



Safety precautions

Always read this section before starting use.

Pulsejet valve controller (OMC2)

Installation, Piping & Wiring

WARNING

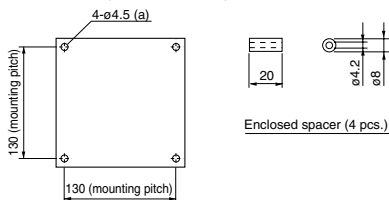
1 There is a risk of electric shock by touching the electrical wiring connections (bare live parts) of the pulsejet valve controller.

- (1) Always turn the power OFF before carrying out electrical wiring. Do not touch the parts other than the switches, terminal block and jumpers.

CAUTION

1 Fixing method

- (1) Do not install the product in a place subject to dust or water.
- (2) There are four holes (a) on the pulsejet valve controller as shown below. Use M4 screws, etc. to securely fix the controller. Use the enclosed spacers as required.



2 Wiring method

Turn the main power OFF before starting wiring work.

- (1) Terminal block cable (for TB4): Use a vinyl sheath cable with a section area of 0.75 mm² to 2 mm².
- (2) Treatment of wire end: Attach a crimp terminal to the end of the wire connected to the AC input and valve output (TB1, TB2).

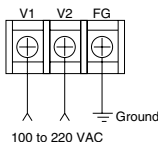
Applicable crimp terminals (example)

Maker	Type	Applicable wire size
JST MFG CO. LTD.	V2 - M4	1.04 to 2.63 mm ²

The applicable wire size will differ according to the crimp terminal.

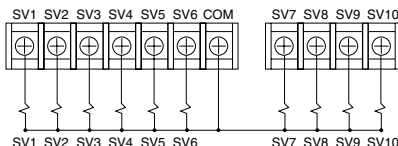
3 AC input and ground

- (1) Always connect the ground cable to prevent electric shocks.
- (2) Confirm that the rated voltage of the valve, and connect the corresponding voltage to the AC input terminal (V1, V2).



4 Valve output

- (1) Connect in order from SV1 on the valve output terminal block for the number of valves to be used.
- (2) After wiring, replace the clear terminal cover.



When Using

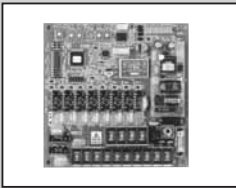
CAUTION

1 Confirmation before use

- (1) Turn off the main power.
- (2) Confirm that the pulsejet valve controller is securely fixed so that it will not fall off.
- (3) After confirming the wiring, replace the terminal cover.
- (4) Confirm that the screws on the wired terminal block are not loose.
- (5) Check the power voltage with a tester, etc. The voltage fluctuation must be within $\pm 10\%$ of the rated voltage.
- (6) When selecting the solenoid valve, consider the value indicated for the output circuit leakage current in specifications.

2 Appropriate usage method

- (1) Do not touch with wet hands.
- (2) Always turn the power switch OFF before changing the settings (touching the jumper or dip switches). There is a risk of electric shock.
- (3) Do not disassemble or modify the product.
- (4) Do not insert sockets into the jumper (J6).
- (5) Do not use in areas where the ambient temperature is -10°C or less or $+60^{\circ}\text{C}$ or more.



Pulsejet valve controller
(dust collector controller)

OMC2 Series

● Step number: 6, 10

Specifications

Item	OMC2-6	OMC2-10
Output step number	6	10
Power voltage V	AC 100 to 220 ± 10% (50/60 Hz) *1	
Power consumption VA	5 or less (only controller)	
Load current	Rush current	10 or less (peak surge current in one cycle of the 50 Hz sine wave must not be repeated.)
	A Holding current	1 or less
Power fuse	3 A 250 V	
Cycle completion signal (FY) allowable current	0.55 A 30 V	
Ambient temperature °C	-10 to 60	
Ambient humidity %RH	80 or less	
Conservation ambient temperature °C	-20 to 70	
Pulse ON time setting range	(01 to 99) x (0.01 sec or 0.1 sec or 1 sec or 10 sec)	
Pulse OFF time setting range	(01 to 99) x (1 sec or 10 sec)	
Interval accuracy when setting	Set time ± 5% + max. 1/2 cycle (commercial frequency)	
Operation mode	Stand alone	Continuous run mode with a single unit
	Interlock	Serial connection interlock mode between master unit and slave unit
Pulse repeat number	Single or double-striking (double-striking not possible when interval time is set)	
Stop	Immediate stop or cycle stop (select either one.)	
Interval time	1 to 99 min. (valid only when single-striking is set)	
Insulation resistance	10 MΩ or more (500 VDC)	
Withstanding voltage	No error for one minute at 1500 VAC	
Output circuit leakage current	1 mA or less at 100 VAC, 1.3 mA or less at 200 VAC, 1.4 mA or less at 220 VAC	

*1: Set the voltage of the connected valve to the power voltage.

How to order



Model no.

Ⓐ Step no.

Symbol	Descriptions
Ⓐ Step no.	
6	6 steps
10	10 steps

<Example of model number>

OMC2-6

Model no.: OMC2

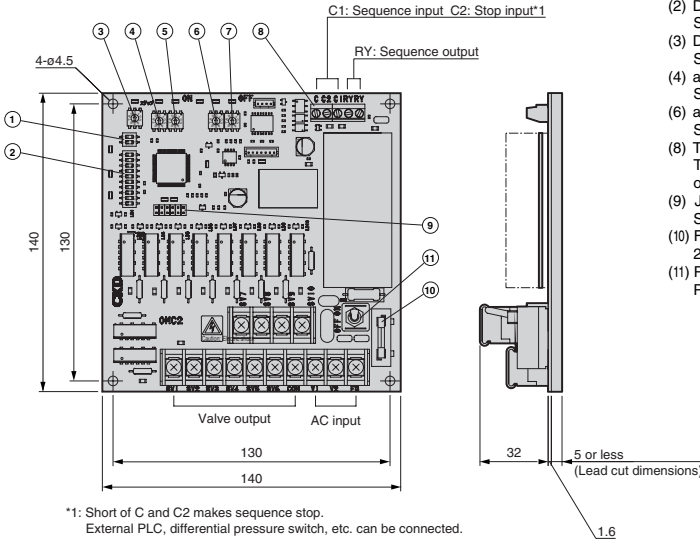
Ⓐ Step no.: 6

⚠ Note on solenoid valve model no. selection

OMC2 can be used with the solenoid valve PDV3, PDV2, PJBV or PDVE4. Set the rated voltage of the solenoid valve to the system's power voltage. If the OMC2 power voltage is 100 VAC, select the solenoid valve for 100 VAC. If the OMC2 power voltage is 200 VAC, select the solenoid valve for 200 VAC.

Dimensions

● OMC2-6/10



● Explanation of switch

- (1) Dip switch: Set switch of single unit, master unit and slave unit.
- (2) Dip switch: Set double-striking or interval timer.
- (3) Dip switch: Set step number.
- (4) and (5) Dip switches: Set ON time.
- (6) and (7) Dip switches: Set OFF time.
- (8) Terminal block: Terminal block for external sequence output terminal and stop input terminal
- (9) Jumper: Set each function.
- (10) Fuse: 250 V 3 A
- (11) Power switch: Power supply switch

HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK
For
dry air
Explosion
proof
HVB/
HVL
SAB/
SVB
NP/NAP/
NVP
CHB/G

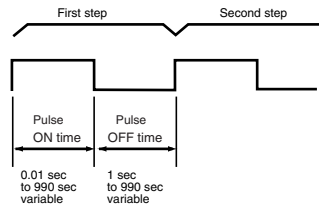
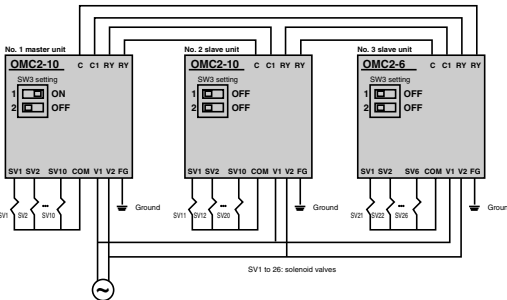
Wiring diagram

● Controller wiring diagram when exceeding 10 steps

● Time setting

Pulse ON and OFF times can be separately set as shown below.

MXB/G
Other G.P.
systems
PD/FAD/
P.J
CVE/
CVSE
CPE/
CPD
Medical
analysis
Custom
order



Pulse ON and OFF times after the second step are the same as those of the second step.

For dust collector control
Fluid control components for air blow

Fluid control components for air blow

Electronic Catalog file list

Fluid control components for air blow

High performance direct acting 2 port solenoid valve (page 669)

Electronic Catalog file list is applied to "CAD DATA 2006".

Model no.	DXF		MICRO CADAM
	Folder name	Filename	Filename (GROUP: CAD, USER: STDLIB)
PJ-C6	PJ_GPJ	pj_c6	CKD-PJ-C6
GPJ-0		gpj_0	CKD-GPJ-0

Pilot operated 2 port solenoid valve (pages 673 to 674)

Model no.	DXF		MICRO CADAM
	Folder name	Filename	Filename (GROUP: CAD, USER: STDLIB)
FAD-8A/10A-2C	FAD	fad_8a_10a_2c	CKD-FAD-8A/10A-2C
FAD-8A/10A-2CS		fad_8a_10a_2cs	CKD-FAD-8A/10A-2CS
FAD-8A/10A-2G		fad_8a_10a_2g	CKD-FAD-8A/10A-2G
FAD-L10/15A-2C		fad_l10_15a_2c	CKD-FAD-L10/15A-2C
FAD-L10/15A-2G		fad_l10_15a_2g	CKD-FAD-L10/15A-2G
FAD-L10/15A-2CS		fad_l10_15a_2cs	CKD-FAD-L10/15A-2CS
FAD-L10/15A-2CG		fad_l10_15a_2cg	CKD-FAD-L10/15A-2CG
FAD-L10/15A-3T		fad_l10_15a_3t	CKD-FAD-L10/15A-3T
Accessory (mounting plate)		fad_f	CKD-FAD-F

Direct acting 2 port solenoid valve (page 677)

Model no.	DXF		MICRO CADAM
	Folder name	Filename	Filename (GROUP: CAD, USER: STDLIB)
FAPB-8-5	FAPB	fapb_8_5	CKD-FAPB-8-5

Pilot operated 2 port valve for dust collector control (pages 681 to 683)

Model no.	DXF		MICRO CADAM
	Folder name	Filename	Filename (GROUP: CAD, USER: STDLIB)
PD3-20A	PD3_PDV3	pd3_20a	CKD-PD3-20A
PD3-25A		pd3_25a	CKD-PD3-25A
PD3-40A		pd3_40a	CKD-PD3-40A
PD3-40A-RC		pd3_40a_rc	CKD-PD3-40A-RC
PDV3-20A		pdv3_20a	CKD-PDV3-20A
PDV3-25A		pdv3_25a	CKD-PDV3-25A
PDV3-40A		pdv3_40a	CKD-PDV3-40A
PDV3-40A-RC		pdv3_40a_rc	CKD-PDV3-40A-RC
Accessory DIN terminal box (G1/2, Pg11), with light, conduit (CTC19, G1/2), T type terminal box (G1/2), with light		pdv3_f	CKD-PDV3-F

Box type manifold solenoid valve for control (page 691)

Model no.	DXF		MICRO CADAM
	Folder name	Filename	Filename (GROUP: CAD, USER: STDLIB)
PJVB-6	PJVB	pjvb_6	CKD-PJVB-6
PJVB-8		pjvb_8	CKD-PJVB-8