

MD-Series

- Max. vacuum level : -27.46 inHg (-93kPa)
- Max. flow rate : 12.04 scfm (341 NI/min)
- Supply air pressure : 43.5~87 psi, max 101.5psi
(3~6bar, max 7bar)
- Air consumption : 3.43~5.37 scfm (97~152 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.

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

①②③④⑤⑥⑦⑧⑨⑩⑪

① Model

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

② Exhaust type

- **S*** - Twofold Silencer
 - P - G3/8" port
- *S : Only for MD303..

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

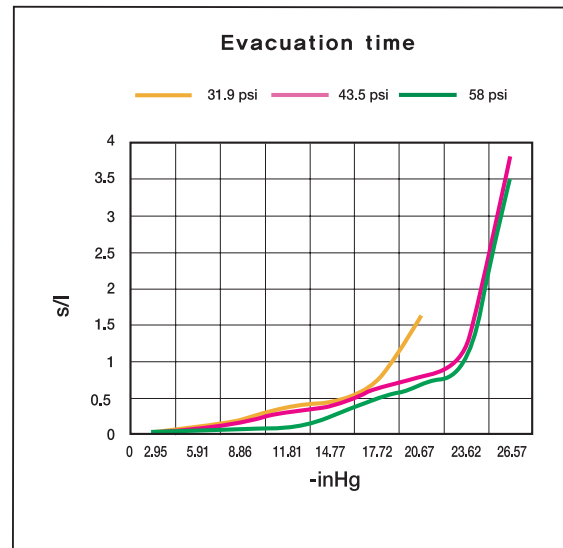
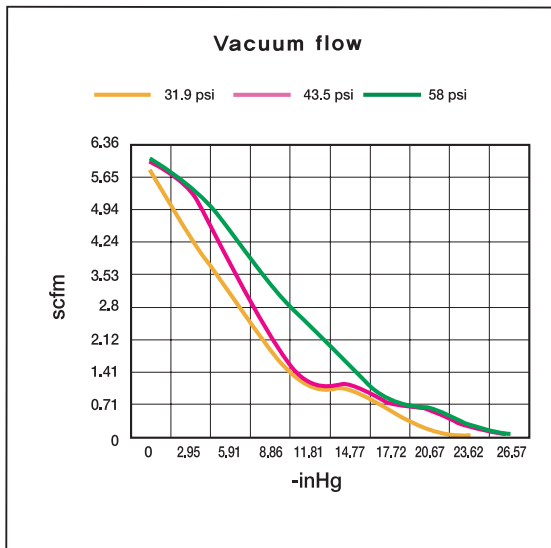
- No mark - Standard
- **V** - Viton®
- E** - EPDM

Performance Data

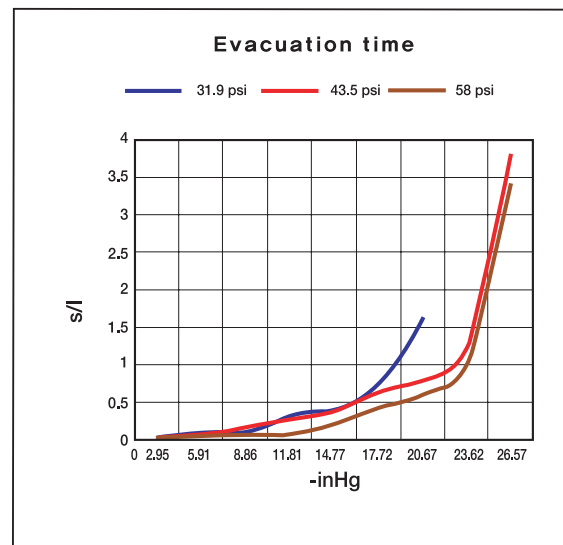
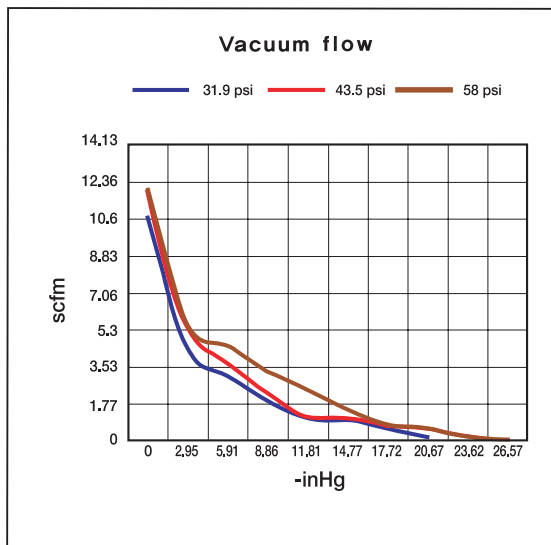
Model	MAX. Vacuum (-inHg)	Feed pressure (psi)	Vacuum flow (scfm) at different vacuum levels (-inHg)									
			0	2.95	5.9	8.85	11.8	14.76	17.7	20.67	23.62	26.57
MD 302..	22.147	31.9	5.79	4.33	3.11	1.87	1.11	1.01	0.58	0.16	-	-
	27.463	43.5	6	5.37	3.74	2.26	1.17	1.13	0.78	0.58	0.23	0.067
	27.463	58	6.04	5.44	4.5	3.32	2.44	1.52	0.82	0.61	0.24	0.074
MD 303..	22.147	31.9	10.67	4.33	3.11	1.87	1.11	1.01	0.58	0.16	-	-
	27.463	43.5	11.94	5.37	3.74	2.26	1.17	1.13	0.78	0.58	0.23	0.067
	27.463	58	12.04	5.44	4.5	3.32	2.44	1.52	0.82	0.61	0.24	0.074

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
MD 302..	31.9	3.43	0.03	0.12	0.21	0.38	0.47	0.73	1.62	-	-
	43.5	4.17	0.027	0.1	0.19	0.3	0.4	0.64	0.8	1.2	3.8
	58	5.37	0.026	0.058	0.09	0.1	0.25	0.5	0.69	1.05	3.5
MD 303..	31.9	3.43	0.019	0.09	0.1	0.32	0.42	0.73	1.62	-	-
	43.5	4.17	0.015	0.07	0.18	0.28	0.38	0.64	0.8	1.2	3.8
	58	5.37	0.01	0.048	0.07	0.09	0.2	0.42	0.6	1	3.4

▼ MD-302..



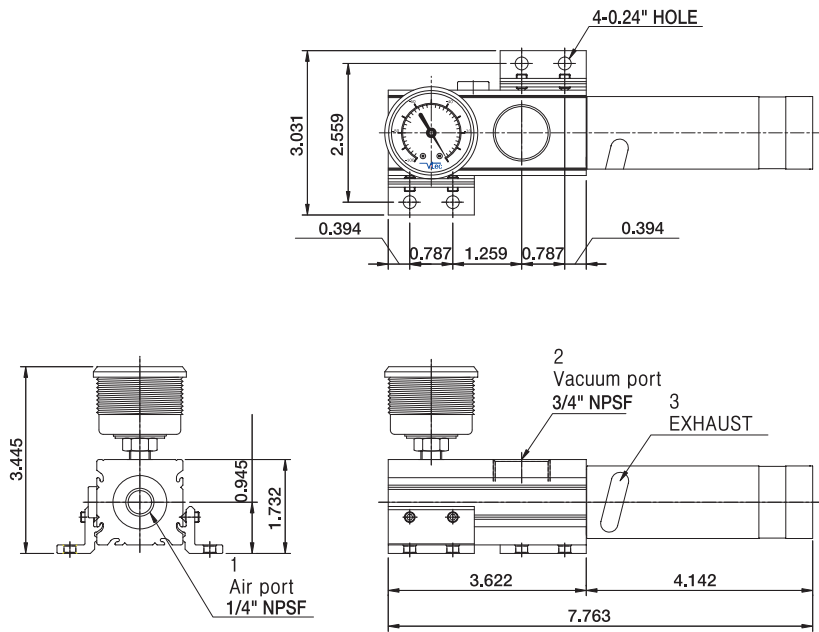
▼ MD-303..



Dimensional Information

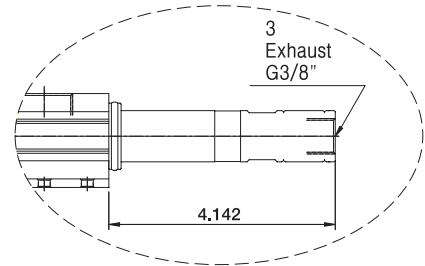
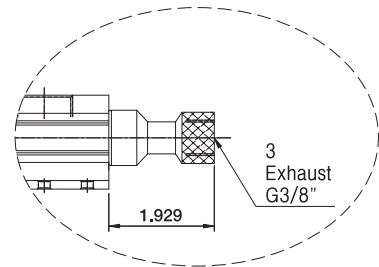
Standard

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



[Measure unit : inch]

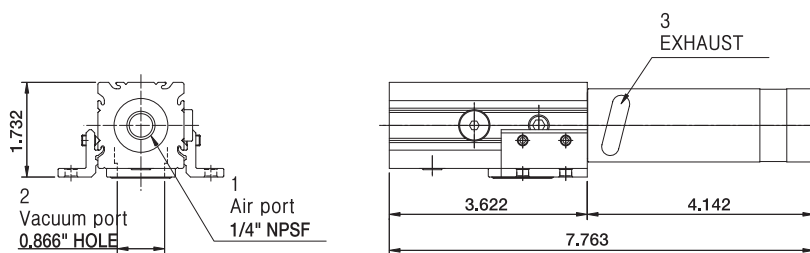
▼ Series MD 302 P.. MDL 302 P..



▲ Series MD 303 P.. MDL 303 P..

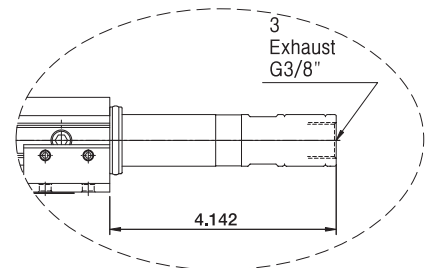
Standard

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

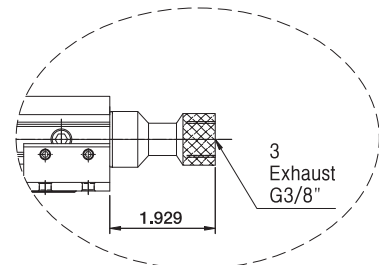


[Measure unit : inch]

▼ Series MD 303 P.. MDL 303 P..



▲ Series MD 302 P.. MDL 302 P..

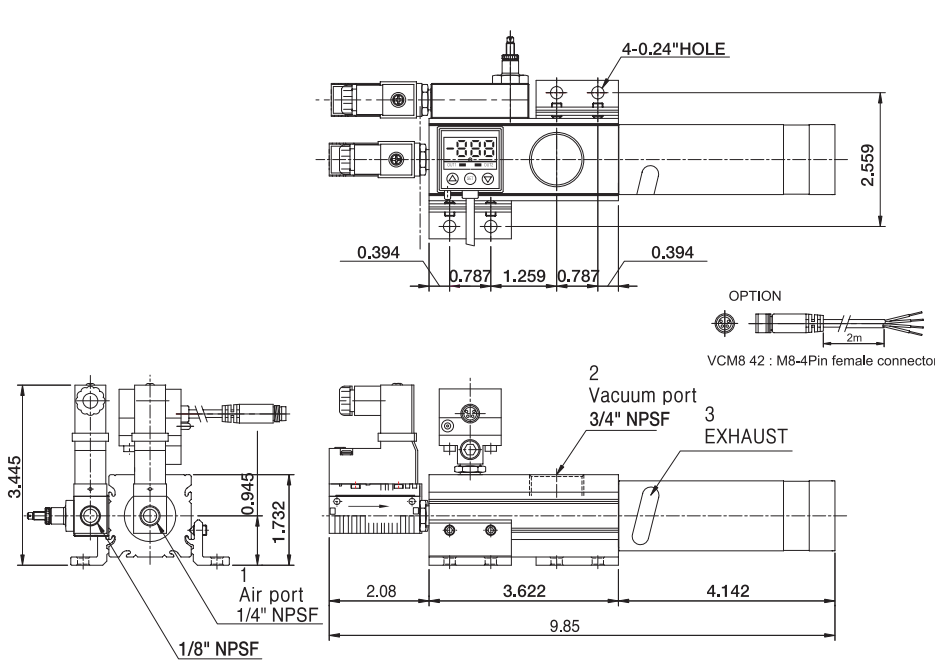


VACUUM PUMPS

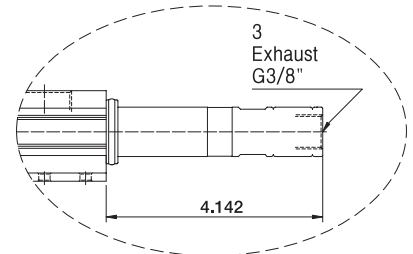
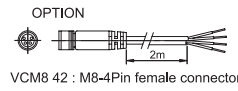
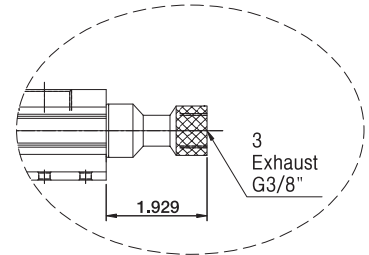
Dimensional Information

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..

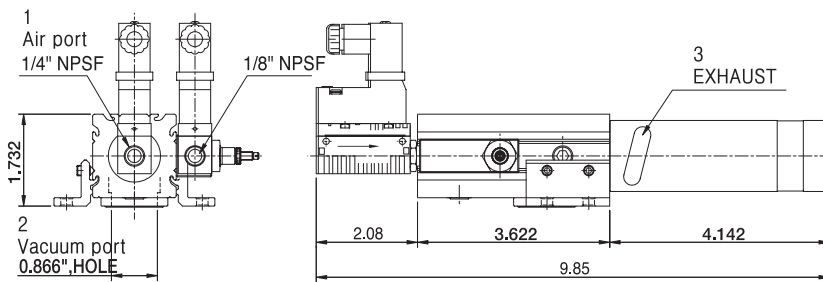


▲ Series MD 303 P.. MDL 303 P..

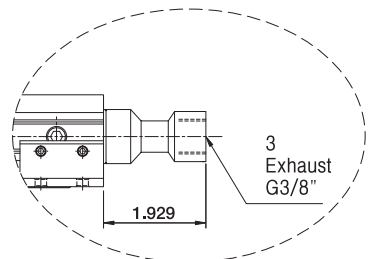
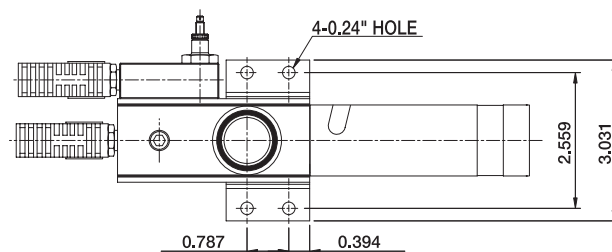
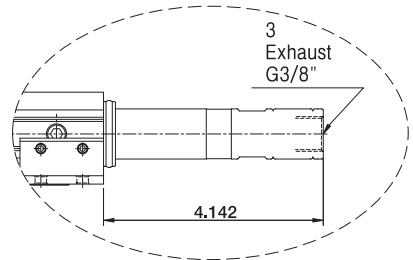
[Measure unit : inch]

With Air Control valve, Vacuum Release Control valve

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



▼ Series MD 303 P.. MDL 303 P..



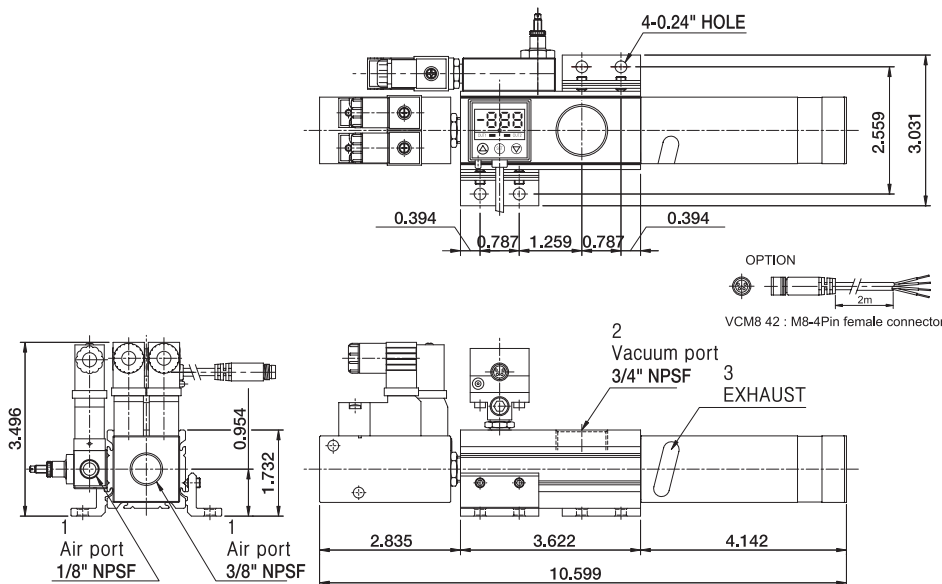
▲ Series MD 302 P.. MDL 302 P..

[Measure unit : inch]

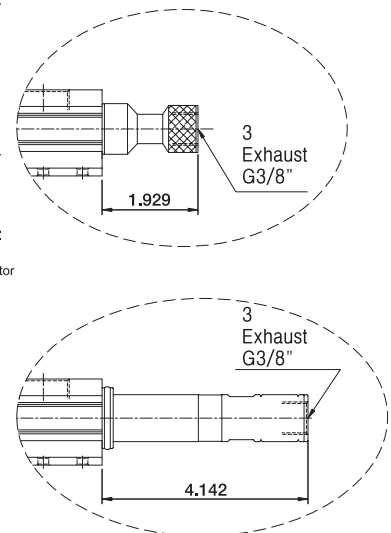
Dimensional Information

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..

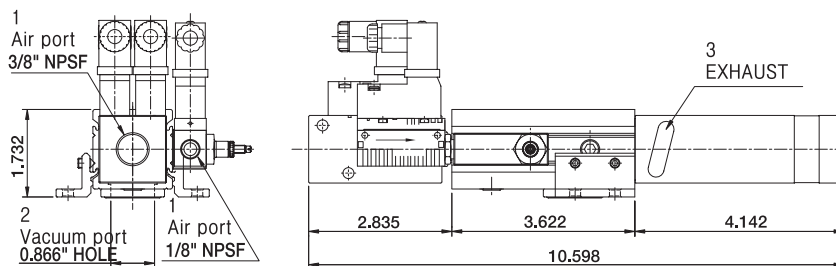


▲ Series MD 303 P.. MDL 303 P..

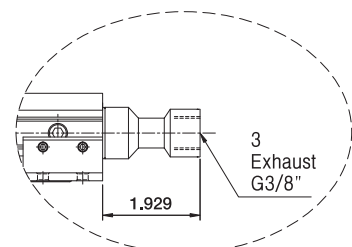
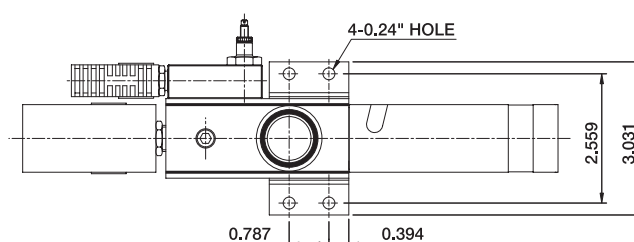
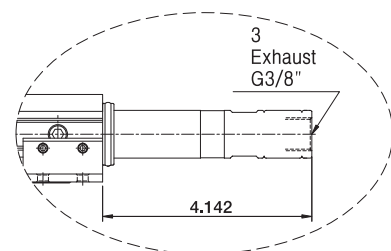
[Measure unit : inch]

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]