One line pump

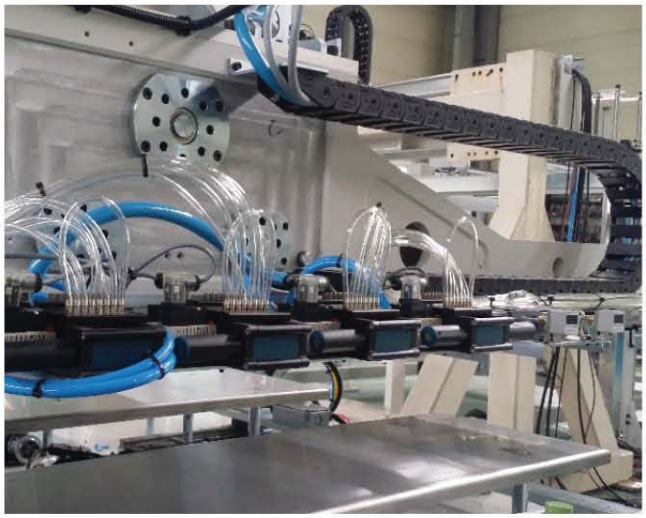
Features and Strengths

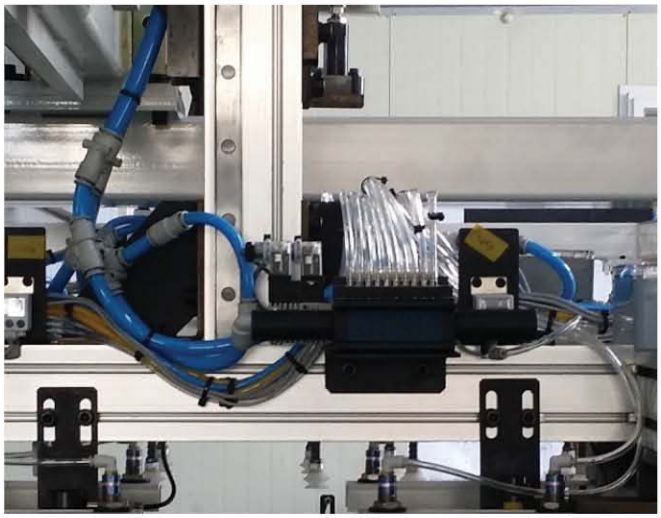
Multi-stage vacuum ejector
Available to multi with individual vacuum system

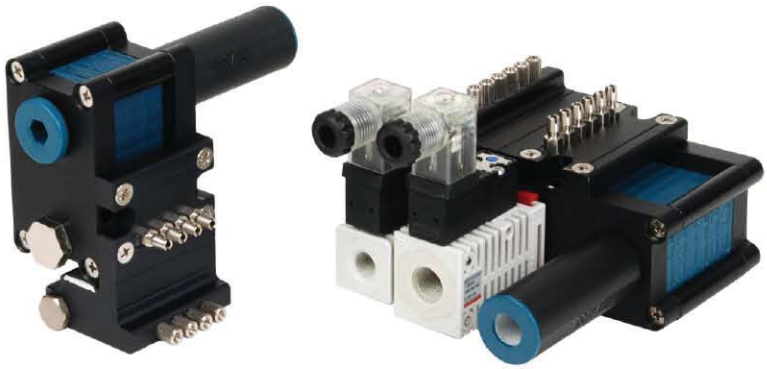
Advantages

Excellent performance in dust environment application with line vacuum filter
Individual vacuum system
Long-life time
Compact size and light weight
Quick multiple port's vacuum release

Application



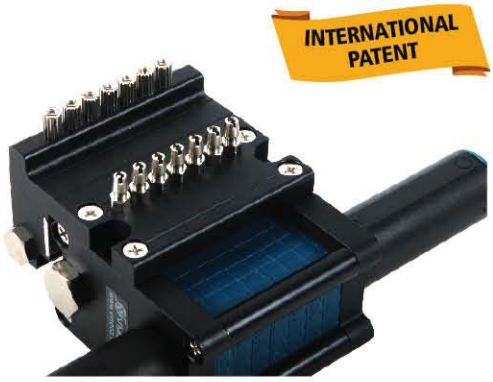




Overall of specification

Model	Max. Vacuum level (- kPa)	Max. Feed Pressure (bar)	Max. Vacuum Flow (Nl/m)	Air Consumption (Nl/m)
VTOM5	85	7	27	15 ~ 21
VTOM10	85	7	35	30 ~ 42
VTOX5	92	7	24	21.6 ~ 24
VTOX10	92	7	32	43.2 ~ 48

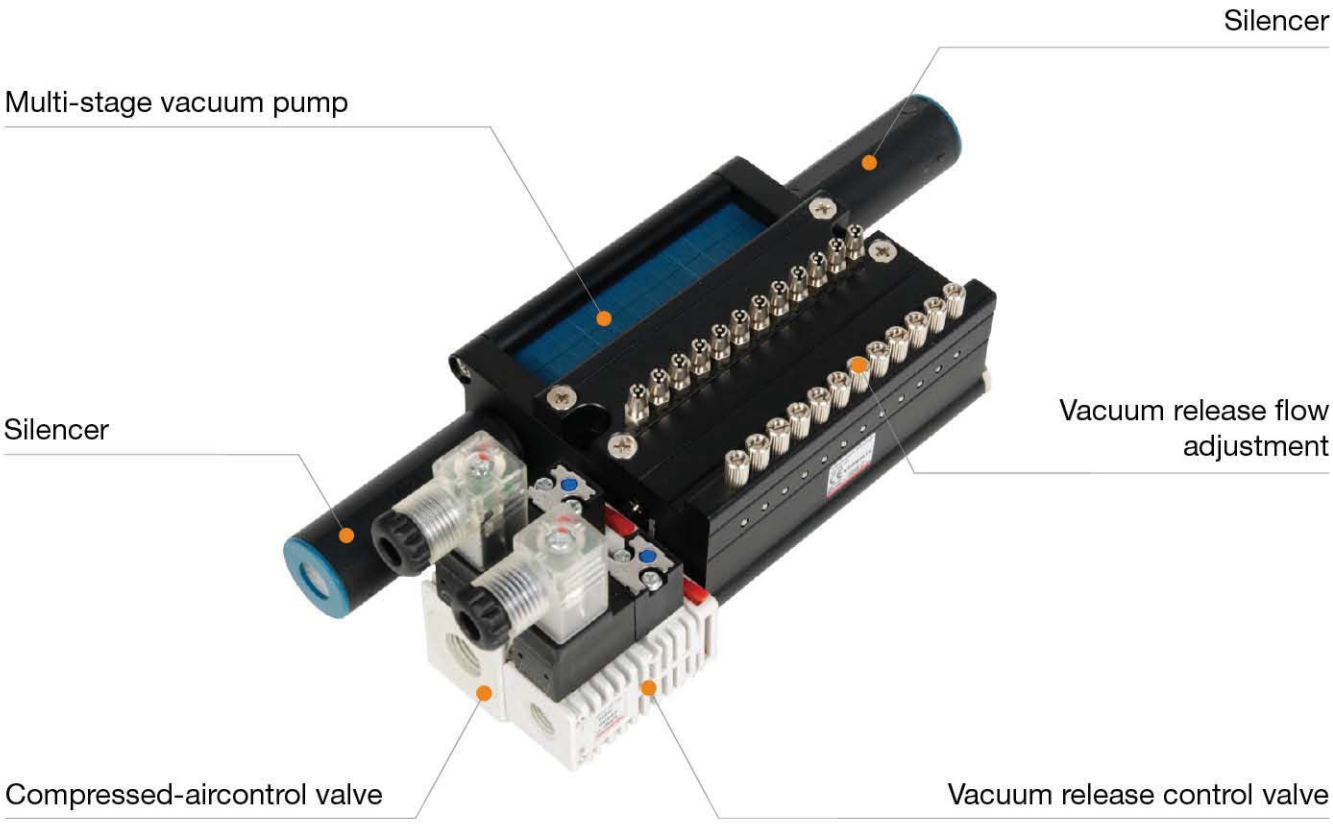
One line pump



VMECA One line pump is multi stage vacuum ejector and uses individual pumps to make up the complete unit.
Each individual pump can be stacked for creating a modular manifold based system – Also it can be controlled with only two control valves for compressed-air and vacuum release.
From 4 to 16 units, the pump can be made depending upon requirements and individual system can increase the safety during operation.

Key advantages

- Multi-stage vacuum pump
- Individual vacuum system
- Only two control valves are needed to control compressed-air and vacuum release



VTOX5 / VTOM5

Features and Strengths

- Individual vacuum operation with two control valves
- Multi-stage ejector
- Manifold type - Maximum 16stacks
- Quick response time
- Compact size and light weight

Specifications

Description	VTOX5	VTOM5
Max. Vacuum level	-92 kPa	-85 kPa
Open Vacuum flow	24 Nl/min	27 Nl/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 65 dbA	50 ~ 65 dbA
Weight	37g	37g

Vacuum Flow

Model	Max. vacuum (-kPa)	Vacuum flow (Nl/min) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
VTOX5	92	24	13	9	8	7	5	4	2.7	1.2	0.45
VTOM5	85	27	16	13	12	11	8	6	2.4	0.66	-

Evacuation Time

Model	Air Consumption (Nl/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
VTOX5	21.6 ~ 24	0.258	0.796	1.516	2.4	3.38	4.91	6.896	10.16	19.19
VTOM5	15 ~ 21	0.218	0.556	1.00	1.576	2.356	3.44	5.27	10.216	-

VTOX10 / VTOM10

Features and Strengths

· Individual vacuum operation with two control valves
· Multi-stage ejector
· Manifold type - Maximum 16stacks
· Quick response time
· Compact size and light weight

Specifications

Description	VTOX10	VTOM10
Max. Vacuum level	-92 kPa	-85 kPa
Open Vacuum flow	32 Nl/min	35 Nl/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 65 dbA	50 ~ 65 dbA
Weight	37g	37g

Vacuum Flow

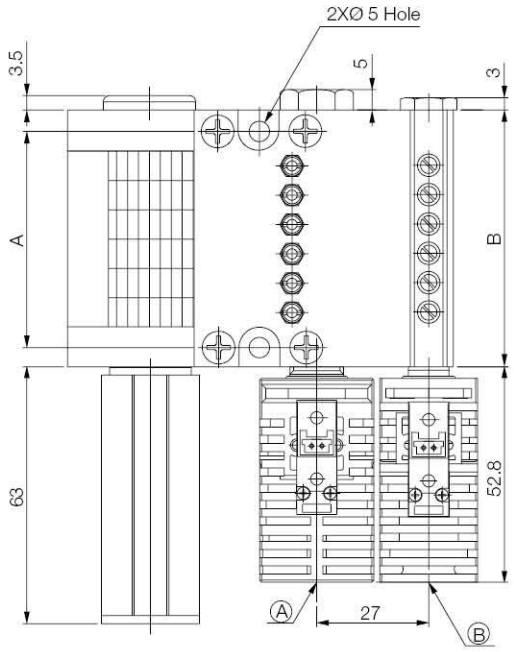
Model	Max. vacuum (-kPa)	Vacuum flow (Nl/min) at different vacuum levels (-kPa)									
		0	10	20	30	40	50	60	70	80	90
VTOX10	92	32	21	17	15	14	11	9	5.4	2.4	0.9
VTOM10	85	35	29	25	23	19	16	12	4.8	1.32	-

Evacuation Time

Model	Air Consumption (Nl/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
		10	20	30	40	50	60	70	80	90
VTOX10	43.2 ~ 48	0.129	0.398	0.758	1.2	1.78	2.455	3.455	5.08	9.594
VTOM10	30 ~ 42	0.109	0.278	0.50	0.788	1.178	1.72	2.635	5.158	-

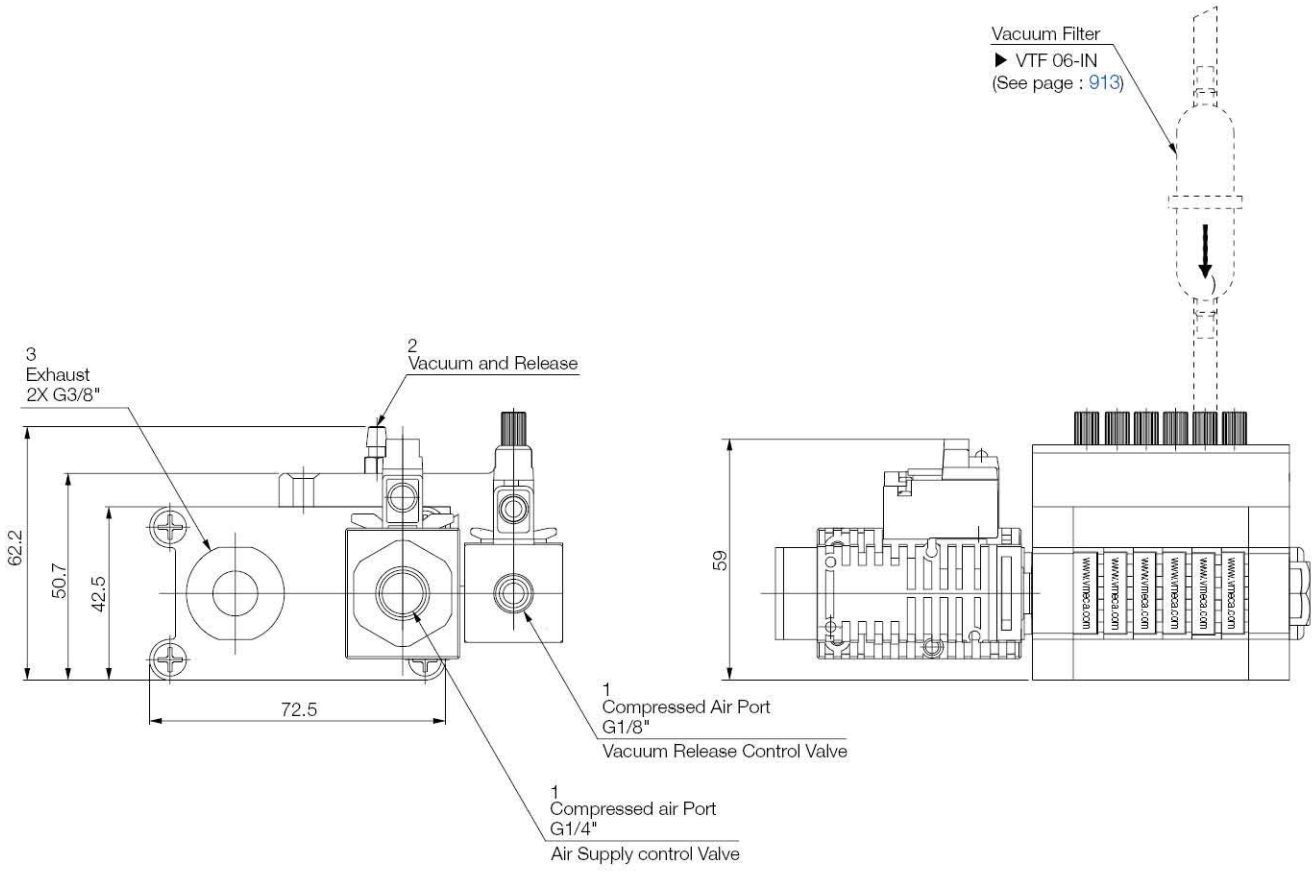
Dimension – VTOX5 / VTOM5 / VTOX10 / VTOM10

[Unit : mm]

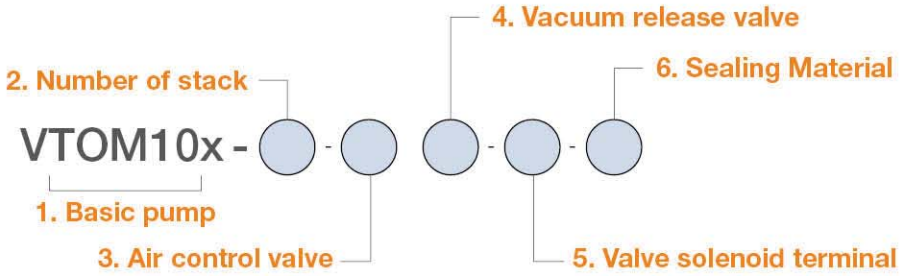


Stack	A	B
4 stacks	38.3	48.3
5 stacks	45.5	55.5
6 stacks	53	63
7 stacks	60	70
8 stacks	67.5	77.5
9 stacks	74.8	84.8
10 stacks	82	92
11 stacks	88.5	98.5
12 stacks	96	106
13 stacks	103.2	113.2
14 stacks	111	121
15 stacks	118	128
16 stacks	125.2	135.8

Remark : Ⓐ - Air supply (vacuum) control valve
Ⓑ - Vacuum release control valve
(see page : 936, 937)



Build an Ordering No.



1. Basic pump	Description	Symbol
	One-Line Vacuum Pump - VTOX5 series	VTOX5
	One-Line Vacuum Pump - VTOX10 series: Maximum stack up to 12 stacks	VTOX10
	One-Line Vacuum Pump - VTOM5 series	VTOM5
	One-Line Vacuum Pump - VTOM10 series: Maximum stack up to 12 stacks	VTOM10

2. Number of stack	Description	Symbol
	4 stacks	4
	5 stacks	5
	6 stacks	6
	7 stacks	7
	8 stacks	8
	9 stacks	9
	10 stacks	10
	11 stacks	11
	12 stacks	12
	13 stacks	13
	14 stacks	14
	15 stacks	15
	16 stacks	16
	- VTOX5 and VTOM5 with above 12stacks includes 2 silencers	
	- VTOX10 and VTOM10 with above 6stacks includes 2 silencers	

3. Air control valve	Description	Symbol
	No air control valve	Blank
	Air control valve, AC110V	A1
	Air control valve, AC220V	A2
	Air control valve, DC24V	A3

4. Vacuum release valve	Description	Symbol
	No vacuum release valve	Blank
	Vacuum release valve, AC110V	R1
	Vacuum release valve, AC220V	R2
	Vacuum release valve, DC24V	R3

5. Valve terminal	Description	Symbol
	Solenoid Terminal, DIN, No LW	DN
	Solenoid Terminal, DIN, Lamp, No LW	DL
	Solenoid Terminal, Conn, Lamp & 0.3m LW: Only available with DC24V	CL
	Solenoid Terminal, DIN, 2 in 1 BUS cable: Not available with Double Solenoid Valve	2B

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