

MDL-Series

- Max. vacuum level : -22.15 inHg (-75 kPa)
- Max. flow rate : 12.79 scfm (362 NI/min)
- Supply air pressure : 58~87 psi, max 101.5psi (4~6bar, max 7bar)
- Air consumption : 2.47~3.67 scfm (70~104 NI/min)
- Supply air type : Dry compressed air
- Working temperature : -4 °F ~ +176 °F
- Noise level : 50~60 dBA



Main Advantages

- Located at or near the point of use thus reducing system volume, increase and reducing cycle time
- Compact in size and light weight
- Maintain vacuum despite fluctuations and drops in air pressure
- VMECA TWOFOLD SILENCER^{PT} assures low noise levels (about 30% lower than conventional silencer)
- Adjustable exhaust direction
- Optional Air-saving kit (AS-KIT) available to minimize energy consumption.
- Optional factory installed air control / vacuum release valves and digital vacuum switch available.
- Easily mountable and interchangeable vacuum cartridge (save the maintenance time)

Order No.

MDL 303 S - NF34 AS A3 R3 - CL A - S2 - N V

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

① Model

- **MDL 303** - 3 stage nozzle
- MDL 302 - 2 stage nozzle

② Exhaust type

- **S*** - Twofold Silencer
- P - G3/8" port

*S : Only for MDL303..

③ Vacuum port

- **NF34** - NPSF 3/4"
- NH22* - 0.86" Hole

* NH22 : For direct installation

④ Air saving kit

No mark - Standard

- **AS** - Air saving kit

⑤ 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 ⑦

⑥ Voltage of vacuum release control valve

R1 - AC110V
R2 - AC220V

- **R3** - DC24V

⑦ 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'**
(See page : 336, 337)

⑧ Vacuum release flow adjust

No mark - Standard

- **A** - Attached

⑨ Vacuum switch

No mark - Vacuum gauge.

- **S2(P)** - Digital display output 2points, No analog supply M8-4Pin Connector type 0.3m lead wire.
- SG2(P) - Digital display output 2 points, No analog supply Grommet type 4-Core 2m lead wire.
- SG3(P) - Digital display 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 - Standard

- **N** - Non-return valve.

⑪ Sealing

No mark - Standard

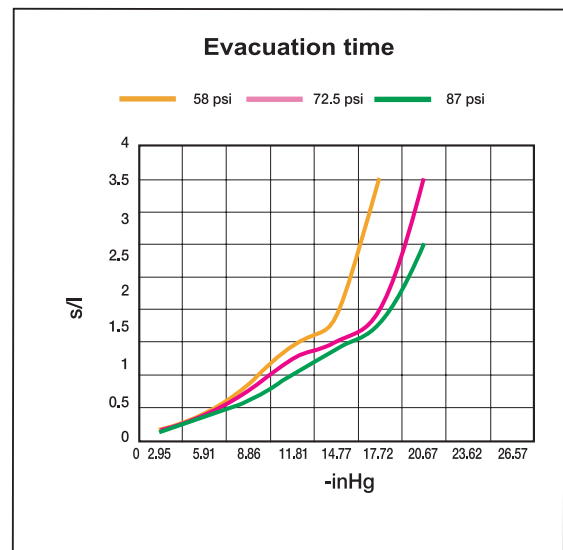
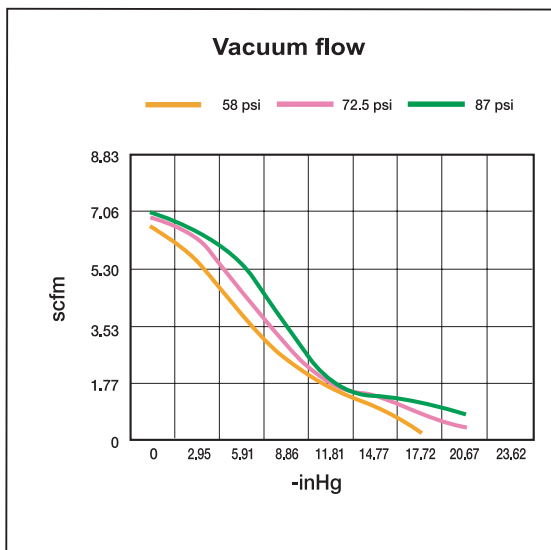
- **V** - Viton®
- E - EPDM

Performance Data

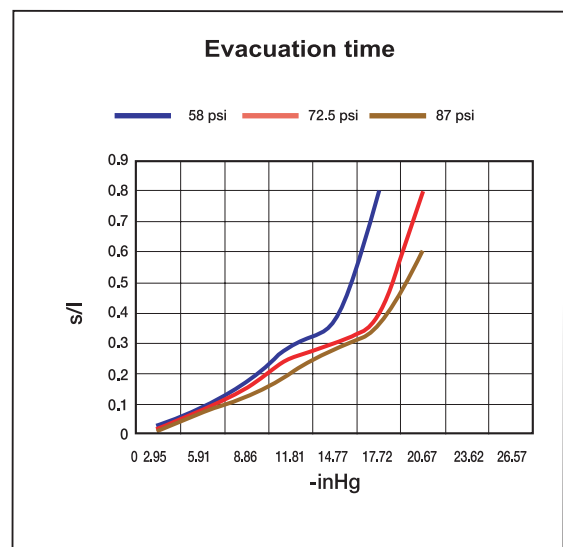
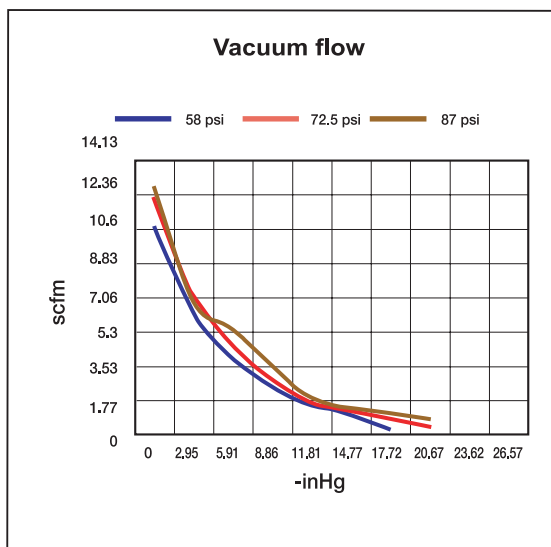
Model	MAX. Vacuum (-inHg)	Feed pressure (psi)	Vacuum flow (scfm) at different vacuum levels (-inHg)									
			0	2.95	5.9	8.85	11.8	14.76	17.7	20.67	23.62	26.57
MDL 302..	17.718	58	6.640	5.580	3.885	2.472	1.625	0.989	0.240	-	-	-
	20.671	72.5	6.887	6.216	4.591	2.896	1.766	1.324	0.812	0.399	-	-
	22.147	87	7.063	6.463	5.439	3.532	1.836	1.342	1.130	0.777	-	-
MDL 303..	17.718	58	10.666	6.216	3.885	2.472	1.625	0.989	0.240	-	-	-
	20.671	72.5	12.149	7.063	4.591	2.896	1.766	1.324	0.812	0.399	-	-
	22.147	87	12.785	6.851	5.439	3.532	1.836	1.342	1.130	0.777	-	-

Model	Feed pressure (psi)	Air consumption (scfm)	Time, s/l, to evacuate a volume to different vacuum levels (-inHg)									
			2.95	5.9	8.85	11.8	14.76	17.7	20.67	23.62	26.57	
MDL 302..	58	2.47	0.035	0.084	0.17	0.29	0.38	0.8	-	-	-	
	72.5	3.00	0.027	0.08	0.15	0.25	0.3	0.4	0.8	-	-	
	87	3.67	0.028	0.08	0.12	0.2	0.28	0.36	0.6	-	-	
MDL 303..	58	2.47	0.028	0.09	0.17	0.29	0.38	0.8	-	-	-	
	72.5	3.00	0.013	0.08	0.15	0.25	0.3	0.4	0.8	-	-	
	87	3.67	0.012	0.07	0.12	0.2	0.28	0.36	0.6	-	-	

▼ MDL-302..



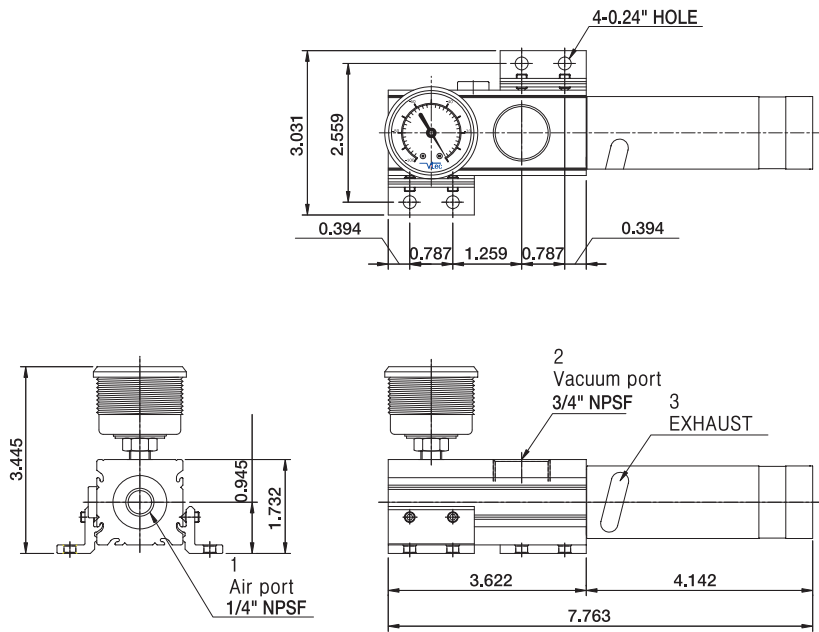
▼ MDL-303..



Dimensional Information

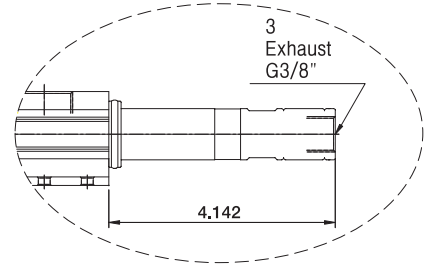
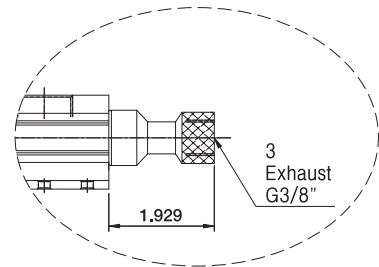
Standard

▼ Series MD 303 S - NF34.. / MDL 303 S - NF34..



[Measure unit : inch]

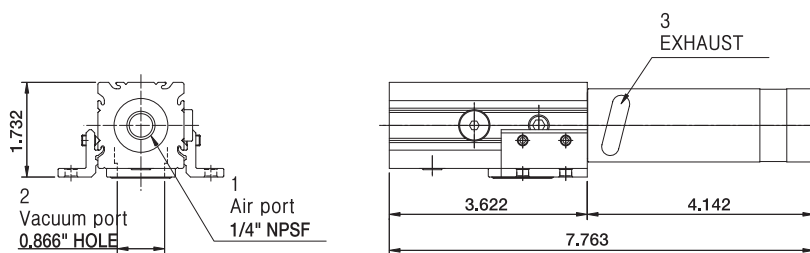
▼ Series MD 302 P.. MDL 302 P..



▲ Series MD 303 P.. MDL 303 P..

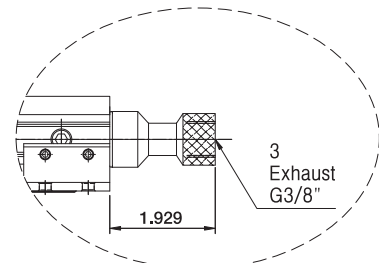
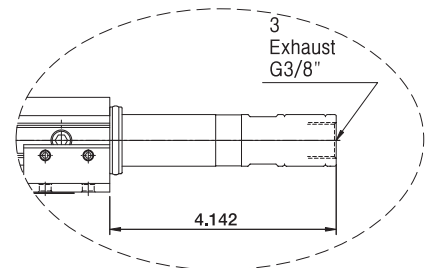
Standard

▼ Series MD 303 S - NH22.. / MDL 303 S - NH22..



[Measure unit : inch]

▼ Series MD 303 P.. MDL 303 P..

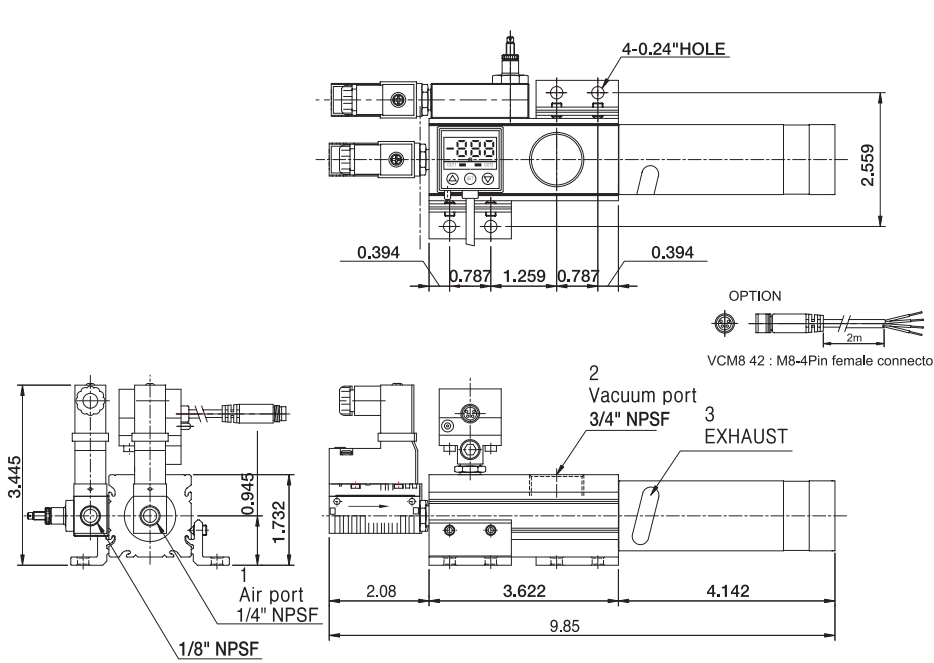


▲ Series MD 302 P.. MDL 302 P..

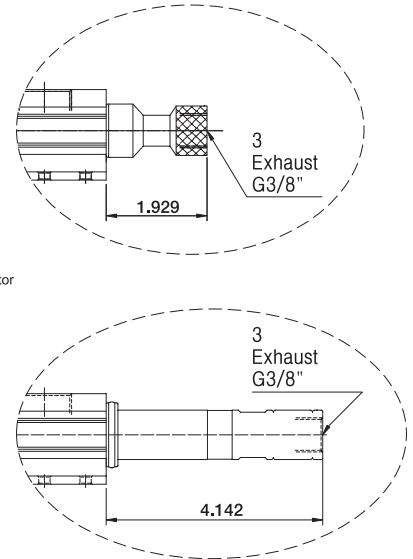
Dimensional Information

With Air Control valve, Vacuum Release Control valve and Digital Vacuum Switch

▼ **Series MD 303 S - NF34.. / MDL 303 S - NF34..**



▼ **Series MD 302 P..
MDL 302 P..**

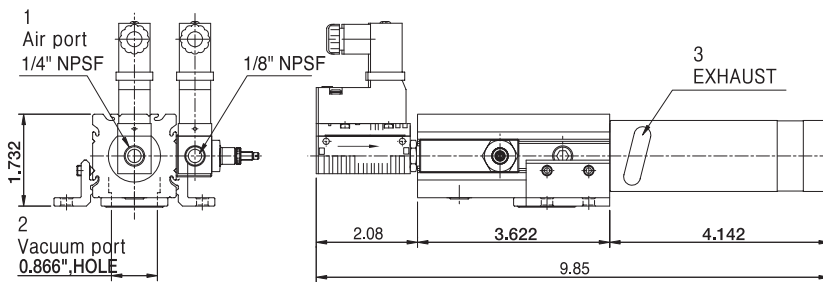


▲ **Series MD 303 P..
MDL 303 P..**

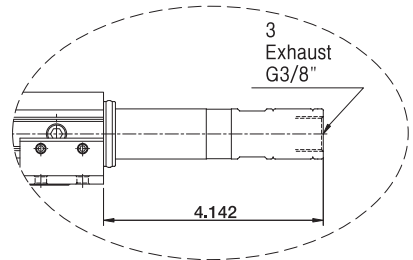
[Measure unit : inch]

With Air Control valve, Vacuum Release Control valve

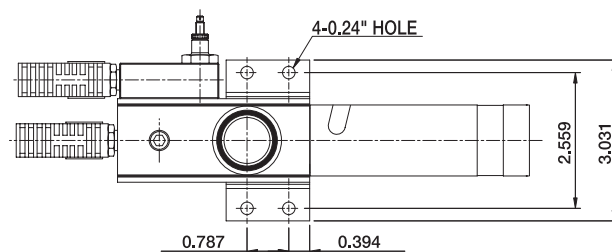
▼ **Series MD 303 S - NH22.. / MDL 303 S - NH22..**



▼ **Series MD 303 P..
MDL 303 P..**



▲ **Series MD 302 P..
MDL 302 P..**

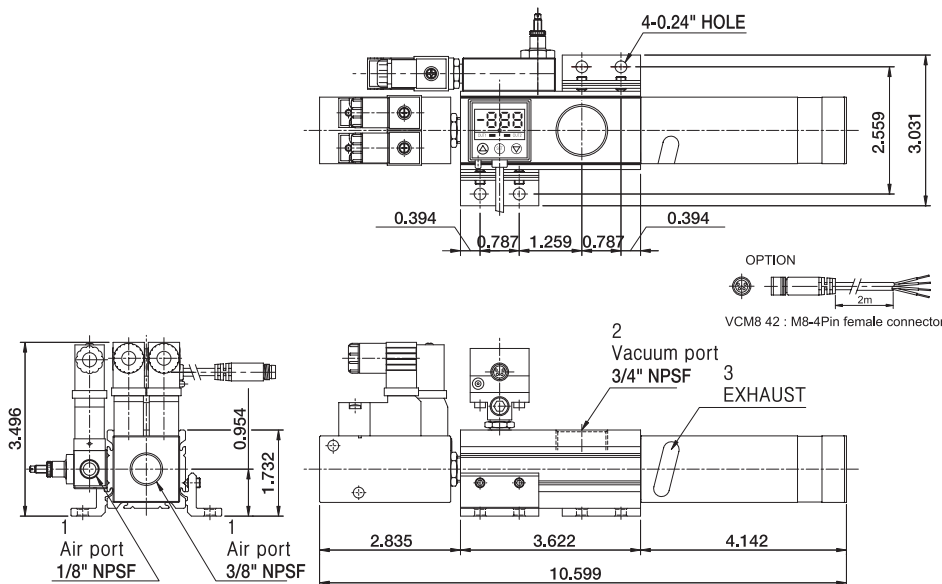


[Measure unit : inch]

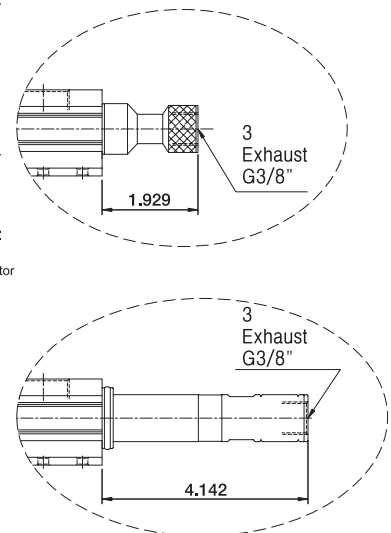
Dimensional Information

With Air Control valve (Double sol.type), Vacuum Release Control valve and Digital Vacuum Switch

▼ Series MD 303 S - NF34.. / MDL 303 S - NF34..



▼ Series MD 302 P.. MDL 302 P..

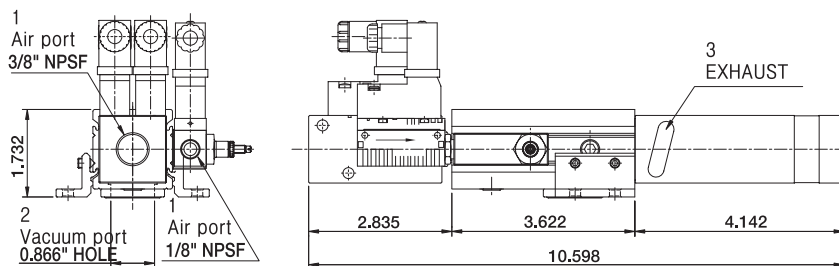


▲ Series MD 303 P.. MDL 303 P..

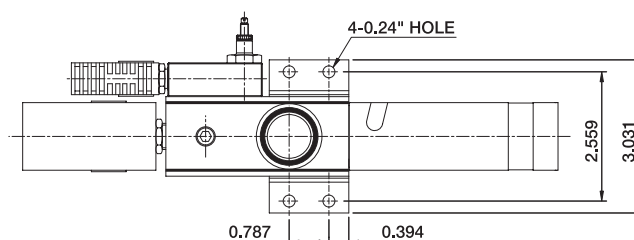
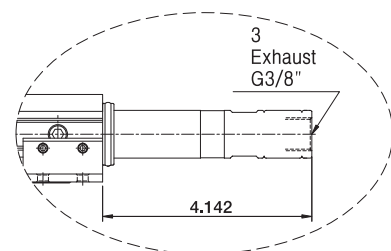
[Measure unit : inch]

With Air Control valve (Double sol.type), Vacuum Release Control valve

▼ Series MD 303 S - NH22.. / MDL 303 S - NH22..



▼ Series MD 303 P.. MDL 303 P..



▲ Series MD 302 P.. MDL 302 P..

[Measure unit : inch]