

Keyboard pump

Features and Strengths

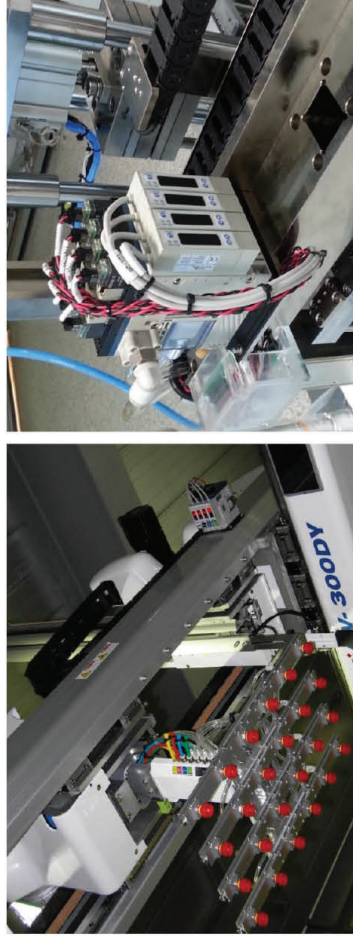
- Multi stage ejector
- Integrated filter with high dirt capacity & Auto-cleaning system
- Available up to 8 multi-stack vacuum system

Advantages

- Excellent performance in dust environment application
- Individual vacuum operation
- Long-life time
- Compact size and light weight



Application



Overall of specification

Model	Max. Vacuum	Max. Feed Pressure (bar)	Max. Vacuum Flow (NI/m)	Air Consumption (NI/m)
VKM5	85	7	26	12 ~ 21
VKM61	85	7	37	15 ~ 21
VKM62	85	7	74	30 ~ 42
VKM73	85	7	111	40 ~ 58
VKM74	85	7	135	54 ~ 78
VKX5	92	7	23	13 ~ 22
VKX61	92	7	31	21 ~ 24
VKX62	92	7	62	43 ~ 48
VKX73	92	7	94	49 ~ 66
VKX74	92	7	109	66 ~ 88

Keyboard pump

VMECA Keyboard pump can be combined with the optional vacuum On/Off control valve, vacuum release valve and vacuum switch to create an optimal vacuum solution for various industry such as packaging, semicon and etc. It can control both vacuum and release in individual system and it contributes more efficient and reliable performance in operation. Also VMECA Keyboard pump has filters on air port and vacuum port and features auto filter cleaning system.

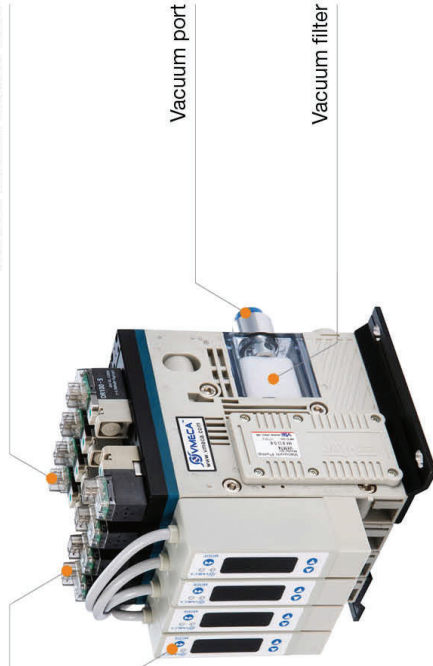
Key advantages

- Multi-stage vacuum pump
- Vacuum filter self cleaning system – Filters on both air and vacuum port
- Fast response time and long life time



Air control valve

Vacuum switch



Mini Keyboard		
Model	Vacuum level	Vacuum flow
VKX5	-92 kPa	23 NI/min
VKM5	-85 kPa	26 NI/min

Midi Keyboard		
Model	Vacuum level	Vacuum flow
VKX61	-92 kPa	31 NI/min
VKX62	-92 kPa	62 NI/min
VKM61	-85 kPa	37 NI/min
VKM62	-85 kPa	74 NI/min

Mega Keyboard		
Model	Vacuum level	Vacuum flow
VKX73	-92 kPa	94 NI/min
VKX74	-92 kPa	109 NI/min
VKM73	-85 kPa	111 NI/min
VKM74	-85 kPa	135 NI/min

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

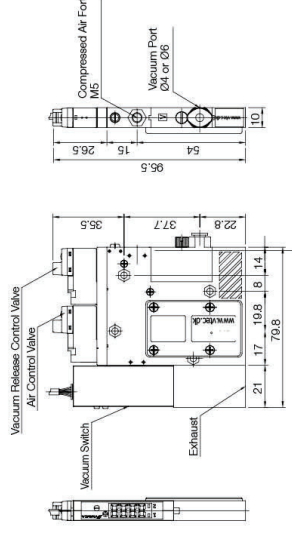


Dimensions – VKM5 / VKX5 series

[Unit : mm]

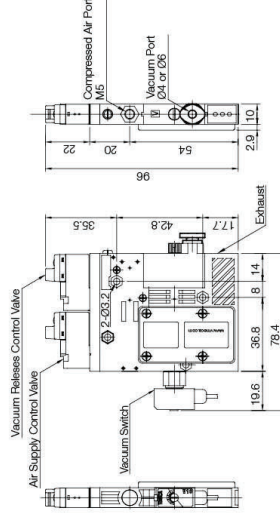
Single unit

Control valve Connector type / Flashing lamp display vacuum switch



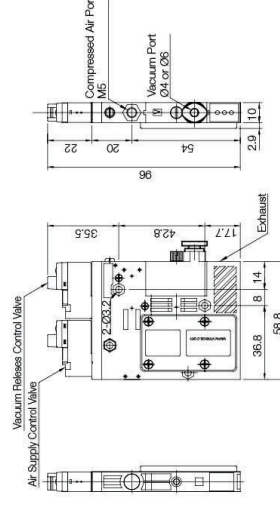
Single unit

Control valve Connector type / Digital vacuum switch



Single unit

Control valve Connector type / Basic



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

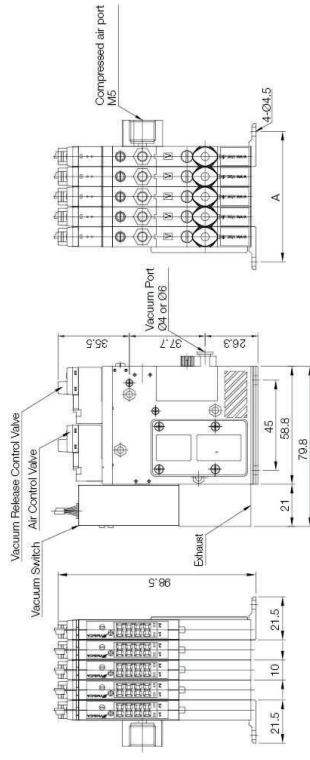
Model	Max. vacuum (-kPa)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
VKM5	85	26	15	12	11	10	8	5.5	2.8	0.7	-
VKX5	92	23	12	8	7	6	5	4	2.7	1.2	0.45

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	

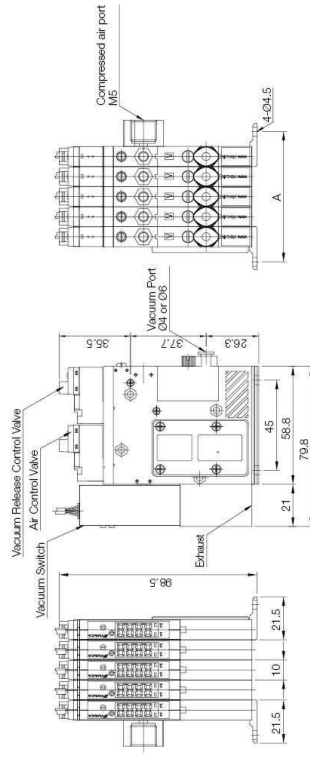
Manifold unit

Control valve Connector type / Flashing lamp display vacuum switch

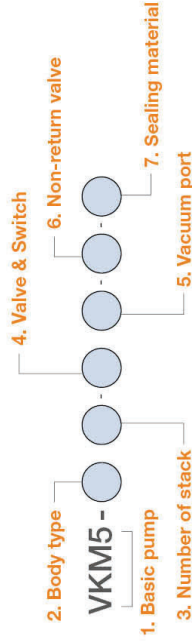


Manifold Unit with central exhaust unit

Control valve Connector type / Flashing lamp display vacuum switch



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), Vacuum switch, NPN		AL
Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Vacuum switch, NPN		BL
Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), Vacuum switch, PNP		ALP
Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Vacuum switch, PNP		BLP
Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, NPN		AID
Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, NPN		BLD
Air control valve : N.C (Normal Closed) / Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, PNP		ALDP
Air control valve : N.O (Normal Open) / Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, PNP		BLDP
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), Vacuum switch, NPN		EL
Air control valve : N.O (Normal Open), Vacuum switch, NPN		FL
Air control valve : N.C (Normal Closed), Vacuum switch, PNP		ELP
Air control valve : N.O (Normal Open), Vacuum switch, PNP		FLP
Air control valve : N.C (Normal Closed), Digital vacuum switch, NPN		ELD
Air control valve : N.O (Normal Open), Digital vacuum switch, NPN		FLD
Air control valve : N.C (Normal Closed), Digital vacuum switch, PNP		ELDP
Air control valve : N.O (Normal Open), Digital vacuum switch, PNP		FLDP
Air control valve : N.C (Normal Closed)		G
Air control valve : N.O (Normal Open)		H
Air control valve : N.O (Normal Open)		IL
Vacuum release valve : N.C (Normal Closed), Vacuum switch, NPN		ILD
Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, NPN		JL
Vacuum switch, NPN		JLD
Digital vacuum switch, NPN		ILP
Vacuum release valve : N.C (Normal Closed), Vacuum switch, PNP		ILDP
Vacuum release valve : N.C (Normal Closed), Digital vacuum switch, PNP		JLP
Vacuum switch, PNP		JLDP
Digital vacuum switch, PNP		K
Vacuum release valve : N.C (Normal Closed)		
- The valves are available only with DC24V		
- The valves are connector type with 0.3m lead wire & lamp		

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

Spare Parts – Filter

Part No.	Description
FK05-A3-4-N	Filter cover case for Ø4 hose fitting, Fix bolt, Gasket
FK05-A3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket
FK05-F3-4-N	Filter cover case for Ø4 hose fitting, Fix bolt, Gasket, Filter element
FK05-F3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket, Filter element
VIFE-K05	Vacuum filter element

VKM61 / VKX61

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	VKM61	VKX61
Max. Vacuum level	-85 kPa	-92 kPa
Open Vacuum flow	37 NI/min	31 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	213.5 g	213.5 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	
VKM61	85	37	26	16	14	10	8	6	6	2.7	0.66	-
VKX61	92	31	18	9	8	7	5	4	2.7	1.2	0.46	-

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	
VKM61	15 ~ 21	0.218	0.556	1	1.576	2.356	3.44	5.27	10.216	-	
VKX61	21 ~ 24	0.258	0.796	1.516	2.4	3.56	4.91	6.896	10.16	19.19	

VKM62 / VKX62

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	VKM62	VKX62
Max. Vacuum level	-85 kPa	-92 kPa
Open Vacuum flow	74 NI/min	62 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	213.5 g	213.5 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
VKM62	85	74	52	31	28	20	16	12	4.8	1.32	-
VKX62	92	62	36	18	16	13	11	9.0	5.4	2.4	0.9

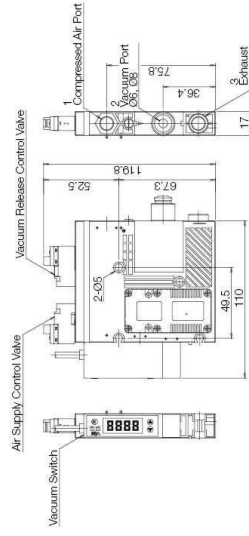
Evacuation Time

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	
VKM62	30 ~ 42	0.109	0.278	0.5	0.788	1.178	1.72	2.635	5.158	-	
VKX62	43 ~ 48	0.129	0.398	0.758	1.2	1.78	2.455	3.445	5.08	9.549	

Dimensions – VKM61 / VKX61 series

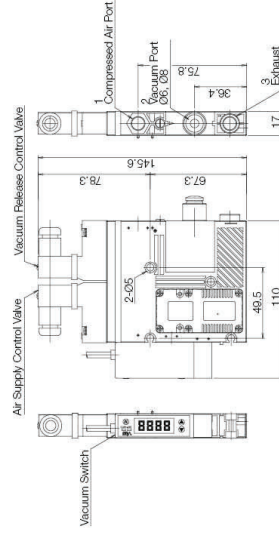
Single unit

Control valve Connector type / Digital vacuum switch



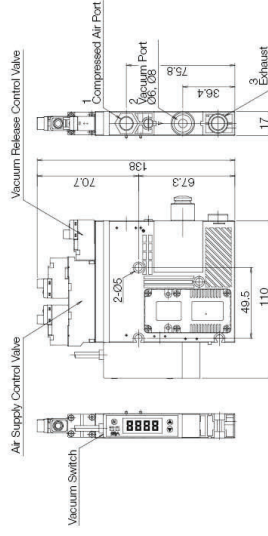
Single unit

Control valve DIN type / Digital vacuum switch



Single unit

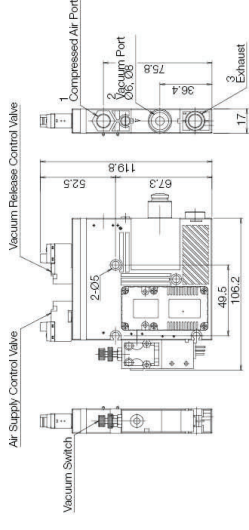
Control valve double solenoid type / Digital vacuum switch



Dimensions – VKM62 / VKX62 series

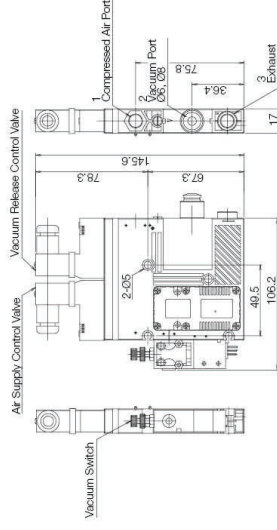
Single unit

Control valve Connector type / Mechanical vacuum switch



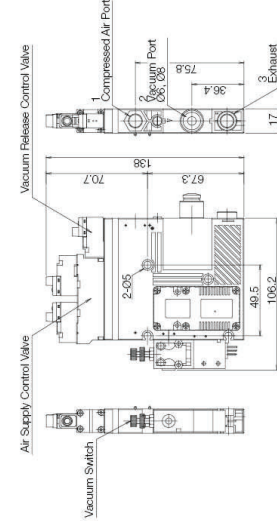
Single unit

Control valve DIN type / Mechanical vacuum switch



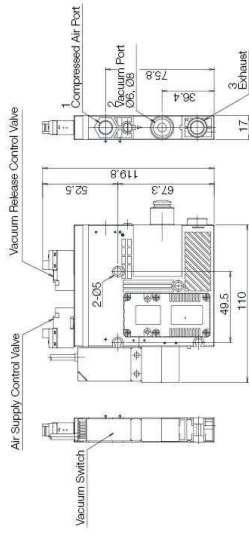
Single unit

Control valve double solenoid type / Mechanical vacuum switch



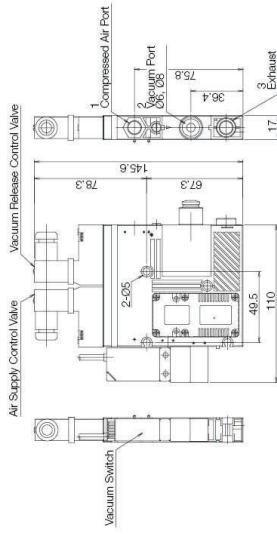
Single unit

Control valve Connector type / Flashing lamp display vacuum switch



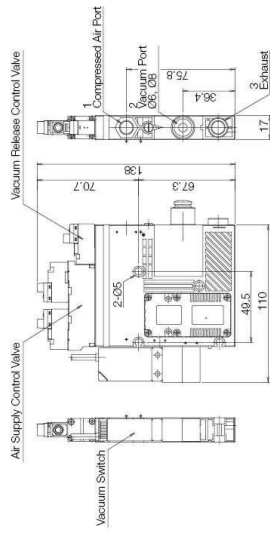
Single unit

Control valve DIN type / Flashing lamp display vacuum switch



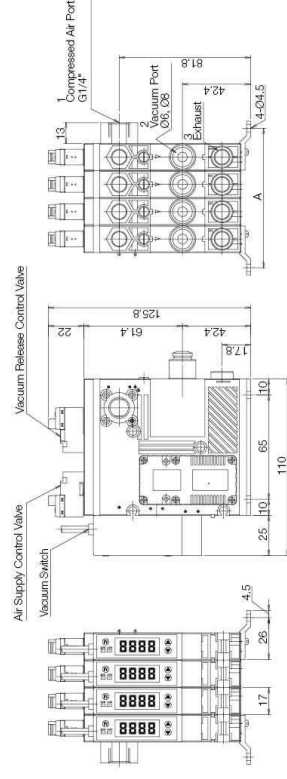
Single unit

Control valve double solenoid type / Flashing lamp display vacuum switch



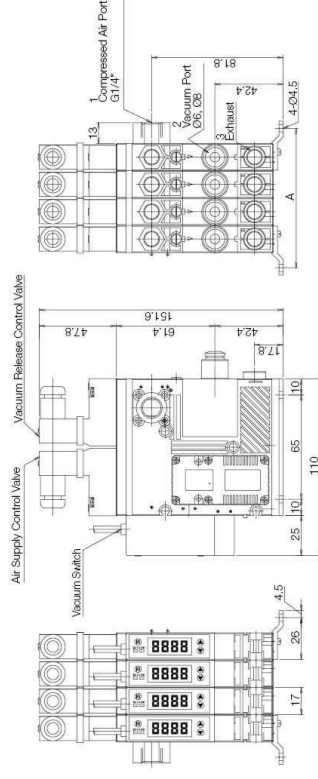
Manifold unit

Control valve Connector type / Digital vacuum switch



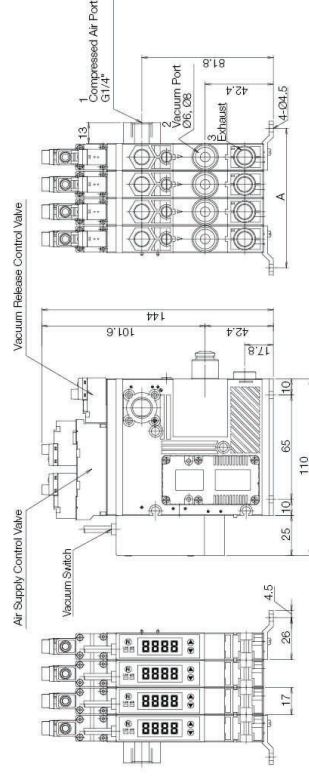
Manifold unit

Control valve DIN type / Digital vacuum switch



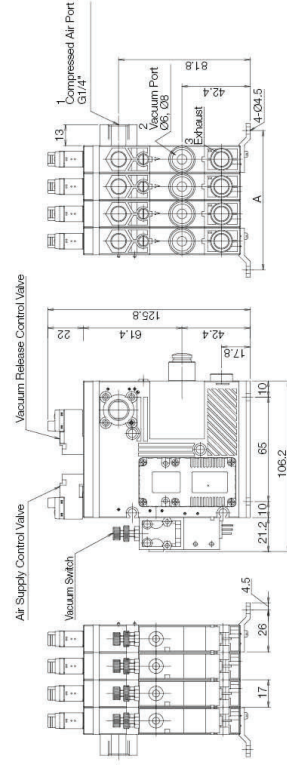
Manifold unit

Control valve double solenoid type / Digital vacuum switch



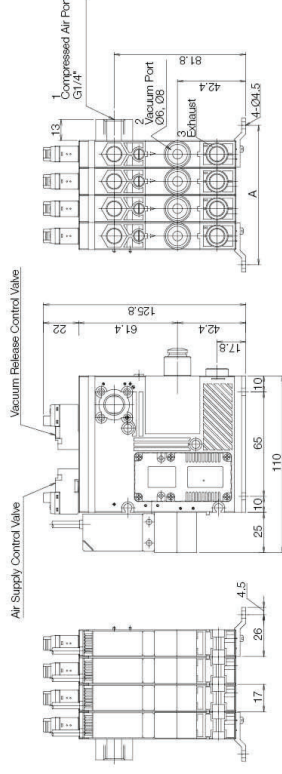
Manifold unit

Control valve Connector type / Mechanical vacuum switch



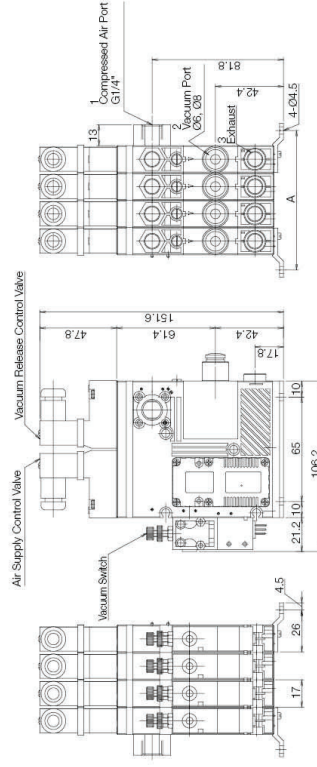
Manifold unit

Control valve Connector type / Flashing lamp display vacuum switch



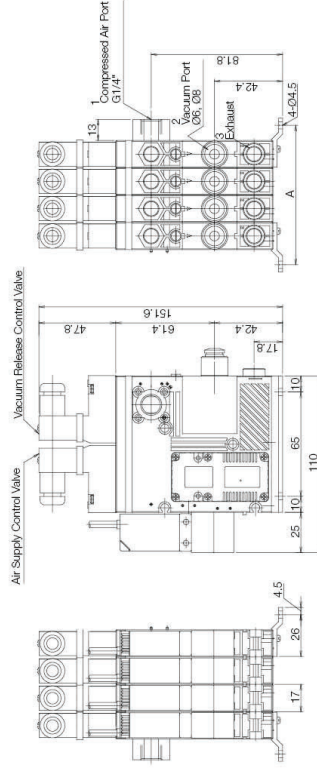
Manifold unit

Control valve DIN type / Mechanical vacuum switch



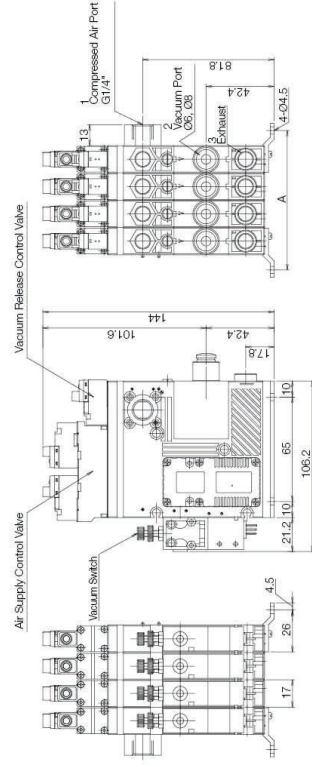
Manifold unit

Control valve DIN type / Flashing lamp display vacuum switch



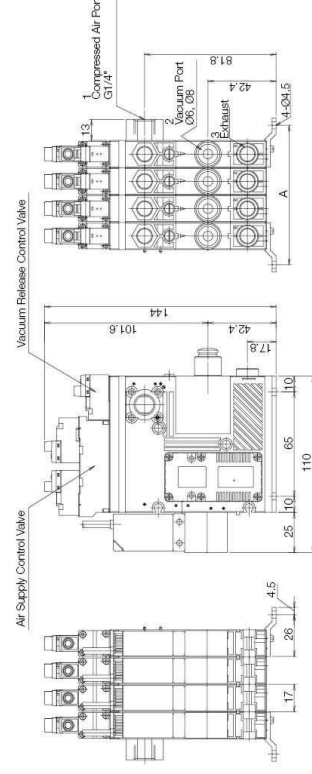
Manifold unit

Control valve double solenoid type / Mechanical vacuum switch



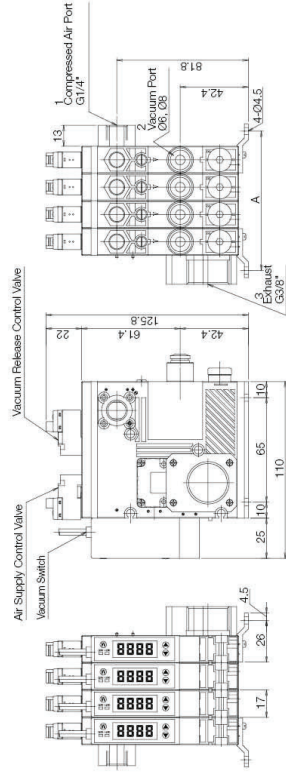
Manifold unit

Control valve double solenoid type / Flashing lamp display vacuum switch



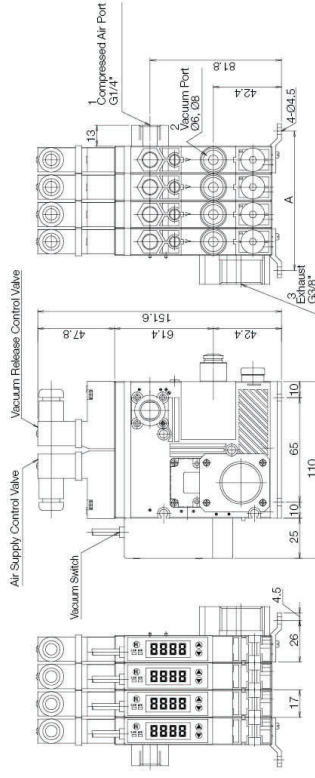
Manifold unit with central exhaust

Control valve Connector type / Digital vacuum switch



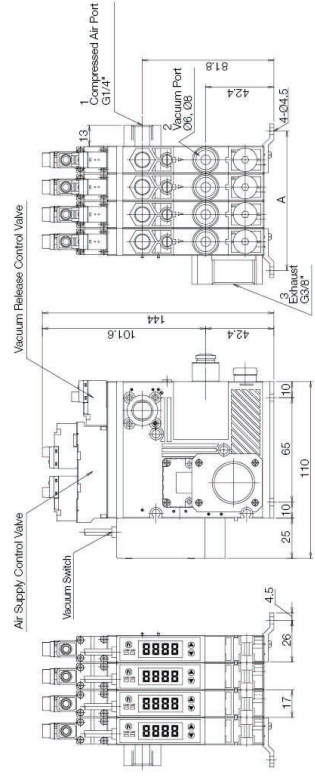
Manifold unit with central exhaust

Control valve DIN type / Digital vacuum switch



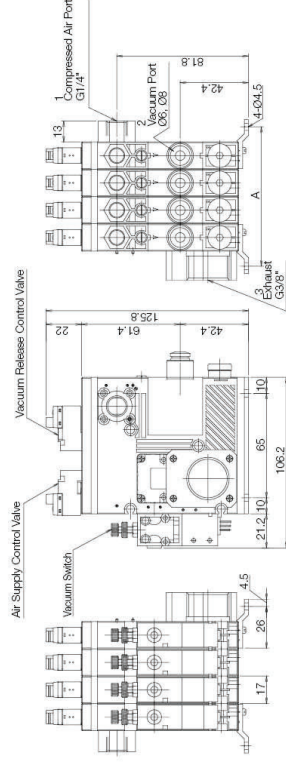
Manifold unit with central exhaust

Control valve double solenoid type / Digital vacuum switch



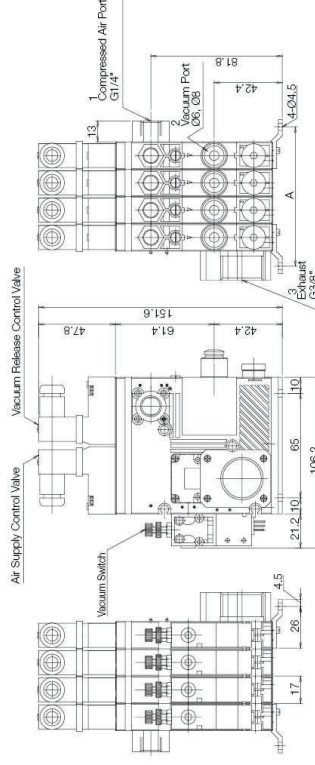
Manifold unit with central exhaust

Control valve Connector type / Mechanical vacuum switch



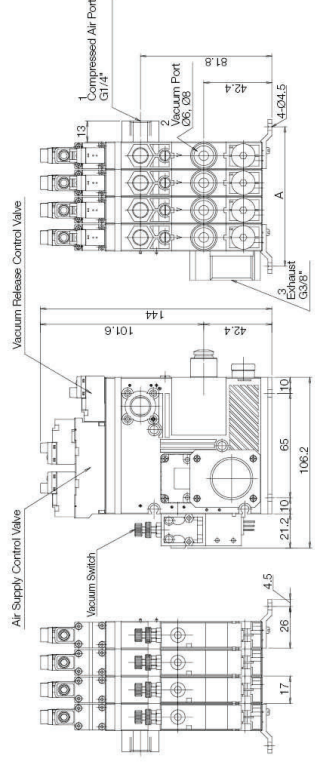
Manifold unit with central exhaust

Control valve DIN type / Mechanical vacuum switch



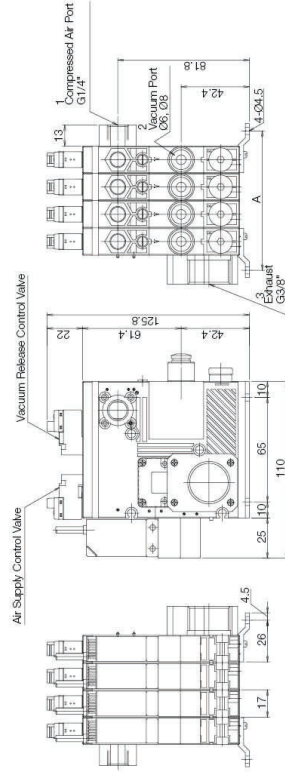
Manifold unit with central exhaust

Control valve double solenoid type / Mechanical vacuum switch



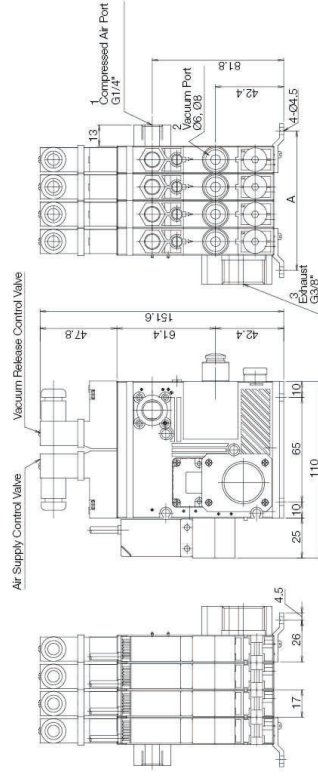
Manifold unit with central exhaust

Control valve Connector type / Flashing lamp display vacuum switch



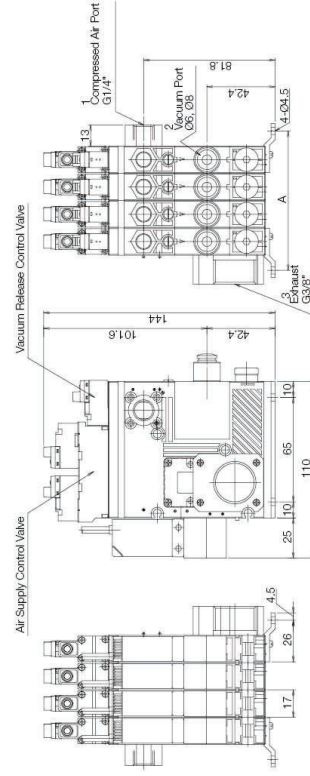
Manifold unit with central exhaust

Control valve DIN type / Flashing lamp display vacuum switch

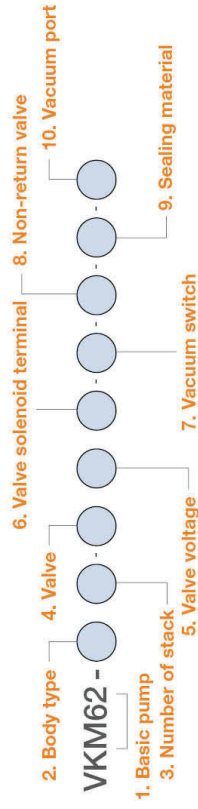


Manifold unit with central exhaust

Control valve double solenoid type / Flashing lamp display vacuum switch



Build an Ordering No.



1. Basic pump	Description	Symbol
	Midi Keyboard pump – "X" type	VKXG1
	Midi Keyboard pump – "M" type	VKM61
	Midi Keyboard pump – "X" type	VKXG2
	Midi Keyboard pump – "M" type	VKM62

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	

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
	Mechanical switch	S1
	Flashing LED, No analog supply, 4-core 1m lead wire, NPN	S4
	Flashing LED, No analog supply, 3-core 1m lead wire, PNP	S5

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

Spare Parts – Filter

Part No.	Description
FK62-A3-6	Filter cover case for Ø6 hose fitting, Fix bolt
FK62-A3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket
FK62-F3-6	Filter cover case for Ø6 hose fitting, Fix bolt, Filter element
FK62-F3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket, Filter element
FK62-A3-8	Filter cover case for Ø8 hose fitting, Fix bolt
FK62-A3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket
FK62-F3-8	Filter cover case for Ø8 hose fitting, Fix bolt, Filter element
FK62-F3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket, Filter element
VTE-K62	Filter element

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

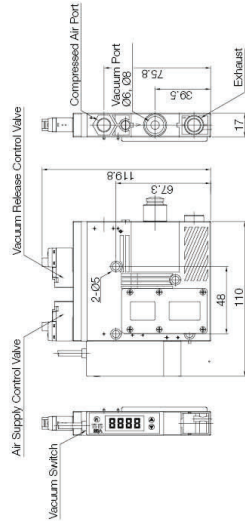
Evacuation Time

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

Dimensions – VKM73 / VKX73 series

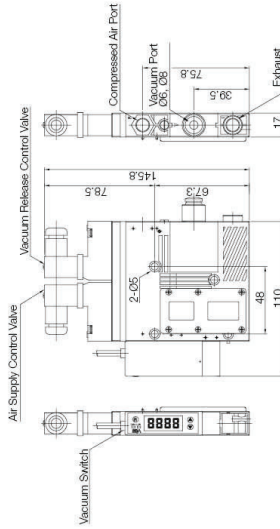
Single unit

Control valve Connector type / Digital vacuum switch



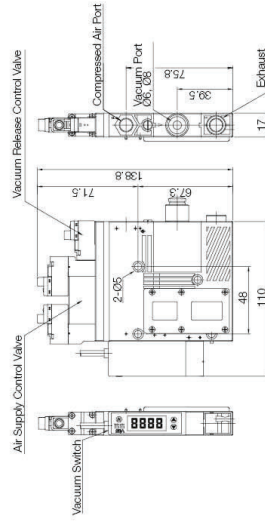
Single unit

Control valve DIN type / Digital vacuum switch



Single unit

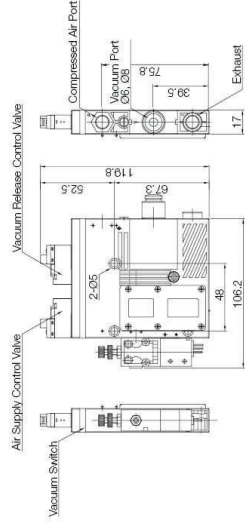
Control valve double solenoid type / Digital vacuum switch



Dimensions – VKM74 / VKX74 series

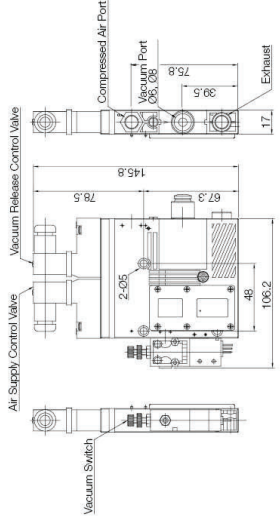
Single unit

Control valve Connector type / Mechanical vacuum switch



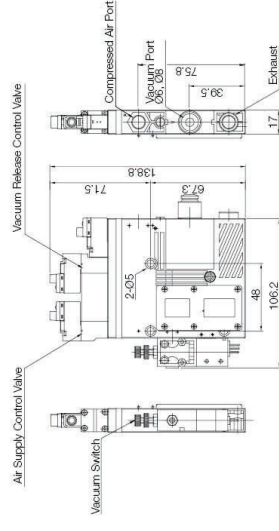
Single unit

Control valve DIN type / Mechanical vacuum switch



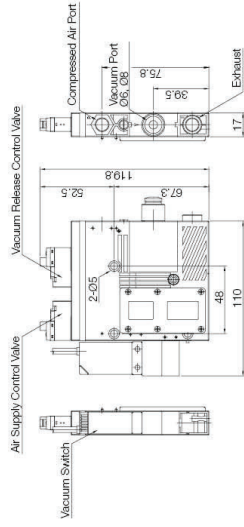
Single unit

Control valve double solenoid type / Mechanical vacuum switch



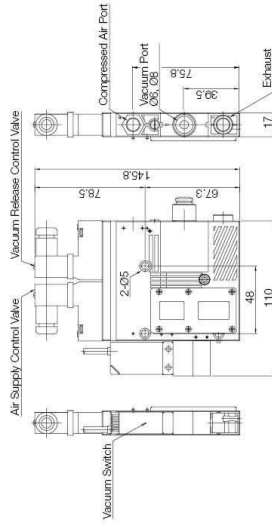
Single unit

Control valve Connector type / Flashing lamp display vacuum switch



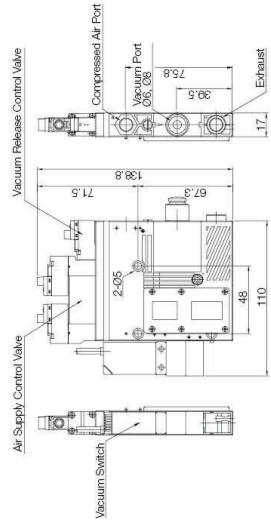
Single unit

Control valve DIN type / Flashing lamp display vacuum switch



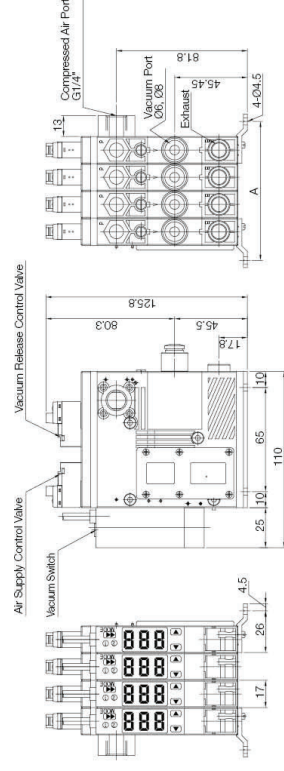
Single unit

Control valve double solenoid type / Flashing lamp display vacuum switch



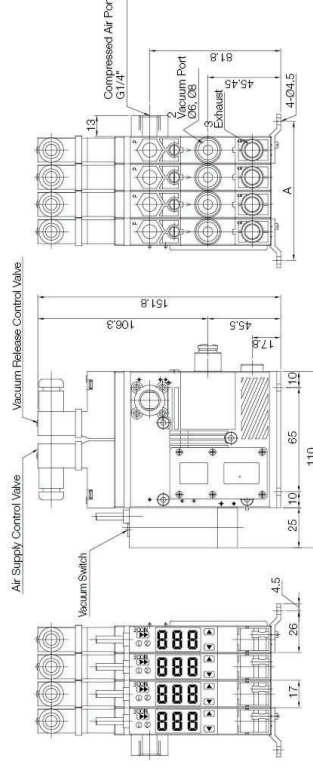
Manifold unit

Control valve Connector type / Digital vacuum switch



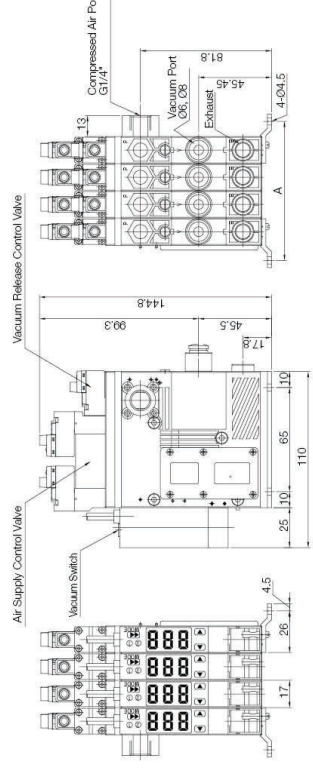
Manifold unit

Control valve DIN type / Digital vacuum switch



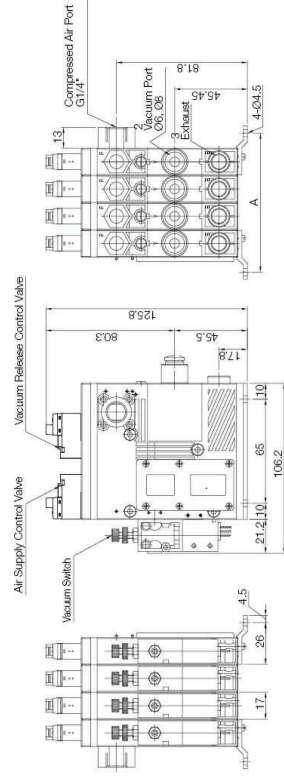
Manifold unit

Control valve double solenoid type / Digital vacuum switch



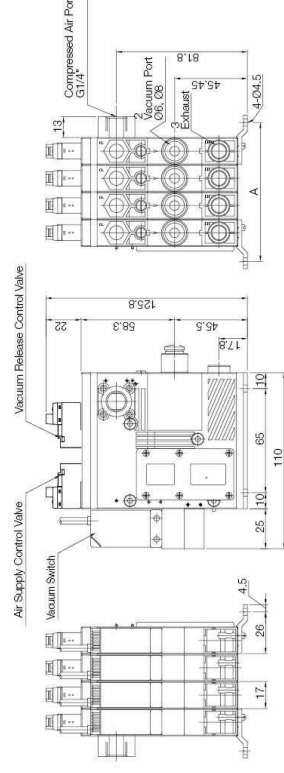
Manifold unit

Control valve Connector type / Mechanical vacuum switch



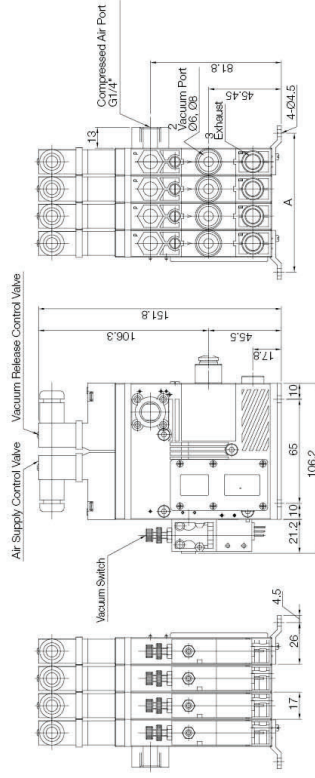
Manifold unit

Control valve Connector type / Flashing lamp display vacuum switch



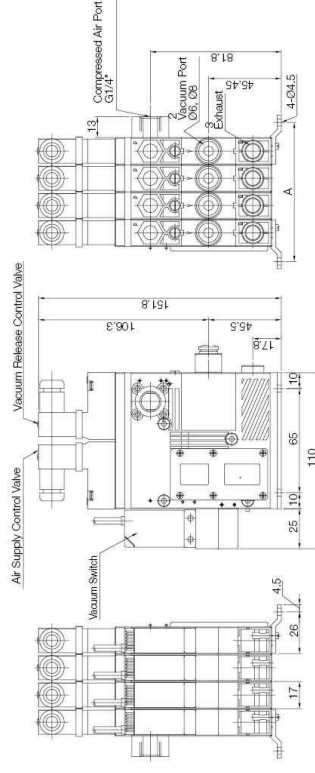
Manifold unit

Control valve DIN type / Mechanical vacuum switch



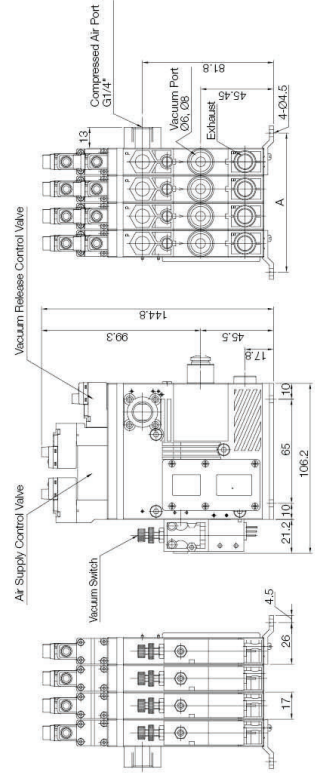
Manifold unit

Control valve DIN type / Flashing lamp display vacuum switch



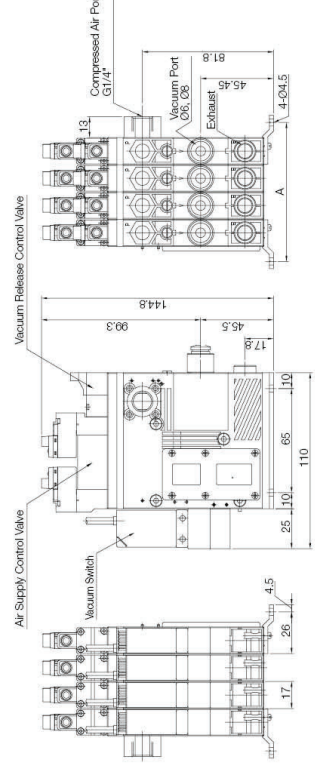
Manifold unit

Control valve double solenoid type / Mechanical vacuum switch



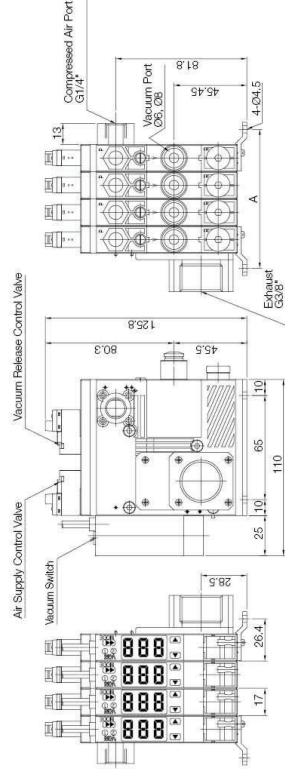
Manifold unit

Control valve double solenoid type / Flashing lamp display vacuum switch



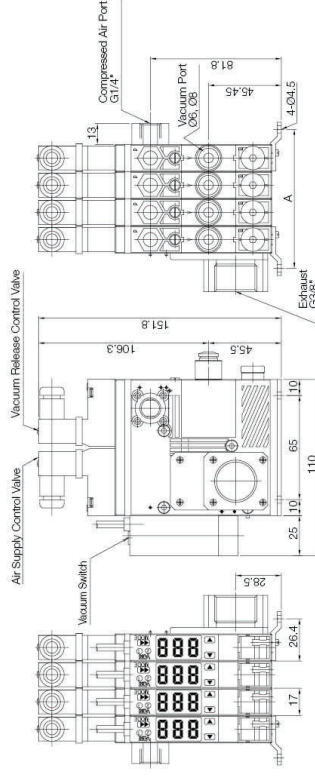
Manifold unit with central exhaust

Control valve Connector type / Digital vacuum switch



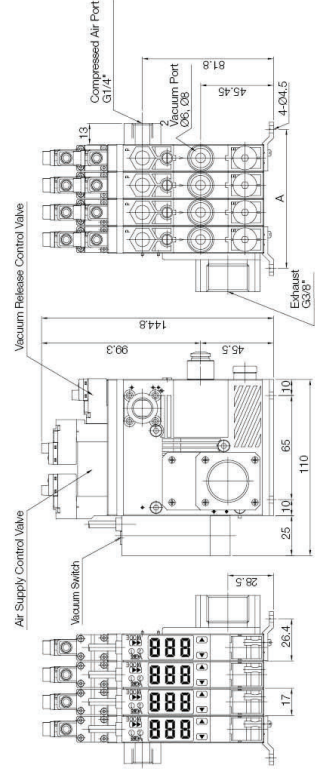
Manifold unit with central exhaust

Control valve DIN type / Digital vacuum switch



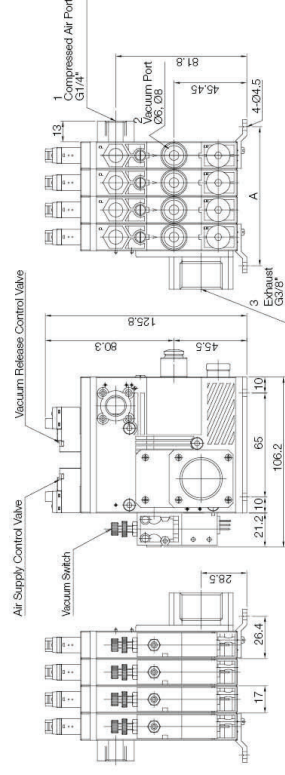
Manifold unit with central exhaust

Control valve double solenoid type / Digital vacuum switch



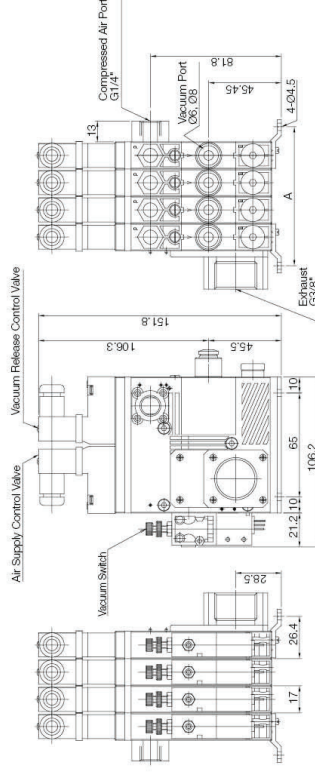
Manifold unit with central exhaust

Control valve Connector type / Mechanical vacuum switch



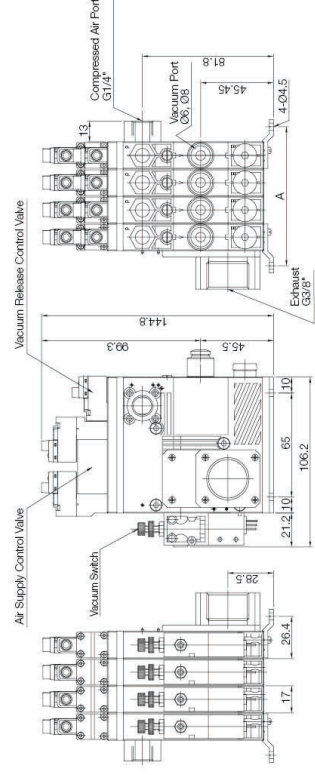
Manifold unit with central exhaust

Control valve DIN type / Mechanical vacuum switch



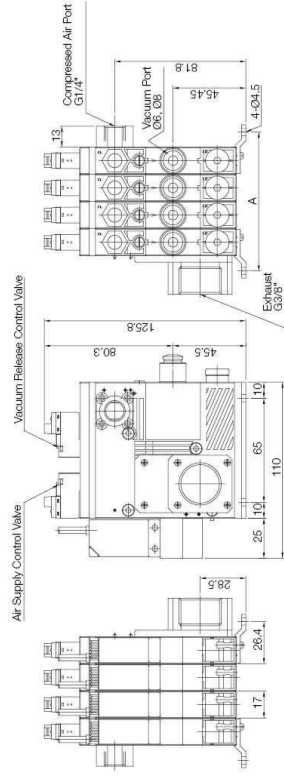
Manifold unit with central exhaust

Control valve double solenoid type / Mechanical vacuum switch



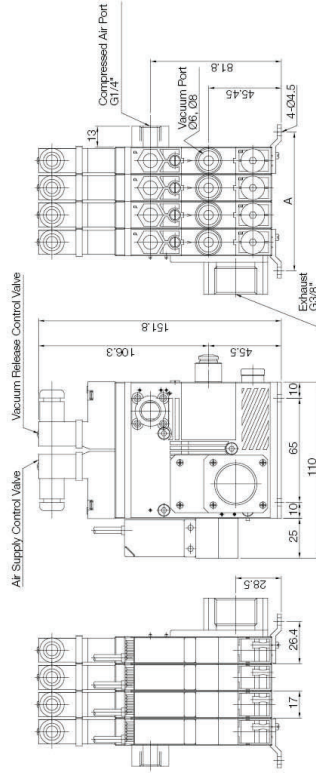
Manifold unit with central exhaust

Control valve Connector type / Flashing lamp display vacuum switch



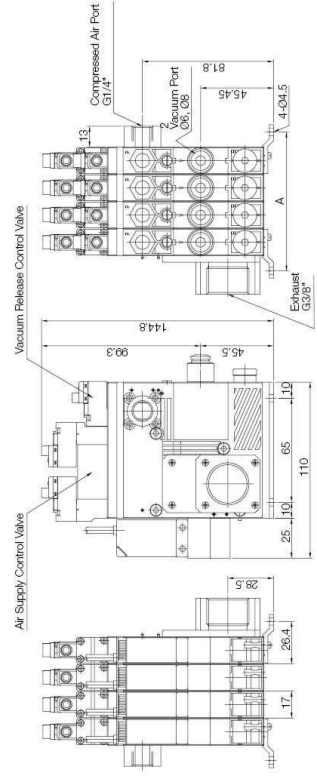
Manifold unit with central exhaust

Control valve DIN type / Flashing lamp display vacuum switch

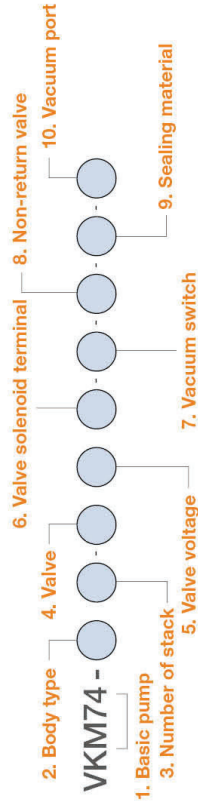


Manifold unit with central exhaust

Control valve double solenoid type / Flashing lamp display vacuum switch



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	

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
	Mechanical switch	S1
	Flashing LED, No analog supply, 4-core 1m lead wire, NPN	S4
	Flashing LED, No analog supply, 3-core 1m lead wire, PNP	S5

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

Spare Parts – Filters

Part No.	Description
FOK72-A3-6	Filter cover case for Ø6 hose fitting, Fix bolt
FOK72-A3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket
FOK72-F3-6	Filter cover case for Ø6 hose fitting, Fix bolt, Filter element
FOK72-F3-6-N	Filter cover case for Ø6 hose fitting, Fix bolt, Gasket, Filter element
FOK72-A3-8	Filter cover case for Ø8 hose fitting, Fix bolt
FOK72-A3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket
FOK72-F3-8	Filter cover case for Ø8 hose fitting, Fix bolt, Filter element
FOK72-F3-8-N	Filter cover case for Ø8 hose fitting, Fix bolt, Gasket, Filter element
VTFE-K72	Filter element