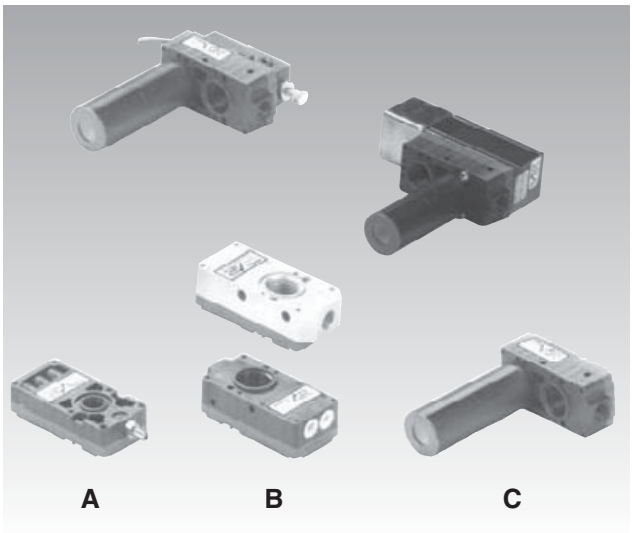
M-Mini Pump

Max.vacuum level : -85kpa (-637.5mmHg)
Max.Flow rate : 220Nl/m (13.2m³/hr)
Supply air pressure : 4-6 bar Max. 7 bar
Supply air type : Dry compressed air
Working temperature : -20℃ to +80℃
Noise level : 50 - 68dBA



Main advantages

These M-Mini range pumps are compact and low weight design. Although they are the smallest of the VTM range they still use a Multi Stage Ejector principal for generating the vacuum, these pumps provide large capacity vacuum flow combined with high grade plastic, making the pums resilient to most hazardous vapours. Because the pumps are two small they can be mounted locally to the vacuum requirement, even directly onto the back of suction cups if required. Different vacuum port sizes are available with options for an integrally mounted exhaust or a 3/8" detachable versions. The pumps can be specified with a vacuum switch or a quick release module attached directly onto the pump. The pump can have seal materials options of Viton® & EPDM for corrosive and acidic appliactions.

Order no.

VTM5 - B - A3 D3 - S1 - V
① ② ③ ④ ⑤ ⑥

① Model - Capacity equivalent to electricity motor pump size

•	VTM5	- 0.05KW
	VTM10	- 0.10KW
	VTM20	- 0.20KW
	VTM30	- 0.30KW

② Air Supply, Vacuum, Exhaust Port

	Air	Vacuum	Exhaust
A	M5-Ø6	G1/8"	Internal silencer
NA	M5-Ø6	NPSF1/8"	Internal silencer
• B	G1/8"	G3/8"	Internal silencer
BA	G1/8"	G3/8"	Internal silencer, connection plate-AL
NB	NPSF1/8"	NPSF 3/8"	Internal silencer
NBA	NPSF1/8"	NPSF 3/8"	Internal silencer, connection plate-AL
C	G1/8"	G3/8"	External silencer
NC	NPSF1/8"	NPSF 3/8"	External silencer

※ Standard pump model
VTM5 - A, NA, B, BA, NB, NBA, C, NC
VTM10 - A ,NA, B, BA, NB, NBA, C, NC
VTM20 - B, BA, NB, NBA, C, NC
VTM30 - B, BA, NB, NBA, C, NC

③ Air supply control valve

	A1	- AC110V
	A2	- AC220V
•	A3	- DC24V

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

* : Only for DC24V

⑤ Vacuum switch / Quick release module

•	S1	- Mechanical vacuum switch
	Q1	- Quick release module : 12㎤
	Q2	- Quick release module : 30㎤

※ Remark : For mechanical vacuum switch and air supply control valve available for vacuum pump B, BA, NB, NBA, C, NC type only.

⑥ Sealing

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

Characteristics

Model	max. vacuum -kPa(-mmHg)	Max. vacuum flow (Nl/m)	air consumption (Nl/m)	noise level (dBA)	weight (g)	min hose inner Ø (within 2m)		
						air supply	vacuum	exhaust
VTM5	85 (637.5)	37	15–21	50 – 65	–	〉2	〉5	〉8
VTM10		74	30–42	55 – 68	–	〉2	〉8	〉10
VTM20		149	60–84	60 – 68	–	〉4	〉10	〉12
VTM30		220	90–126	60 – 68	–	〉6	〉12	〉15

※ Remarks : type weight = VTM5-A(B,BA,NBA,C,NC) : 26g(30,56,30,56,42,42)
VTM10-A(B,BA,NBA,C,NC) : 28g(32,58,32,58,44,44)
VTM20-B(BA,NB,NBA,C,NC) : 41g(79,41,79,53,53)
VTM30-B(BA,NB,NBA,C,NC) : 60g(98,60,98,72,72)

Induce air in liters per minute (Nl/m)

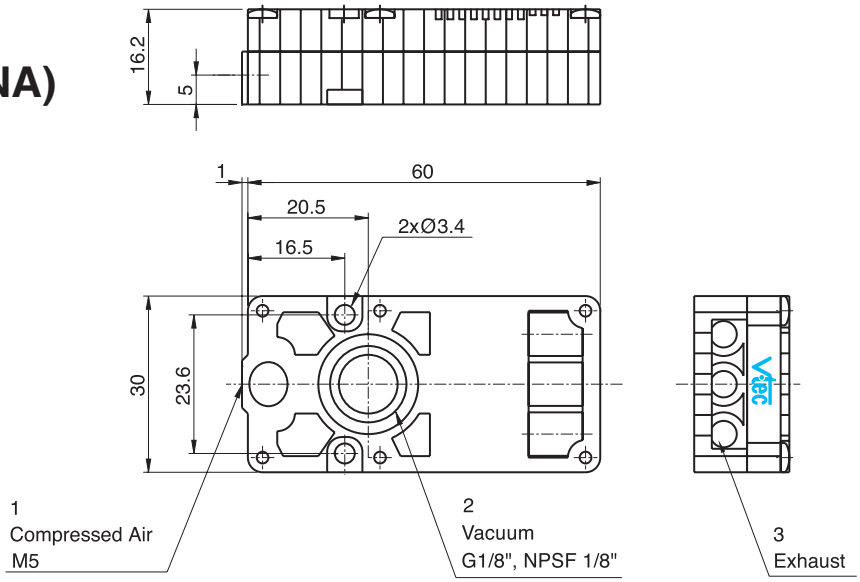
-mmHg / -kPa / Model	0 / 0	75 / 10	150 / 20	225 / 30	300 / 40	375 / 50	450 / 60	525 / 70	600 / 80
VTM5	37	26	16	14	10	8	6	2.4	0.66
VTM10	74	52	31	28	20	16	12	4.8	1.32
VTM20	149	99	62	54	40	32	22	10.5	2.7
VTM30	220	147	92	73	60	47	32	16	4.1

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

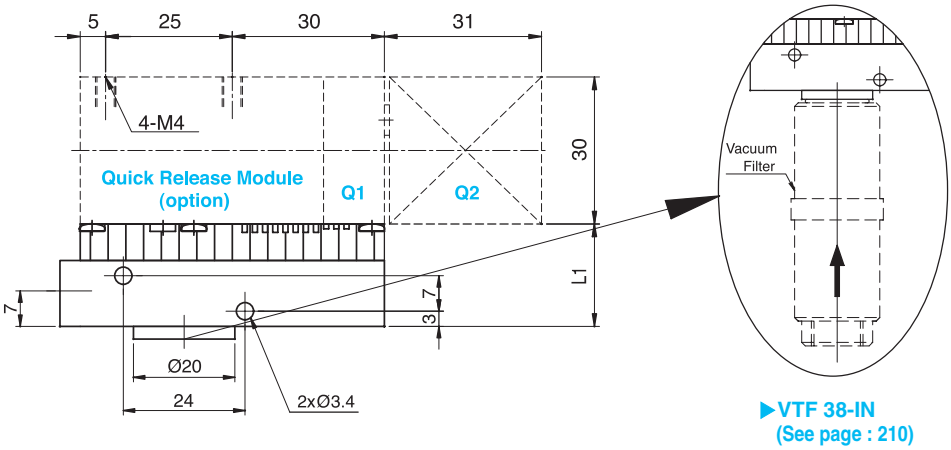
-mmHg / -kPa / Model	75 / 10	150 / 20	225 / 30	300 / 40	375 / 50	450 / 60	525 / 70	600 / 80
VTM5	0.218	0.556	1	1.576	2.356	3.44	5.27	10.216
VTM10	0.109	0.278	0.5	0.788	1.178	1.72	2.635	5.158
VTM20	0.054	0.139	0.25	0.394	0.589	0.86	1.317	2.579
VTM30	0.041	0.104	0.186	0.295	0.441	0.647	0.898	1.935

Dimensional Information

5
VTM (10)-A(NA)



5
VTM (10)-B (BA, NB, NBA)
20
30



▶VTF 38-IN
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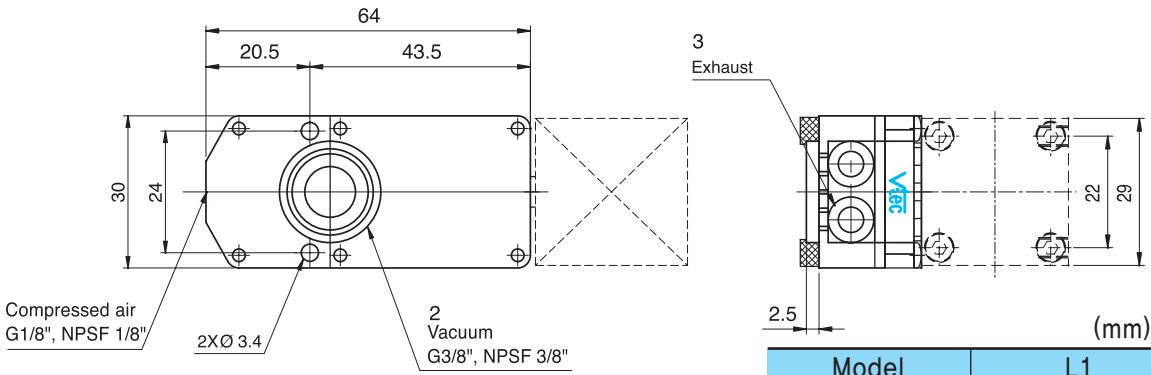


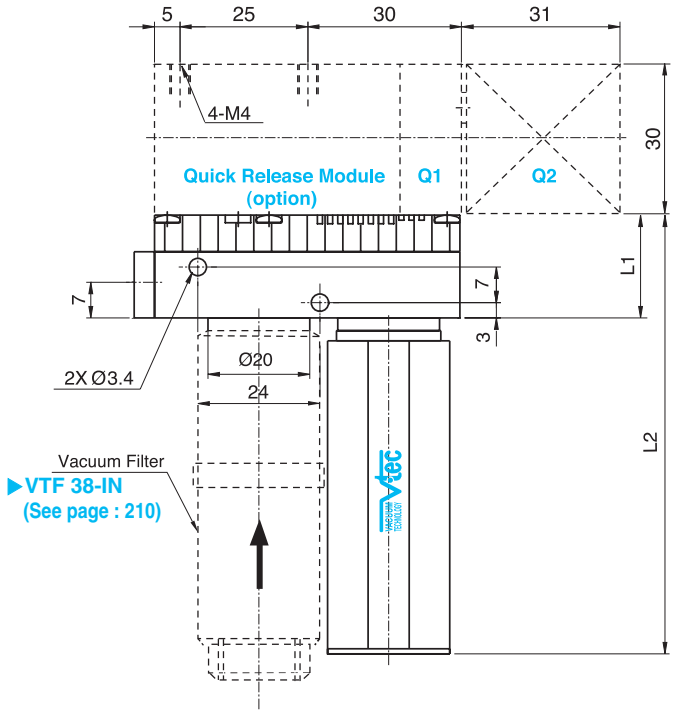
(mm)

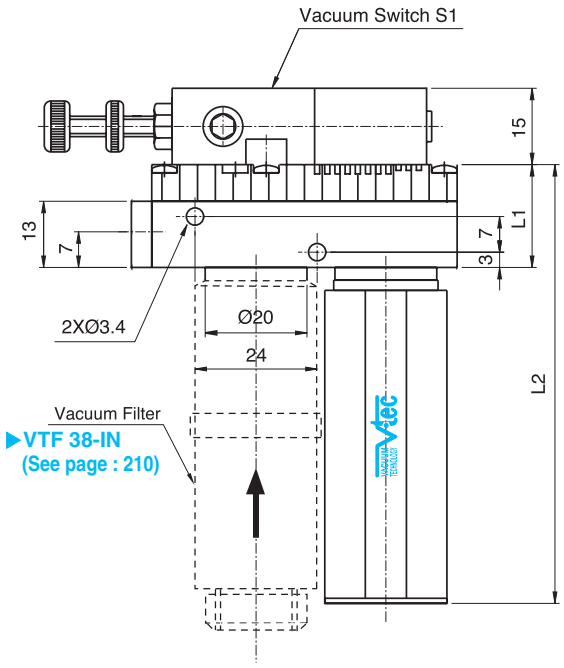
Model	L1
VTM5	20.2
VTM10	20.2
VTM20	27.4
VTM30	34.6

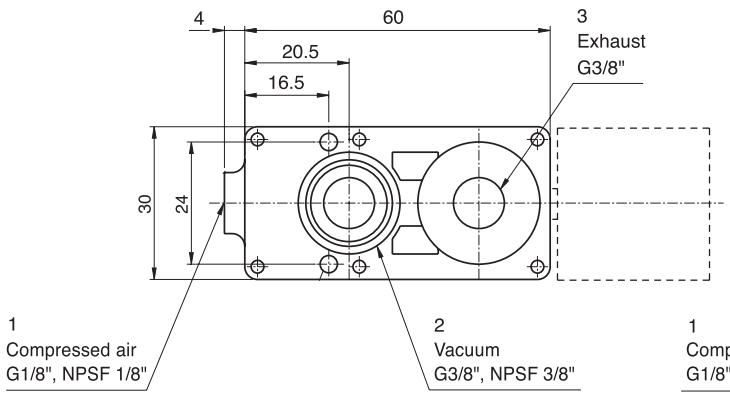
Dimensional Information

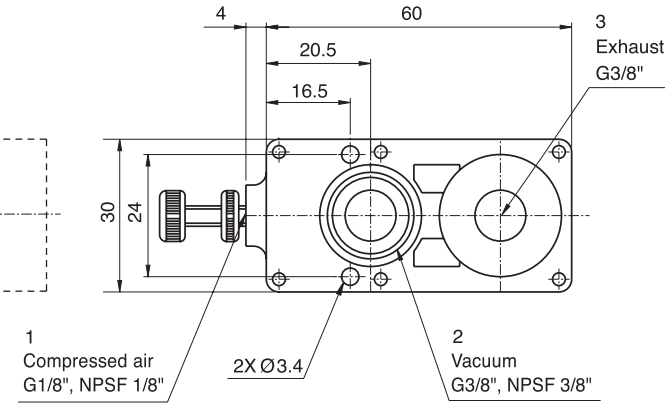
5
VTM (10)-C (NC)
20
30

with swith S1









(mm)

Model	L1	L2
VTM5	20.2	86.2
VTM10	20.2	86.2
VTM20	27.4	93.4
VTM30	34.6	100.6