

MDL-Series

- Max. vacuum level : -75 kPa (-22.15 inHg)
- Max. flow rate : 362 NI/min (12.79 scfm)
- Supply air pressure : 4 ~ 6 bar, max 7 bar
(58~87 psi, max 101.5 psi)
- Air consumption : 70~104 NI/min (2.47~3.67 scfm)
- Supply air type : Dry compressed air
- Working temperature : -20°C to +80°C
- 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 - 34 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

- **34** - G3/4"
- H22* - Ø22Hole

* H22 : For direct installation

④ Air saving kit (108)

- 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' (134, 341)

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

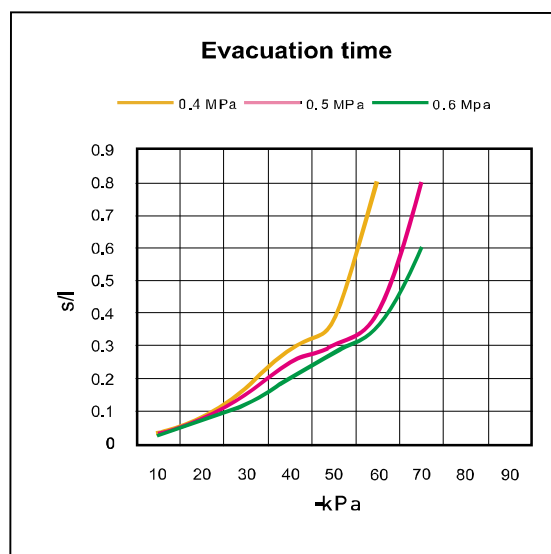
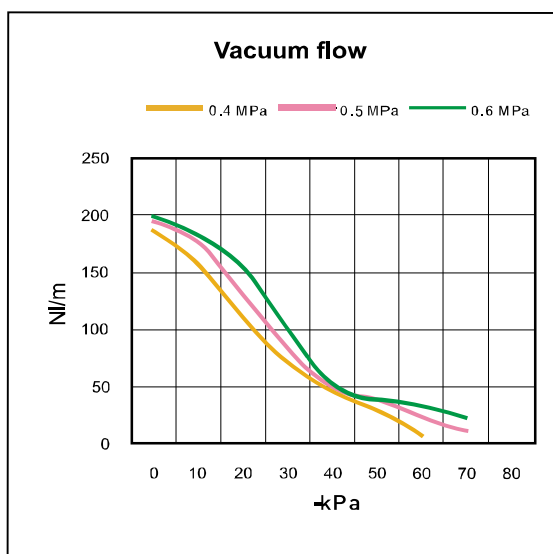
- No mark - Standard
- **V** - Viton®
- E - EPDM

Performance Data

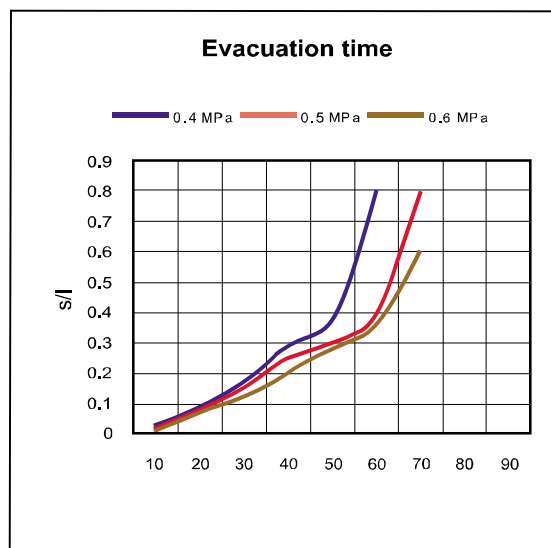
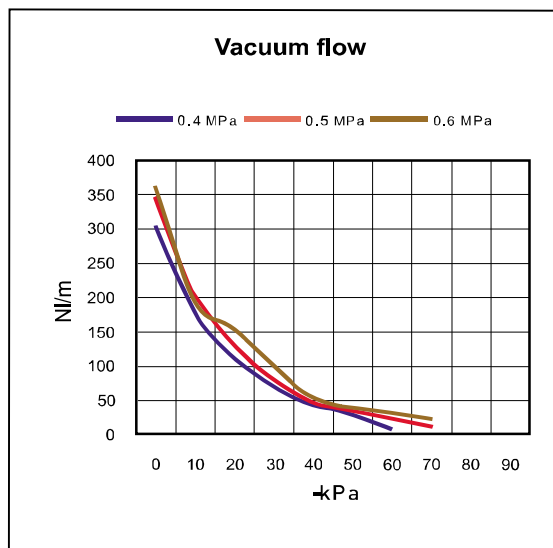
Model	MAX. Vacuum (-kPa)	Feed pressure (MPa)	Vacuum flow, NI/min, at different vacuum levels -kPa (-mmHg)									
			0 (0)	10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
MDL 302..	60	0.4	188	158	110	70	46	28	6.8	-	-	-
	70	0.5	195	176	130	82	50	37.5	23	11.3	-	-
	75	0.6	200	183	154	100	52	38	32	22	-	-
MDL 303..	60	0.4	302	176	110	70	46	28	6.8	-	-	-
	70	0.5	344	200	130	82	50	37.5	23	11.3	-	-
	75	0.6	362	194	154	100	52	38	32	22	-	-

Model	Feed pressure (MPa)	Air consumption (NI/min)	Time, s/l, to evacuate a volume to different vacuum levels -kPa (-mmHg)									
			10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)	
MDL 302..	0.4	70	0.035	0.084	0.17	0.29	0.38	0.8	-	-	-	
	0.5	85	0.027	0.08	0.15	0.25	0.3	0.4	0.8	-	-	
	0.6	104	0.028	0.08	0.12	0.2	0.28	0.36	0.6	-	-	
MDL 303..	0.4	70	0.028	0.09	0.17	0.29	0.38	0.8	-	-	-	
	0.5	85	0.013	0.08	0.15	0.25	0.3	0.4	0.8	-	-	
	0.6	104	0.012	0.07	0.12	0.2	0.28	0.36	0.6	-	-	

▼ MDL-302..



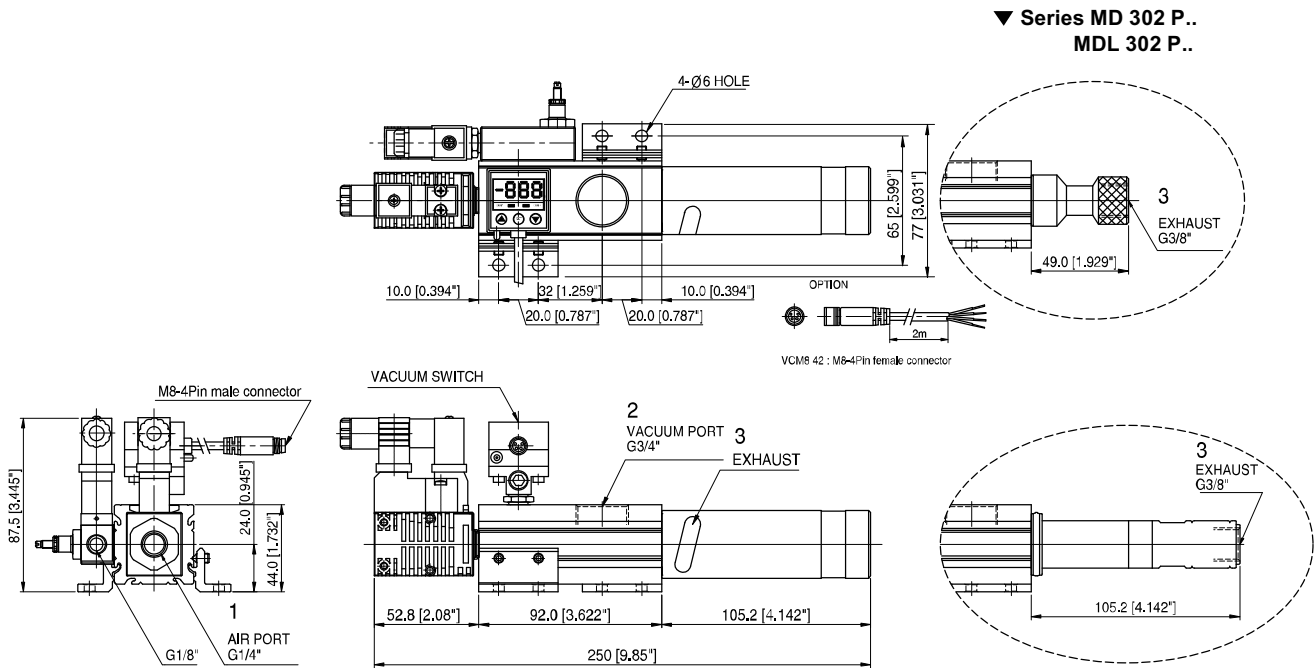
▼ MDL-303..



Dimensional Information

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

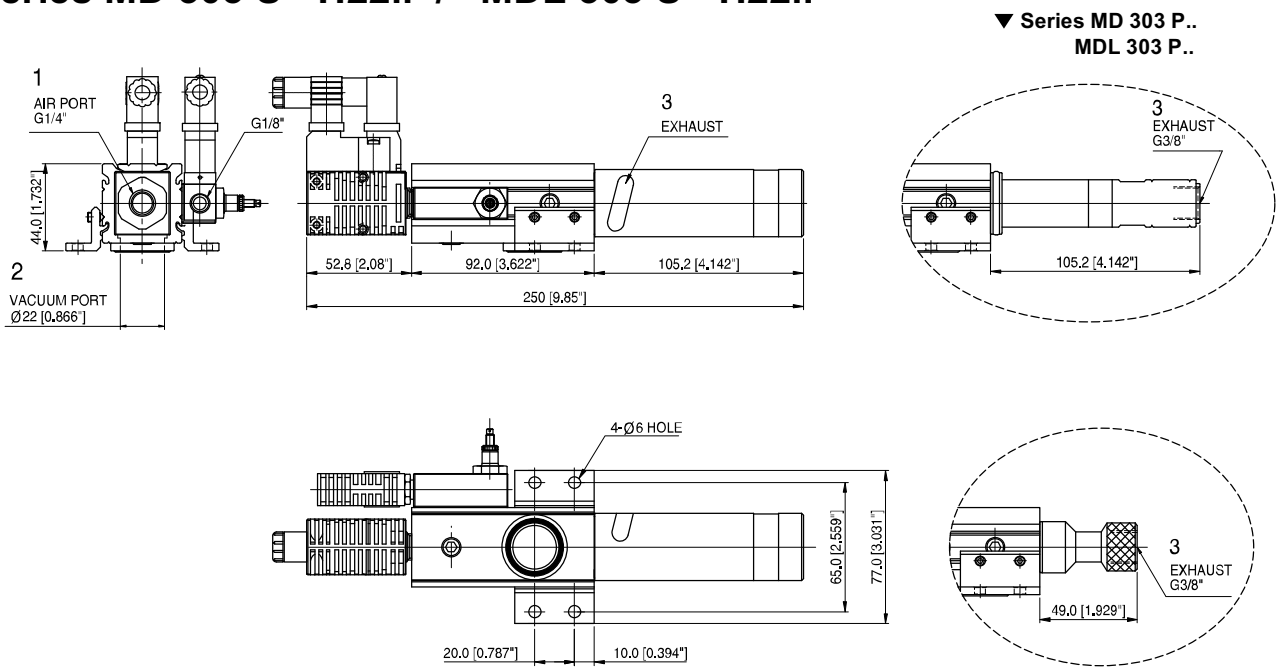
▼ Series MD 303 S - 34.. / MDL 303 S - 34..



Measure unit : mm [in]

With Air Control valve, Vacuum Release Control valve

▼ Series MD 303 S - H22.. / MDL 303 S - H22..



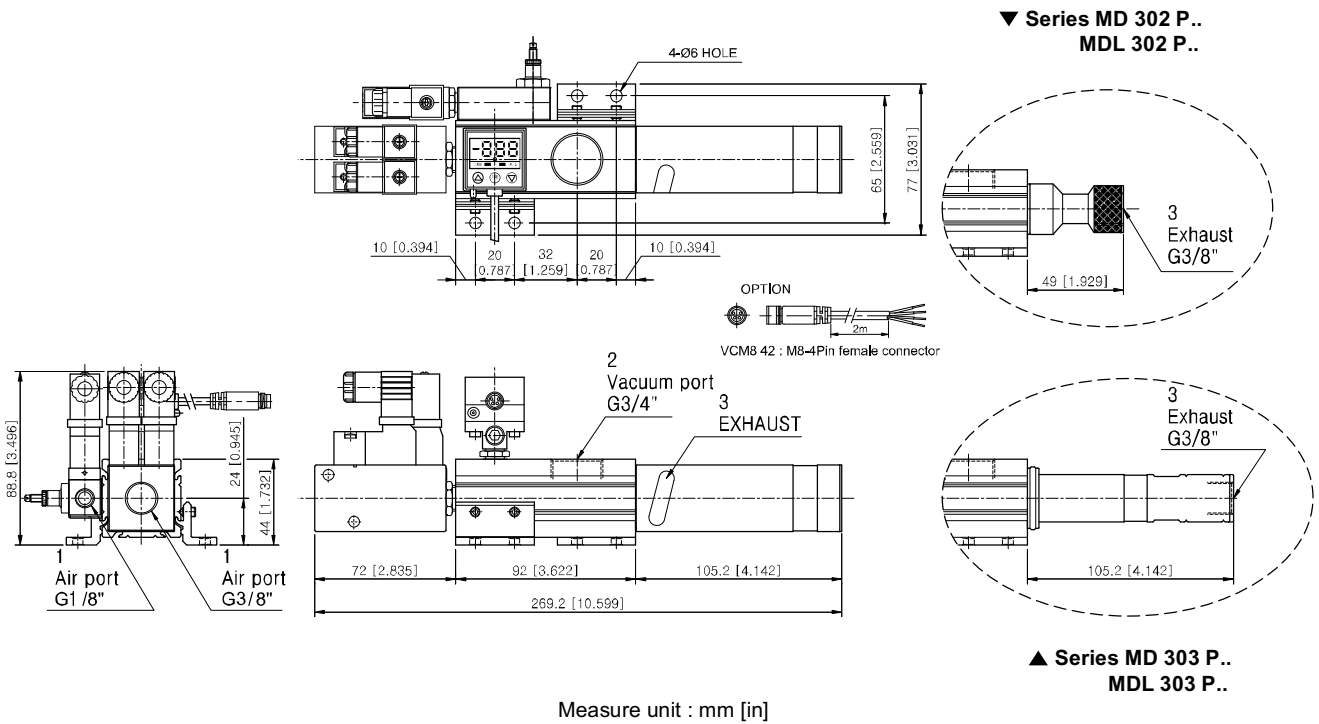
Measure unit : mm [in]

VACUUM PUMPS

Dimensional Information

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

▼ Series MD 303 S - 34.. / MDL 303 S - 34..

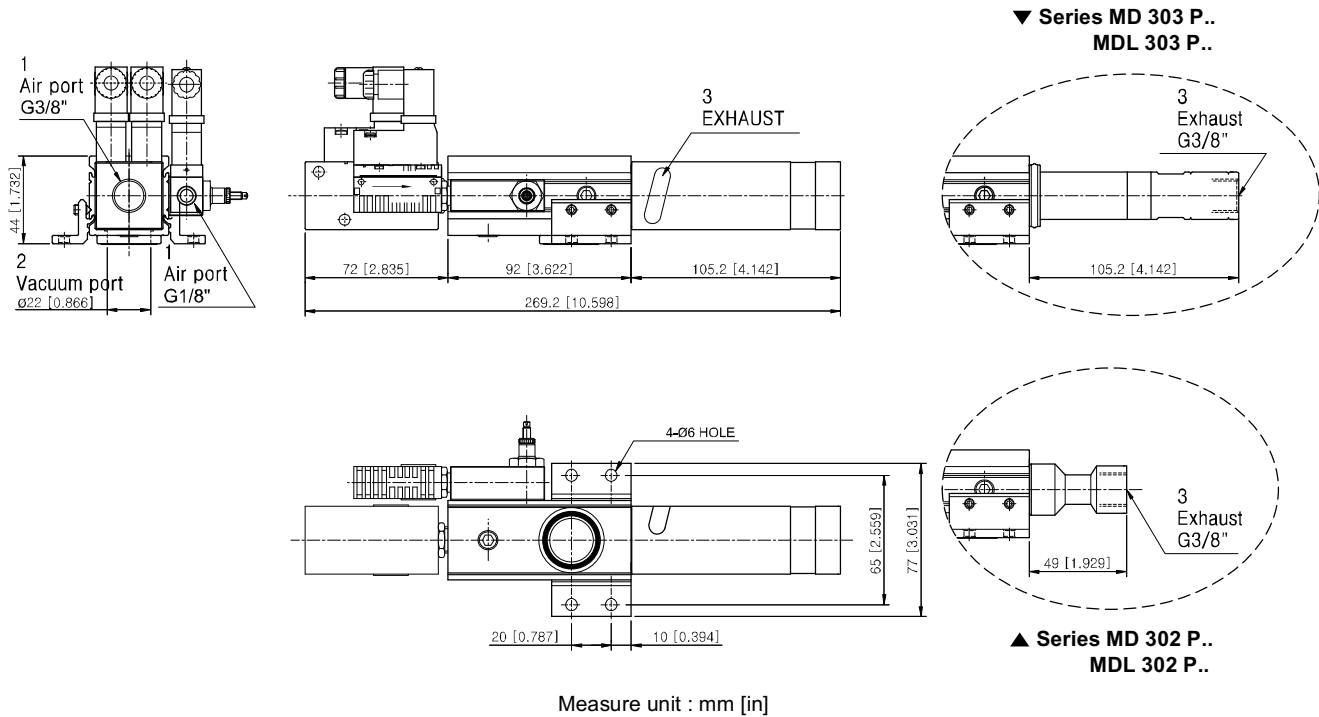


▼ Series MD 302 P..
MDL 302 P..

▲ Series MD 303 P..
MDL 303 P..

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

▼ Series MD 303 S - H22.. / MDL 303 S - H22..



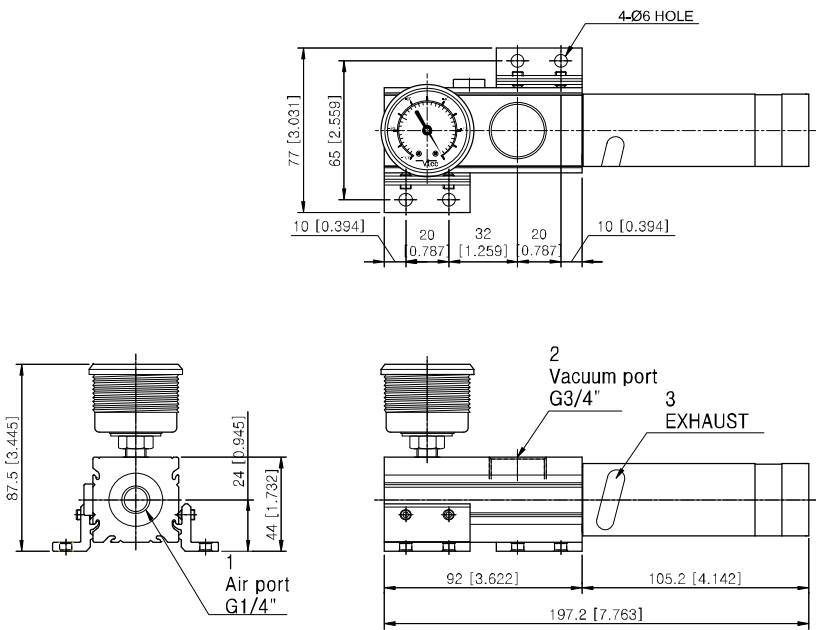
▼ Series MD 303 P..
MDL 303 P..

▲ Series MD 302 P..
MDL 302 P..

Dimensional Information

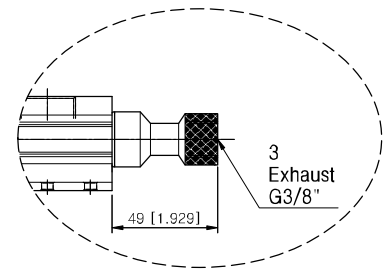
Standard

▼ Series MD 303 S - 34.. / MDL 303 S - 34..

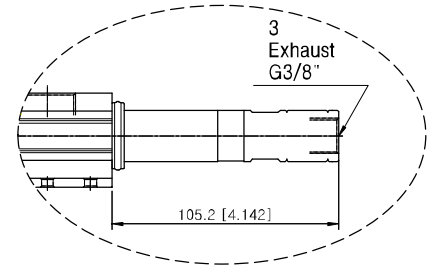


Measure unit : mm [in]

▼ Series MD 302 P.. / MDL 302 P..

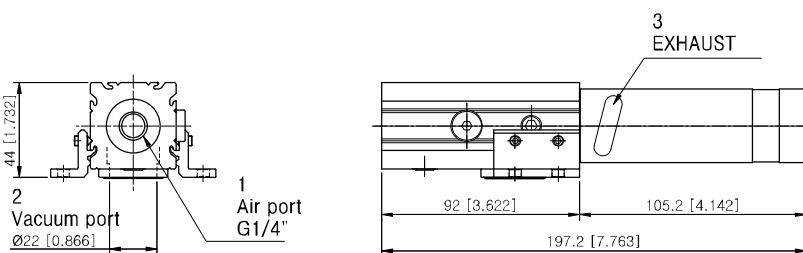


▲ Series MD 303 P.. / MDL 303 P..



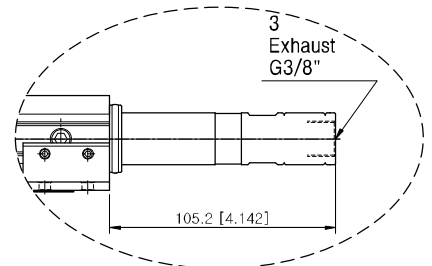
Standard

▼ Series MD 303 S - H22.. / MDL 303 S - H22..



Measure unit : mm [in]

▼ Series MD 303 P.. / MDL 303 P..



▲ Series MD 302 P.. / MDL 302 P..

