

PML-Series

- Max. vacuum level : -75 kPa (-22.15 inHg)
- Max. flow rate : 362~1448 NI/min (12.78~51.14 scfm)
- Supply air pressure : 4 ~ 6 bar, max 7 bar
(58~87 psi, max 101.5 psi)
- Air consumption : 70~416 NI/min (3.43~21.47 scfm)
- Supply air type : Dry compressed air
- Working temperature : -20°C to +80°C
- Noise level : 60~65 dBA



Main Advantages

- Large vacuum flow rate yet low air consumption.
- Various connection ports available.
- Fast evacuation time.
- Optional Air-Saving Kit (AS-KIT) available to minimize energy consumption.
- Optional factory installed air control / vacuum release valves and digital vacuum switches available.
- Strong aluminum body.
- Easily mountable and maintainable with interchangeable vacuum cartridge.

Order No.

PML 303X1 A - 34 - B1 - AS - A3 R3 - CL - S2 N V

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Model (Vacuum flows)

- **PML303 X 1** - 362 NI/min
- PML303 X 2 - 724 NI/min
- PML303 X 3 - 1086 NI/min
- PML303 X 4 - 1448 NI/min

② Body type

- **A** - Vacuum port on side
- B - Vacuum port on top & side

③ Vacuum port

- **34*** - G3/4"
- 01 - G1"

* 34 : Body type B is available only with vacuum port 34

④ Mounting bracket

- No mark - Not included
- **B1** - 4 Point support
- B2 - 2 Point L-type

⑤ Air saving kit (108)

- No mark - Not included
- **AS** - Air saving kit

⑥ Voltage of air supply control valve

- A1 - AC110V
- A2 - AC220V
- **A3** - DC24V
- D1* - AC110V
- D2* - AC220V
- D3* - DC24V

* D. : Double solenoid valve is available only with 'DN' or 'DL', section ⑧

⑦ Voltage of vacuum release control valve

- R1 - AC110V
- R2 - AC220V
- **R3** - DC24V

⑧ Solenoid Terminal

- DN - DIN type without lead wire
- DL - DIN type with lamp without lead wire
- **CL*** - Connector type with lamp & 0.3 m lead wire
- 2B* - DIN type with '2 in 1' BUS cable
(air control v/v + Vacuum release v/v)
- 3B* - DIN type with '3 in 1' BUS cable
(air control v/v + Vacuum release v/v) + Digital switch

* Can not available with double solenoid valve

※ Remark

CL : Available only with DC24V

3B : Available only with DC24V

Available only with 'S2' or 'S2P', section ⑨

☞ About 'BUS cable' (340, 341)

⑨ Vacuum switch

No mark - Vacuum gauge attached

- **S2(P)** - Digital output 2 points, No analog supply. M8-4Pin male connector. (0.3m lead wire)
- SG2(P) - Digital output 2 points, No analog supply. Grommet type 4-Core 2m lead wire
- SG3(P) - Digital output 2 points, Analog supply. Grommet type 5-Core 2m lead wire.

※ Remark: ① S.(P)

↳ Output type :PNP open collector

② VCM8 42 : M8-4Pin connector wire. Only for type S2 or S2(P).

⑩ Non-return valve

No mark - Not included

- **N** - Non-return valve

⑪ Sealing

No mark - NBR

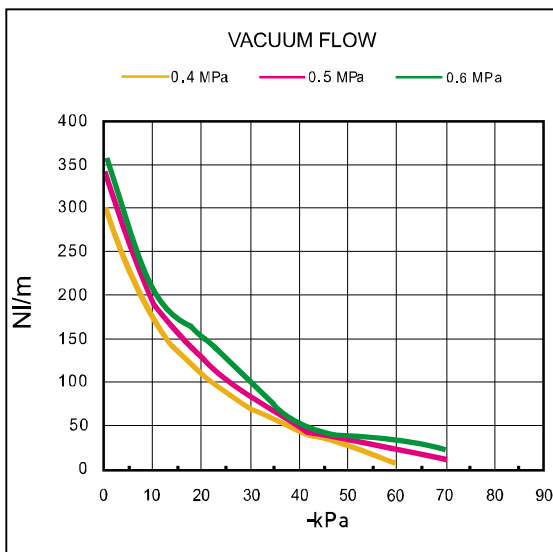
- **V** - Viton®
- E - EPDM

Performance Data

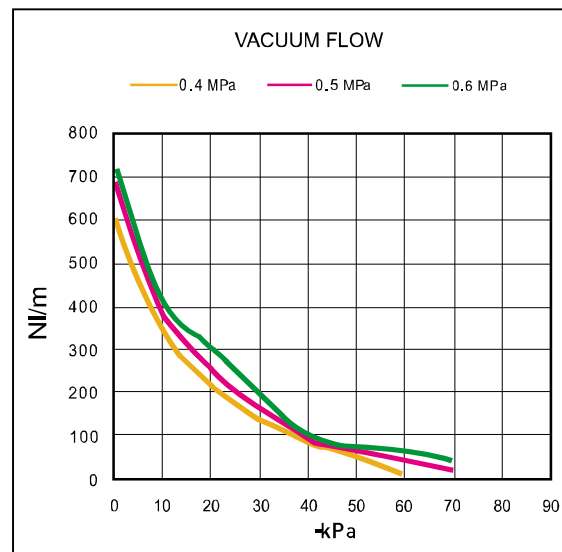
Vacuum flow, NI/min, at different vacuum levels -kPa (-mmHg)

Model	MAX. Vacuum (-kPa)	Feed pressure (MPa)	0 (0)	10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
PML 303X1..	60	0.4	302	172	110	70	46	28	6.8	-	-	-
	70	0.5	344	196	130	82	50	37.5	23	11.3	-	-
	75	0.6	362	207	154	100	52	38	32	22	-	-
PML 303X2..	60	0.4	604	344	220	140	92	56	13.6	-	-	-
	70	0.5	688	392	260	164	100	75	46	23.8	-	-
	75	0.6	724	415	308	200	104	76	64	44	-	-
PML 303X3..	60	0.4	906	516	330	210	138	84	20.4	-	-	-
	70	0.5	1032	588	390	246	150	112.5	69	34	-	-
	75	0.6	1086	621	462	300	156	114	96	66	-	-
PML 303X4..	60	0.4	1208	688	440	280	184	112	27	-	-	-
	70	0.5	1376	784	520	328	200	150	92	45	-	-
	75	0.6	1448	828	616	400	208	152	128	88	-	-

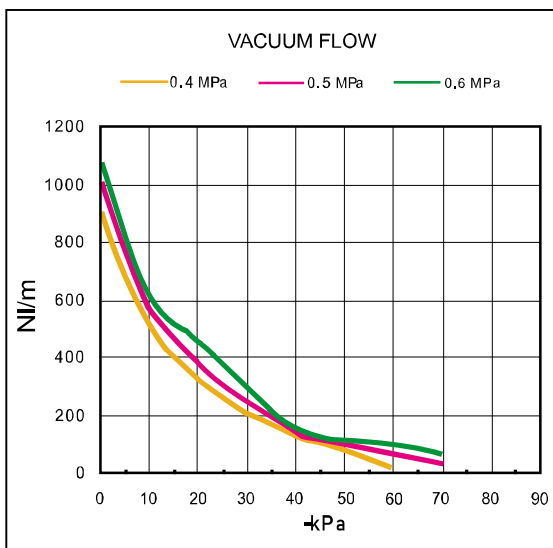
▼ PML 303 X1 ..



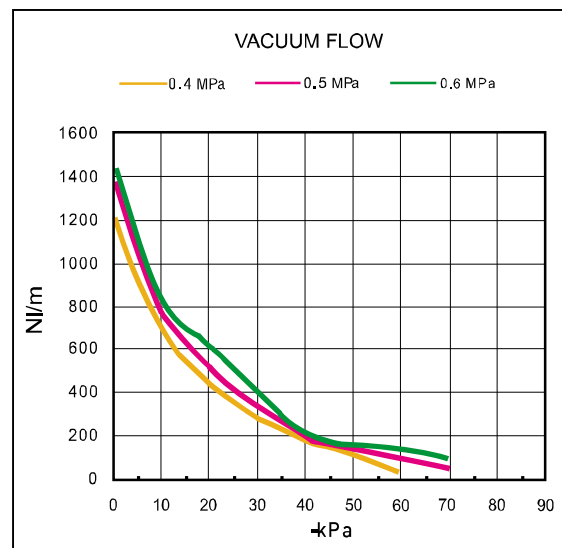
▼ PML 303 X2 ..



▼ PML 303 X3 ..



▼ PML 303 X4 ..



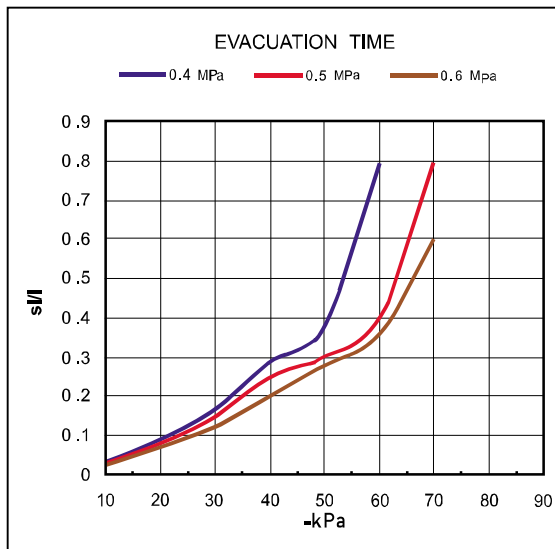
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Performance Data

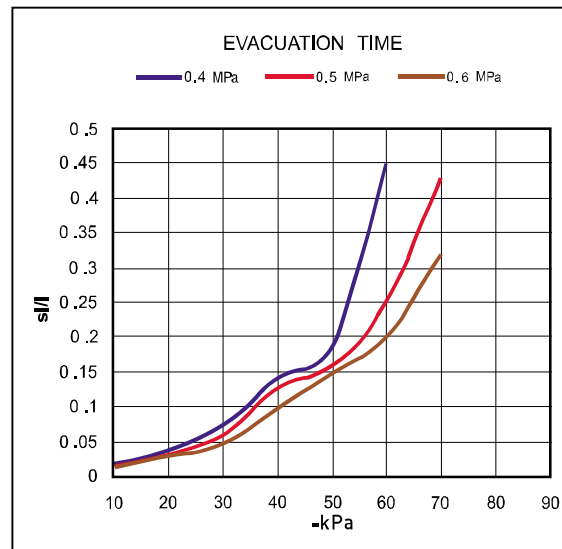
Time, s/l, to evacuate a volume to different vacuum levels -kPa(-mmHg)

Model	Feed pressure (MPa)	Air consumption (NI/min)	10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
PML 303X1..	0.4	70	0.032	0.09	0.17	0.29	0.38	0.8	-	-	-
	0.5	85	0.023	0.08	0.15	0.25	0.3	0.4	0.8	-	-
	0.6	104	0.022	0.07	0.12	0.2	0.28	0.36	0.6	-	-
PML 303X2..	0.4	140	0.017	0.037	0.073	0.14	0.19	0.45	-	-	-
	0.5	170	0.014	0.032	0.06	0.128	0.16	0.25	0.43	-	-
	0.6	208	0.012	0.03	0.047	0.098	0.15	0.2	0.32	-	-
PML 303X3..	0.4	210	0.016	0.03	0.05	0.09	0.12	0.26	-	-	-
	0.5	255	0.0085	0.028	0.05	0.08	0.1	0.13	0.26	-	-
	0.6	312	0.0079	0.02	0.04	0.06	0.09	0.12	0.2	-	-
PML 303X4..	0.4	280	0.0089	0.023	0.04	0.07	0.09	0.2	-	-	-
	0.5	340	0.0057	0.018	0.03	0.063	0.075	0.1	0.2	-	-
	0.6	416	0.0053	0.015	0.029	0.052	0.071	0.09	0.15	-	-

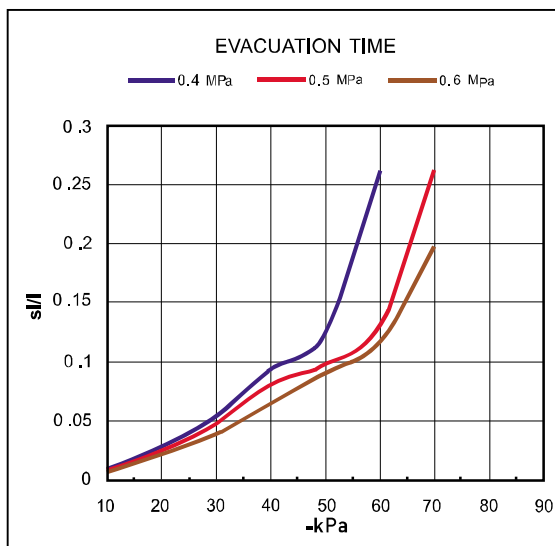
▼ PML 303 X1 ..



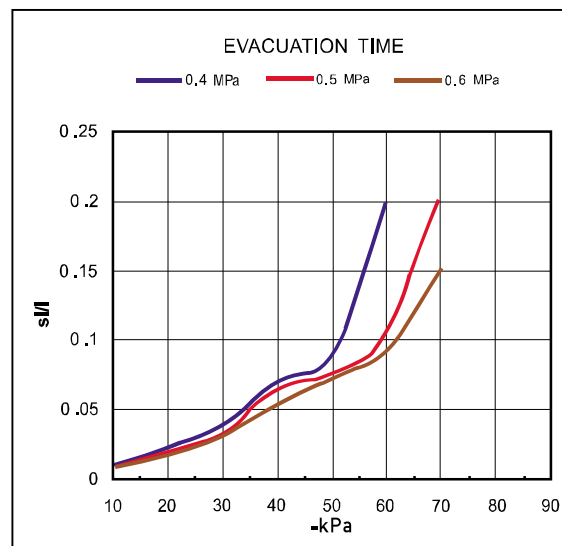
▼ PML 303 X2 ..



▼ PML 303 X3 ..



▼ PML 303 X4 ..

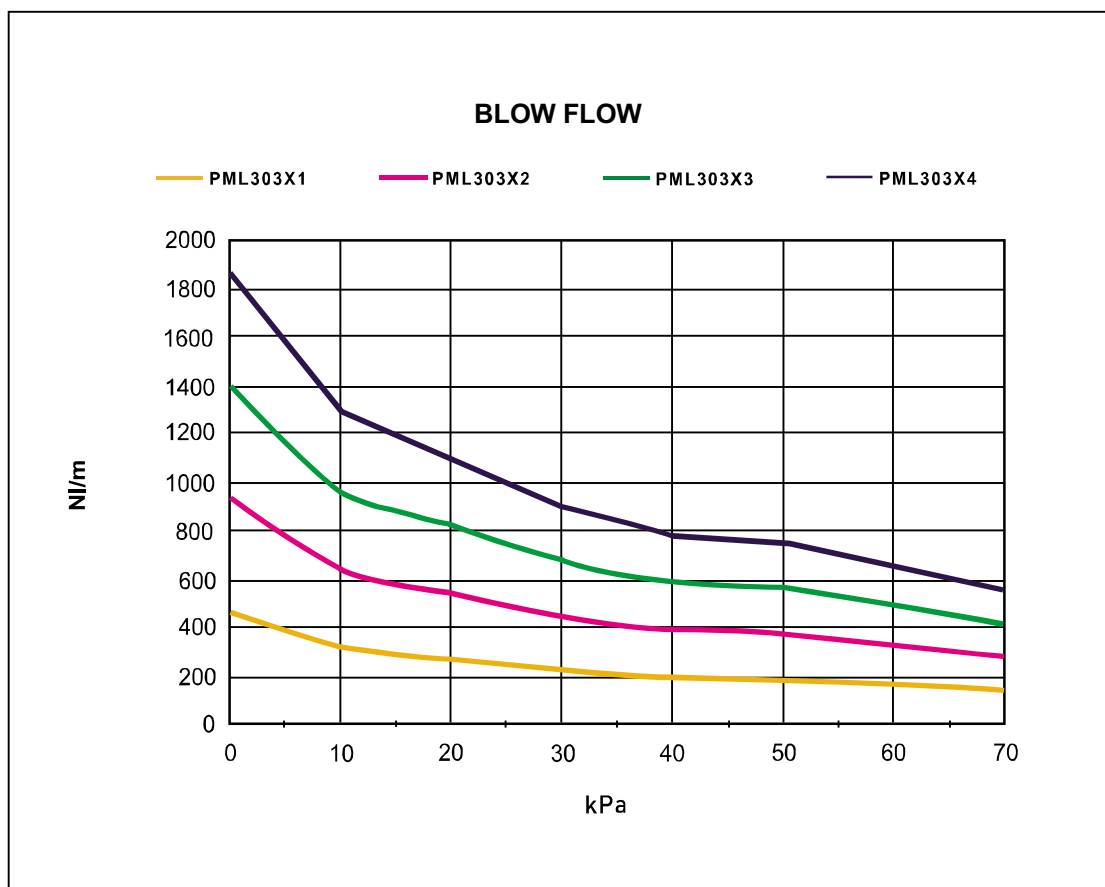


Performance Data

Blow flow, NI/min, at different internal pressure levels kPa (mmHg)

Model	Feed pressure (MPa)	Air consumption (NI/min)	0 (0)	10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)
PML 303X1..	0.6	104	470	320	272	225	196	189	165	140
PML 303X2..	0.6	208	940	640	544	450	392	378	330	280
PML 303X3..	0.6	312	1404	966	822	678	589	564	492	416
PML 303X4..	0.6	416	1868	1284	1096	904	784	752	656	556

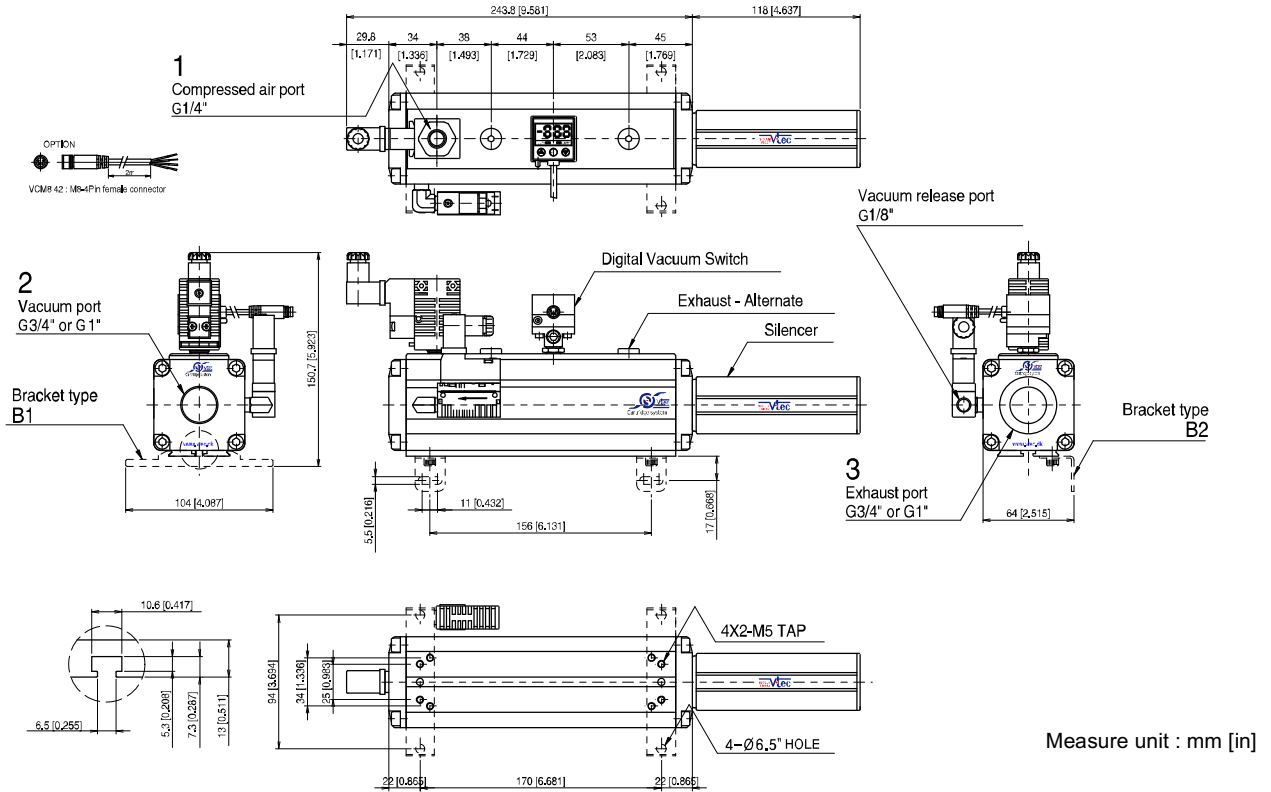
※ Remark : Choose the 'A' body type (Vacuum port on side) for blowing function.



Dimensional Information

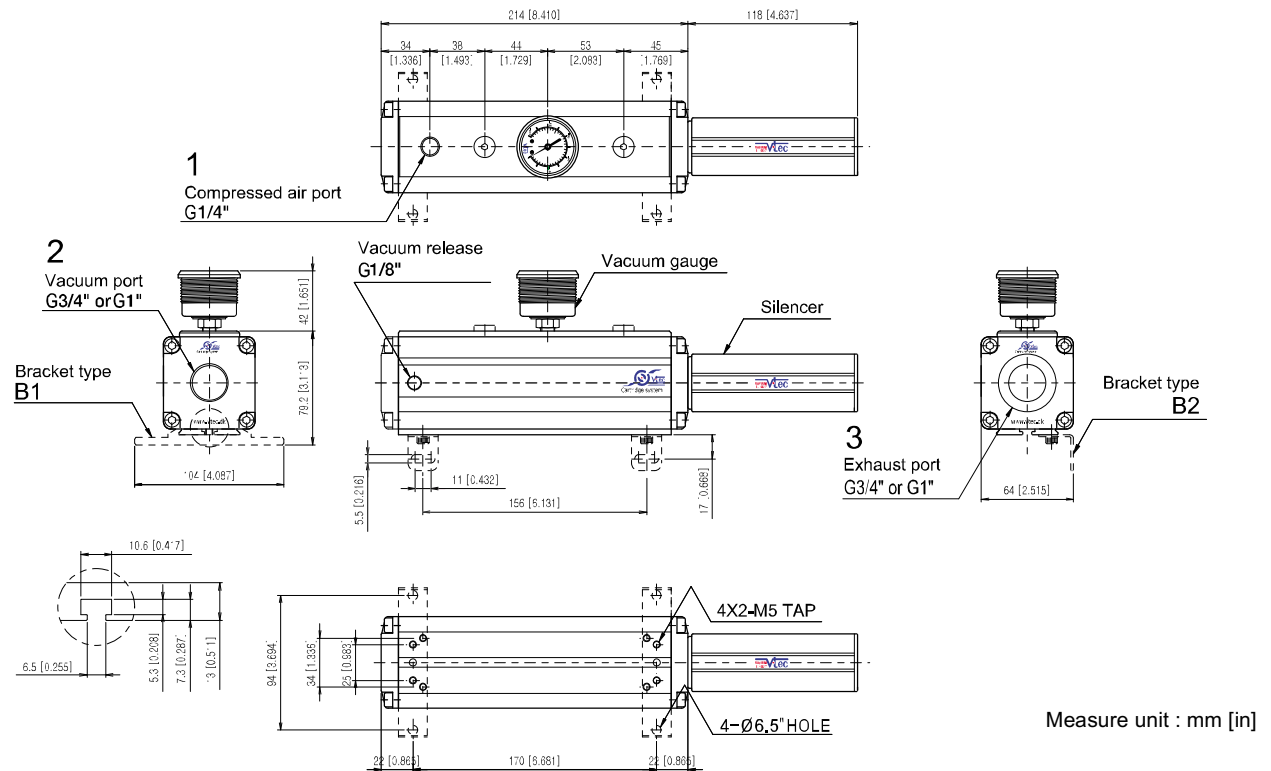
With Air Control valve, Vacuum release control valve, Digital vacuum switch

▼Series PM 303X()..A.. / PML 303X()..A..



Standard

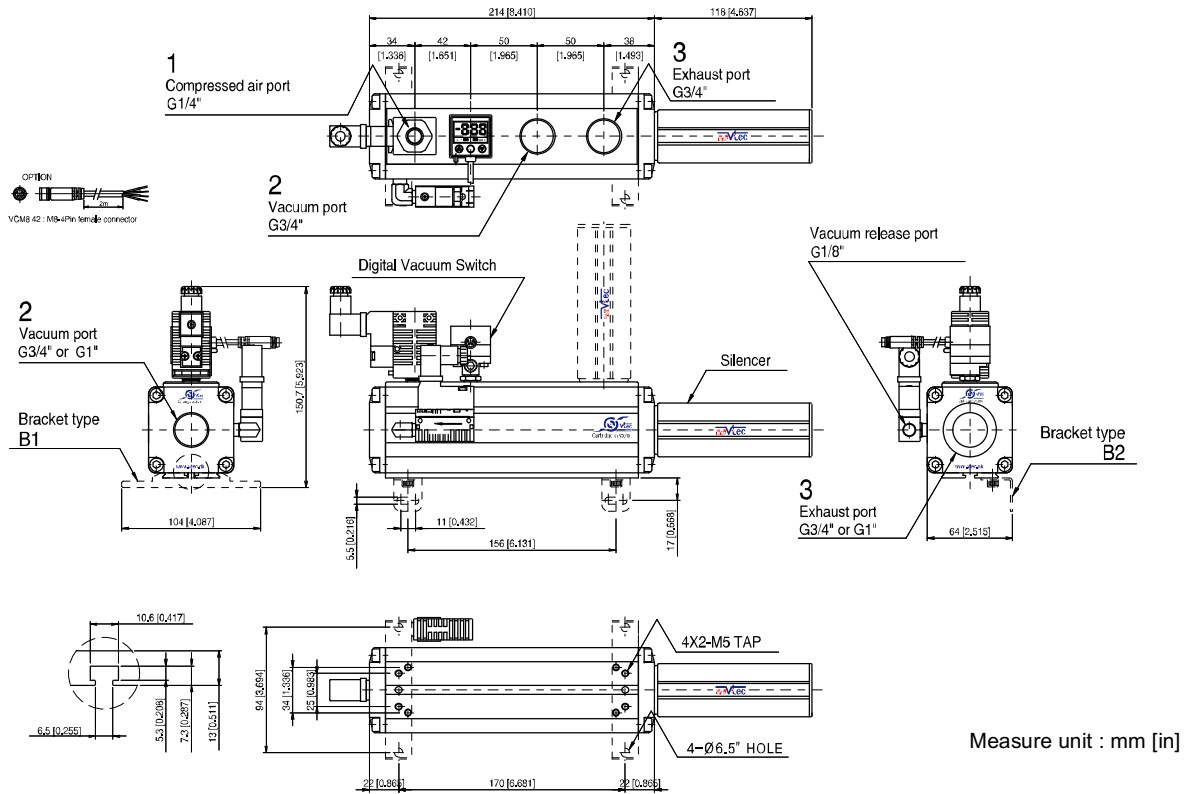
▼Series PM 303X()..A.. / PML 303X()..A..



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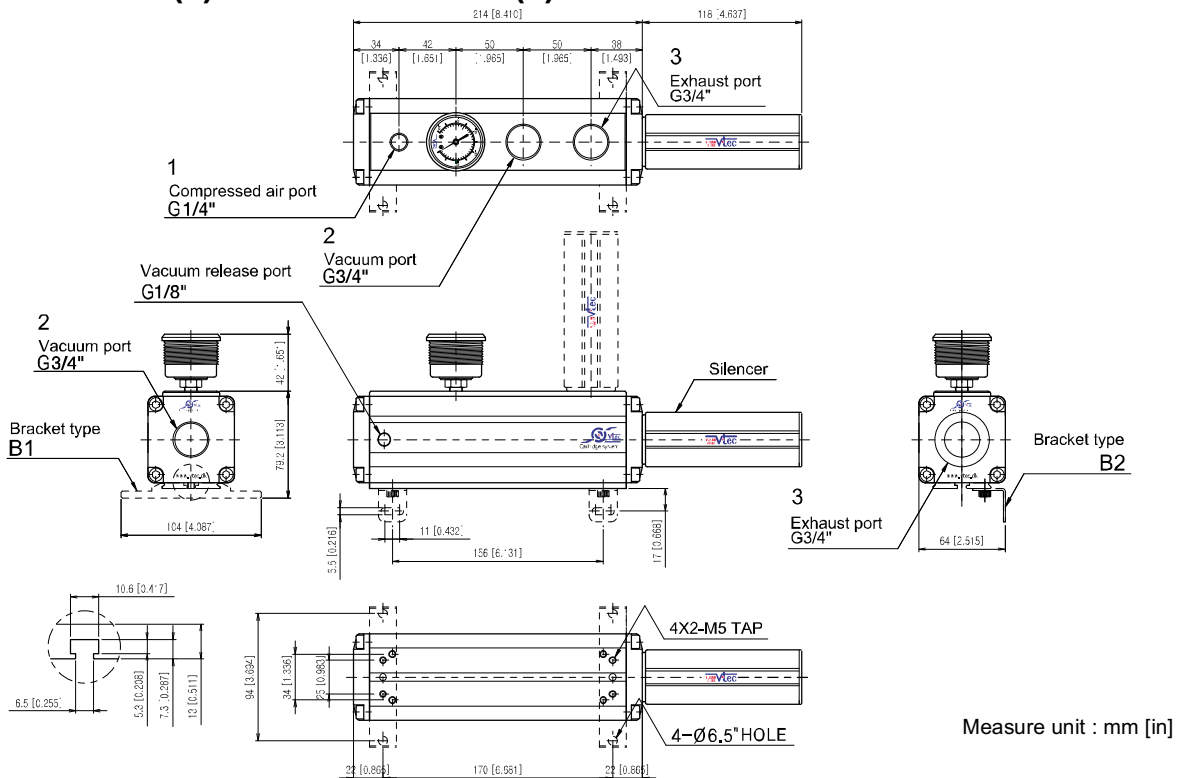
With Air Control valve, Vacuum release control valve, Digital vacuum switch

▼ Series PM 303X()..B.. / PML 303X()..B..



Standard

▼ Series PM 303X()..B.. / PML 303X()..B..



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