

# I/O Relay Terminal G70V

# I/O Relay Terminals with 16 Points and Push-In Plus Terminal Blocks to Downsize Control Panels and Reduce Wiring Time



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.



- Wiring time is reduced by 60% compared to traditional screw terminals.
- I/O Relay Terminals with 16 points to accept G2RV Slim I/O Relays or G3RV SSRs.
- Work is reduced even further with one-step cable connection to the PLC.
- Diode provided for coil surge absorption.
- Operation indicators for immediate recognition of I/O signal status.
- DIN Track or screw mounting.

\* According to OMRON actual measurement data from November 2015.



Refer to Safety Precautions on page 9.

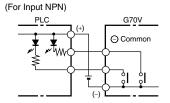
# **Model Number Legend**

**G70V** -  $\square$   $\square$   $\square$   $\square$   $\square$  16  $\square$  (6)

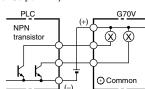
- (1) Mountable Relays
  - S: Relays
  - Z: Sockets
- (2) Input/Output Classification
  - I: For input
- O: For output
- (3) I/O Specification
  - C: Contacts (Applicable when (2) is O (for output) (relay output).)
  - D: DC (Applicable when (2) is I (for input) (coil for input).)
  - M: AC/DC (Applicable when (1) is Z (Sockets).)
- (4) Number of I/O Points
  - 16: 16 points
- (5) Terminal Type
  - P: Push-In Plus terminal blocks
- (6) Internal I/O Circuit Common

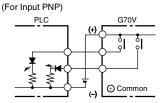
Blank: NPN

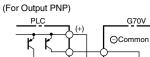
1: PNP

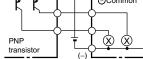












## **Ordering Information**

#### I/O Relay Terminal

Terminals	Туре	Points	Internal I/O circuit common	Rated voltage	Model		
	Input *1 Output *2	NPN (- c			NPN (- common)		G70V-SID16P
Push-In Plus terminal blocks		16	PNP (+ common)	24 VDC	G70V-SID16P-1		
Fusii-iii Fius teiriiiiai biocks		16	16	NPN (+ common)	24 VDC	G70V-SOC16P	
	Output *2		PNP (- common)		G70V-SOC16P-1		

**<sup>\*1.</sup>** Mountable Relays: G2RV-1-S-AP-G DC21V. **\*2.** Mountable Relays: G2RV-1-S-G DC21V.

#### **Relay Terminal Sockets**

Applicable I/O Relay Terminal	Туре	Common Processing in Connector	Model
G70V-SID16P	Input	NPN (- common)	G70V-ZID16P
G70V-SID16P-1	mput	PNP (+ common)	G70V-ZID16P-1
G70V-SOC16P	Output	NPN (+ common)	G70V-ZOM16P
G70V-SOC16P-1	Output	PNP (- common)	G70V-ZOM16P-1

Note: Relays are not mounted to the G70V-ZID/ZOM16P(-1) Relay Terminal Sockets. Combine the Relay Terminal Sockets with Slim I/O Relays or Slim I/O SSRs.

#### **Accessories (Order Separately)**

#### **Mountable Relays**

Applicable I/O Relay Terminal	Туре	Classification			Model
G70V-SID16P(-1)	Input	Slim I/O Relays *1		G2RV-1-S-AP-G DC21	
	Output	Slim I/O Relays	No Latching Lever *2		G2RV-1-S-G DC21
			Latching Lever		G2RV-1-SI-G DC21
G70V-SOC16P(-1)		Slim I/O SSRs For AC For DC	Zero cross function	G3RV-202S DC24	
				No zero cross function	G3RV-202SL DC24
			For DC		G3RV-D03SL DC24

Note: To use Slim I/O SSRs, either remove the Slim I/O Relays to mount them or order a Relay Terminal Socket and I/O SSRs separately and combine them.

#### Connecting Cables XW2Z-R

Cable with Loose Wire and Crimp Terminals: XW2Z-RY□C
 Cable with Loose Wires: XW2Z-RA□C
 Cable with Fujitsu connectors (1:1): XW2Z-R□C
 (1:2): XW2Z-R□C-□

XW2Z-RO□C-□ (1:3): XW2Z-R□C-□-□

• Cable with MIL connectors (1:1): XW2Z-RI□C XW2Z-RO□C (1:2): XW2Z-RI□-□-D□

XW2Z-RM□-□-D□ XW2Z-RO□-□-D1

Refer to Applicable Cables on page 11 for details.

#### Labels

Model	Minimum order (sheet) (quantity per sheet)
XW5Z-P2.5LB2	5 (1 sheet / 72 pieces)

#### **Parts for DIN Track Mounting**

Тур	е	Model	Minimum order (quantity)
DIN	1 m	PFP-100N	
Tracks	0.5 m	PFP-50N	<del></del>
End Plate		PFP-M	10
Spacer		PFP-S	10

Refer to your OMRON website for details on the PFP-.

<sup>\*1.</sup> G2RV-1-S-AP-G Slim I/O Relays are mounted to G70V-SID16P(-1) I/O Relay Terminals as a standard feature.

<sup>\*2.</sup> G2RV-1-S-G Slim I/O Relays are mounted to G70V-SOC16P(- 1) I/O Relay Terminals as a standard feature. When ordering, designate the rated voltage.

# **Specifications**

#### Coil Ratings (Common to Input/Output per Relay)

Item Rated voltage (V)	Rated current (mA)	Coil resistance (Ω)	Operation voltage	Release voltage	Maximum allowable voltage	Power consumption (mW)
24 VDC	13.3	1575	80% max. of rated voltage	10% min. of rated voltage	110% of rated voltage	Approx. 280

Note: 1. The rated current and coil resistance are measured at a coil temperature of 23°C with a tolerance of ±15% for coil resistance.

2. The operating characteristics are measured at a coil temperature of 23°C.

3. The value for maximum voltage is the maximum value within the allowable voltage fluctuation range for the relay coil's operating power supply. Continuous operation at this voltage is not within product specifications.

4. The rated current includes the current for the indicators on the I/O Relay Terminal.

#### Contact Ratings (G2RV-1-S-G I/O Relay)

Classification	Classification For input		utput
Item	Resistive load (cos	Resistive load (cos	Inductive load (cos¢=0.4 L/R=7 ms)
Rated load	50 mA at 30 VAC 50 mA at 36 VDC	6 A at 250 VAC 6 A at 30 VDC	2.5 A at 250 VAC 2 A at 30 VDC
Rated carry current	50 mA	6 A	
Max. switching voltage	30 VAC, 36 VDC	250 VAC, 125 VDC	
Max. switching current	50 mA	6 A	
Maximum switching capacity		1,500 VA 180 W	500 VA 60 W
Error rate (reference value) *	1 mA at 100 mVDC	10 mA at 5 VDC	
Electrical life expectancy	5,000,000 operations min.	NO contacts: 70,000 operations mir NC contacts: 50,000 operations min	
Mechanical life expectancy	5,000,000 operations min.	5,000,000 operations min.	

<sup>\*</sup>The above values are for a switching frequency of 120 operations/min.

#### **Characteristics**

Item	Model	G70V-SID16P(-1) (Input, DC coil)	G70V-SOC16P(-1) (output, DC coil)	
Contact for		SPST-NO × 16	SPDT×16	
Contact ma	terial	Ag alloy + Au plating Ag alloy		
Contact res	istance <b>*</b> 1	150 m $\Omega$ max.		
Must Opera	te time <b>*</b> 2	20 ms max.		
Release tim	e <b>*</b> 2	40 ms max.		
Max.	Mechanical limit	18,000 operations/hour		
switching frequency	At rated load	1,800 operations/hr (under rated load)		
Insulation re	esistance	100 M $\Omega$ min.		
Dielectric st	rength	Between coil and contacts: 2,500 VAC for 1 min		
Vibration re	sistance	5 min each in 3 directions along 3 axes		
Shock resis	tance	100 m/s <sup>2</sup> , 3 times each in 6 directions along 3 axes		
Noise immu	nity	Noise level: 1.5 kV; pulse width: 100 ns to 1 μs		
Ambient op temperature		-40 to 55°C (with no icing or condensation)		
Ambient op	erating humidity	35% to 85% RH		
LED color	Power supply	Green		
LED COIOI	I/O	Yellow		
Weight		Approx. 350 g	Approx. 370 g	

Note: The above values are initial values. \*1. Measurement condition: 1 A at 5 VDC.

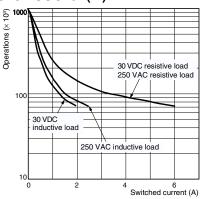
\*2. Ambient temperature: 23°C.

#### **Applicable Standards**

• UL 61010-2-201, CAN/CSA-C22.2 No.61010-2-201, TÜV (EN 61810-1)

# **Engineering Data (Reference Value)**

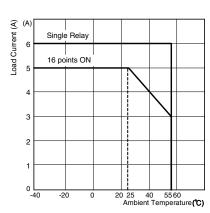
#### Endurance Curve (NO Contacts) G70V-SOC16P(-1)



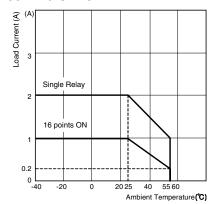
Note: This data contains actual measured values that were sampled from the production line and prepared in graph format, and are for reference purposes only. A relay is manufactured by mass production, and as a basic rule must be used with allowance made for a certain amount of deviation

# Load Current vs. Ambient Temperature

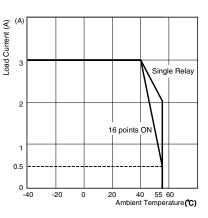
G70V-SOC16P(-1)



#### G3RV-202S DC24 G3RV-202SL DC24



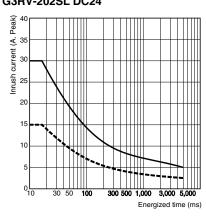
#### G3RV-D03 DC24



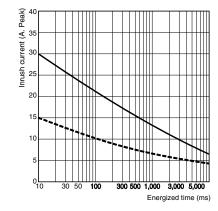
#### Inrush Current Resistance: Non-repetitive

The following graphs show the maximum inrush currents that can be withstood for non-repetitive operation. For repetitive operation, the figures should be reduced by half.

#### G3RV-202S DC24 G3RV-202SL DC24



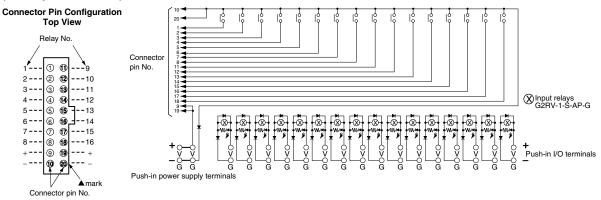
#### G3RV-D03 DC24



# **Terminal Arrangement/Internal Connection**

#### G70V-SID16P

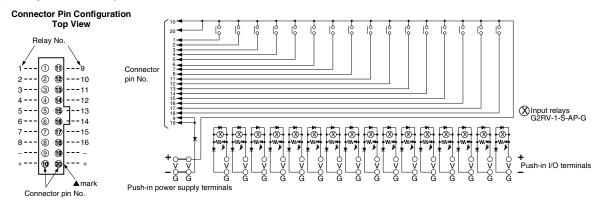
(NPN input/- common)



**Note:** Pin numbers are indicated for convenience. The ▲ mark can be used to determine orientation.

Terminal name	Description
V (push-in power supply terminals)	Unit power supply terminals (24 VDC)
G (push-in power supply terminals)	onit power supply terminals (24 vbo)
V (push-in I/O terminals)	Relay-drive coil terminals (24 VDC)
G (push-in I/O terminals)	Thelay-unive con terminals (24 vDo)

#### G70V-SID16P-1 (PNP input/+ common)



**Note:** Pin numbers are indicated for convenience. The ▲ mark can be used to determine orientation.

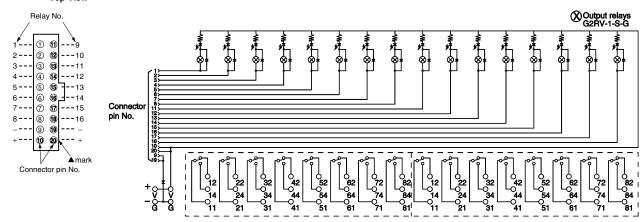
Terminal name	Description
V (push-in power supply terminals)	Unit power supply terminals (24 VDC)
G (push-in power supply terminals)	of the power supply terminals (24 vDO)
V (push-in I/O terminals)	Relay-drive coil terminals (24 VDC)
G (push-in I/O terminals)	Tibiay-unive con terminais (24 VDO)

#### G70V-SOC16P

#### (NPN output/+ common)

Note: A controller with an NPN transistor, common output can be connected to the G70V-SOC16P.

#### Connector Pin Configuration Top View



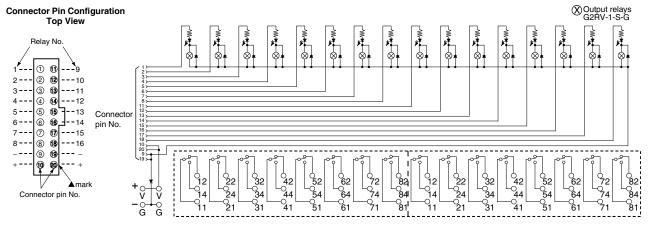
**Note:** Pin numbers are indicated for convenience. The ▲ mark can be used to determine orientation.

Terminal name	Description	
V (push-in power supply terminals)	Unit power supply terminals (24 VDC)	
G (push-in power supply terminals)	onit power supply terminals (24 VDC)	
11 to 81 (push-in I/O terminal common terminals)		
12 to 82 (push-in I/O terminal NC terminals)	Relay contact terminals	
14 to 84 (push-in I/O terminal NO terminals)		

#### G70V-SOC16P-1

#### (PNP output/- common)

Note: A controller with a PNP transistor, + common output can be connected to the G70V-SOC16P-1.



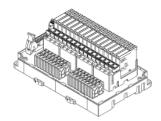
Note: Pin numbers are indicated for convenience. The ▲ mark can be used to determine orientation.

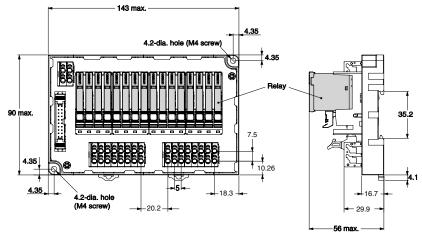
Terminal name	Description
V (push-in power supply terminals)	Unit power supply terminals (24 VDC)
G (push-in power supply terminals)	onit power supply terminals (24 VDO)
11 to 81 (push-in I/O terminal common terminals)	
12 to 82 (push-in I/O terminal NC terminals)	Relay contact terminals
14 to 84 (push-in I/O terminal NO terminals)	

**Dimensions** (Unit: mm)

#### I/O Relay Terminals and Relay Terminal Sockets

For Inputs G70V-SID16P G70V-SID16P-1 G70V-ZID16P G70V-ZID16P-1



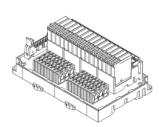


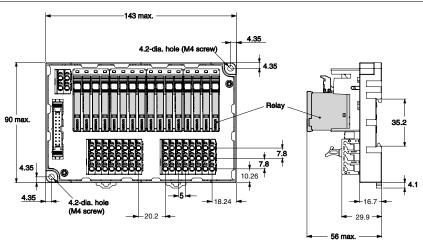
Note: 1. Relays are not mounted to the G70V-ZID16P(-1) Relay Terminal Sockets.

The dimensions are for when Relays are not mounted.

2. Specified mounting torque: 0.59 to 0.98 N·m.

**For Outputs** G70V-SOC16P G70V-SOC16P-1 G70V-ZOM16P G70V-ZOM16P-1



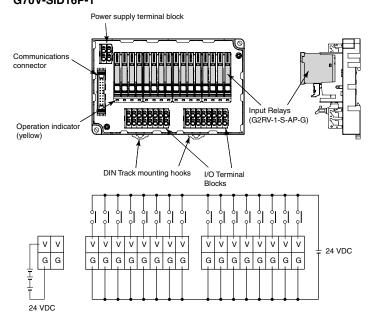


Note: 1. Relays are not mounted to the G70V-ZOM16P(-1) Relay Terminal Sockets. The dimensions are for when Relays are not mounted.

2. Specified mounting torque: 0.59 to 0.98 N·m.

### I/O Relay Terminal Details

#### Input Relay Terminal G70V-SID16P G70V-SID16P-1



 Supply a power supply that meets the voltage specifications for both the Relays and I/O Relay Terminal to the V and G terminals.

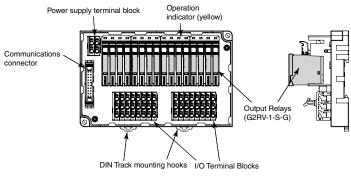
Make sure that the polarity is correct.

The V terminals are positive and the G terminals are negative.

 Supply the rated voltage (24 VDC) of the Controller's input circuit to the power supply input terminals (V and G). Use a power supply with low noise.

# Output Relay Terminal G70V-SOC16P

G70V-SOC16P-1



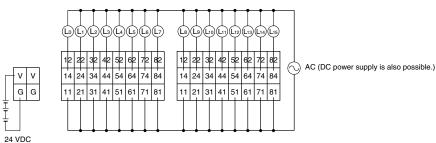
 Supply a power supply that meets the voltage specifications for both the Relays and I/O Relay Terminal to the V and G

Make sure that the polarity is correct.

The V terminals are positive and the G terminals are negative.

- The terminals (11 to 81, 12 to 82, and 14 to 84) are contact outputs. Supply a suitable power supply for the loads.
- The power supply input terminals (V and G) supply power to both drive the Relays and to operate the Controller's output transistors.

Align the voltage specifications of the Controller and the I/O Relay Terminal.



#### Safety Precautions

Be sure to read the Common Precautions for I/O Relay Terminal in the website at the following URL: http://www.ia.omron.com/.

#### **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**

#### **Transportation**

- Do not transport the I/O Relay Terminal under the following conditions. Doing so may occasionally result in damage, malfunction, or deterioration of performance characteristics.
  - · Locations subject to water or oil
  - · Locations subject to high temperature or high humidity
  - · Locations subject to condensation due to rapid changes in temperature

#### **Operating and Storage Environments**

- Do not use or store the I/O Relay Terminal in the following locations. Doing so may result in damage, malfunction, or deterioration of performance characteristics.
  - · Locations subject to rainwater or water splashes
  - · Locations subject to exposure to water, oil, or chemicals
  - · Locations subject to high temperature or high humidity
  - · Locations subject to ambient storage temperatures outside the range -40 to 65°C
  - Locations subject to ambient operating temperatures outside the range -40 to 55°C
  - · Locations subject to relative humidity outside the range 35% to 85% or locations in which condensation may occur due to rapid changes in temperature
  - · Locations subject to corrosive gases or inflammable gases
  - · Locations subject to dust, salts, or iron, or locations where there is salt damage
  - · Locations subject to direct sunlight
  - · Locations subject to shock or vibration

#### Installation and Mounting

I/O Relay Terminal may fall off.

- Mount the I/O Relay Terminal in the specified direction. Otherwise excessive heat generated by the I/O Relay Terminal may occasionally cause burning. • Mount the I/O Relay Terminal firmly to a DIN Track. Otherwise, the
- . Do not handle the I/O Relay Terminal with oily or dusty (especially
- iron dust) hands.
- · Make sure that there is no excessive ambient temperature rise due to the heat generation of the I/O Relay Terminal. If the I/O Relay Terminal is mounted inside a panel, install a fan so that the interior of the panel is fully ventilated.

#### Installation and Wiring

- Use wires that are suited to the load current and voltage. Otherwise, excessive heat generated by the wires may cause burning or may cause the wire covering to melt, possibly leading to electric shock.
- Do not use wires with a damaged outer covering. Otherwise, it may result in electric shock or ground leakage.
- . Do not wire any wiring in the same duct or conduit as power or high-tension lines. Otherwise, inductive noise may damage the I/O Relay Terminal or cause it to malfunction.
- Do not apply a voltage or current that exceeds the rating to any terminal. Doing so may result in failure or burning.

#### **Push-In Plus Terminal Blocks**

- · Do not wire anything to the release holes.
- · Do not tilt or twist a flat-blade screwdriver while it is inserted into a release hole on the terminal block. The terminal block may be damaged.
- 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 cause the wire disconnection.
- Do not insert more than one wire into each terminal insertion hole.
- To prevent wiring materials from smoking or ignition, use the wiring materials given in the following table.

	Stripping length			
Recommended wire gauge	Ferrules used	Ferrules not used		
0.25 to 1.5mm <sup>2</sup> /AWG24 to 16	10 mm	8 mm		

Note: Please use Ferrules with UL certification (R/C).

#### **Application**

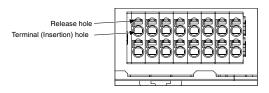
- · Select a load within the rated values. Not doing so may result in malfunction, failure, or burning.
- The I/O Relay Terminal may occasionally rupture if short-circuit current flows. As protection against accidents due to shortcircuiting, be sure to install protective devices, such as fuses and no-fuse breakers, on the power supply side.
- · Use a power supply within the rated frequencies. Otherwise, malfunction, failure, or burning may occasionally occur.
- · Minor electric shock may occasionally occur. Always turn OFF the power supply before performing wiring.

#### **Precautions for Correct Use**

- Do not drop the I/O Relay Terminal or subject it to abnormal vibration or shock during transportation or mounting. Doing so may result in deterioration of performance, malfunction, or failure.
- Do not transport an I/O Relay Terminal when it is not packaged.
   Damage or failure may occur.
- Use a power supply with low noise.

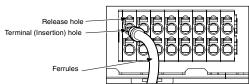
#### **Push-In Plus Terminal Blocks**

# 1. Connecting Wires to the Push-In Plus Terminal Block Part Names of the Terminal Block



#### **Connecting Wires with Ferrules**

Insert the ferrule straight into the terminal block until the end strikes the terminal block.

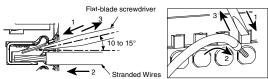


 If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.

#### **Connecting Stranded Wires**

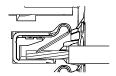
Use the following procedure to connect the wires to the terminal block.

- 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.
- With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal block
- 3. Remove the flat-blade screwdriver from the release hole.



#### **Checking Connections**

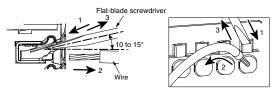
- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.
- To prevent short circuits, insert the stripped part of a stranded wire or the conductor part of a ferrule until it is hidden inside the terminal insertion hole.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



#### 2. 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 and ferrules.

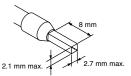
- Hold a flat-blade screwdriver at an angle and insert it into the release hole
- With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
- 3. Remove the flat-blade screwdriver from the release hole.



# 3. Recommended Ferrules and Crimp Tools Recommended Ferrules

Applicable wire		Ferrule	Recommended ferrules					
(mm²)	(AWG)	Conduct or length (mm)	Phoenix Contact product	Weidmulier product	Wago product			
0.25	24	8	AI0.25-8	H0.25/12	FE-0.25-8N-YE			
0.34	22	8	AI0.34-8	H0.34/12	FE-0.34-8N-TQ			
0.5	20	8	AI0.5-8	H0.5/14	FE-0.5-8N-WH			
0.75	18	8	AI0.75-8	H0.75/14	FE-0.75-8N-GY			
1	18	8	Al1-8	H1.0/14	FE-1.0-8N-RD			
1.5	16	8	Al1.5-8	H1.5/14	FE-1.5-8N-BK			
Recomn	Recommended crimp tool		CRIMPFOX6	PZ6 roto	Variocrimp4			

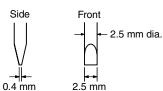
- \*1. Make sure that the outer diameter of the wire coating is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
- **\*2.** Make sure that the ferrule processing dimensions conform to the following figures.



#### **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 2015/Dec.



Model	Manufacturer			
XW4Z-00B	Omron			
ESD0.40×2.5	Wera			
SZF 0.4×2.5	Phoenix Contact			
0.4×2.5×75 302	Wiha			
AEF.2.5×75	Facom			
210-719	Wago			
SDI 0.4×2.5×75	Weidmuller			

# **Applicable Cables**

Name	1	Appearance	Cabl	le leng	th L (	(mm)	Connecting Cables	Applicable Connectors
		End A End B	1,000				XW2Z-RY100C	
Cables with Loose Wires and Crimp Terminals XW2Z-RY□C		Device end I/O Relay Terminal	1,500				XW2Z-RY150C	ı
	16 I/O points		2,000				XW2Z-RY200C	Various devices
		3,000				XW2Z-RY300C	-	
	300 ∟	5,000				XW2Z-RY500C	1	
Cables with Loose			2,000		XW2Z-RA200C			
Wires XW2Z-RA□C	300	5,000	5,000		XW2Z-RA500C	Various devices		
			1,000	1,000			XW2Z-R100C	
0.11			1,500				XW2Z-R150C	
Cables with Connectors (1:1)	16 I/O points		2,000				XW2Z-R200C	PLC I/O Units with Fujitsu
XW2Z-R□C			3,000				XW2Z-R300C	connectors (1:1)
		<b> </b>	5,000				XW2Z-R500C	1
					(D) 7	<u></u>		
			(A) 1,000		(B) 7		XW2Z-RI100C-75	-
		<del></del>	(A) 1,500		(B) 1		XW2Z-RI150C-125	
	32 input points		(A) 2,000		(B) 1	,750	XW2Z-RI200C-175	
Cables with			(A) 3,000		(B) 2	,750	XW2Z-RI300C-275	
Connectors (1:2)			(A) 5,000		(B) 4	,750	XW2Z-RI500C-475	PLC I/O Units with Fujitsu
XW2Z-RI□C-□, XW2Z-RO□C-□		(120)	(A) 1,000		(B) 750		XW2Z-RO100C-75	connectors (1:2)
XVVZZ-NOUG-U			(A) 1,500		(B) 1,250		XW2Z-RO150C-125	1
	32 output points	Straight length (without bends)	(A) 2,000		(B) 1,750		XW2Z-RO200C-175	1
			(A) 3,000		(B) 2,750		XW2Z-RO300C-275	-
			(A) 5,000		(B) 4		XW2Z-RO500C-475	1
Cables with Connectors (1:3) XW2Z-R□C-□-□		(A) ————————————————————————————————————	(A) 1,500	(B) 1,	250	(C) 1,000	XW2Z-R150C-125-100	
	48 I/O points	(270)	(A) 2,000	(B) 1,	750	(C) 1,500	XW2Z-R200C-175-150	PLC I/O Units with Fujitsu connectors (1:3)
		(C) Straight length (without bends)	(A) 3,000	(B) 2,	750	(C) 2,500	XW2Z-R300C-275-250	
Cables with	16 input points	Іп л	250				XW2Z-RI25C	-
Connectors (1:1) XW2Z-RI□C.				500		XW2Z-RI50C	PLC I/O Units with MIL connectors (1:1)	
XW2Z-RI⊟C, XW2Z-RO⊟C	16 output points		250		XW2Z-RO25C	IVIIL connectors (1:1)		
	' '		500		XW2Z-RO50C			
Cables with Connectors (1:2) XW2Z-RICID1, XW3Z-ROUD1, 16 ii	32 input points		(A) 500	(A) 500		50	XW2Z-RI50-25-D1	
	32 iriput points		(A) 750		(B) 500 (B) 250 (B) 500 (B) 250		XW2Z-RI75-50-D1	PLC I/O Units with MIL connectors (NPN) (1:2)
		(A) —	(A) 500				XW2Z-RO50-25-D1	
	32 output points		(A) 750				XW2Z-RO75-50-D1	
	16 input points/		(A) 500				XW2Z-RM50-25-D1	
	16 output points	(120)	(A) 750	` ′		00	XW2Z-RM75-50-D1	=
	, , ,					50	XW2Z-RI50-25-D2	
XW2Z-RM□-□-D2	32 input points	(B)	· /	(A) 500				PLC I/O Units with
	16 input points/	Straight length (without bends)	(A) 500		(B) 5		XW2Z-RI75-50-D2	
					(B) 250		XW2Z-RM50-25-D2	MIL connectors (PNP) (1:2)
1	16 output points				(B) 500		XW2Z-RM75-50-D2	

Name		Appearance	Cable length L (mm)		Connecting Cables	Applicable Connectors	
		End A End B	(A) 1,000	(B) 750	XW2Z-RI100C-75-MN		
		Device end I/O Relay Terminal	(A) 1,500	(B) 1,250	XW2Z-RI150C-125-MN	1	
	32 input points	(A)	(A) 2,000	(B) 1,750	XW2Z-RI200C-175-MN	Mitsubishi Electric PLCs with 32-point connectors (1:2) For inputs: AX42, A1SX41, A1SX42 For outputs:	
Mitsubishi Electric PLC			(A) 3,000	(B) 2,750	XW2Z-RI300C-275-MN		
Connecting Cables XW2Z-RI□C-□-MN,			(A) 1,000	(B) 750	XW2Z-RO100C-75-MN		
XW2Z-RO□C-□-MN		(120)		· '	XW2Z-RO150C-125-MN		
	32 output points		(A) 1,500	(B) 1,250		AY42, A1SY41, A1SY42	
		(B) ———	(A) 2,000	(B) 1,750	XW2Z-RO200C-175-MN		
		Straight length (without bends)	(A) 3,000	(B) 2,750	XW2Z-RO300C-275-MN		
			500		XW2Z-R050C-SCH-A	1	
		(A) ———	1,000		XW2Z-R100C-SCH-A		
	32 input points	(A)	2,000		XW2Z-R200C-SCH-A	Schneider Electric PLCs	
			3,000		XW2Z-R300C-SCH-A	with 32-point connectors	
			5,000		XW2Z-R500C-SCH-A	(1:2) - For inputs:	
		(120)	500		XW2Z-R050C-SCH-B	140 DDI 353 00	
		(A)	1,000		XW2Z-R100C-SCH-B	For outputs: 140 DDO 353 00	
	32 output points	Straight length (without bends)	2,000		XW2Z-R200C-SCH-B		
			3,000		XW2Z-R300C-SCH-B		
Schneider Electric PLC Connecting Cables			5,000		XW2Z-R500C-SCH-B		
XW2Z-R□C-SCH-□			500		XW2Z-R050C-SCH-C		
			1,000		XW2Z-R100C-SCH-C		
	16 input points		2,000		XW2Z-R200C-SCH-C	Schneider Electric PLCs	
			3,000		XW2Z-R300C-SCH-C	with 16-point connectors	
			5,000		XW2Z-R500C-SCH-C	(1:1) - For inputs:	
	16 output points		500		XW2Z-R050C-SCH-D	For outputs: BMX DDO 1602 For outputs: BMX DDO 1602	
		-	1,000		XW2Z-R100C-SCH-D		
			2,000		XW2Z-R200C-SCH-D		
			3,000		XW2Z-R300C-SCH-D		
			5,000		XW2Z-R500C-SCH-D		
			500		XW2Z-R050C-SIM-A		
	32 input points	1	1,000		XW2Z-R100C-SIM-A		
		(A)	2,000		XW2Z-R200C-SIM-A		
			3,000		XW2Z-R300C-SIM-A	Siemens PLCs with 32-point connectors (1:2)	
		(120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120) (120)	5,000		XW2Z-R500C-SIM-A	Sz-point connectors (1.2) For inputs: 6ES7 321-1BL00-0AA0 For outputs: 6ES7 322-1BL00-0AA0	
	32 output points		500 1,000 2,000 3,000		XW2Z-R050C-SIM-B		
					XW2Z-R100C-SIM-B		
					XW2Z-R200C-SIM-B		
		oudigin longer (marout bonds)			XW2Z-R300C-SIM-B		
			5,000		XW2Z-R500C-SIM-B		
			500		XW2Z-R050C-SIM-C		
Siemens PLC			1,000		XW2Z-R100C-SIM-C	Siemens PLCs with	
Connecting Cables XW2Z-R□C-SIM-□	16 input points		2,000		XW2Z-R200C-SIM-C	16-point connectors (1:1) For inputs:	
VANACT-UMC-OIINI-M		<b>│                                    </b>	3,000		XW2Z-R300C-SIM-C	6ES7 321-1BH02-0AA0	
			5,000		XW2Z-R500C-SIM-C		
			500		XW2Z-R050C-SIM-D		
			1,000		XW2Z-R100C-SIM-D		
	32 input points	(A)	2,000		XW2Z-R200C-SIM-D		
			3,000		XW2Z-R300C-SIM-D	Siemens PLCs with	
		(120)	5,000		XW2Z-R500C-SIM-D	32-point connectors (1:2) For inputs:	
			500		XW2Z-R050C-SIM-E	6ES7 421-1BL-0AA0 For outputs:	
			1,000		XW2Z-R100C-SIM-E	6ES7 422-1BL-0AA0	
	32 output points	Straight length (without bends)	2,000		XW2Z-R200C-SIM-E	0207 122 132 07410	
			3,000		XW2Z-R300C-SIM-E	1	
			5,000		XW2Z-R500C-SIM-E	1	

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- Offer; Acceptance. These terms and conditions (these "Terms") are deemed part of all quotes, agreements, purchase orders, acknowledgments, price lists, catalogs, manuals, brochures and other documents, whether electronic or in catalogs, manuals, brochures and other documents, whether electronic or in writing, relating to the sale of products or services (collectively, the "Products") by Omron Electronics LLC and its subsidiary companies ("Omron"). Omron objects to any terms or conditions proposed in Buyer's purchase order or other documents which are inconsistent with, or in addition to, these Terms. Prices: Payment Terms. All prices stated are current, subject to change without notice by Omron. Omron reserves the right to increase or decrease prices on any unshipped portions of outstanding orders. Payments for Products are due net 30 days unless otherwise stated in the invoice. Discounts. Cash discounts, if any, will apply only on the net amount of invoices sent to Buyer after deducting transportation charges, taxes and duties, and will be allowed only if (i) the invoice is paid according to Omron's payment terms and (ii) Buyer has no past due amounts.

- and (ii) Buyer has no past due amounts.

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- Orders. Omron will accept no order less than \$200 net billing.

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  10. Force Majeure. Omron shall not be liable for any delay or failure in delivery
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- - except in "break down" situations.
    b. Such carrier shall act as the agent of Buyer and delivery to such carrier shall
  - constitute delivery to Buyer; c. All sales and shipments of Products shall be FOB shipping point (unless oth-
- c. All sales and shipments of Products shall be FOB shipping point (unless otherwise stated in writing by Omron), at which point title and risk of loss shall pass from Omron to Buyer; provided that Omron shall retain a security interest in the Products until the full purchase price is paid;
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   e. Omron will package Products as it deems proper for protection against normal handling and extra charges apply to special conditions.

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  (ii) Use in consumer products or any use in significant quantities.

  (iii) Energy control systems, combustion systems, railroad systems, aviation systems, medical equipment, amusement machines, vehicles, safety equipment, and installations subject and industrial consumers and consumers are consumers and status of the consumers and consumers.
  - ment, and installations subject to separate industry or government regulations. (iv) Systems, machines and equipment that could present a risk to life or prop erty. Please know and observe all prohibitions of use applicable to this Prod-
  - NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO

- ADDRESS THE RISKS, AND THAT THE OMRON'S PRODUCT IS PROP-ERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.
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- to confirm actual specifications of purchased Product.

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