

Ultra-Compact Interface Wiring System XW2K

The Industry's Smallest*1 Compact Interface Wiring System to Reduce Work and Save Space on Control Panels

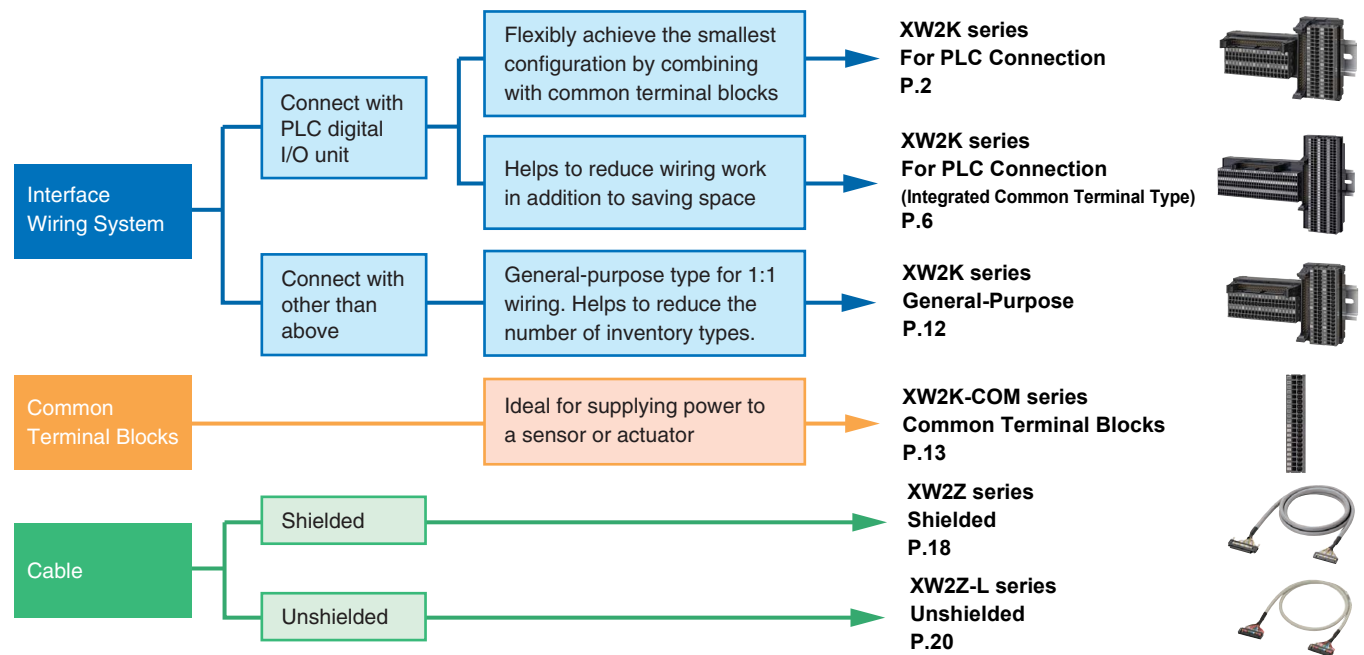
- This product is the industry's smallest*1 and is mountable in two ways (vertical and horizontal), so you can use space efficiently to downsize and save space on your control panels.
- Push-In Plus terminal blocks are employed to reduce wiring work by 60%*2 compared with traditional screw terminal blocks. No loosening of screws means maintenance-free operation.
- Wiring patterns specifically designed for connections with the PLCs of each company reduce the work required for signal layout checking.
- Two types are available to choose from to suit the relay method of the I/O line. (Connection example 1: Interface wiring system, connection example 2: Interface wiring system (integrated common terminal type))



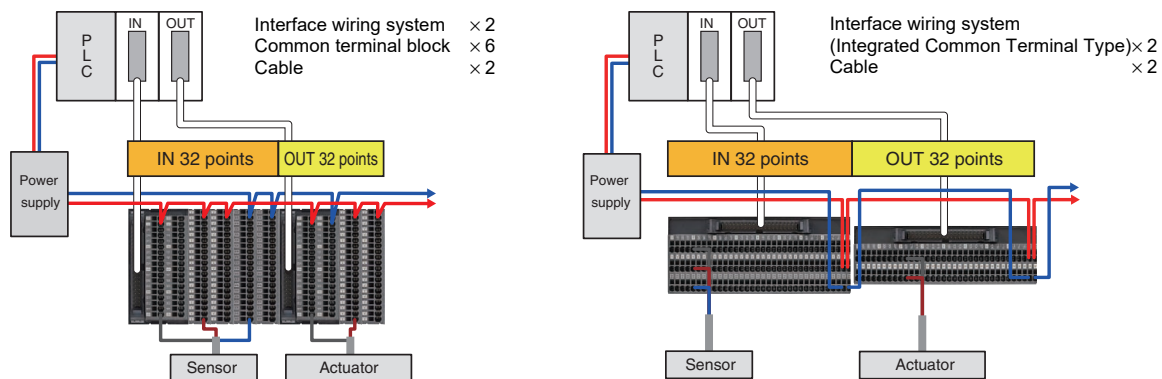
Refer to Safety Precautions on page 14

*1. Results of OMRON survey conducted in March, 2022
*2. OMRON's actual measurement value data

Selection Guide



Connection Examples



XW2K

Ultra-Compact Interface Wiring System

XW2K

For PLC Connection



Model Number Structure

Model Number Legend

XW2K- **G**- **32**

Series name (1) (2) (3) (4) (5)

(1) Number of Connector poles
34: 34 poles
40: 40 poles

(3) PLC manufacturer
O: OMRON, Yokogawa Electric, Hitachi Industrial Equipment Systems
M: Mitsubishi Electric, Fuji Electric
K: KEYENCE

(4) I/O Points
32: 32 Points

(5) Wiring pattern

A:
B:
C:
Blank:

Note:
Refer to the following PLC compatibility table.

PLC Compatibility Table

| PLC | | | | | Quantity required | Interface Wiring System Blue text: For PLC Black text: 1:1 wiring | Cable | | |
|-------------------------|--------------------------|--------------------------|------------------------|---------------|-------------------|---|---------------|---------------|---------------|
| Manufacturer name | Series name | I/O | Unit model | I/O Points | | | Shielded | Unshielded | |
| OMRON | CS | Input | CS1W-ID231 | 32 | 1 | XW2K-40G-O32A | XW2Z-100B | XW2Z-0100BF-L | |
| | | | CS1W-ID261 | 64 | 2 | | | | |
| | | Output | CS1W-OD231, CS1W-OD232 | 32 | 1 | | | | XW2K-40G-O32B |
| | | | CS1W-OD261, CS1W-OD262 | 64 | 2 | | | | |
| | | Mixed I/O (input side) | CS1W-MD261, CS1W-MD262 | 32 | 1 | | | | XW2K-40G-O32A |
| | | | CS1W-MD561 | 32 | 1 | | | | XW2K-40G-O32B |
| | | Mixed I/O (output side) | CS1W-MD261, CS1W-MD262 | 32 | 1 | | | | XW2K-40G-O32C |
| | | | CS1W-MD561 | 32 | 1 | | | | XW2K-40G-O32C |
| | CJ | Input | CJ1W-ID231 | 32 | 1 | XW2K-40G-O32A | XW2Z-100B | XW2Z-0100BF-L | |
| | | | CJ1W-ID261 | 64 | 2 | XW2K-40G-O32A | | | |
| | | | CJ1W-ID232, CJ1W-ID233 | 32 | 1 | XW2K-40G-O32C | | | |
| | | | CJ1W-ID262 | 64 | 2 | XW2K-40G-O32C | | | |
| | | Output | CJ1W-OD231 | 32 | 1 | XW2K-40G-O32B | XW2Z-100B | XW2Z-0100BF-L | |
| | | | CJ1W-OD261 | 64 | 2 | XW2K-40G-O32B | | | |
| | | | CJ1W-OD232, CJ1W-OD233 | 32 | 1 | XW2K-40G-O32C | | | |
| | | | CJ1W-OD234 | 32 | 1 | XW2K-40G-O32C | | | |
| | | Mixed I/O (input side) | CJ1W-OD262, CJ1W-OD263 | 64 | 2 | XW2K-40G-O32C | XW2Z-100K | XW2Z-0100FF-L | |
| | | | CJ1W-MD231 | 16 | 1 | XW2K-20G-T *1 | | | |
| | | | CJ1W-MD232 | 16 | 1 | | | | |
| | | | CJ1W-MD233 | 16 | 1 | | | | |
| | | Mixed I/O (output side) | CJ1W-MD261 | 32 | 1 | | XW2K-40G-O32A | XW2Z-100A | XW2Z-0100AD-L |
| | | | CJ1W-MD263, CJ1W-MD563 | 32 | 1 | XW2K-40G-O32C | | | |
| | | | CJ1W-MD231 | 16 | 1 | XW2K-20G-T *1 | | | |
| | | | CJ1W-MD232 | 16 | 1 | | | | |
| | CJ1W-MD233 | 16 | 1 | | | | | | |
| | CJ1W-MD261 | 32 | 1 | XW2K-40G-O32B | XW2Z-100X | | XW2Z-0100DD-L | | |
| | CJ1W-MD263, CJ1W-MD563 | 32 | 1 | XW2K-40G-O32C | | | | | |
| | NX | Input | NX-ID5142-5 | 16 | | 1 | | XW2K-20G-T *1 | XW2Z-100X |
| NX-ID6142-5 | | | 32 | 1 | | XW2K-40G-O32C | | | |
| NX-ID6142-6 | | | 32 | 1 | XW2K-40G-O32A | | | | |
| Output | | NX-OD5121-5, NX-OD5256-5 | 16 | 1 | XW2K-20G-T *1 | XW2Z-100K | XW2Z-0100FF-L | | |
| | | NX-OD6121-5, NX-OD6256-5 | 32 | 1 | XW2K-40G-O32C | | | | |
| | | NX-OD6121-6 | 32 | 1 | XW2K-40G-O32B | | | | |
| | | NX-OD6121-6 | 32 | 1 | XW2K-40G-O32B | | | | |
| Mixed I/O (input side) | | NX-MD6121-5, NX-MD6256-5 | 16 | 1 | XW2K-20G-T *1 | XW2Z-100X | XW2Z-0100DD-L | | |
| | | NX-MD6121-6 | 16 | 1 | | | | | |
| | | NX-MD6121-5, NX-MD6256-5 | 16 | 1 | | | | | |
| Mixed I/O (output side) | NX-MD6121-5, NX-MD6256-5 | 16 | 1 | XW2K-20G-T *1 | XW2Z-100X | XW2Z-0100DD-L | | | |
| | NX-MD6121-6 | 16 | 1 | | | | | | |

| PLC | | | | | Quantity required | Interface wiring system Blue text: For PLC Black text: 1:1 wiring | Cable | | | |
|--------------------------------------|--|-----------------------------|--|------------------------|-------------------|---|---------------|---------------|---------------|---------------|
| Manufacturer name | Series name | I/O | Unit model | I/O Points | | | Shielded | Unshielded | | |
| Yokogawa Electric | FA-M3 | Input | F3XD32-3F, F3XD32-4F, F3XD32-5F | 32 | 1 | XW2K-40G-O32A | XW2Z-100B | XW2Z-0100BF-L | | |
| | | | F3XD64-3F, F3XD64-4F | 64 | 2 | | | | | |
| | | Output | F3YD32-1H, F3YD32-1T F3YD32-1P, F3YD32-1R | 32 | 1 | | | | XW2K-40G-O32B | |
| | | | F3YD64-1P, F3YD64-1R | 64 | 2 | | | | | |
| | | | Mixed I/O (input side) | F3WD64-3P, F3WD64-4P | 32 | | | | 1 | XW2K-40G-O32A |
| Mixed I/O (output side) | F3WD64-3P, F3WD64-4P | 32 | 1 | XW2K-40G-O32B | | | | | | |
| Hitachi Industrial Equipment Systems | EH-150/EHV | Input | EH-XD32, EH-XDL32, EH-XDS32, EH-XDB32, EH-XDBL32 | 32 | 1 | XW2K-40G-O32A | XW2Z-100B | XW2Z-0100BF-L | | |
| | | | EH-XD64, EH-XDL64 EH-XDB64, EH-XDBL64 | 64 | 2 | | | | | |
| | | Output | EH-YT32, EH-YTP32 | 32 | 1 | | | | XW2K-40G-O32B | |
| | | | EH-YT64, EH-YTP64 | 64 | 2 | | | | | |
| Mitsubishi Electric | MELSEC L | Input | LX41C4 | 32 | 1 | XW2K-40G-M32 | XW2Z-100B | XW2Z-0100BF-L | | |
| | | | LX42C4 | 64 | 2 | | | | | |
| | | Output | LY41NT1P, LY41PT1P | 32 | 1 | | | | | |
| | | | LY42NT1P, LY42PT1P | 64 | 2 | | | | | |
| | | | Mixed I/O (input side) | LH42C4NT1P, LH42C4PT1P | 32 | | | | 1 | |
| | Mixed I/O (output side) | LH42C4NT1P, LH42C4PT1P | 32 | 1 | | | | | | |
| | MELSEC Q | Input | QX41, QX41-S1, QX41-S2, QX71 | 32 | 1 | | | | | |
| | | | QX42, QX42-S1, QX72, QX82, QX82-S1 | 64 | 2 | | | | | |
| | | Output | QY41P, QY71 | 32 | 1 | | | | | |
| | | | QY42P, QY82P | 64 | 2 | | | | | |
| | | | Mixed I/O (input side) | QH42P, QX41Y41P | 32 | | | | 1 | |
| | Mixed I/O (output side) | QH42P, QX41Y41P | 32 | 1 | | | | | | |
| | MELSEC iQ-R | Input | RX41C4, RX71C4 RX41C6HS, RX61C6HS | 32 | 1 | | | | | |
| | | | RX42C4, RX72C4 | 64 | 2 | | | | | |
| | | Output | RY41NT2P, RY41NT2H RY41PT1P, RY41PT2H | 32 | 1 | | | | | |
| RY42NT2P, RY42PT1P | | | 64 | 2 | | | | | | |
| Mixed I/O (input side) | | | RH42C4NT2P | 32 | 1 | | | | | |
| Mixed I/O (output side) | RH42C4NT2P | 32 | 1 | | | | | | | |
| Fuji Electric | MICREX-SX | Input | NP1X3202-W, NP1X3206-W | 32 | 1 | XW2K-40G-M32 | XW2Z-100B | XW2Z-0100BF-L | | |
| | | | NP1X6406-W | 64 | 2 | | | | | |
| | | Output | NP1Y32T09P1, NP1Y32U09P1 | 32 | 1 | | | | | |
| | | | NP1Y64T09P1, NP1Y64U09P1 | 64 | 2 | | | | | |
| | | | Mixed I/O (input side) | NP1W6406T, NP1W6406U | 32 | | | | 1 | |
| Mixed I/O (output side) | NP1W6406T, NP1W6406U | 32 | 1 | | | | | | | |
| KEYENCE | KV-1000 | Input | KV-C32XA | 32 | 1 | XW2K-34G-K32 | XW2Z-100EE | XW2Z-0100EE-L | | |
| | | | KV-C64XA | 64 | 2 | | | | | |
| | | Output | KV-C32TA | 32 | 1 | | | | | |
| | | | KV-C64TA | 64 | 2 | | | | | |
| | | | CPU unit | KV-1000 (CPU) | - | | | | 1 | XW2K-40G-T *1 |
| | KV-3000 KV-5000 KV-7000 KV-8000 | Input | KV-C32XC | 32 | 1 | XW2K-34G-K32 | XW2Z-100EE | XW2Z-0100EE-L | | |
| | | | KV-C64XC | 64 | 2 | | | | | |
| | | Output | KV-C32TC, KV-C32TD, KV-C32TCP | 32 | 1 | | | | | |
| | | | KV-C64TC, KV-C64TD, KV-C64TCP | 64 | 2 | | | | | |
| | | | Mixed I/O | KV-C16XTD | 32 | | | | 1 | |
| | | Mixed I/O (input side) | KV-C32XTD | 32 | 1 | | | | | |
| | | Mixed I/O (output side) | KV-C32XTD | 32 | 1 | | | | | |
| | CPU unit | KV-3000 / 5000 / 5500 (CPU) | - | 1 | XW2K-40G-T *1 | XW2Z-100K | XW2Z-0100FF-L | | | |
| | KV Nano | Basic unit | KV-SIR32XT | 32 | 1 | XW2K-40G-T *1 | XW2Z-100K | XW2Z-0100FF-L | | |
| | | | KV-SIR32XT | 32 | 1 | | | | | |
| Input | | KV-NC32T | 32 | 1 | XW2K-34G-T *1 | | | | XW2Z-100EE | XW2Z-0100EE-L |
| | | KV-NC32EX | 32 | 1 | | | | | | |
| | | KV-NC32ET | 32 | 1 | | | | | | |
| Output | | KV-NC16EXT | 32 | 1 | | | | | | |
| | | KV-NC32EXT | 32 | 1 | | | | | | |
| Mixed I/O (input side) | KV-NC32EXT | 32 | 1 | | | | | | | |
| Mixed I/O (output side) | KV-NC32EXT | 32 | 1 | | | | | | | |

Note: 1. This PLC compatibility table mainly lists digital I/O units. For units not in the compatibility table, select a general-purpose type for 1:1 wiring (page 12).
 2. The cable model to use is one with a cable length of 1 m. Refer to the section from page 18 for details.
 3. Caution is required when connecting with Yokogawa Electric, Hitachi Industrial Equipment Systems, and Fuji Electric PLCs. The PLC address is in the order of left to right, but the PLC address indication printed on the top surface of the terminal block follows that of the representative manufacturer.
 · For Yokogawa Electric and Hitachi Industrial Equipment Systems PLCs ⇒ Address indication of OMRON PLCs
 · For Fuji Electric PLCs ⇒ Address indication of Mitsubishi Electric PLCs

*1. Refer to page 12 for the model reference.

For PLC Connection

For PLC Connection (Integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

XW2K

For OMRON, Yokogawa Electric, or Hitachi Industrial Equipment Systems PLC Connection

Ordering Information

| Appearance | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|----------------------|--|
|  | MIL 40 poles | 32 | Green | XW2K-40G-O32A | When installed vertically: 39 x 75 x 40.8 When installed horizontally: 75 x 39 x 40.8 |
| | | | Blue | XW2K-40G-O32B | |
| | | | Black | XW2K-40G-O32C | |

Ratings

| | | |
|---------------------------|--|---|
| Rated voltage | 30 VDC | |
| Rated current | I/O unit signal line: 0.5 A, I/O unit common line: 4 A, Power supply line: 7 A | |
| Applicable wire #1 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

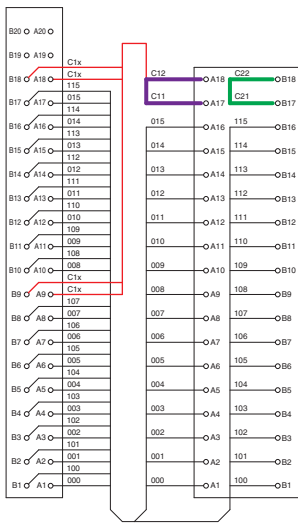
*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

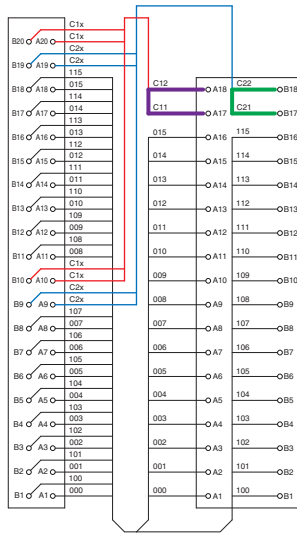
Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions

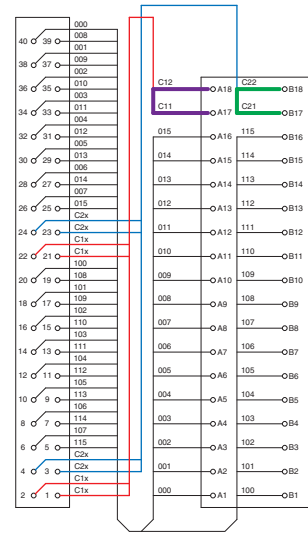
XW2K-40G-O32A



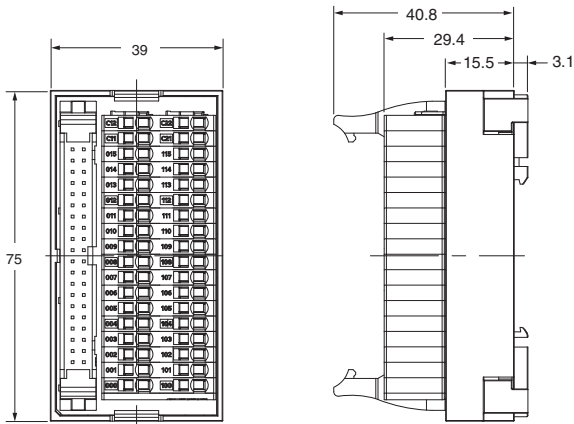
XW2K-40G-O32B



XW2K-40G-O32C



I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 4 A, Power supply line (purple/green): 7 A



Note: The dimensions diagram is common for all three models.

How to distinguish between the three XW2K-40G-O32□ models

The PWB colors are different so you can determine the model from the front without looking at the model indication on the side.



For PLC Connection

For PLC Connection (Integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks


Common Items for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

For Mitsubishi Electric, Fuji Electric, or KEYENCE PLC Connection

Ordering Information

| Appearance | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|---------------------|--|
|  | MIL 40 poles | 32 | Black | XW2K-40G-M32 | When installed vertically: 39 x 75 x 40.8 When installed horizontally: 75 x 39 x 40.8 |
| | MIL 34 poles | | | XW2K-34G-K32 | |

Ratings

| | | |
|---------------------------|--|---|
| Rated voltage | 30 VDC | |
| Rated current | I/O unit signal line: 0.5 A, I/O unit common line: 1 A/2 A, Power supply line: 7 A | |
| Applicable wire *1 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

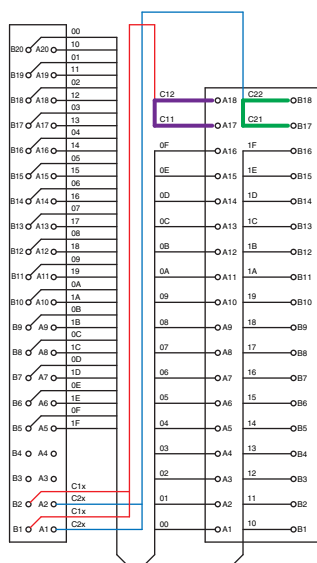
*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

Refer to the common items (page 14) for details on performance.

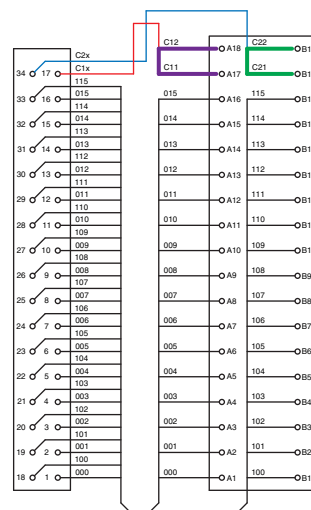
Wiring Diagram and Dimensions

XW2K-40G-M32

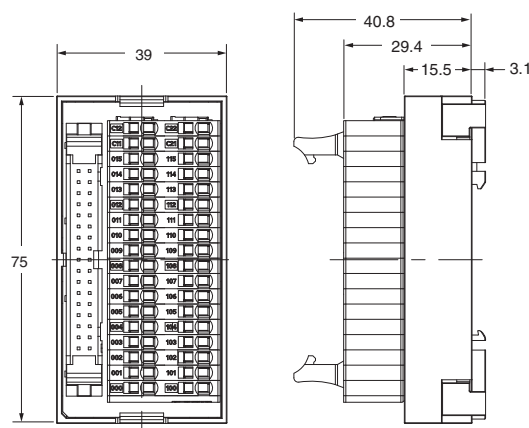
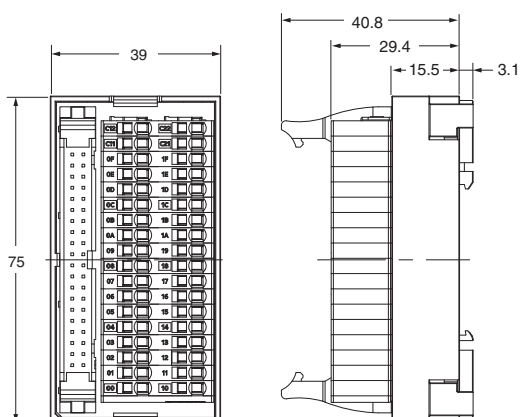


I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 2 A
Power supply line (purple/green): 7 A

XW2K-34G-K32



I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 1 A
Power supply line (purple/green): 7 A



For PLC Connection

For PLC Connection (Integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

Ultra-Compact Interface Wiring System

XW2K

For PLC Connection (Integrated Common Terminal Type)



Model Number Structure

Model Number Legend

XW2K-□□**G**-□□□□-□□□□
 Series name (1) (2) (3) (4) (5) (6)

- | | | | | |
|--|---|---|---|---|
| (1) Number of Connector poles 20: 20 poles 34: 34 poles 40: 40 poles | (3) PLC manufacturer O: OMRON, Yokogawa Electric, Hitachi Industrial Equipment Systems M: Mitsubishi Electric, Fuji Electric K: KEYENCE | (4) I/O Points 16: 16 Points 32: 32 Points | (5) Circuit pattern A: B: C: Blank: Note: Refer to the following PLC compatibility table. | (6) Power supply terminals IN: For input OUT: For output |
|--|---|---|---|---|

PLC Compatibility Table

| PLC | | | | | Quantity required | Interface Wiring System (integrated common terminal type) | Cable | | |
|--------------------------|-------------------------|--------------------------|--------------------------|------------------------|-------------------|---|-------------------|-------------------|------------------|
| Manufacturer name | Series name | I/O | Unit model | I/O Points | | | Shielded | Unshielded | |
| OMRON | CS | Input | CS1W-ID231 | 32 | 1 | XW2K-40G-O32A-IN | XW2Z-100B | XW2Z-0100BF-L | |
| | | | CS1W-ID261 | 64 | 2 | | | | |
| | | Output | CS1W-OD231, CS1W-OD232 | 32 | 1 | XW2K-40G-O32B-OUT | | | |
| | | | CS1W-OD261, CS1W-OD262 | 64 | 2 | | | | |
| | Mixed I/O (input side) | Mixed I/O (output side) | CS1W-MD261, CS1W-MD262 | 32 | 1 | XW2K-40G-O32A-IN | | | |
| | | | CS1W-MD561 | 32 | 1 | | XW2K-40G-O32B-OUT | | |
| | CJ | Input | CJ1W-ID231 | 32 | 1 | XW2K-40G-O32A-IN | | XW2Z-100B | XW2Z-0100BF-L |
| | | | CJ1W-ID261 | 64 | 2 | | | | |
| | | | CJ1W-ID232, CJ1W-ID233 | 32 | 1 | XW2K-40G-O32C-IN | | | |
| | | | CJ1W-ID262 | 64 | 2 | | | | |
| | | Output | CJ1W-OD231 | 32 | 1 | XW2K-40G-O32B-OUT | | | |
| | | | CJ1W-OD261 | 64 | 2 | | | | |
| | | | CJ1W-OD232, CJ1W-OD233 | 32 | 1 | XW2K-40G-O32C-OUT | | | |
| | | | CJ1W-OD234 | 32 | 1 | | | | |
| | | Mixed I/O (input side) | Mixed I/O (output side) | CJ1W-MD231 | 16 | 1 | XW2K-20G-O16A-IN | XW2Z-100A | XW2Z-0100AD-L |
| | | | | CJ1W-MD233 | 16 | 1 | | XW2Z-100X-R | --- |
| | | | | CJ1W-MD261 | 32 | 1 | XW2K-40G-O32A-IN | XW2Z-100B | XW2Z-0100BF-L |
| | | | | CJ1W-MD263, CJ1W-MD563 | 32 | 1 | | XW2K-40G-O32C-IN | XW2Z-100K |
| | Mixed I/O (output side) | Mixed I/O (output side) | CJ1W-MD231 | 16 | 1 | XW2K-20G-O16B-OUT | XW2Z-100A | XW2Z-0100AD-L | |
| | | | CJ1W-MD233 | 16 | 1 | | XW2Z-100X-R | --- | |
| | | | CJ1W-MD261 | 32 | 1 | XW2K-40G-O32B-OUT | XW2Z-100B | XW2Z-0100BF-L | |
| | | | CJ1W-MD263, CJ1W-MD563 | 32 | 1 | | XW2K-40G-O32C-OUT | XW2Z-100K | XW2Z-0100FF-L |
| | NX | Input | NX-ID5142-5 | 16 | 1 | XW2K-20G-O16A-IN | XW2Z-100X-R | --- | |
| | | | NX-ID6142-5 | 32 | 1 | | | | |
| | | | NX-ID6142-6 | 32 | 1 | | | | XW2K-40G-O32A-IN |
| | | NX-OD5121-5, NX-OD5256-5 | 16 | 1 | | | | | |
| | | NX-OD6121-5, NX-OD6256-5 | 32 | 1 | XW2K-40G-O32C-OUT | XW2Z-100K | XW2Z-0100FF-L | | |
| | | NX-OD6121-6 | 32 | 1 | | | | XW2K-40G-O32B-OUT | XW2Z-100B |
| Mixed I/O (input side) | | Mixed I/O (output side) | NX-MD6121-5, NX-MD6256-5 | 16 | 1 | XW2K-20G-O16A-IN | XW2Z-100X-R | | |
| | | | NX-MD6121-6 | 16 | 1 | | | XW2K-20G-O16B-OUT | XW2Z-100A |
| NX-MD6121-5, NX-MD6256-5 | 16 | 1 | XW2K-20G-O16B-OUT | XW2Z-100X-R | --- | | | | |
| NX-MD6121-6 | 16 | 1 | | | | XW2Z-100A | XW2Z-0100AD-L | | |

| PLC | | | | | Quantity required | Interface Wiring System (integrated common terminal type) | Cable | | |
|--------------------------------------|---|---------------------------------------|---|-------------------|-------------------|---|------------|---------------|-------------------|
| Manufacturer name | Series name | I/O | Unit model | I/O Points | | | Shielded | Unshielded | |
| Yokogawa Electric | FA-M3 | Input | F3XD32-3F, F3XD32-4F F3XD32-5F | 32 | 1 | XW2K-40G-O32A-IN | XW2Z-100B | XW2Z-0100BF-L | |
| | | | F3XD64-3F, F3XD64-4F | 64 | 2 | | | | |
| | | Output | F3YD32-1H, F3YD32-1T, F3YD32-1P | 32 | 1 | | | | XW2K-40G-O32B-OUT |
| | | | F3YD64-1P | 64 | 2 | | | | |
| Mixed I/O (input side) | F3WD64-3P, F3WD64-4P | 32 | 1 | XW2K-40G-O32A-IN | | | | | |
| Mixed I/O (output side) | F3WD64-3P, F3WD64-4P | 32 | 1 | XW2K-40G-O32B-OUT | | | | | |
| Hitachi Industrial Equipment Systems | EH-150/EHV | Input | EH-XD32, EH-XDL32, EH-XDS32, EH-XDB32, EH-XDBL32 | 32 | 1 | XW2K-40G-O32A-IN | XW2Z-100B | XW2Z-0100BF-L | |
| | | | EH-XD64, EH-XDL64 EH-XDB64, EH-XDBL64 | 64 | 2 | | | | |
| | | Output | EH-YT32 | 32 | 1 | | | | XW2K-40G-O32B-OUT |
| | | | EH-YT64 | 64 | 2 | | | | |
| Mitsubishi Electric | MELSEC L | Input | LX41C4 | 32 | 1 | XW2K-40G-M32-IN | XW2Z-100B | XW2Z-0100BF-L | |
| | | | LX42C4 | 64 | 2 | | | | |
| | | Output | LY41NT1P | 32 | 1 | | | | XW2K-40G-M32-OUT |
| | | | LY42NT1P | 64 | 2 | | | | |
| | Mixed I/O (input side) | LH42C4NT1P | 32 | 1 | XW2K-40G-M32-IN | | | | |
| | Mixed I/O (output side) | LH42C4NT1P | 32 | 1 | XW2K-40G-M32-OUT | | | | |
| | MELSEC Q | Input | QX41, QX41-S1, QX41-S2, QX71 | 32 | 1 | XW2K-40G-M32-IN | | | |
| | | | QX42, QX42-S1, QX72, QX82, QX82-S1 | 64 | 2 | | | | |
| | | Output | QY41P, QY71 | 32 | 1 | | | | XW2K-40G-M32-OUT |
| | | | QY42P | 64 | 2 | | | | |
| | Mixed I/O (input side) | QH42P, QX41Y41P | 32 | 1 | XW2K-40G-M32-IN | | | | |
| | Mixed I/O (output side) | QH42P, QX41Y41P | 32 | 1 | XW2K-40G-M32-OUT | | | | |
| MELSEC iQ-R | Input | RX41C4, RX71C4, RX41C6HS, RX61C6HS | 32 | 1 | XW2K-40G-M32-IN | | | | |
| | | RX42C4, RX72C4 | 64 | 2 | | | | | |
| | Output | RY41NT2P, RY41NT2H | 32 | 1 | | XW2K-40G-M32-OUT | | | |
| | | RY42NT2P | 64 | 2 | | | | | |
| Mixed I/O (input side) | RH42C4NT2P | 32 | 1 | XW2K-40G-M32-IN | | | | | |
| Mixed I/O (output side) | RH42C4NT2P | 32 | 1 | XW2K-40G-M32-OUT | | | | | |
| Fuji Electric | MICREX-SX | Input | NP1X3202-W, NP1X3206-W | 32 | 1 | XW2K-40G-M32-IN | XW2Z-100B | XW2Z-0100BF-L | |
| | | | NP1X6406-W | 64 | 2 | | | | |
| | | Output | NP1Y32T09P1, NP1Y32U09P1 | 32 | 1 | | | | XW2K-40G-M32-OUT |
| | | | NP1Y64T09P1, NP1Y64U09P1 | 64 | 2 | | | | |
| Mixed I/O (input side) | NP1W6406T, NP1W6406U | 32 | 1 | XW2K-40G-M32-IN | | | | | |
| Mixed I/O (output side) | NP1W6406T, NP1W6406U | 32 | 1 | XW2K-40G-M32-OUT | | | | | |
| KEYENCE | KV-1000 | Input | KV-C32XA | 32 | 1 | XW2K-34G-K32-IN | XW2Z-100EE | XW2Z-0100EE-L | |
| | | | KV-C64XA | 64 | 2 | | | | |
| | | Output | KV-C32TA | 32 | 1 | | | | XW2K-34G-K32-OUT |
| | | | KV-C64TA | 64 | 2 | | | | |
| | KV-3000 KV-5000 KV-5500 KV-7000 KV-8000 | Input | KV-C32XC | 32 | 1 | XW2K-34G-K32-IN | | | |
| | | | KV-C64XC | 64 | 2 | | | | |
| | | Output | KV-C32TC, KV-C32TD | 32 | 1 | | | | XW2K-34G-K32-OUT |
| | | | KV-C64TC, KV-C64TD | 64 | 2 | | | | |
| | Mixed I/O (input side) | KV-C32XTD | 32 | 1 | XW2K-34G-K32-IN | | | | |
| | Mixed I/O (output side) | KV-C32XTD | 32 | 1 | XW2K-34G-K32-OUT | | | | |
| KV Nano | Input | KV-NC32EX | 32 | 1 | XW2K-34G-K32-IN | | | | |
| | | KV-NC32ET | 32 | 1 | | | | | |
| | Output | KV-NC32EX | 32 | 1 | | XW2K-34G-K32-OUT | | | |
| | | KV-NC32ET | 32 | 1 | | | | | |
| Mixed I/O (input side) | KV-NC32EXT | 32 | 1 | XW2K-34G-K32-IN | | | | | |
| Mixed I/O (output side) | KV-NC32EXT | 32 | 1 | XW2K-34G-K32-OUT | | | | | |

Note: 1. This terminal block is a sink (NPN) type-compatible product. For source (PNP) use, reverse the polarity of the external power supply and the power source for I/O devices.
 2. The cable model to use is one with a cable length of 1 m. Refer to the section from page 18 for details.
 3. Caution is required when connecting with Yokogawa Electric, Hitachi Industrial Equipment Systems, and Fuji Electric PLCs. The PLC address is in the order of left to right, but the PLC address indication printed on the top surface of the terminal block follows that of the representative manufacturer.
 · For Yokogawa Electric and Hitachi Industrial Equipment Systems PLCs ⇒ Address indication of OMRON PLCs
 · For Fuji Electric PLCs ⇒ Address indication of Mitsubishi Electric PLCs

For PLC Connection

For PLC Connection (integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks



Cable (Shielded)

Cable (Unshielded)

XW2K

For OMRON PLC Connection

Ordering Information

| Appearance | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|--------------------------|--|
|  | MIL 20 poles | 16 | Green | XW2K-20G-O16A-IN | When installed vertically: 52.7 x 75 x 40.8 When installed horizontally: 75 x 52.7 x 40.8 |
|  | | | Blue | XW2K-20G-O16B-OUT | When installed vertically: 39 x 75 x 40.8 When installed horizontally: 75 x 39 x 40.8 |

Ratings

| | |
|---|--|
| Rated voltage | 30 VDC |
| Rated current | I/O unit signal line: 0.5 A, I/O unit common line: 2 A, Power supply line: 4 A |
| Applicable wire *1 | Stranded wire, solid wire |
| | Ferrules |
| 0.08 to 1.5 mm ² (AWG 28 to 16) | |
| With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) | |
| Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) | |

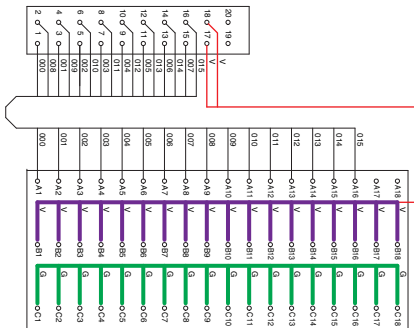
*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

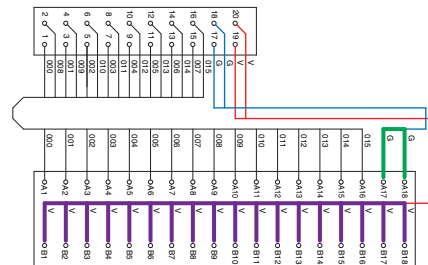
Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions

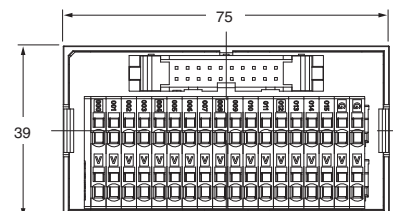
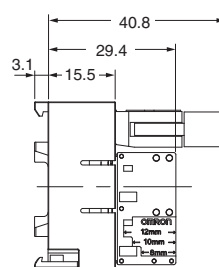
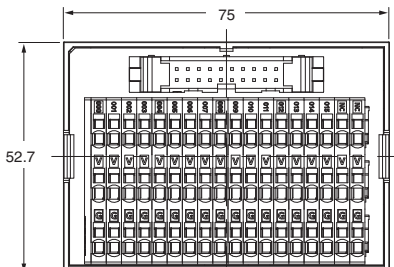
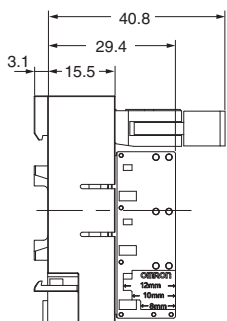
XW2K-20G-O16A-IN



XW2K-20G-O16B-OUT

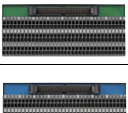


I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 2 A, Power supply line (purple/green): 4 A



For OMRON, Yokogawa Electric, or Hitachi Industrial Equipment Systems PLC Connection

Ordering Information

| Appearance *1 | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|-------------------|--|
|  | MIL 40 poles | 32 | Green | XW2K-40G-O32A-IN | When installed vertically: 52.7 x 124 x 40.8 When installed horizontally: 124 x 52.7 x 40.8 |
| | | | Black | XW2K-40G-O32C-IN | |
| | | | Blue | XW2K-40G-O32B-OUT | When installed vertically: 39 x 124 x 40.8 When installed horizontally: 124 x 39 x 40.8 |
| | | | Black | XW2K-40G-O32C-OUT | |

*1. The appearance shows the models of circuit patterns A and B. Circuit pattern C (XW2K-40G-O32C-IN/OUT) has a different appearance and the board color is black.

Ratings

| | | |
|--------------------|--|---|
| Rated voltage | 30 VDC | |
| Rated current | I/O unit signal line: 0.5 A, I/O unit common line: 4 A, Power supply line: 7 A | |
| Applicable wire *2 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

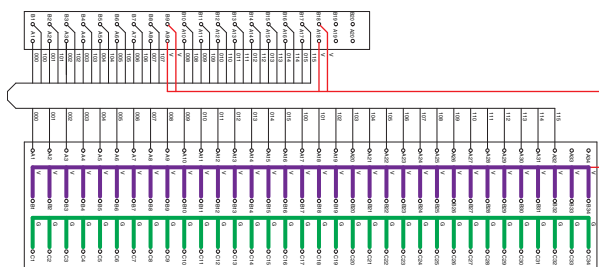
*2. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions

XW2K-40G-O32A-IN



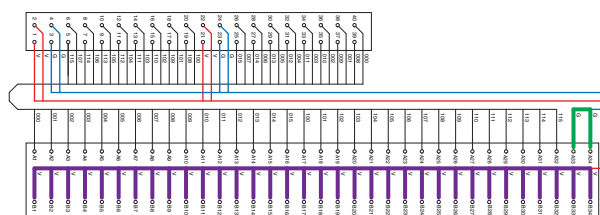
XW2K-40G-O32B-OUT



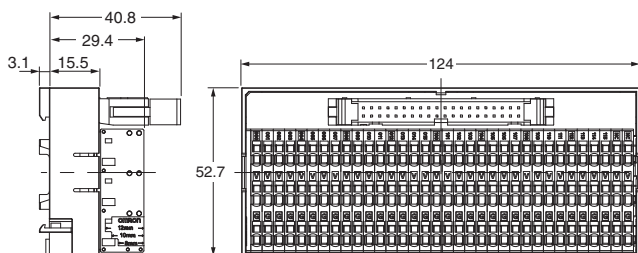
XW2K-40G-O32C-IN



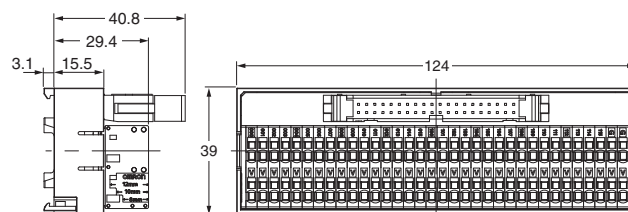
XW2K-40G-O32C-OUT



I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 4 A, Power supply line (purple/green): 7 A



Note: The dimensions diagram is common for both models.





Note: The dimensions diagram is common for both models.

XW2K

For Mitsubishi Electric or Fuji Electric PLC Connection

Ordering Information

| Appearance | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|-------------------------|--|
|  | MIL 40 poles | 32 | Black | XW2K-40G-M32-IN | When installed vertically: 52.7 x 124 x 40.8 When installed horizontally: 124 x 52.7 x 40.8 |
|  | | | | XW2K-40G-M32-OUT | When installed vertically: 39 x 124 x 40.8 When installed horizontally: 124 x 39 x 40.8 |

Ratings

| | | |
|---------------------------|--|---|
| Rated voltage | 30 VDC | |
| Rated current | I/O unit signal line: 0.5 A, I/O unit common line: 2 A, Power supply line: 7 A | |
| Applicable wire #1 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

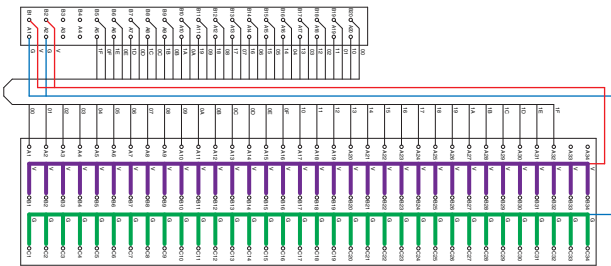
*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

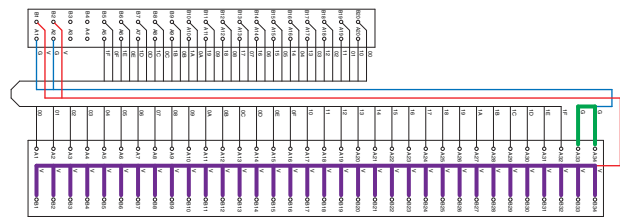
Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions

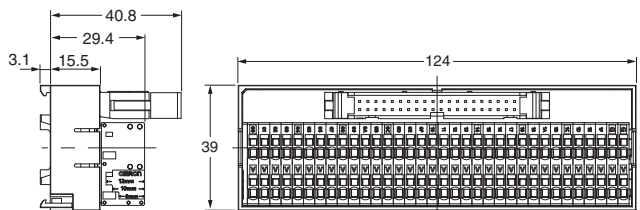
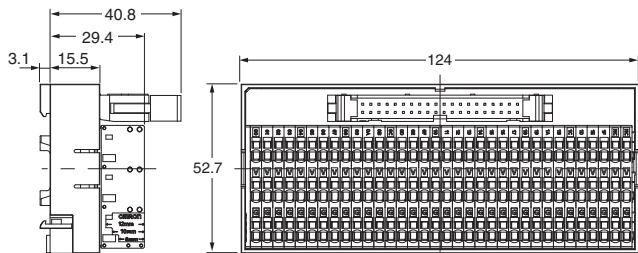
XW2K-40G-M32-IN



XW2K-40G-M32-OUT





I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 2 A, Power supply line (purple/green): 7 A



For KEYENCE PLC Connection

Ordering Information

| Appearance | Mounted connector | I/O Points | PWB color | Model | Dimension (mm) |
|---|-------------------|------------|-----------|-------------------------|--|
|  | MIL 34 poles | 32 | Black | XW2K-34G-K32-IN | When installed vertically: 52.7 x 124 x 40.8 When installed horizontally: 124 x 52.7 x 40.8 |
|  | | | | XW2K-34G-K32-OUT | When installed vertically: 39 x 124 x 40.8 When installed horizontally: 124 x 39 x 40.8 |

Ratings

| | | |
|---------------------------|----------------------------------|---|
| Rated voltage | | 30 VDC |
| Rated current | | I/O unit signal line: 0.5 A, I/O unit common line: 2 A, Power supply line: 7 A |
| Applicable wire *1 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

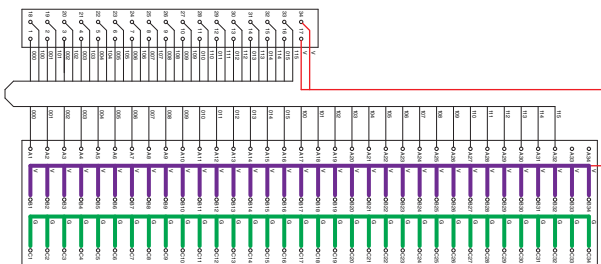
*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.

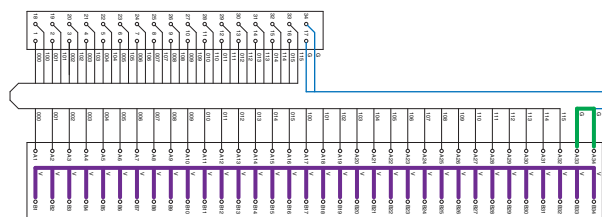
Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions

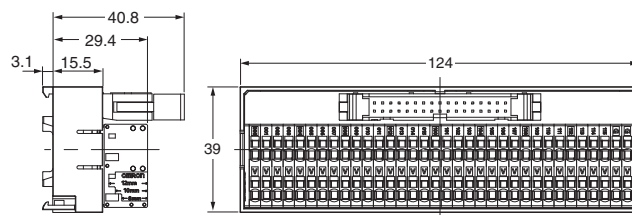
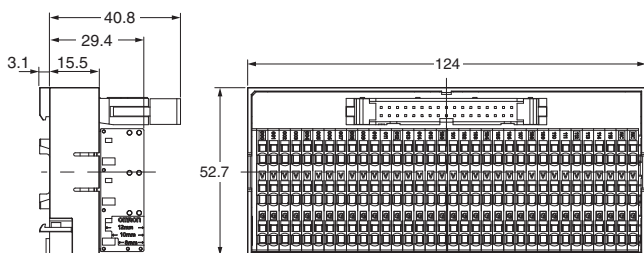
XW2K-34G-K32-IN



XW2K-34G-K32-OUT



I/O unit signal line (black): 0.5 A, I/O unit common line (red/blue): 2 A, Power supply line (purple/green): 7 A



For PLC Connection

For PLC Connection
(Integrated Common Terminal Type)

General-Purpose

Common
Terminal Blocks

Common Items
for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

XW2K

Ultra-Compact Interface Wiring System

XW2K

General-Purpose



Model Number Structure

Model Number Legend

XW2K-□□G-T

Series name (1) (2) (3)

- (1) Number of Connector poles
- (2) Mounted connector
- (3) Wiring

- 20: 20 poles
- 34: 34 poles
- 40: 40 poles
- 50: 50 poles

G: MIL

T: Straight wiring
(1:1 wiring)

Ordering Information

| Appearance | Mounted connector | terminal block poles | PWB color | Model | Dimension A (mm) | Dimension (mm) |
|------------|-------------------|----------------------|-----------|-------------------|------------------|--|
| | MIL 20 poles | 20 | Black | XW2K-20G-T | 56 | When installed vertically: 39 x A x 40.8 When installed horizontally: A x 39 x 40.8 |
| | MIL 34 poles | 34 | | XW2K-34G-T | 75 | |
| | MIL 40 poles | 40 | | XW2K-40G-T | 75 | |
| | MIL 50 poles | 50 | | XW2K-50G-T | 92.5 | |

Ratings

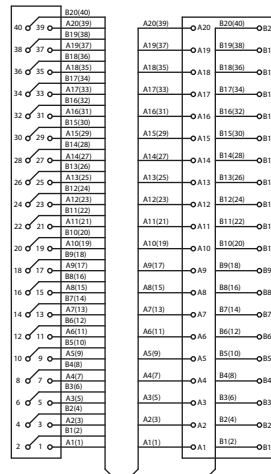
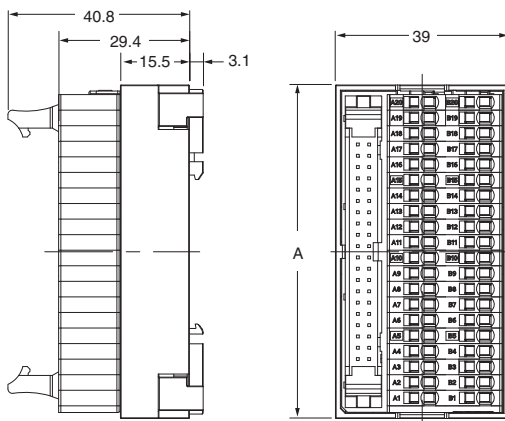
| | | |
|--------------------|---------------------------|---|
| Rated voltage | 125 VAC, 30 VDC *1 | |
| Rated current | 1 A | |
| Applicable wire *2 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

*1. Only "30 VDC" is printed on the main unit.
*2. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.
Refer to the common items (page 14) for details on performance.

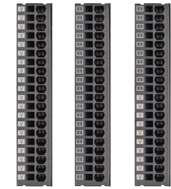
Wiring Diagram and Dimensions:

XW2K-40G-T



Note: Example of 40 poles

Ultra-Compact Common Terminal Blocks (For Sensor Power Supply*) XW2K-COM



* This model is small and ideal for sensor power supply, but it can be used for uses other than sensor power supply (e.g. AC circuit).

Model Number Structure

Model Number Legend

XW2K-COM 20 □

Series name (1) (2)

- | | |
|--|--|
| (1) Number of poles 20: 20 poles | (2) Application P: For + common N: For - common Blank: +/- mix |
|--|--|

Ordering Information

| Appearance | Number of poles | Application | PWB color | Model | Dimension (mm) |
|------------|-----------------|--------------|-----------|-------------|------------------|
| | 20 | For + common | Black | XW2K-COM20P | 14.8 x 75 x 29.4 |
| | | For - common | | XW2K-COM20N | |
| | | +/- mix | | XW2K-COM20 | |

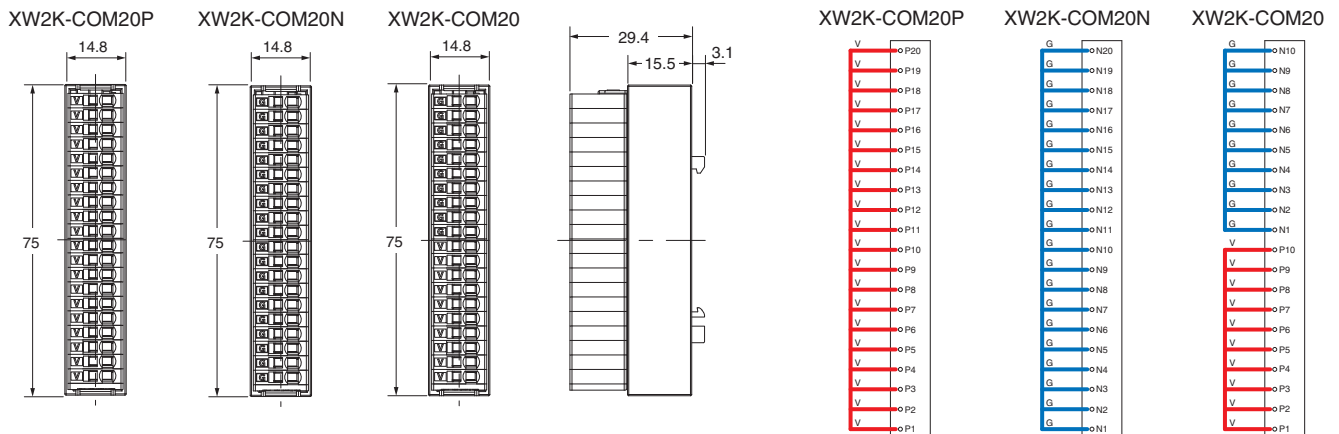
Ratings

| | | |
|---------------------------|----------------------------------|---|
| Rated voltage | 250 VAC/VDC | |
| Rated current | 10 A | |
| Applicable wire *1 | Stranded wire, solid wire | 0.08 to 1.5 mm ² (AWG 28 to 16) |
| | Ferrules | With insulation sleeve: 0.14 to 0.5 mm ² (AWG 26 to 20) Without insulation sleeve: 0.75 to 1.5 mm ² (AWG 18 to 16) |

*1. Outer diameter of insulation must be 2.8 mm max.

Refer to page 16 for information on recommended ferrules and crimp tools.
Refer to the common items (page 14) for details on performance.

Wiring Diagram and Dimensions



Common Items for Terminal Blocks

Specifications

| | | |
|--------------------------------------|---|--|
| Series | Ultra-compact interface wiring system XW2K For PLC connection, For PLC connection (integrated Common Terminal Type), General-purpose | Ultra-Compact common terminal blocks (for sensor power supply) XW2K-COM |
| Ambient operating temperature | -20 to +75°C (with no condensation or icing) | |
| Ambient operating humidity | 5 to 95% RH (with no condensation) | |
| Insulation resistance | 100 MΩ min. (at 500 VDC) | |
| Withstand voltage | 500 VAC for 1 min (leakage current: 1 mA max.) | 1500 VAC for 1 min (leakage current: 1 mA max.) |
| Insertion durability | 50 times | |
| Vibration resistance | 10 to 150 Hz, acceleration of 50 m/s ² for 80 min each in X, Y, and Z directions | |
| Shock resistance | 500 m/s ² for 11 ms each in 6 directions 5 times | |
| Ambient storage temperature | -20 to +75°C (with no condensation or icing) | |
| Ambient storage humidity | 5 to 95% RH (with no condensation) | |

Standards

Compliant standard

- UL 1977

Certification

- cURus (File No. E103202)

Safety Precautions

Warning Indications

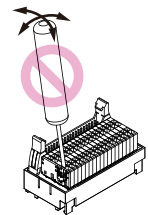
| | |
|------------------------------------|---|
| Precautions for Safe Use | Supplementary comments on what to do or avoid doing, to use the product safely. |
| Precautions for Correct Use | Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance. |

Precautions for Safe Use

- Do not drop the Terminal Block. Terminal Block functionality may be inhibited.
- Terminal Block is designed to satisfy the functions when mounting on the DIN Track. Always mount on the DIN Track.
- Do not exceeds the ratings. Doing so may result failure or burning.
- Do not use Terminal Blocks in locations where toxic gases, such as sulfide gas (H₂S and SO₂), ammonia gas (NH₃), nitrogen gas (HNO₃), chlorine gas (Cl₂), or in locations subject to high temperature or humidity. Doing so may cause functional failure, such as damages due to contact failure or corrosion.
- Do not use the Terminal Blocks submersed in oil or water, or in locations continuously subject to splashes of oil or water. Doing so may result in oil or water entering and damaging the Terminal Blocks.
- Do not use or keep the Terminal Blocks under the following conditions:
 - Subject to severe temperature changes.
 - Subject to high humidity and condensation.
 - Subject to severe vibration or shock.
 - Where direct rays of the sun strike.
 - Where sea breeze may be present.
- When disposing, dispose the Terminal Blocks as industrial wastes.
- Do not wire anything to the release holes.

- Do not tilt or twist a flat-blade screwdriver as shown in the figure while it is inserted into a release hole on the terminal block. The terminal block may be damaged.

Not Correct



- Insert a flat-blade screwdriver into the release holes at an angle. The terminal block may be damaged if you insert the screwdriver straight in.
- Do not allow the flat-blade screwdriver to fall out while it is inserted into a release hole.
- Do not bend a wire past its natural bending radius or pull on it with excessive force. Doing so may sever the cable. Do not apply excessive force to the Terminal Blocks. Doing so may cause connection failure due to damage or deformation.
- Do not presolder the ends of the wires. The wires will become unable to be connected correctly.
- Do not insert more than one wire into each terminal insertion hole.
- Do not use wires with discoloration, doing so may cause conduction failure.
- When stripping the wire coatings, be sure not to damage the core wire. Doing so may cause connection failure.
- Do not perform wiring with wet hands. Doing so may result operation failure or malfunction when power is supplied.
- To prevent wiring materials from smoking or ignition, use the wiring materials given in the following table with referring the ratings of wires.

| | Recommended wire | | Stripping length (Ferrules not used) |
|------|---|---|--------------------------------------|
| | Stranded wire | Solid wire | |
| XW2K | 0.08 to 1.5 mm ² / AWG 28 to 16 | 0.08 to 1.5 mm ² / AWG 28 to 16 | 8 mm |

Precautions for Correct Use

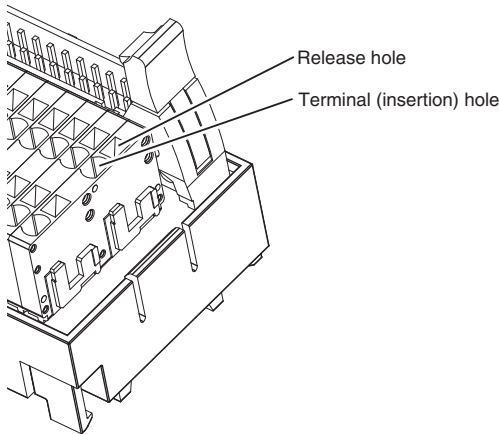
1. Precautions for Correct Use

Wiring Precautions

- Always turn OFF the power supply before wiring. Electrical shock may occur.
- When wiring the terminal block, do not subject it or the wires to stress. Secure the wires so that they do not resonate with vibrations from the facilities in installation conditions.

2. Connecting Wires to the Push-In Plus Terminal Block

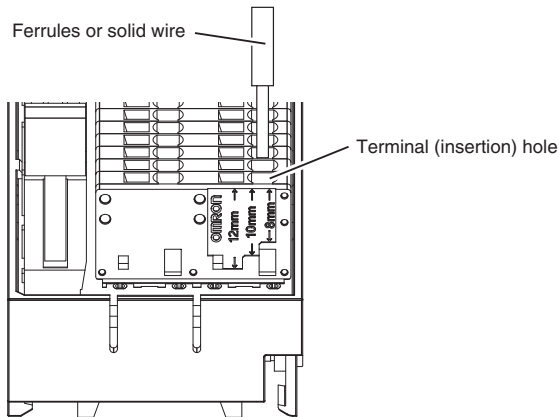
Part Names of the Terminal Block



Connecting Wires with Ferrules (hereinafter referred to as Ferrules) and Solid Wires

Insert the solid wire or ferrule straight into the Terminal Block until the end strikes the Terminal Block.

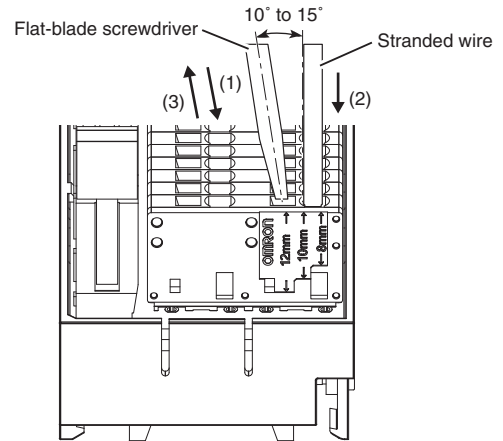
If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.



Connecting Stranded Wires

Use the following procedure to connect the wires to the terminal block.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
The angle should be between 10° and 15°. If the flat-blade screwdriver is inserted correctly, you will feel the spring in the release hole respond.
2. With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal block. Always twist stranded wires together before inserting them.
3. Remove the flat-blade screwdriver from the release hole.



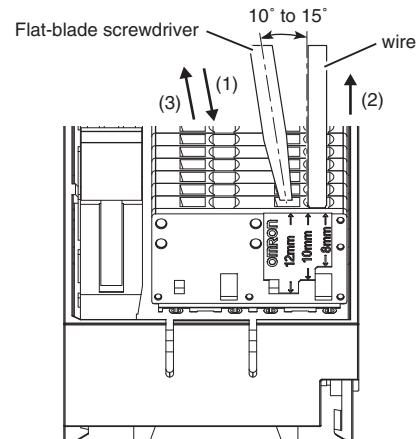
Checking Connections

- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.
- To prevent short circuits, insert the stripped part of a stranded or solid wire or the conductor part of a ferrule until it is hidden inside the terminal insertion hole.

3. Removing Wires from the Push-In Plus Terminal Block

Use the following procedure to remove wires from the terminal block. The same method is used to remove stranded wires, solid wires, and ferrules.

1. Hold a flat-blade screwdriver at an angle and insert it into the release hole.
2. With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
3. Remove the flat-blade screwdriver from the release hole.



Common Items for Terminal Blocks

4. Recommended Ferrules and Crimp Tools

Recommended ferrules

XW2K

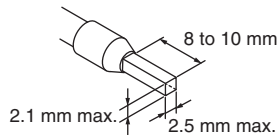
| Applicable wire | | Ferrule Conductor length (mm) | Stripping length (mm) (Ferrules used) | Recommended ferrules | | |
|-------------------------|-------|-------------------------------|---------------------------------------|--|----------------------------|----------------------|
| (mm ²) | (AWG) | | | Manufactured by Phoenix Contact * | Manufactured by Weidmuller | Manufactured by Wago |
| 0.14 | 26 | 8 | 10 | AI 0,14-8 | H0.14/12 | --- |
| 0.25 | 24 | 8 | 10 | AI 0,25-8 | H0.25/12 | 216-301 |
| | | 10 | 12 | AI 0,25-10 | --- | --- |
| 0.34 | 22 | 8 | 10 | AI 0,34-8 | H0.34/12 | 216-302 |
| | | 10 | 12 | AI 0,34-10 | --- | --- |
| 0.50 | 20 | 8 | 10 | AI 0,5-8 | H0.5/14 | 216-201 |
| | | 10 | 12 | AI 0,5-10 | H0.5/16 | 216-241 |
| Recommended crimp tools | | | | CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S | PZ6 roto | Variocrimp4 |

* The above recommended ferrules manufactured by Phoenix Contact do not include models ending in "-GB".

Models ending in "-GB" are not recommended because the inner diameter of the insulation sleeve is larger than standard model (models not ending in "-GB").

- Note:**
1. Make sure that the outer diameter of the wire is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
 2. Make sure that the ferrule processing dimensions conform to the following figure.

Processing dimensions of ferrules

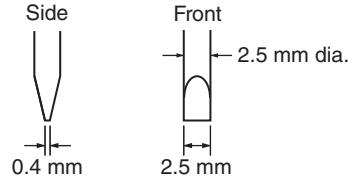


3. For the ferrule which is for applicable wire (0.75 to 1.5 mm²/ AWG 18 to 16), please use a ferrule without an insulation sleeve. (Refer to the following table.)

| Applicable wire | | Ferrule Conductor length (mm) | Stripping length (mm) (Ferrules used) | Recommended ferrules | | |
|-------------------------|-------|-------------------------------|---------------------------------------|--|----------------------------|----------------------|
| (mm ²) | (AWG) | | | Manufactured by Phoenix Contact | Manufactured by Weidmuller | Manufactured by Wago |
| 0.75 | 18 | 8 | 10 | A 0,75-8 | --- | F-0.75-8 |
| | | 10 | 12 | A 0,75-10 | H0,75/10 | F-0.75-10 |
| 1/1.25 | 18/17 | 8 | 8 | A 1-8 | --- | F-1.0-8 |
| | | 10 | 10 | A 1-10 | H1,0/10 | F-1.0-10 |
| 1.25/1.5 | 17/16 | 10 | 10 | A 1,5-10 | H1,5/10 | F-1.5-10 |
| Recommended crimp tools | | | | CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S | PZ6 roto | Variocrimp4 |

Recommended Flat-blade Screwdriver

Use a flat-blade screwdriver to connect and remove wires. Use the following flat-blade screwdriver. The following table shows manufacturers and models as of 2021/Dec.

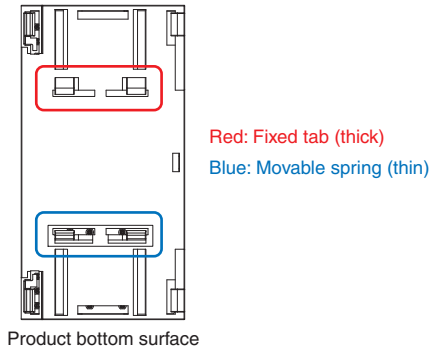


| Model | Manufacturer |
|--------------------------------|-----------------|
| ESD 0,40×2,5 | Wera |
| SZS 0,4×2,5 SZF 0-0,4×2,5 * | Phoenix Contact |
| 0,4×2,5×75 302 | Wiha |
| AEF,2,5×75 | Facom |
| 210-719 | Wago |
| SDIS 0,4×2,5×75 | Weidmuller |
| 9900(-2,5×75) | Vessel |

* OMRON's exclusive purchase model XW4Z-00B is available to order as SZF 0-0,4 x 2,5 (manufactured by Phoenix Contact).

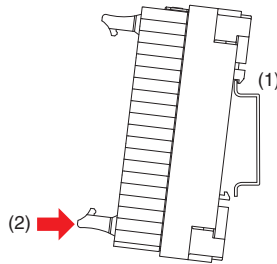
5. Mounting to DIN Track/Removing from DIN Track

[Mounting to DIN track vertically]



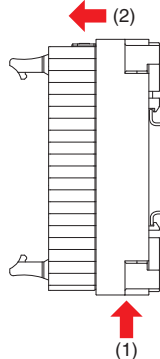
Mounting Method

Hook fixed tab (1).
Push terminal block (2) onto the DIN track.

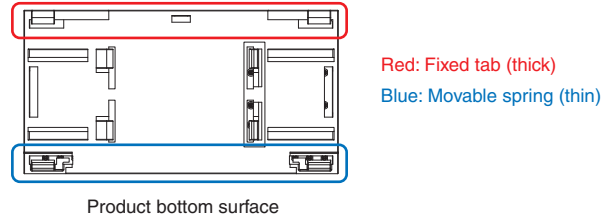


Removal Method

While pressing case (1) upward,
pull the fixed tab side (2) forward.

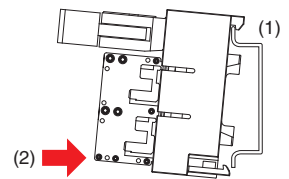


[Mounting to DIN track horizontally]



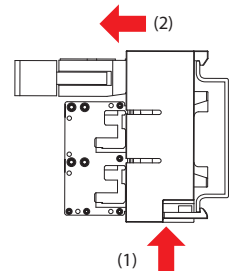
Mounting Method

Hook fixed tab (1).
Push terminal block (2) onto the DIN track.



Removal Method

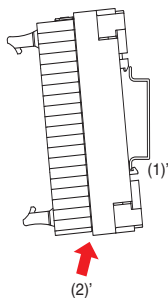
While pressing case (1) upward,
pull the fixed tab side (2) forward.



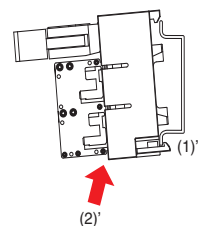
Note (Mounting Method)

If it is difficult to push the front of the main unit due to the wire connections, or if the mounting is hard due to individual differences in track types, it is possible to attach it to the DIN rail with a relatively light force while holding the lower part of the main unit by the mounting method shown in the figure below.

Hook movable spring (1)'.
Push bottom (2)' of the terminal block upward with the terminal block tilted diagonally in relation to the DIN track.



Hook movable spring (1)'.
Push bottom (2)' of the terminal block upward with the terminal block tilted diagonally in relation to the DIN track.



Connecting Cables for Interface Wiring System (Shielded)

XW2Z

For PLC Connection

Connect Interface Wiring System (XW2□□) to I/O Units for Programmable Controllers with one touch.

Shielded



Ratings and Specifications

| | |
|-------------------------------|---|
| Rated current | 1 A |
| Rated voltage | 125 VAC 30 VDC |
| Contact resistance | 20 mΩ max. (at 20 mV, 100 mA max.) *1 |
| Insulation resistance | 100 MΩ min. (at 500 VDC) |
| Dielectric strength | 500 VAC for 1 min (leakage current: 1 mA max.) *2 |
| Ambient operating temperature | -20 to +75°C (with no condensation or icing) *3 |

Note: This cable is for fixed parts. Do not use it for moving parts.

*1. Contact resistance for the Connector.

*2. Dielectric strength for the Connector.

*3. However, when bending the cable to perform wiring, maintenance, and other work, do so within the temperature range of 0 to 75°C in consideration of severing of the cable.

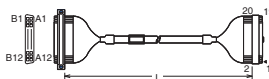
Materials and Finish

XW2Z-□□□A

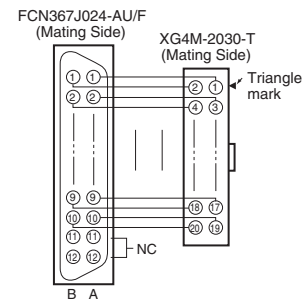
FCN 24-pin – MIL 20-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-----------|--------------------|---|
| | XW2Z-050A | 0.5 | 7.8 dia./R63 |
| | XW2Z-100A | 1 | |
| | XW2Z-150A | 1.5 | |
| | XW2Z-200A | 2 | |
| | XW2Z-300A | 3 | |
| | XW2Z-500A | 5 | |
| | XW2Z-700A | 7 | |
| | XW2Z-010A | 10 | |
| | XW2Z-15MA | 15 | |
| | XW2Z-20MA | 20 | |

Cable length L (m)



Wiring Diagram



XW2Z-□□□X

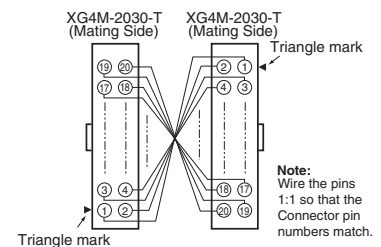
MIL 20-pin – MIL 20-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-----------|--------------------|---|
| | XW2Z-C50X | 0.5 | 7.8 dia./R63 |
| | XW2Z-100X | 1 | |
| | XW2Z-200X | 2 | |
| | XW2Z-300X | 3 | |
| | XW2Z-500X | 5 | |
| | XW2Z-010X | 10 | |

Cable length L (m)



Wiring Diagram



XW2Z-□□□X-R

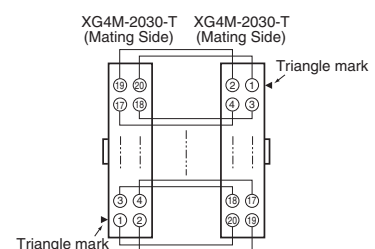
MIL 20-pin – MIL 20-pin, Reverse Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-------------|--------------------|---|
| | XW2Z-C50X-R | 0.5 | 7.8 dia./R63 |
| | XW2Z-100X-R | 1 | |
| | XW2Z-200X-R | 2 | |

Cable length L (m)



Wiring Diagram



General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks

Cable (Shielded)

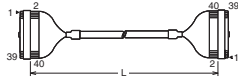
Cable (Unshielded)

XW2Z-□□□EE

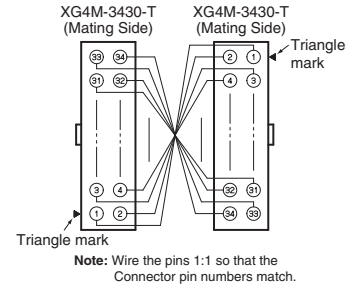
MIL 34-pin – MIL 34-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|------------|--------------------|--|
| | XW2Z-050EE | 0.5 | 9.8 dia./R79 |
| | XW2Z-100EE | 1 | |
| | XW2Z-150EE | 1.5 | |
| | XW2Z-200EE | 2 | |
| | XW2Z-300EE | 3 | |
| | XW2Z-500EE | 5 | |

Cable length L (m)



Wiring Diagram

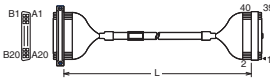


XW2Z-□□□B

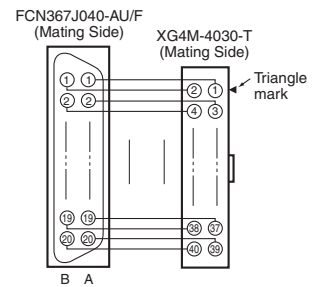
FCN 40-pin – MIL 40-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-----------|--------------------|--|
| | XW2Z-050B | 0.5 | 10.4 dia./R84 |
| | XW2Z-100B | 1 | |
| | XW2Z-150B | 1.5 | |
| | XW2Z-200B | 2 | |
| | XW2Z-300B | 3 | |
| | XW2Z-500B | 5 | |
| | XW2Z-700B | 7 | |
| | XW2Z-010B | 10 | |
| | XW2Z-15MB | 15 | |
| | XW2Z-20MB | 20 | |

Cable length L (m)



Wiring Diagram

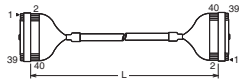


XW2Z-□□□K

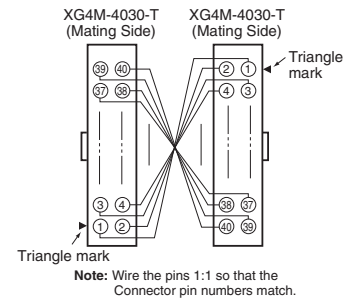
MIL 40-pin – MIL 40-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-----------|--------------------|--|
| | XW2Z-C25K | 0.25 | 10.4 dia./R84 |
| | XW2Z-C50K | 0.5 | |
| | XW2Z-100K | 1 | |
| | XW2Z-150K | 1.5 | |
| | XW2Z-200K | 2 | |
| | XW2Z-300K | 3 | |
| | XW2Z-010K | 10 | |

Cable length L (m)



Wiring Diagram

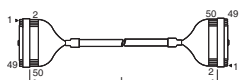


XW2Z-□□□Y

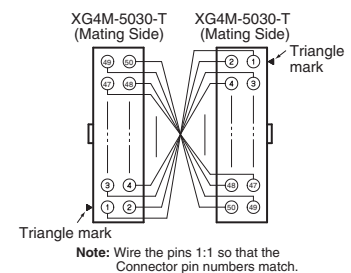
MIL 50-pin – MIL 50-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|-----------|--------------------|--|
| | XW2Z-C25Y | 0.25 | 10.9 dia./R88 |
| | XW2Z-C50Y | 0.5 | |
| | XW2Z-100Y | 1 | |
| | XW2Z-150Y | 1.5 | |
| | XW2Z-200Y | 2 | |
| | XW2Z-300Y | 3 | |
| | XW2Z-010Y | 10 | |

Cable length L (m)



Wiring Diagram



For PLC Connection

For PLC Connection
(Integrated Common Terminal Type)

General-Purpose

Common
Terminal Blocks

Common Items
for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

Connecting Cables for Interface Wiring System (Unshielded)

XW2Z-L

Connect Interface Wiring System (XW2□) to I/O Units for Programmable Controllers with one touch.



Unshielded

Ratings and Specifications

| | |
|-------------------------------|---|
| Rated current | 1 A |
| Rated voltage | 125 VAC 30 VDC |
| Contact resistance | 20 mΩ max. (at 20 mV, 100 mA max.) *1 |
| Insulation resistance | 100 MΩ min. (at 500 VDC) |
| Dielectric strength | 500 VAC for 1 min (leakage current: 1 mA max.) *2 |
| Ambient operating temperature | -20 to +75°C (with no condensation or icing) *3 |

Note: This cable is for fixed parts. Do not use it for moving parts.

*1. Contact resistance for the Connector.

*2. Dielectric strength for the Connector.

*3. However, when bending the cable to perform wiring, maintenance, and other work, do so within the temperature range of 0 to 75°C in consideration of severing of the cable.

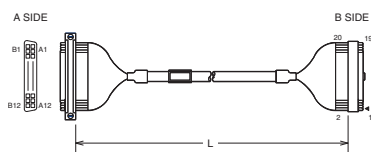
Materials and Finish

XW2Z-□□□AD-L

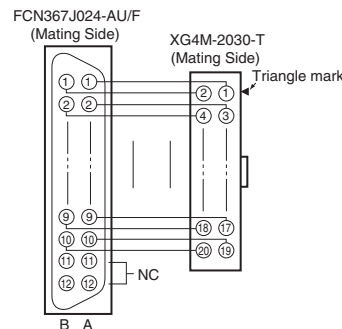
FCN 24-pin – MIL 20-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|---------------|--------------------|--|
| | XW2Z-0050AD-L | 0.5 | 6.7 dia./R54 |
| | XW2Z-0100AD-L | 1 | |
| | XW2Z-0200AD-L | 2 | |
| | XW2Z-0300AD-L | 3 | |

Cable length L (m)



Wiring Diagram

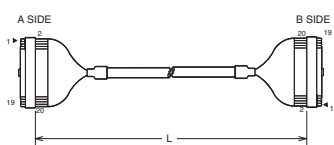


XW2Z-□□□DD-L

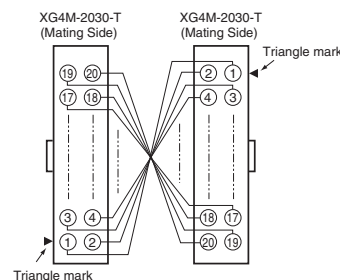
MIL 20-pin – MIL 20-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|------------|---------------|--------------------|--|
| | XW2Z-0050DD-L | 0.5 | 6.7 dia./R54 |
| | XW2Z-0100DD-L | 1 | |
| | XW2Z-0200DD-L | 2 | |

Cable length L (m)



Wiring Diagram



Note: Wire the pins 1:1 so that the Connector pin numbers match.

For PLC Connection

For PLC Connection
(Integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks

Cable (Shielded)

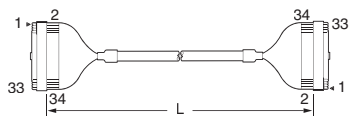
Cable (Unshielded)

XW2Z-□□□EE-L

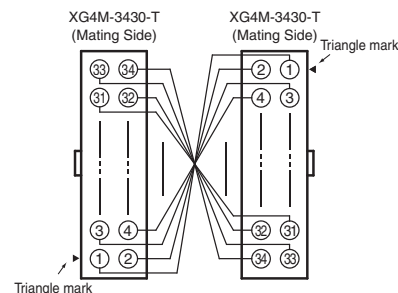
MIL 34-pin – MIL 34-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|---------------|---------------|--------------------|--|
| | XW2Z-0050EE-L | 0.5 | 8.2 dia./R66 |
| | XW2Z-0100EE-L | 1 | |
| | XW2Z-0150EE-L | 1.5 | |
| | XW2Z-0200EE-L | 2 | |
| | XW2Z-0300EE-L | 3 | |
| | XW2Z-0500EE-L | 5 | |
| | XW2Z-0700EE-L | 7 | |
| XW2Z-1000EE-L | 10 | | |

Cable length L (m)



Wiring Diagram



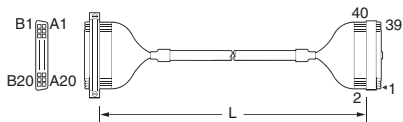
Note: Wire the pins 1:1 so that the Connector pin numbers match.

XW2Z-□□□BF-L

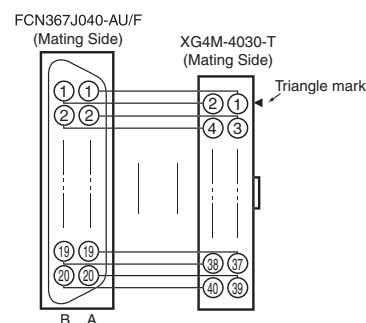
FCN 40-pin – MIL 40-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|---------------|---------------|--------------------|--|
| | XW2Z-0050BF-L | 0.5 | 8.2 dia./R66 |
| | XW2Z-0100BF-L | 1 | |
| | XW2Z-0150BF-L | 1.5 | |
| | XW2Z-0200BF-L | 2 | |
| | XW2Z-0300BF-L | 3 | |
| | XW2Z-0500BF-L | 5 | |
| | XW2Z-0700BF-L | 7 | |
| XW2Z-1000BF-L | 10 | | |

Cable length L (m)



Wiring Diagram

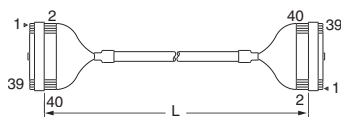


XW2Z-□□□FF-L

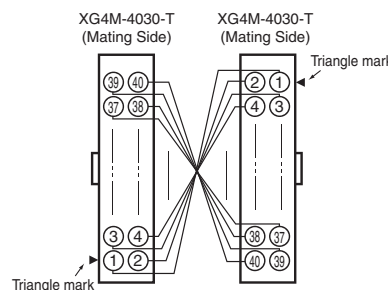
MIL 40-pin – MIL 40-pin, Straight Wiring

| Appearance | Model | Cable length L (m) | Sheath outer diameter (mm)/ Minimum bending radius (mm) |
|---------------|---------------|--------------------|--|
| | XW2Z-0050FF-L | 0.5 | 8.2 dia./R66 |
| | XW2Z-0100FF-L | 1 | |
| | XW2Z-0150FF-L | 1.5 | |
| | XW2Z-0200FF-L | 2 | |
| | XW2Z-0300FF-L | 3 | |
| | XW2Z-0500FF-L | 5 | |
| | XW2Z-0700FF-L | 7 | |
| XW2Z-1000FF-L | 10 | | |

Cable length L (m)



Wiring Diagram



Note: Wire the pins 1:1 so that the Connector pin numbers match.

For PLC Connection

For PLC Connection (Integrated Common Terminal Type)

General-Purpose

Common Terminal Blocks

Common Items for Terminal Blocks

Cable (Shielded)

Cable (Unshielded)

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