

# VACUUM PUMPS / Keyboard pumps – Mini series

## VKM5 / VKX5

### 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	VKM5	VKX5
Max. Vacuum level	-85 kPa	-92 kPa
Open Vacuum flow	26 NI/min	23 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	96g	96g

### 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
VKM5	85	26	15	12	11	10	8	5.5	2.8	0.7	-
VKX5	92	23	12	8	7	6	5	4	2.7	1.2	0.45

### Evacuation Time

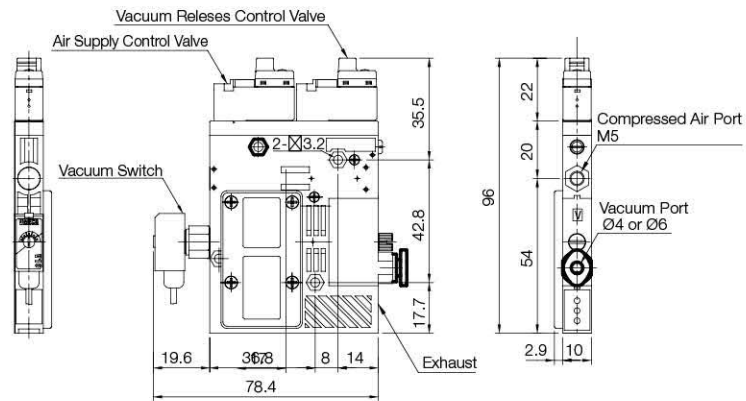
Model	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
VKM5	21	0.22	0.56	1.18	1.58	2.36	3.44	5.27	10.22	-
VKX5	22	0.26	0.80	1.52	2.4	3.38	4.91	6.89	10.16	19

## I Dimensions – VKM5 / VKX5 series

[ Unit : mm ]

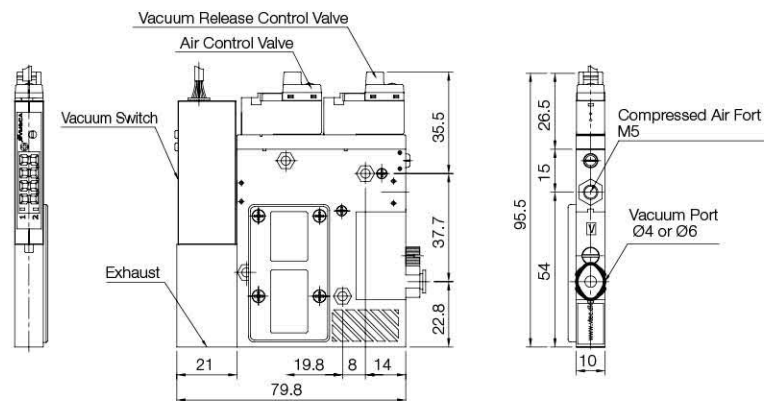
### Single unit

Control valve Connector type / Flashing lamp display vacuum switch



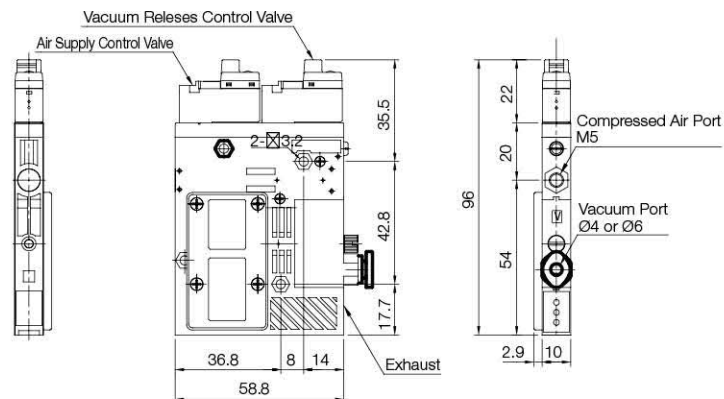
### Single unit

Control valve Connector type / Digital vacuum switch



### Single unit

Control valve Connector type / Basic



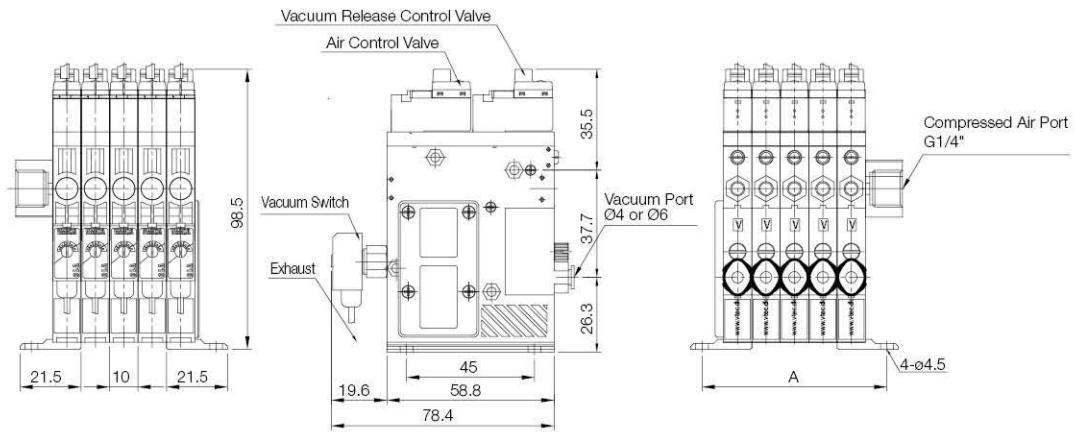
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## Dimension

[ Unit : mm ]

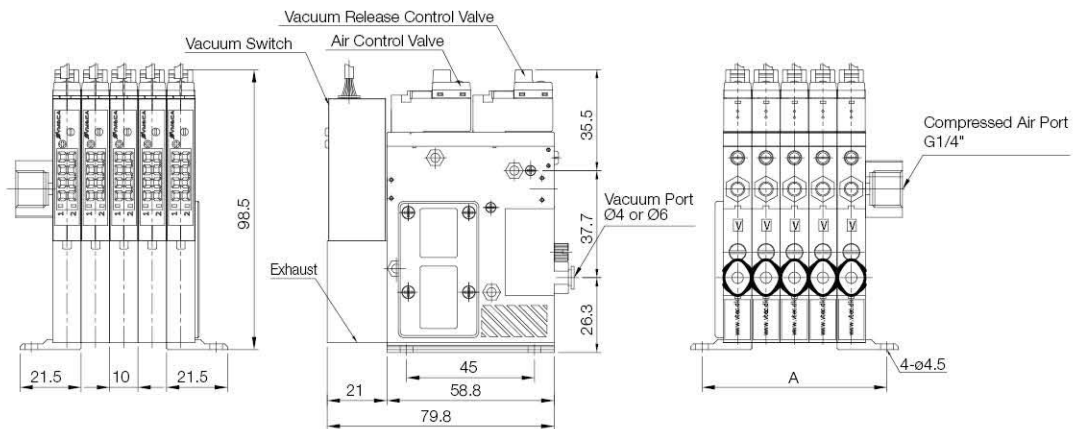
### Manifold unit

Control valve Connector type / Flashing lamp display vacuum switch



### Manifold Unit with central exhaust unit

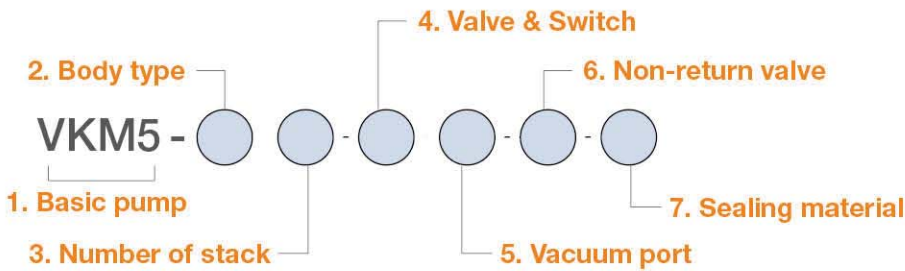
Control valve Connector type / Digital vacuum switch





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## I Build an Ordering No.



1. Basic pump	Description	Symbol
	Mini Keyboard pump – “X” type	VKX5
	Mini Keyboard pump – “M” type	VKM5

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
	9 stacks	9
	10 stacks	10

4. Valve & Switch	Description	Symbol
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), Digital Vacuum switch, NPN	A
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), Digital Vacuum switch, PNP	AP
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), LED Vacuum switch, NPN	AL
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), LED vacuum switch, PNP	ALP
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Digital Vacuum switch, NPN	B
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Digital Vacuum switch, PNP	BP
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), LED Vacuum switch, NPN	BL
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), LED Vacuum switch, PNP	BLP
	Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed)	C
	Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed)	D
	Air control valve : N.C (Normal Closed), Digital Vacuum switch, NPN	E
	Air control valve : N.C (Normal Closed), Digital Vacuum switch, PNP	EP
	Air control valve : N.C (Normal Closed), LED Vacuum switch, NPN	EL
	Air control valve : N.C (Normal Closed), LED Vacuum switch, PNP	ELP
	Air control valve : N.O (Normal Open), Digital Vacuum switch, NPN	F
	Air control valve : N.O (Normal Open), Digital vacuum switch, PNP	FP
	Air control valve : N.O (Normal Open), LED Vacuum switch, NPN	FL
	Air control valve : N.O (Normal Open), LED vacuum switch, PNP	FLP
	Air control valve : N.C (Normal Closed)	G
	Air control valve : N.O (Normal Open)	H
	Vacuum release valve : N.C (Normal Closed), Digital Vacuum switch, NPN	I
	Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, PNP	IP
	Vacuum release valve : N.C (Normal Closed), LED Vacuum switch, NPN	IL
	Vacuum release valve : N.C (Normal Closed), LED vacuum switch, PNP	ILP
	Digital Vacuum switch, NPN	J
	Digital vacuum switch, PNP	JP
	LED Vacuum switch, NPN	JL
	LED vacuum switch, PNP	JLP
	Vacuum release valve : N.C (Normal Closed)	K
	- The valves are available only with DC24V	
	- The valves are connector type with 0.3m lead wire & lamp	

## I Build an Ordering No.

5. Vacuum port	Description	Symbol
	Ø4 hose fitting	4
	Ø6 hose fitting	6
6. Non-return valve	Description	Symbol
	No non-return valve	Blank
	Non-return valve	N
7. Sealing material	Description	Symbol
	NBR	Blank
	VITON	V
	EPDM	E

## I Spare Parts – Filter

Part No.	Description
<a href="#">FCK05-A3-4-N</a>	Filter cover case for Ø4 hose fitting, Fix bolt, Gasket
<a href="#">FCK05-A3-6-N</a>	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket
<a href="#">FCK05-F3-4-N</a>	Filter cover case for Ø4 hose fitting, Fix bolt, Gasket, Filter element
<a href="#">FCK05-F3-6-N</a>	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket, Filter element
<a href="#">VTFE-K05</a>	Vacuum filter element