

# VACUUM PUMPS / Keyboard pumps – Mega series

## VKM73 / VKX73

### Features and Strengths

- Multi-stage vacuum ejector
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Quick response time
- Long life time
- Compact size and light weight



### Specifications

Description	VKM73	VKX73
Max. Vacuum level	-85 kPa	-92 kPa
Open Vacuum flow	111 NI/min	94 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 65 dbA	50 ~ 65 dbA
Weight	212 g	212 g

### Vacuum Flow

Model	Max. vacuum (-kPa)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
VKM73	85	111	78	47	42	30	24	18	7.2	1.98	-
VKX73	92	94	54	27	24	21	17	13.5	9	3.6	1.35

### Evacuation Time

Model	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
VKM73	40 ~ 58	0.08	0.21	0.38	0.59	0.88	1.29	1.98	3.87	-
VKX73	49 ~ 66	0.1	0.3	0.57	0.9	1.34	1.84	2.58	3.81	7.2

## VKM74 / VKX74

### Features and Strengths

- Multi-stage vacuum ejector
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Quick response time
- Long life time
- Compact size and light weight



### Specifications

Description	VKM74	VKX74
Max. Vacuum level	-85 kPa	-92 kPa
Open Vacuum flow	135 NI/min	109 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 65 dbA	50 ~ 65 dbA
Weight	212 g	212 g

### Vacuum Flow

Model	Max. vacuum (-kPa)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
VKM74	85	135	99	62	54	40	32	24	9.6	2.64	-
VKX74	92	109	72	35	32	27	22	18	12	4.8	1.8

### Evacuation Time

Model	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
VKM74	54 ~ 78	0.05	0.14	0.25	0.39	0.59	0.86	1.32	2.58	-
VKX74	66 ~ 88	0.06	0.2	0.38	0.6	0.89	1.23	1.72	2.54	4.8

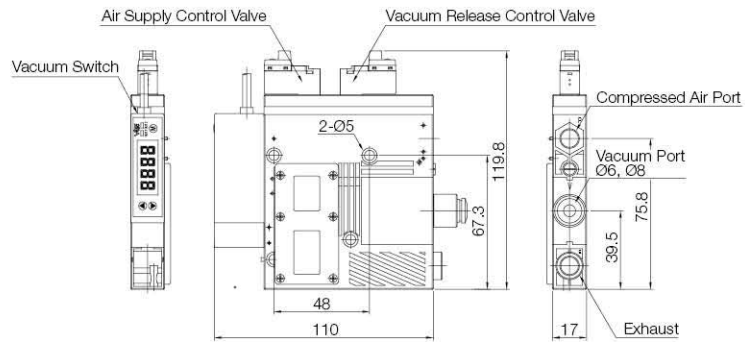
# VACUUM PUMPS / Keyboard pumps – Mega series

## I Dimensions – VKM73 / VKX73 series

[ Unit : mm ]

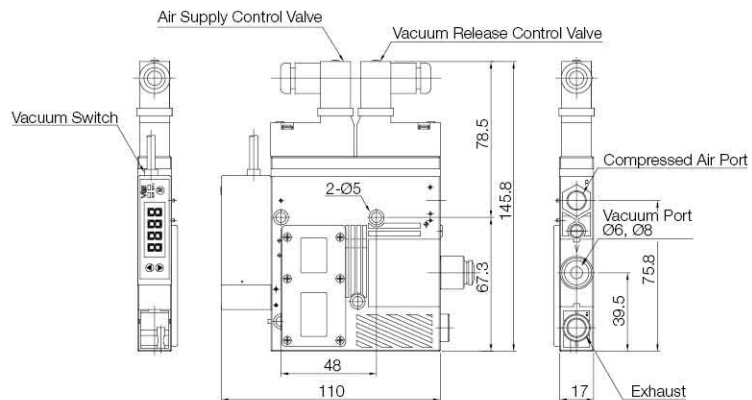
### Single unit

Control valve Connector type / Digital vacuum switch



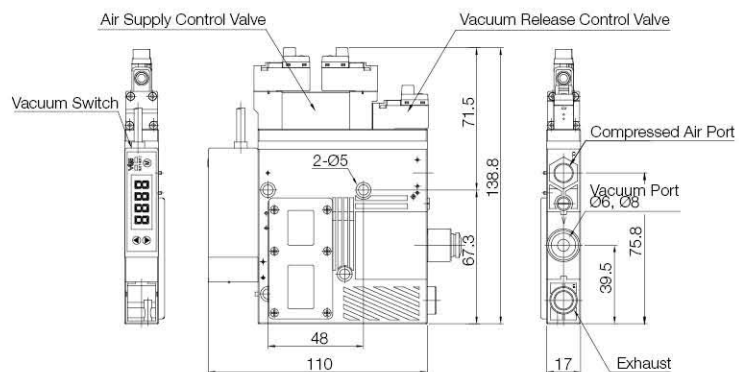
### Single unit

Control valve DIN type / Digital vacuum switch



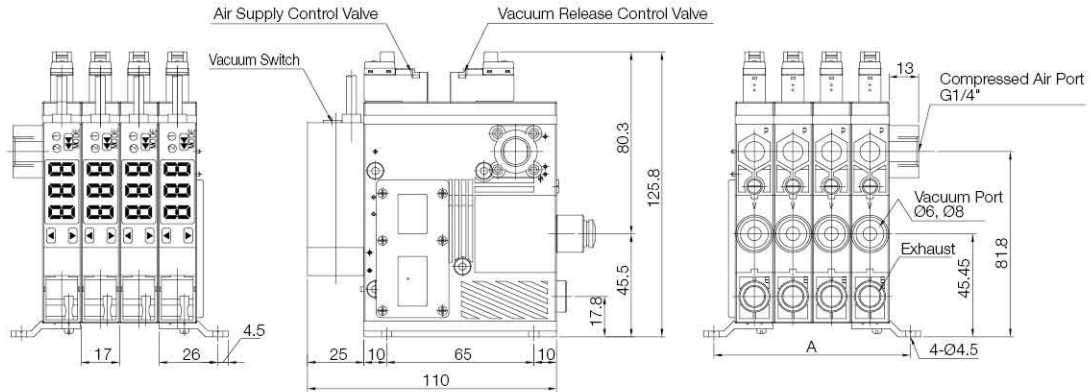
### Single unit

Control valve double solenoid type / Digital vacuum switch



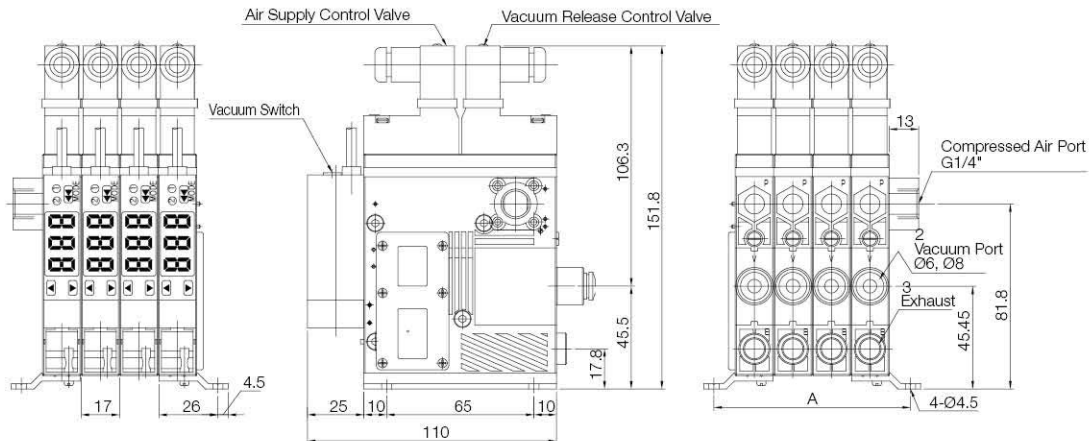
### Manifold unit

Control valve Connector type / Digital vacuum switch



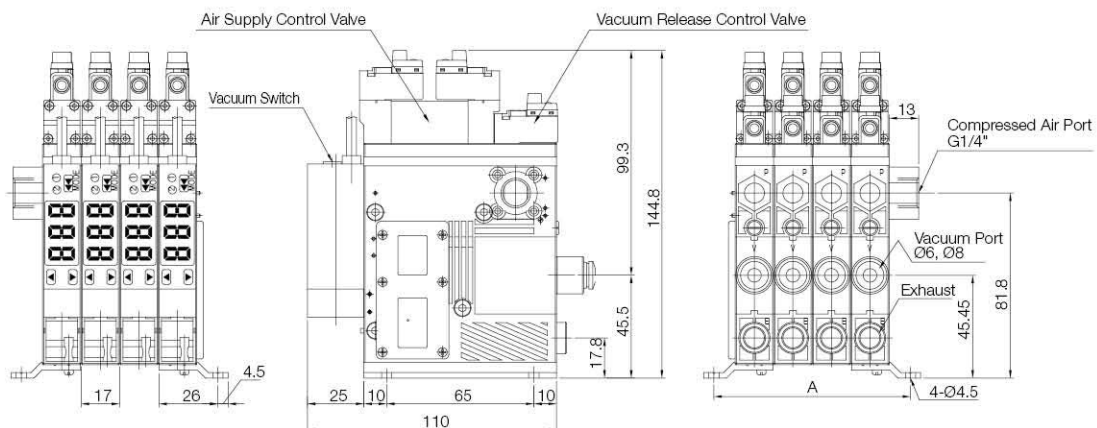
### Manifold unit

Control valve DIN type / Digital vacuum switch



### Manifold unit

Control valve double solenoid type / Digital vacuum switch



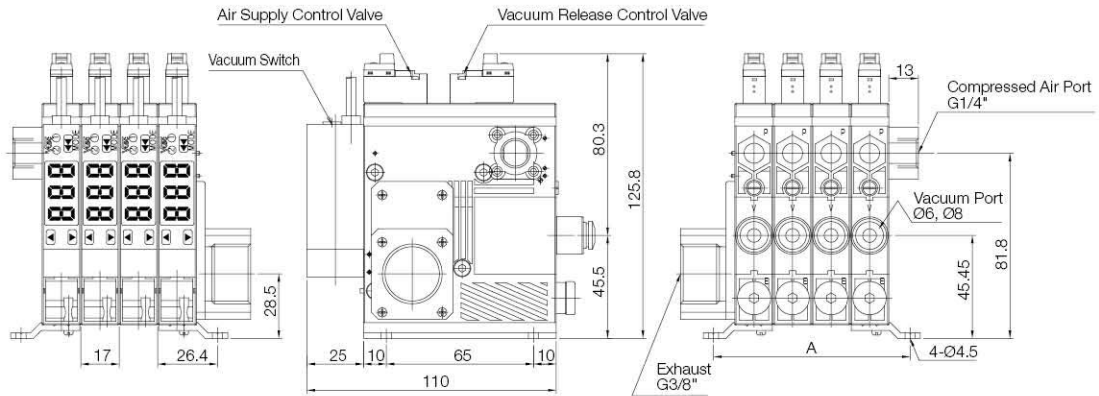
# VACUUM PUMPS / Keyboard pumps – Mega series

## Dimensions

[ Unit : mm ]

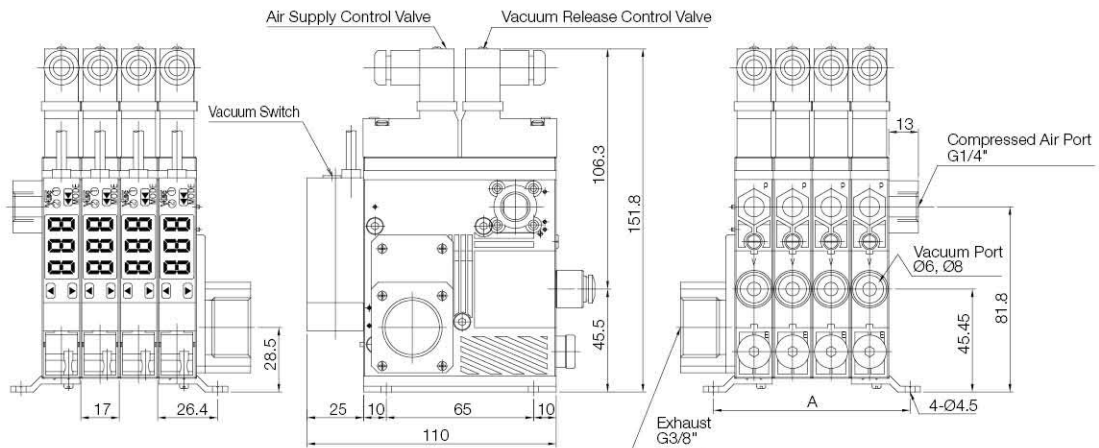
### Manifold unit with central exhaust

Control valve Connector type / Digital vacuum switch



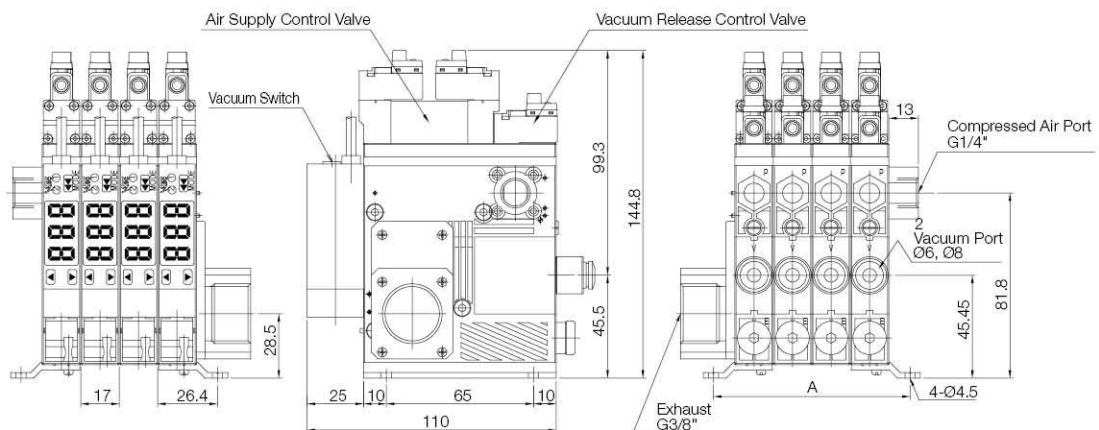
### Manifold unit with central exhaust

Control valve DIN type / Digital vacuum switch



### Manifold unit with central exhaust

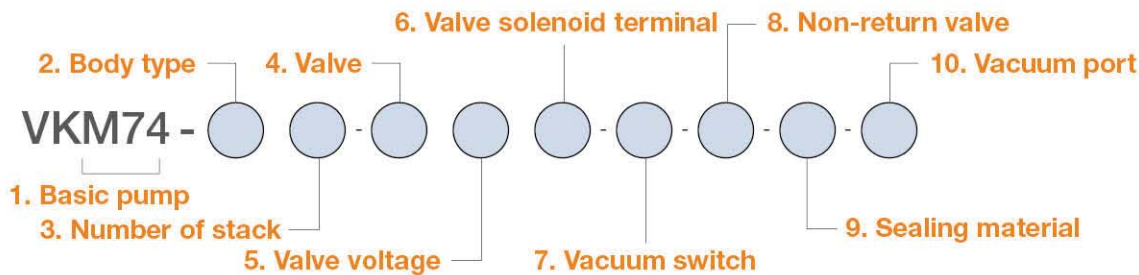
Control valve double solenoid type / Digital vacuum switch





# VACUUM PUMPS / Keyboard pumps – Mega series

## I Build an Ordering No.



1. Basic pump	Description	Symbol
	Mega Keyboard pump – “X” type	VKX73
	Mega Keyboard pump – “M” type	VKM73
	Mega Keyboard pump – “X” type	VKX74
	Mega Keyboard pump – “M” type	VKM74

2. Body type	Description	Symbol
	Single unit	S
	Manifold unit	M
	Manifold unit with central exhaust type	E

3. Number of stack	Description	Symbol
	Single stack	1
	2 stacks	2
	3 stacks	3
	4 stacks	4
	5 stacks	5
	6 stacks	6
	7 stacks	7
	8 stacks	8

4. Valve	Description	Symbol
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed)	A
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed)	B
	Air control valve : N.C (Normal Closed)	C
	Air control valve : N.O (Normal Open)	D
	Vacuum release valve : N.C (Normal Closed)	E
	Air control valve : Double solenoid valve / Vacuum release valve : N.C (Normal Closed)	W
	- Double solenoid valve “W” is available only with DC24V and Connector type valve terminal	

5. Valve voltage	Description	Symbol
	AC110V	1
	AC220V	2
	DC24V	3

6. Valve terminal	Description	Symbol
	Solenoid Terminal, DIN, No LW	1
	Solenoid Terminal, DIN, Lamp, No LW	2
	Solenoid Terminal, Conn, Lamp & 0.3m LW: Only available with DC24V	3
	Solenoid Terminal, DIN, 2 in 1 BUS cable: Not available with Double Solenoid Valve	2B
	Solenoid Terminal, DIN, 3 in 1 BUS cable: Not available with Double Solenoid Valve	3B
	Solenoid Terminal, DIN, 4 in 1 BUS cable: Available with Double Solenoid Valve	4B
	- 3B and 4B are available only with DC24V and C or PC vacuum switch	

## I Build an Ordering No.

7. Vacuum switch	Description	Symbol
	No vacuum switch	Blank
	Digital switch, No analog supply, M8-4pins, NPN	C
	Digital switch, No analog supply, M8-4pins, PNP	PC
	Digital switch, No analog supply, Grommet, NPN	G
	Digital switch, No analog supply, Grommet, PNP	PG
	Digital switch, Analog supply, Grommet, NPN	GA
	Digital switch, Analog supply, Grommet, PNP	PGA

8. Non-return valve	Description	Symbol
	No non-return valve	Blank
	Non-return valve	N

9. Sealing material	Description	Symbol
	NBR	Blank
	VITON	V
	EPDM	E

10. Vacuum port	Description	Symbol
	Ø6 hose fitting	6
	Ø8 hose fitting	8

## I Spare Parts – Filters

Part No.	Description
FCK72-A3-6	Filter cover case for Ø6 hose fitting, Fix bolt
FCK72-A3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket
FCK72-F3-6	Filter cover case for Ø6 hose fitting, Fix bolt, Filter element
FCK72-F3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket, Filter element
FCK72-A3-8	Filter cover case for Ø8 hose fitting, Fix bolt
FCK72-A3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket
FCK72-F3-8	Filter cover case for Ø8 hose fitting, Fix bolt, Filter element
FCK72-F3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket, Filter element
VTFE-K72	Filter element