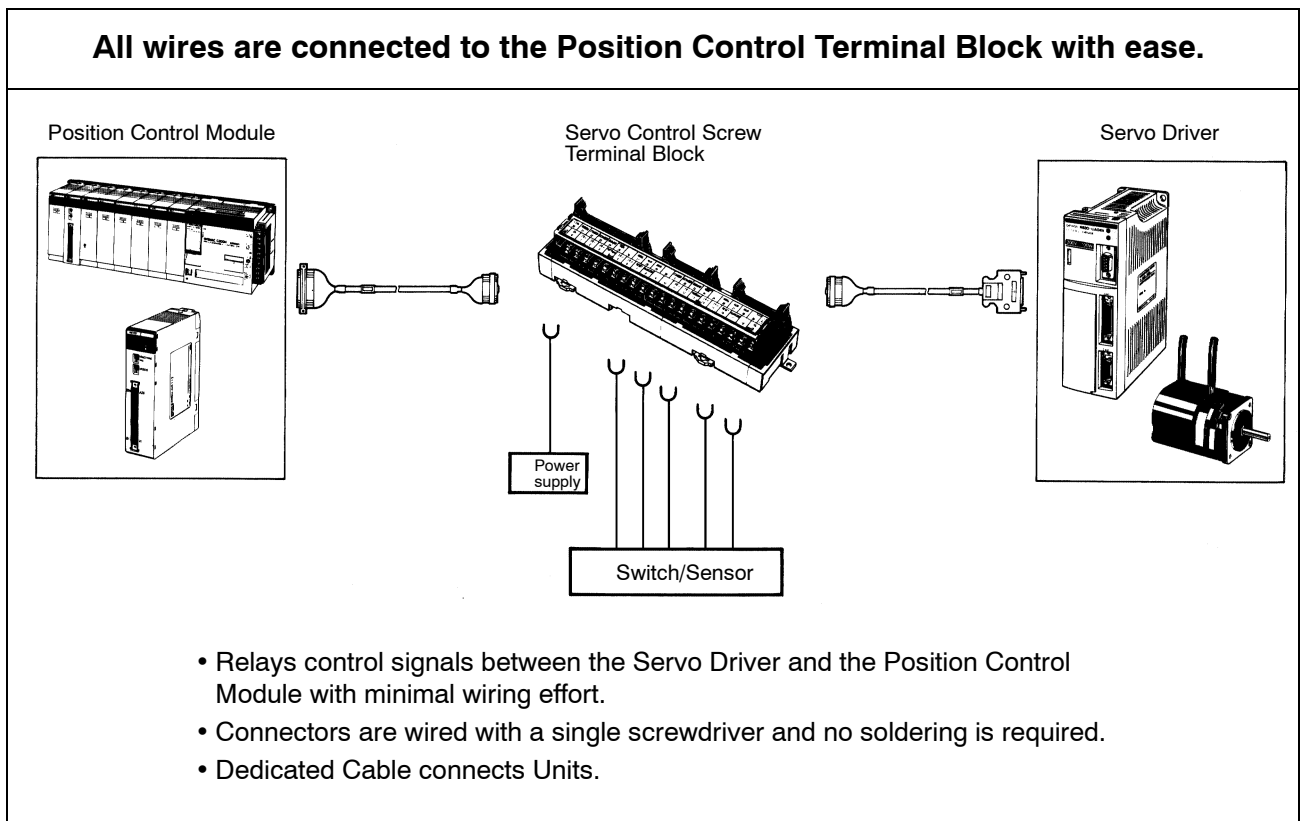
- Note: 1. Two cables each will be required on the Servo Terminal Block and Position Control Module side, and on the Servo Driver side if the CQM1H-PLB21 is used for two axes.
2. Two cables each will be required on the Servo Terminal Block and Position Control Module side, and on the Servo Driver side if the C200HW-NC413 (four axes) is used for two axes.

# Application Examples

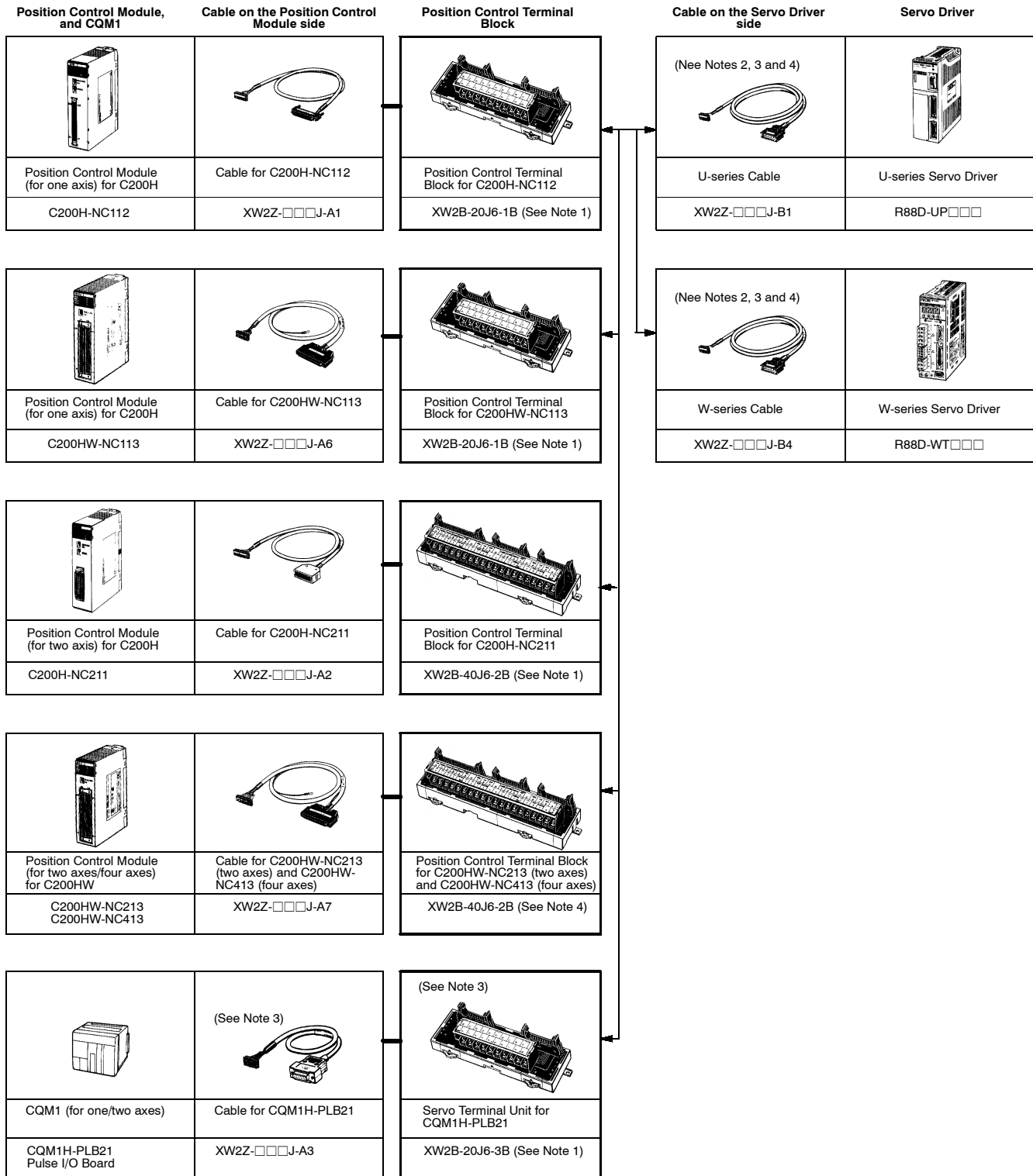
## ■ REDUCE WIRING TO EXTERNAL SENSORS, SWITCHES AND POWER SUPPLY



## Position Control Terminal Block



■ TYPICAL CONFIGURATIONS



- Note: 1. Has the functions of the conventional XW2B-20J6-1, XW2B-40J6-2 and XW2B-20J6-3.  
 2. Two cables will be required on the Servo driver side if the C200H-NC211 (for two axes) is used.  
 3. Two cables each are required on the Position Control Terminal Block and Position Control Module side and on the Servo Driver side if the CQM1H-PLB21 is used for two axes.  
 4. Two cables each will be required on the Position Control Terminal Block and Position Control Module side and on the Servo Driver side if the C200HW-NC413 (four axes) is used.

## Specifications

### ■ POSITION CONTROL TERMINAL BLOCKS

|                       |  |
|-----------------------|--|
| Item                  | XW2B-□□J6-□B   |
| Rated current         | 1 A at a temperature of 30°C (86°F) max.                 |
| Rated voltage         | 24 VdC   |
| Insulation resistance | 5 MΩ min. at 500 VDC                                     |
| Dielectric strength   | 500 VAC for 1 minute with a current leakage of 1 mA max. |
| Enclosure rating      | IP00   |
| Electrical protection | Class 0  |
| Ambient temperature   | Operating: -0°C to 55°C (32°F to 131°F)                  |

### ■ CONNECTORS

|                       |   |
|-----------------------|---|
| Item                  | XW2Z-□J-A□/-B□  |
| Rated current         | 1 A   |
| Rated voltage         | 24 VDC  |
| Contact resistance    | 20 mΩ max. with 100 mA max. at 20 mV max. (See Note 1)                |
| Insulation resistance | 5 MΩ min. at 500 VDC  |
| Dielectric strength   | 500 VAC for 1 minute with a current leakage of 1 mA max. (See Note 2) |
| Enclosure rating      | IP00  |
| Electrical protection | Class 0   |
| Ambient temperature   | Operating: 0°C to 55°C (32°F to 131°F)                                |

Note: 1. The resistance indicated is the contact resistance of the connector.

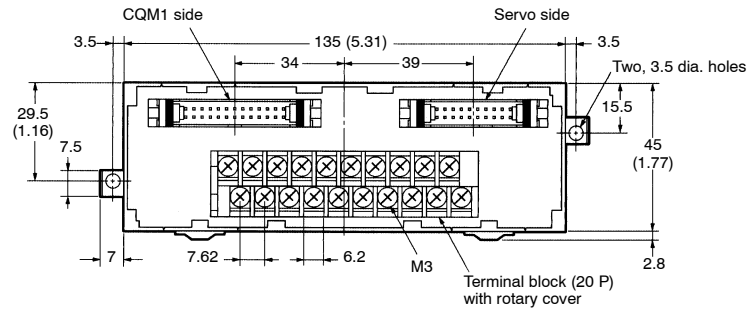
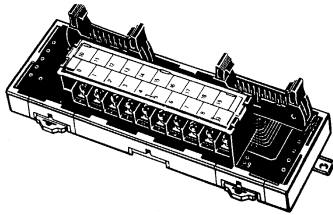
2. The voltage indicated is the dielectric strength of the connector.

# Dimensions

Unit: mm (inch)

## POSITION CONTROL TERMINAL BLOCKS

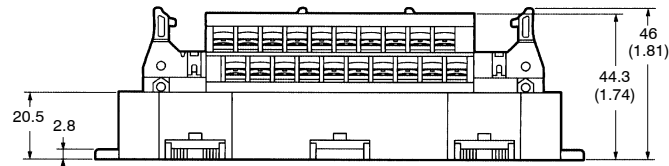
### XW2B-20J6-1B



#### Connection to Terminal Block

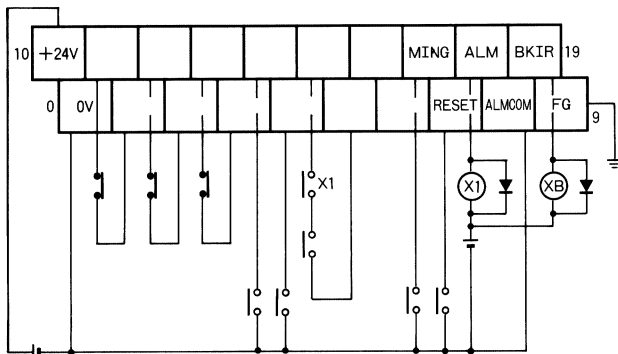
The terminal signal name varies with the servo driver. Refer to the Operation Manual of the servo driver in use.

Identify the servo driver in use by writing the name on the terminal nameplates provided. Affix the nameplate to the terminal cover.



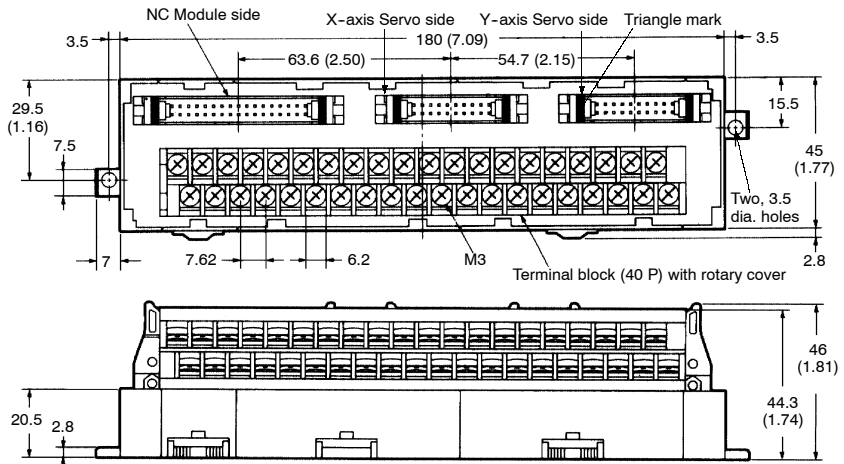
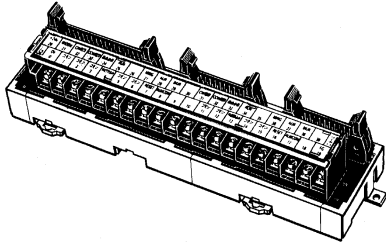
Note: The terminal block has a terminal pitch of 7.62 mm.

#### Connection to One Axis Position Control Modules C200H-NC112-U/C200HW-NC113-U



- Note: 1. Use mode 2 for origin search.
- 2. The XB contact is used to turn the electromagnetic brake ON and OFF.
- 3. The open terminal must be left unconnected.
- 4. 0 V and Common terminals are connected internally.
- 5. The suitable crimp terminal is R1.25-3 (round or fork type).

**XW2B-40J6-2B**



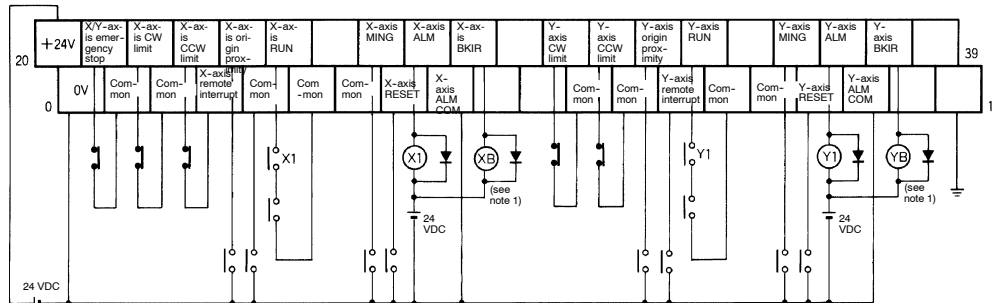
**Connection to Terminal Block**

The terminal signal name varies with the servo driver. Refer to the Operation Manual of the servo driver in use.

Identify the servo driver in use by writing the name on the terminal nameplates provided. Affix the nameplate to the terminal cover.

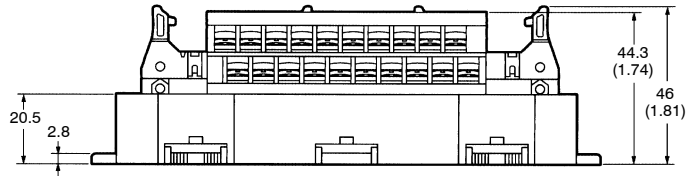
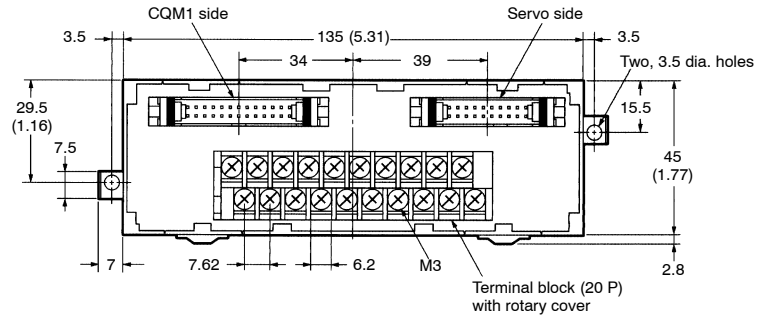
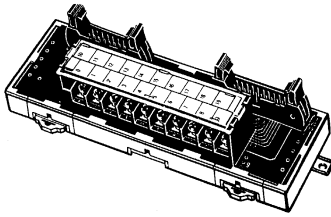
Note: The terminal block has a terminal pitch of 7.62 mm.

**Connection to Multi Axis Position Control Modules  
C200H-NC211-U/C200HW-NC213-U/C200HW-NC413-U**



- Note:
1. The XB contact is used to turn the electromagnetic brake on and off.
  2. Use mode 2 for origin search.
  3. When only a single axis is used, short-circuit the unused axis' CW limit and CCW limit to the common terminal.
  4. The open terminal must be left unconnected.
  5. 0 V and common terminals are connected internally.
  6. The suitable crimp terminal is R1.25-3 (round or fork type).

**XW2B-20J6-3B**



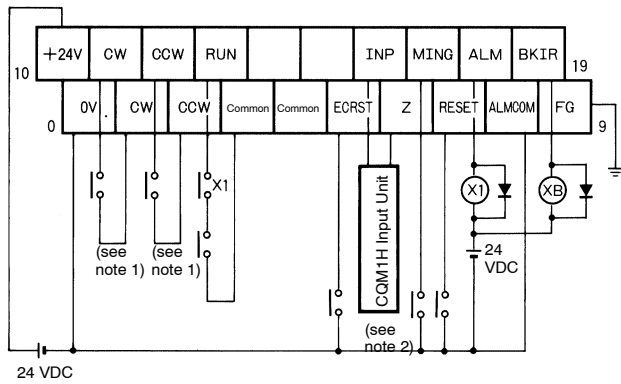
Note: The terminal block has a terminal pitch of 7.62 mm.

**Connection to Terminal Block**

The terminal signal name varies with the servo driver. Refer to the Operation Manual of the servo driver in use.

Identify the servo driver in use by writing the name on the terminal nameplates provided. Affix the nameplate to the terminal cover.

**Connection to Position Control PLC  
CQM1H-PLB21 for 1- or 2-Axis Control**



- Note:
1. When this signal is input, the output pulses of the CQM1H can be input to the high-speed counters directly.
  2. Input this signal output to the CQM1H input modules
  3. The XB contact is used to turn the electromagnetic brake on and off.
  4. Phase Z is an open collector output.
  5. The open terminal must be left unconnected.
  6. 0 V and common terminals are connected internally.
  7. The suitable crimp terminal is R1.25-3 (round or fork type).

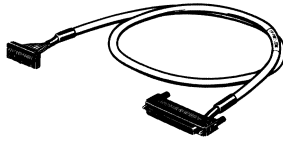


■ XW2Z CONNECTING CABLES

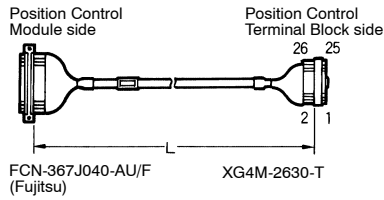
Use the cables to connect the PLC Position Control Module to the XW2B Position Control Terminal Blocks.

For C200H-NC112 Use

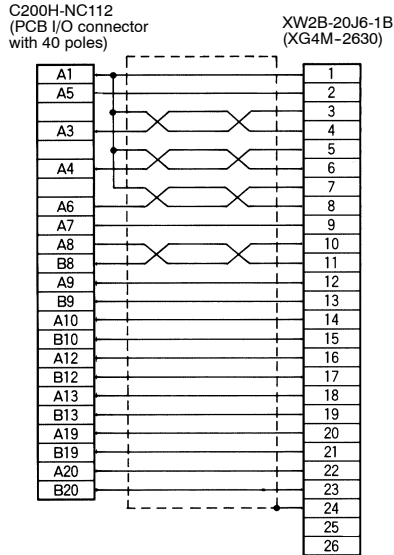
XW2Z-□□□J-A1



Connector

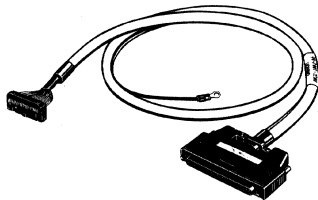


Wiring Diagram  
XW2Z-□□□J-A1

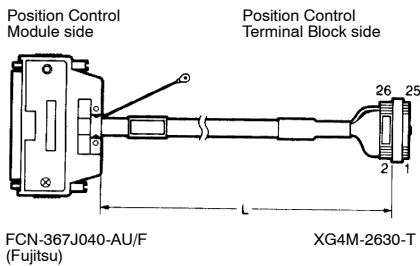


For C200HW-NC113 Use

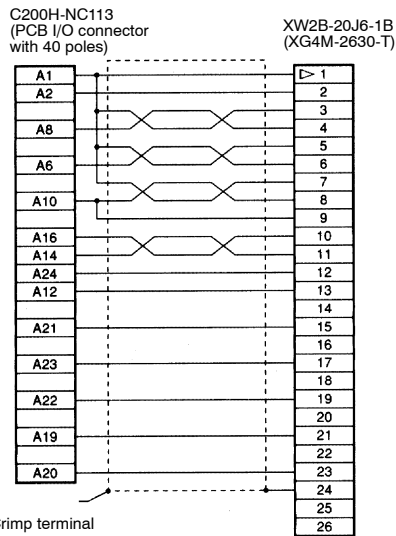
XW2Z-□□□J-A6



Connector



Wiring Diagram  
XW2Z-□□□J-A6



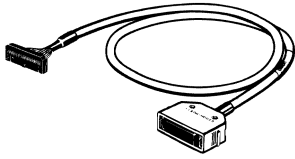
For C200H-NC211 Use

XW2Z-□□□J-A2

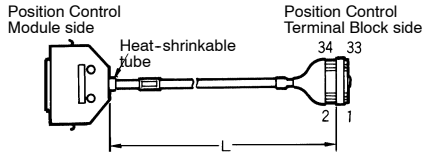
Wiring Diagram  
XW2Z-□□□J-A2

C200H-NC211  
(Multi-pole square  
connector with 34 poles)

XW2B-40J6-2B  
(XG4M-3430)

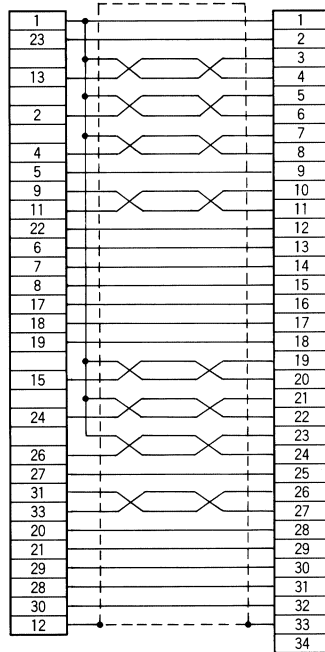


Connector



MR-34LF  
(Honda Tsushin Kogyo)

XG4M-3430-T



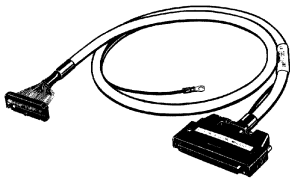
For C200HW-NC213/NC413 Use

XW2Z-□□□J-A7

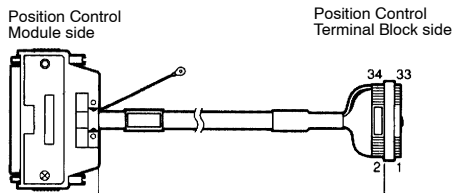
Wiring Diagram  
XW2Z-□□□J-A7

C200H-NC213/NC413  
(Multi-pole square  
connector with 34 poles)

XW2B-40J6-2B  
(XG4M-3430-T)

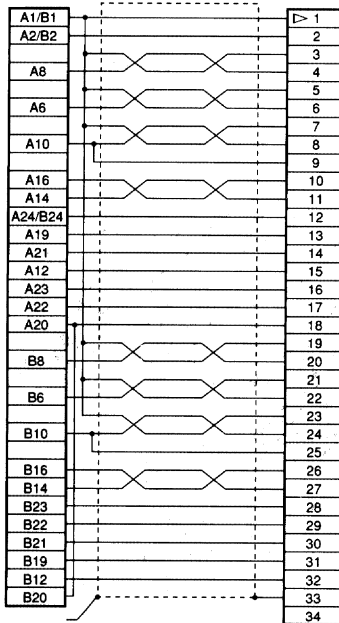


Connector



MR-34LF  
(Honda Tsushin Kogyo)

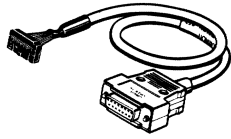
XG4M-3430-T



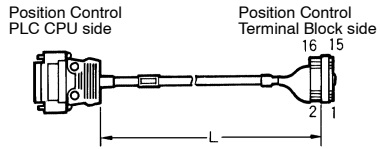
Crimp terminal

**For CQM1 Use**

XW2Z-□□□J-A3



**Connector**



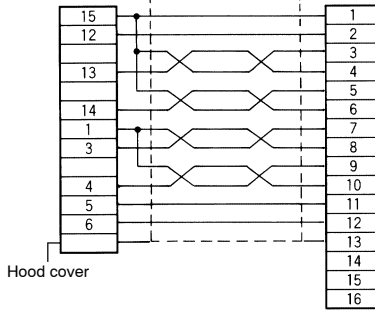
XM2D-1501 Socket  
XM2S-1511 Hood

XG4M-1630-T

**Wiring Diagram**  
XW2Z-□□□J-A3

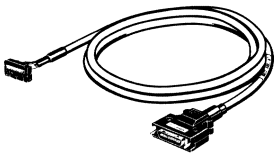
CQM1H-PLB21 (XM2D-1501)

XW2B-20J6-3B (XG4M-1630)

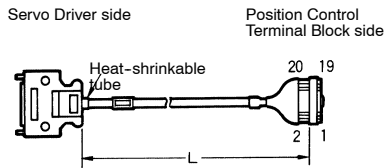


**For U-Series Servo Driver and Servo Terminal Block**

XW2Z-□□□J-B1



**Connector**



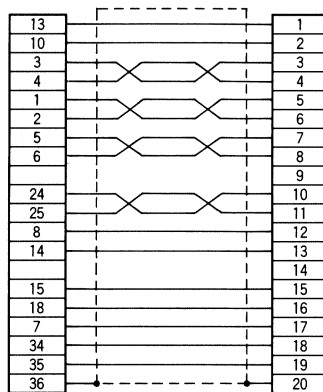
10136-3000VE Plug  
10336-52A0-008 Hood (both Sumitomo 3M)

XG4M-2030-T

**Wiring Diagram**  
XW2Z-□□□J-B1

R88D-UP□□□□ (Half-pitch connector with 36 poles)

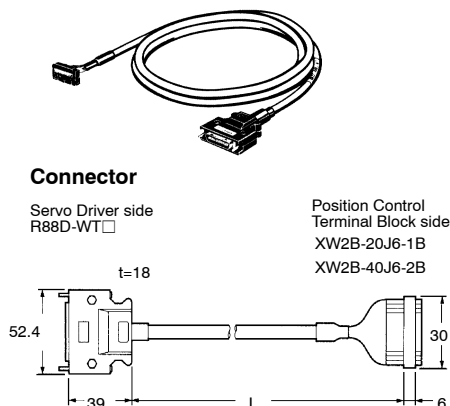
XW2B-□□J6-□B (XG4M-2030)



For W-Series Servo Driver and Servo Terminal Block

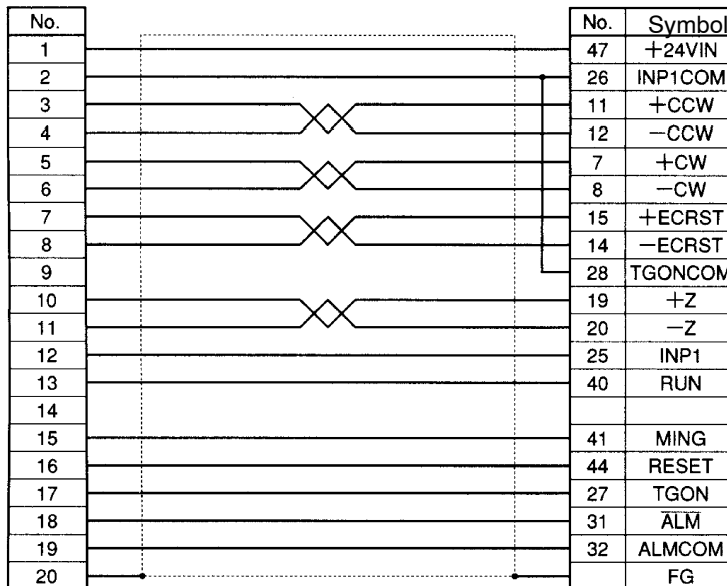
XW2Z-□□□J-B4

Wiring Diagram  
XW2Z-□□□J-B4



Position Control Terminal Block

Servo Drive



Cable: AWG28 × 4P + AWG28 × 9C

Precautions

■ WIRING

The open terminal must be left unconnected.  
 0 V and common terminals are connected internally.  
 Do not wire the Servo Screw Terminal Block while power is supplied to the unit, or the terminals may be short-circuited with the cable and the Unit may malfunction.

■ TERMINAL WIRE CONNECTIONS

The suitable crimp terminal is R1.25-3 (round or fork type).

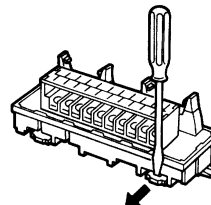
Terminal Screw Tightening Torque

When connecting crimp terminals or wires to the terminal block, be sure to tighten each crimp terminal or wire to 0.5 to 0.8 N • m (4.9 to 7.8 kgf • cm).

■ TRACK MOUNTING

More than one XW2B Position Control Screw Terminal Block can be densely mounted to a DIN track, in which case, move the mounting stays from both sides of the XW2B to the bottom of the XW2B.

Secure both ends of the XW2B with end plates.



**NOTE: DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters to inches divide by 25.4.**

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 Scarborough, Ontario M1B 5V8  
**416-286-6465**

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Наши преимущества:

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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