

Installation Instruction Manual for FZ5 series

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9307999-4A

Precautions for Compliance with UL Standards and CSA Standards

Notice to Users of the FZ5 series in the USA and Canada

Please observe the following installation information in addition to the general information in the instruction manuals when installing the product in the USA or Canada in order to use the product under UL and CSA-certified conditions. These conditions are required by NFPA 70, National Electrical Code in the USA and the Canadian Electrical Code, Part I in Canada and may differ from information given in the product manuals and safety precautions. This manual must be consulted in all cases in order to understand the risk of potential HAZARDS and the actions which must be taken to avoid them.

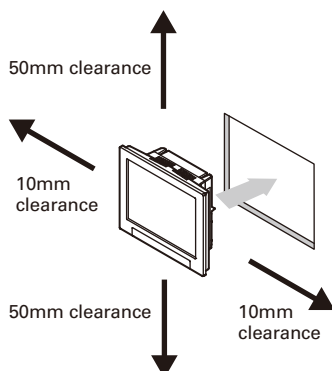
If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

- **Wiring for Power Input**
 - Use SELV Power Source.
 - Do not use ferrule terminals for field wiring.
 - Tightening torque of the terminals : 12.4 Lb In. (1.4Nm)
 - Wire range : AWG 16 to 13
- **Environment**
 - Pollution degree 2;
 - Installation category I;
 - Maximum altitude of 2000m;
 - Humidity, 35-85%RH (non-condensing);
 - Power supply voltage, 24VDC (20.4 to 26.4V DC);
 - Indoor use;
 - Operating Temperature, 0 to 50°C;
 - Protection, IP20;

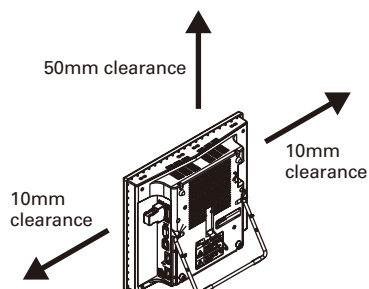
- **Mounting**

Maintain a minimum clearance of 50 mm above and below the Sensor Controller to improve air circulation. A minimum clearance of 10 mm between other devices must also be maintained on the right and left sides of the product. However, if the adjacent devices do not generate heat, provide at least 50 mm of clearance from the top of the Sensor Controller. For the clearance at the bottom and sides, follow the mounting method.

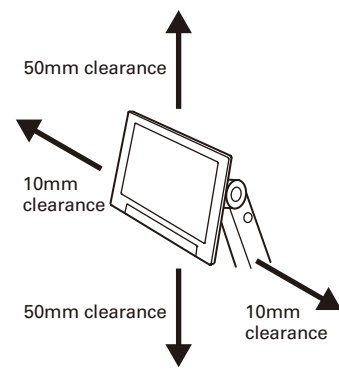
- **Panel mounting**



- **Desktop stand**



- **VESA mounting**



● I/O connector
 Connection example
 -Cable-
 FZ-VP 2M / FZ-VP 5M / FZ-VPX 2M / FZ-VPX 5M

No.	Signal name	Wire color	Mark (red)	Function	No.	Signal name	Wire color	Mark (blk)	Function
A1	COMIN	Orange	■	Common for input signals	B1	RESET	Orange	■	Sensor Controller restart
A2	ENCTRIG_A1 (*2)	Gray	■	Encoder trigger input (Phase A)	B2	ENCTRIG_A0	Gray	■	Encoder trigger input(Phase A)
A3	ENCTRIG_B1 (*2)	White	■	Encoder trigger input (Phase B)	B3	ENCTRIG_B0	White	■	Encoder trigger input(Phase B)
A4	STEP1 (*2)/ ENCTRIG_Z1 (*2)	Yellow	■	Measurement trigger input/ Encoder trigger input (Phase Z)	B4	STEP0/ ENCTRIG_Z0	Yellow	■	Measurement trigger input/Encoder trigger input(Phase Z)
A5	DSA1 (*2)	Pink	■	Data send request signal	B5	DSA0	Pink	■	Data send request signal
A6	DI1	Orange	■■	Command inputs	B6	DI0	Orange	■■	Command inputs
A7	DI3	Gray	■■		B7	DI2	Gray	■■	
A8	DI5	White	■■		B8	DI4	White	■■	
A9	DI7	Yellow	■■		B9	DI6	Yellow	■■	
A10	STGOUT1	Pink	■■■		Strobe trigger output (*1)	B10	STGOUT0	Pink	
A11	STGOUT3	Orange	■■■	Strobe trigger output (*1)	B11	STGOUT2	Orange	■■■	Strobe trigger output (*1)
A12	ERROR	Gray	■■■	ON when there is an error.	B12	RUN/BUSY1 (*2)	Gray	■■■	*3
A13	COMOUT1	White	■■■	Common for output signals	B13	BUSY0	White	■■■	ON during processing
A14	GATE1 (*2)	Yellow	■■■	ON for the set output time	B14	GATE0	Yellow	■■■	ON for the set output time
A15	OR1 (*2)	Pink	■■■	Overall judgment result	B15	OR0	Pink	■■■	Overall judgment result
A16	READY1 (*2)	Orange	■■■	ON when image input is allowed	B16	READY0	Orange	■■■	ON when image input is allowed
A17	COMOUT2	Gray	■■■■	Common for output signals	B17	DO0	Gray	■■■■	Data output
A18	DO1	White	■■■■	Data output	B18	DO2	White	■■■■	
A19	DO3	Yellow	■■■■		B19	DO4	Yellow	■■■■	
A20	DO5	Pink	■■■■		B20	DO6	Pink	■■■■	
A21	DO7	Orange	■■■■		B21	DO8	Orange	■■■■	
A22	DO9	Gray	■■■■		B22	DO10	Gray	■■■■	
A23	DO11	White	■■■■		B23	DO12	White	■■■■	
A24	DO13	Yellow	■■■■		B24	DO14	Yellow	■■■■	
A25	COMOUT3	Pink	■■■■		Common for output signals	B25	DO15	Pink	

*Handling the output common terminals
 COMOUT1: STGOUT0 to 3, RUN/BUSY1, ERROR, BUSY0, OR0 to 1, GATE0 to 1 COMOUT2: READY0 to 1, DO0 to 7 COMOUT3: DO8 to 15
 *1 This is a signal that is used when the strobe device is connected to the Sensor Controller.
 *2 This signal is only available in the Random trigger mode.
 *3 ON while the layout turned on output setting is displayed / ON during processing

● Camera connector
 Connection example
 -Cable-

FZ-VS3 2M / FZ-VS3 3M / FZ-VS3 5M / FZ-VS3 10M
 FZ-VSB3 2M / FZ-VSB3 3M / FZ-VSB3 5M / FZ-VSB3 10M
 FZ-VSL3 2M / FZ-VSL3 3M / FZ-VSL3 5M / FZ-VSL3 10M
 FZ-VSLB3 2M / FZ-VSLB3 3M / FZ-VSLB3 5M / FZ-VSLB3 10M
 FZ-VS4 15M
 FZ-VSL4 15M

-Camera-
 FZ-SC / FZ-S
 FZ-SFC / FZ-SF / FZ-SPC / FZ-SP
 FZ-SHC / FZ-SH
 FZ-SC2M / FZ-S2M
 FZ-SC5M2 / FZ-S5M2
 FZ-SQ010F / FZ-SQ050F / FZ-SQ100F / FZ-SQ100N

-Terminal connect -
 FZ-VSJ

For KC standard only

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