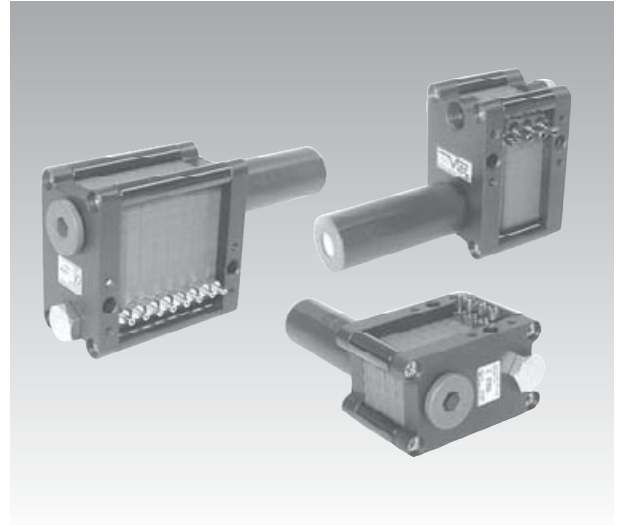


M – Minimultiple Pump

Max. vacuum level	: -85kpa (-637.5mmHg)
Max. flow rate	: 35NI/m x N stack
Supply air pressure	: 4-6 bar Max. 7 bar
Supply air type	: Dry compressed air
Working temperature	: -20°C to +80°C
Noise level	: 50 – 65dBA

Main advantages

This M-Minimultiple model uses individual pumps to make up the complete unit, each pump is in itself a multi stage ejector unit. Each individual pump can be stacked to together thus creating a modular manifold based system. The advantages of this unit is that it can be operated using just one control valve whilst retaining individual vacuum lines separate to one another, therefore if any leakage or surface deformation occurs and one pad loses it vacuum, it does not effect the vacuum level in the other pads. Pumps can be stacked up from 2 - 16 unit depending upon requirements. The pumps can have seal material options of Viton® & EPDM for corrosive and acidic applications.



Order no.

VTM5 x 6 - A3 D3 - 4 - V

①
②
③
④
⑤
⑥

① Model – Capacity equivalent to electricity motor pump size

- **VTM5** – 0,05KW
- **VTM10** – 0,1KW

③ Air supply control valve

- **A1** – AC110V
- **A2** – AC220V
- **A3** – DC24V

⑤ Vacuum port, inner dia of tube

- **2** – Ø2
- **4** – Ø4

② Vacuum stack

- **2** – 2 stack **10** – 10 stack
- **3** – 3 stack **11** – 11 stack
- **4** – 4 stack **12** – 12 stack
- **5** – 5 stack **13** – 13 stack
- **6** – 6 stack **14** – 14 stack
- **7** – 7 stack **15** – 15 stack
- **8** – 8 stack **16** – 16 stack
- **9** – 9 stack

※ Remark : VTM5 maximum stack up to 16 stack (above 12 stack complete with 2 Silencer)
VTM10 maximum stack up to 12 stack (above 6 stack complete with 2 Silencer)

④ Control valve & Solenoid terminal

- **1** – Piston valve
– DIN type without lead wire
- **2** – Piston valve
– DIN type with lamp without lead wire
- **3*** – Piston valve
– Connector type with 0,3m lead wire & lamp
- **D1** – Diaphragm valve
– DIN type without lead wire
- **D2** – Diaphragm valve
– DIN type with lamp without lead wire
- **D3*** – Diaphragm valve
– Connector type with 0,3m lead wire & lamp

※ Remarks : VTM5 – over 12 stacks
VTM10 – over 8 stacks *# Using Piston valve
* : Only for DC24V

⑥ Sealing

- **No mark** – Standard (NBR)
- **V** – Viton®
- **E** – EPDM

Characteristics

Model	max. vacuum -kPa(-mmHg)	Max. vacuum flow (NI/m)	air consumption (NI/m)	noise level (dBA)	weight (g)	min hose inner Ø (within 2m)		
						air supply	vacuum	exhaust
VTM5x2stack	85 (637,5)	27X2	30-42	55-60	67	> 2	> 2,5	3/8" x1
VTM5x3stack		27X3	45-63	55-60	80	> 2	> 2,5	3/8" x1
VTM5x4stack		27X4	60-84	55-60	247	> 4	> 2,5	3/8" x1
VTM5x5stack		27X5	75-105	60-65	255	> 4	> 2,5	3/8" x1
VTM5x6stack		27X6	90-126	60-65	281	> 4	> 2,5	3/8" x1
VTM5x7stack		27X7	105-147	60-65	299	> 4	> 2,5	3/8" x1
VTM5x8stack		27X8	120-168	60-65	317	> 6	> 2,5	3/8" x1
VTM5x9stack		27X9	135-189	60-65	335	> 6	> 2,5	3/8" x1
VTM5x10stack		27X10	150-210	60-65	353	> 6	> 2,5	3/8" x1
VTM5x11stack		27X11	165-231	60-65	371	> 6	> 2,5	3/8" x1
VTM5x12stack		27X12	180-252	60-65	389	> 6	> 2,5	3/8" x2
VTM5x13stack		27X13	195-273	60-65	417	> 6	> 2,5	3/8" x2
VTM5x14stack		27X14	210-294	60-65	435	> 8	> 2,5	3/8" x2
VTM5x15stack		27X15	225-315	60-65	453	> 10	> 2,5	3/8" x2
VTM5x16stack		27X16	240-336	60-65	471	> 10	> 2,5	3/8" x2
VTM10x2stack		85 (637,5)	35X2	60-84	55-60	67	> 4	> 4
VTM10x3stack	35X3		90-126	60-65	80	> 4	> 4	3/8" x1
VTM10x4stack	35X4		120-168	60-65	247	> 6	> 4	3/8" x1
VTM10x5stack	35X5		150-210	60-65	255	> 6	> 4	3/8" x1
VTM10x6stack	35X6		180-252	60-65	281	> 6	> 4	3/8" x2
VTM10x7stack	35X7		210-294	60-65	299	> 8	> 4	3/8" x2
VTM10x8stack	35X8		240-336	60-65	327	> 8	> 4	3/8" x2
VTM10x9stack	35X9		270-378	60-65	345	> 10	> 4	3/8" x2
VTM10x10stack	35X10		300-420	60-65	363	> 10	> 4	3/8" x2
VTM10x11stack	35X11		330-462	60-65	381	> 10	> 4	3/8" x2
VTM10x12stack	35X12		360-504	60-65	399	> 10	> 4	3/8" x2

VACUUM PUMP

Induce air in liters per minute (NI/m)

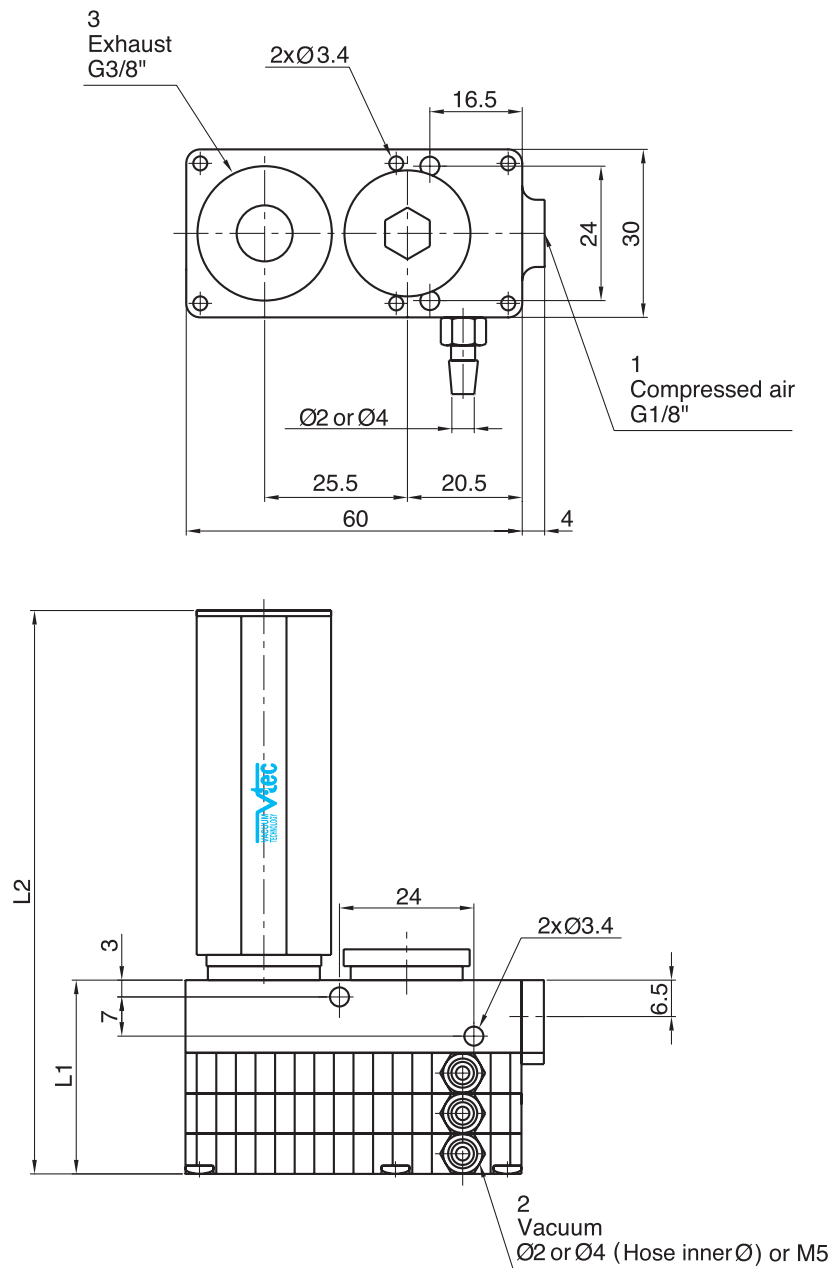
-mmHg -kPa	0	75	150	225	300	375	450	525	600
Model	0	10	20	30	40	50	60	70	80
VTM5x1stack	27	16	13	12	11	8	6	2,4	0,66
VTM10x1 stack	35	29	25	23	19	16	12	4,8	1,32

Time in seconds to evacuate to vacuum level (sec/l)

-mmHg -kPa	75	150	225	300	375	450	525	600
Model	10	20	30	40	50	60	70	80
VTM5x1stack	0,218	0,556	1	1,576	2,356	3,44	5,270	10,216
VTM10x1 stack	0,109	0,278	0,5	0,788	1,178	1,72	2,635	5,158

Dimensional Information

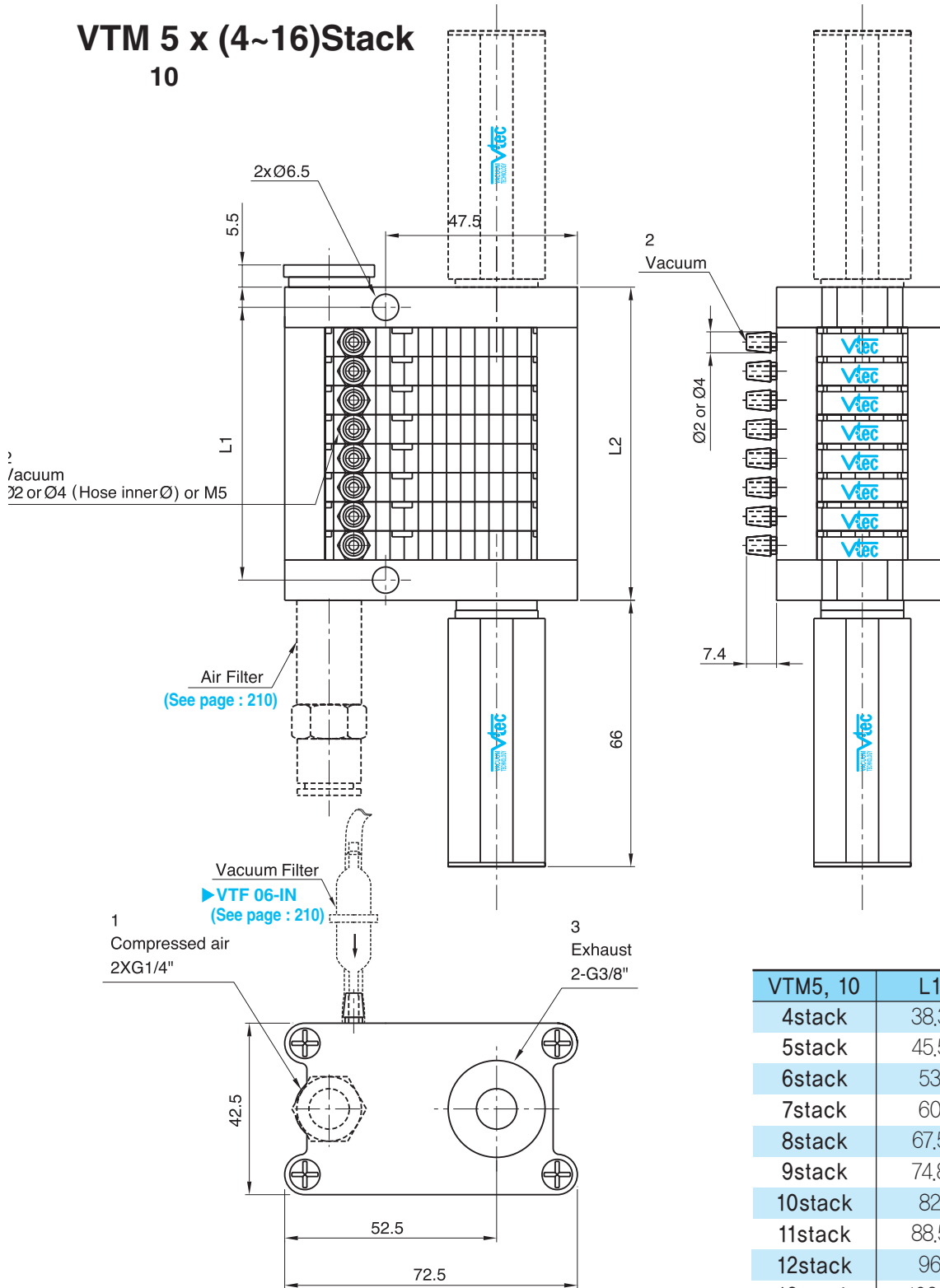
VTM 5 x (2, 3)Stack 10



	(mm)	
VTM5.10	L1	L2
2stack	27,4	93,4
3stack	34,6	100,6

Dimensional Information

VTM 5 x (4~16)Stack 10



	(mm)	
VTM5, 10	L1	L2
4stack	38,3	48,3
5stack	45,5	55,5
6stack	53	63
7stack	60	70
8stack	67,5	77,5
9stack	74,8	84,8
10stack	82	92
11stack	88,5	98,5
12stack	96	106
13stack	103,2	113,2
14stack	111	121
15stack	118	128
16stack	125,2	135,2