

## VS - Series

Max. vacuum level	: -93 kPa (-27.46 inHg)
Max. flow rate	: 341 NL/min (12.04 scfm)
Supply air pressure	: 3 ~ 6 bar, max 7 bar (43.5~87 psi, max 101.5 psi)
Air consumption	: 97~152 NL/min (3.43~5.37 scfm)
Supply air type	: Dry compressed air
Working temperature	: -20°C to +80°C
Noise level	: 50~60 dBA



## Main advantages

- High operational reliability despite fluctuating.
- Quick response time.
- VMECA Twofold Silencer™ assures low noise levels.
- Easy to distribute vacuum. (Multiple connection alternatives up to 9 ports.)
- Optional Air-Saving(AS)kit available to minimize energy consumption.
- Optional factory installed air control/vacuum release valves and vacuum switch available.
- Easily mountable and interchangeable vacuum cartridge.

## Order No.

VS 144 - AS - A3 R3 - CL A - S2 N V



### ① Vacuum Port

144 - G1/4" X 4EA
146 - G1/4" X 6EA
148 - G1/4" X 8EA

### ④ Voltage of vacuum release control valve

R1 - AC110V
R2 - AC220V
• R3 - DC24V

### ⑦ 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).

### ② Air saving kit (□ 108)

No mark - Standard
• AS - Air saving kit attached

### ⑤ 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)

### ③ 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 ⑤

### ⑧ Non-return valve

No mark - Standard

• N - Non-return valve.

### ⑨ Sealing

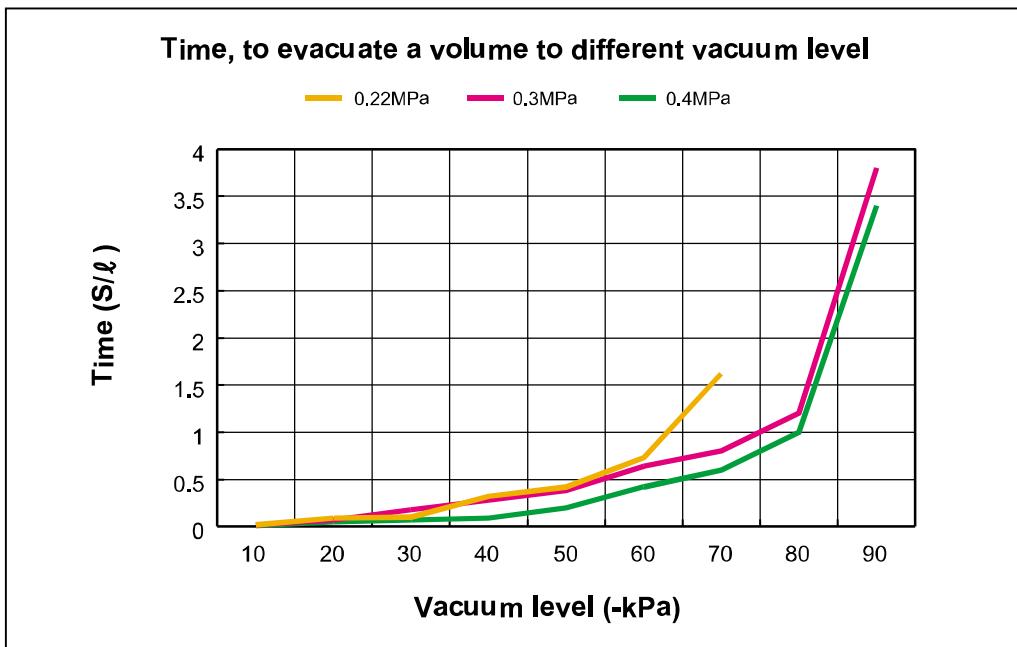
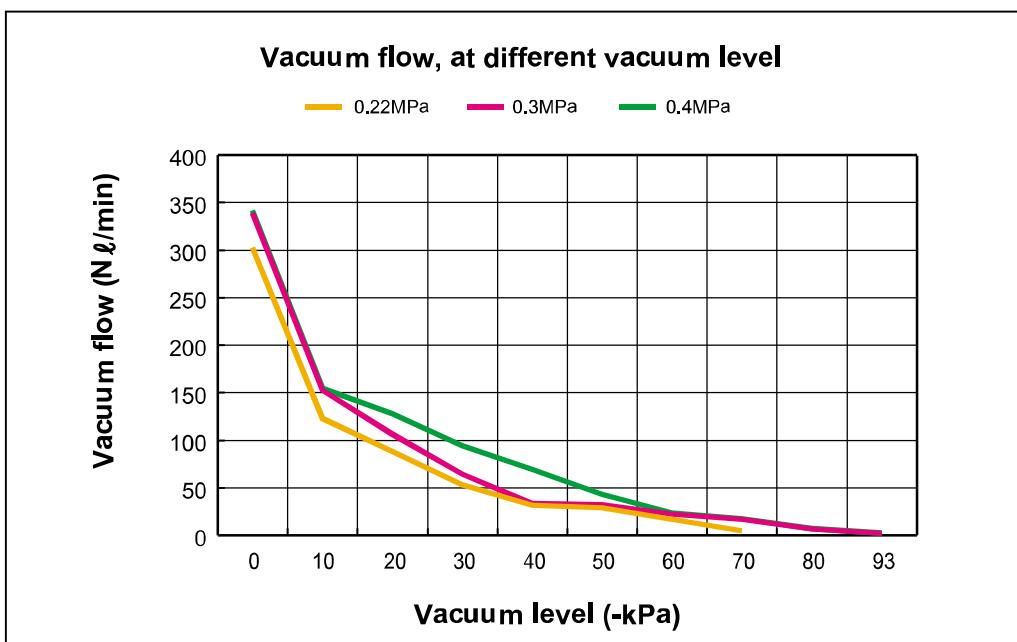
No mark - Standard

V - Viton®
E - EPDM

## Performance Data

Series	MAX. Vacuum (-kPa)	Feed pressure (MPa)	Vacuum flow, Nl/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)
VS	75	0.22	302	122.5	88	53	31.4	28.5	16.5	4.6	-	-
	93	0.3	338	152	106	64	33	32	22	16.5	6.4	1.9
	93	0.4	341	154	127.5	94	69	43	23.3	17.3	6.9	2.1

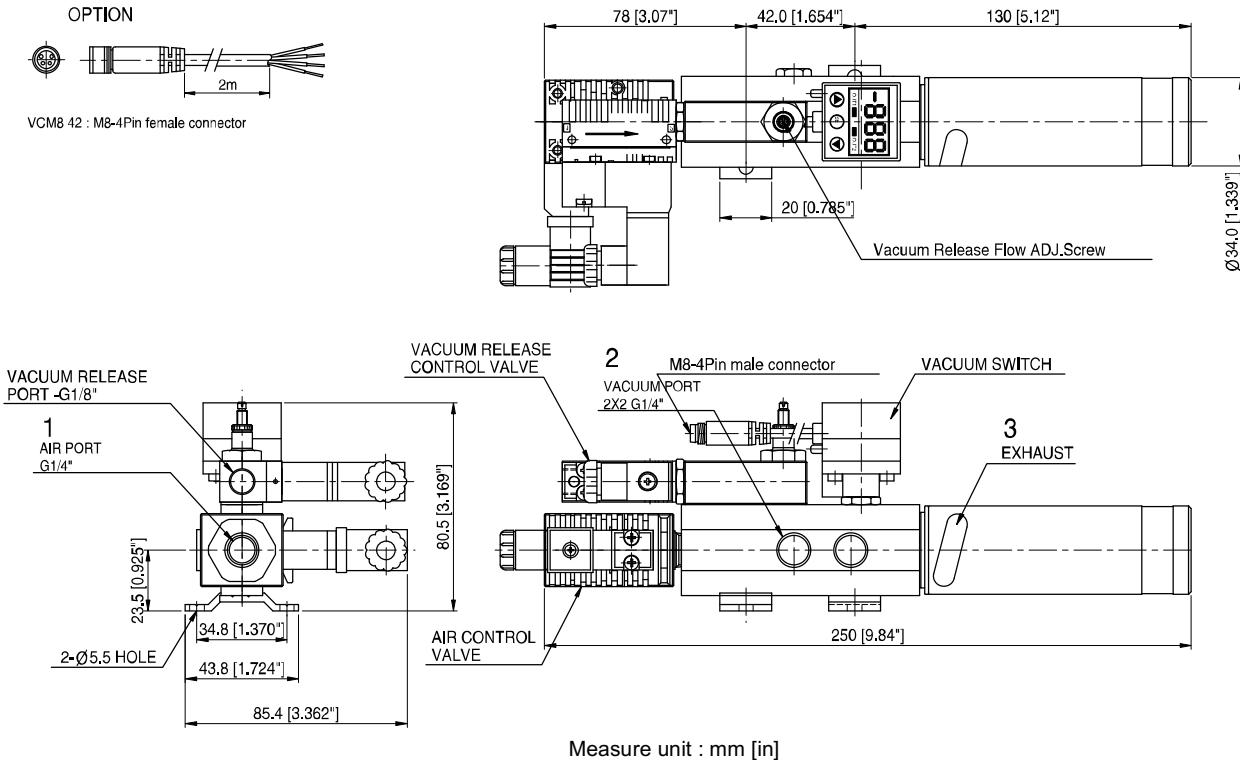
Series	Feed pressure (MPa)	Air consumption (Nl/min)	Time, s/l, to evacuate a volume to different vacuum levels -kPa (-mmHg)								
			10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
VS	0.22	97	0.019	0.09	0.1	0.32	0.42	0.73	1.62	-	-
	0.3	118	0.015	0.07	0.18	0.28	0.38	0.64	0.8	12	3.8
	0.4	152	0.01	0.48	0.07	0.09	0.2	0.42	0.8	1	3.4



## Dimensional Information

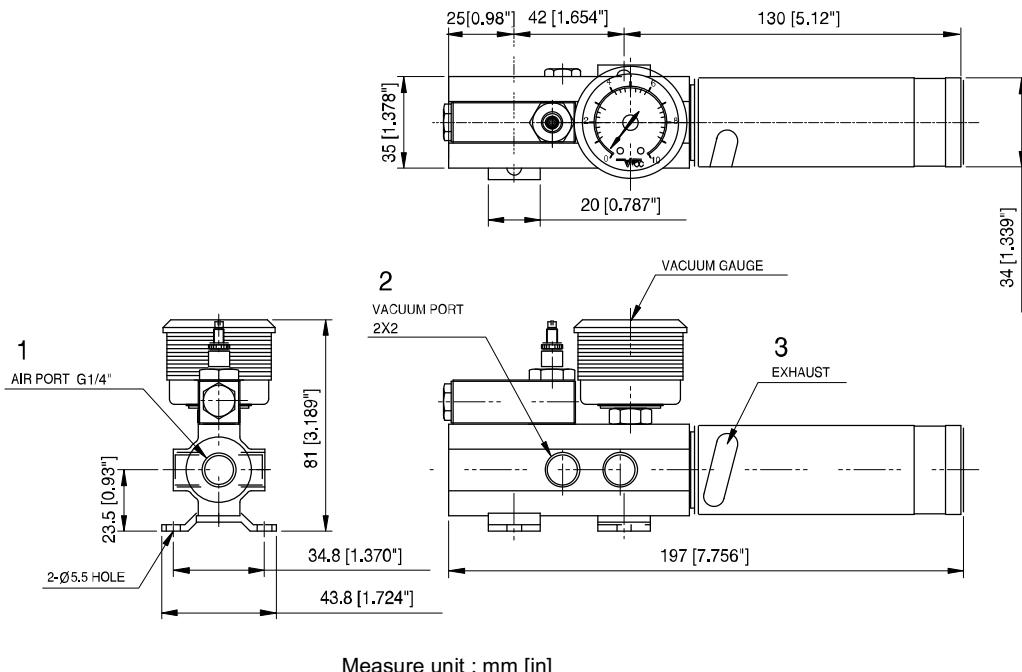
With Vacuum control valve, Vacuum release control valve and Digital Vacuum Switch

### ▼ Series VS 144.. / VLS 144..



## Standard

### ▼ Series VS 144.. / VLS 144..

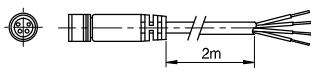


## Dimensional Information

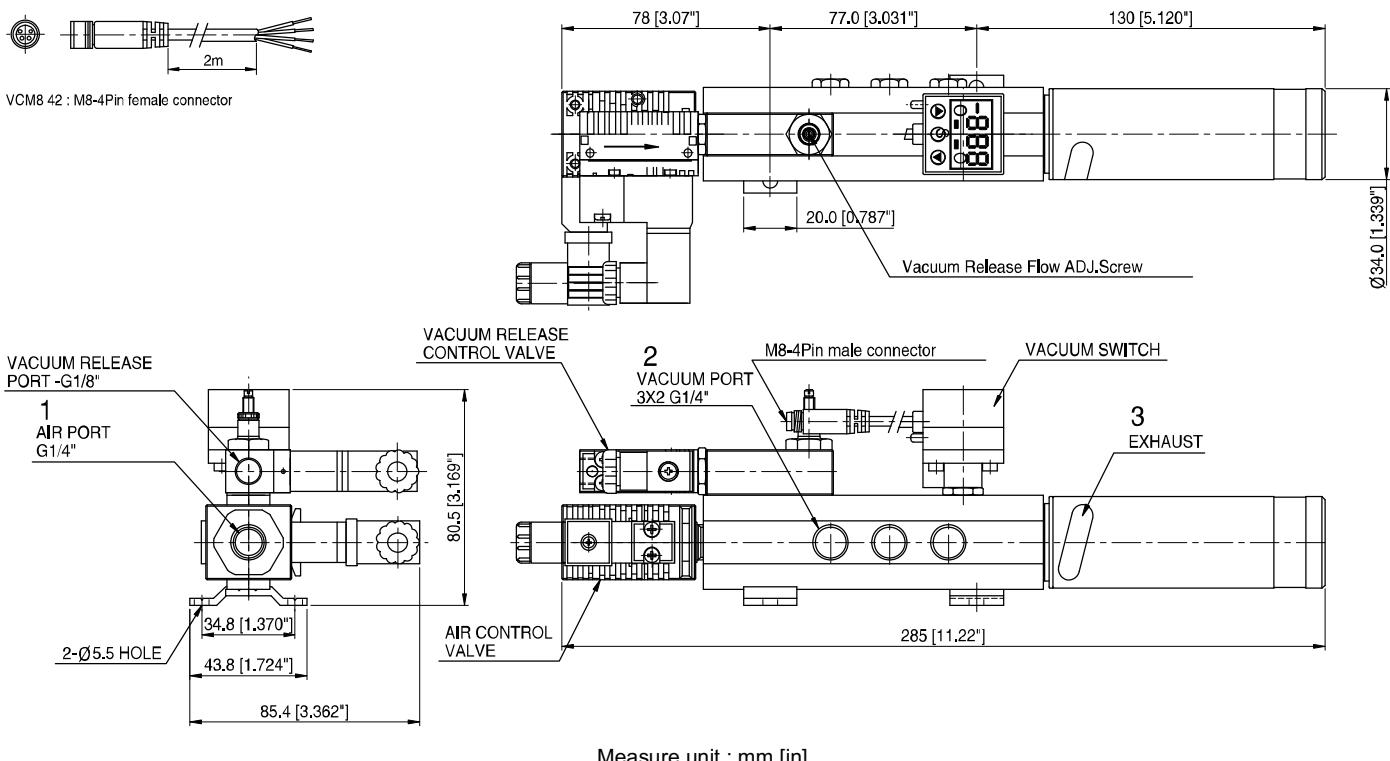
With Vacuum control valve, Vacuum release control valve and Digital Vacuum Switch

### ▼ Series VS 146.. / VLS 146..

OPTION

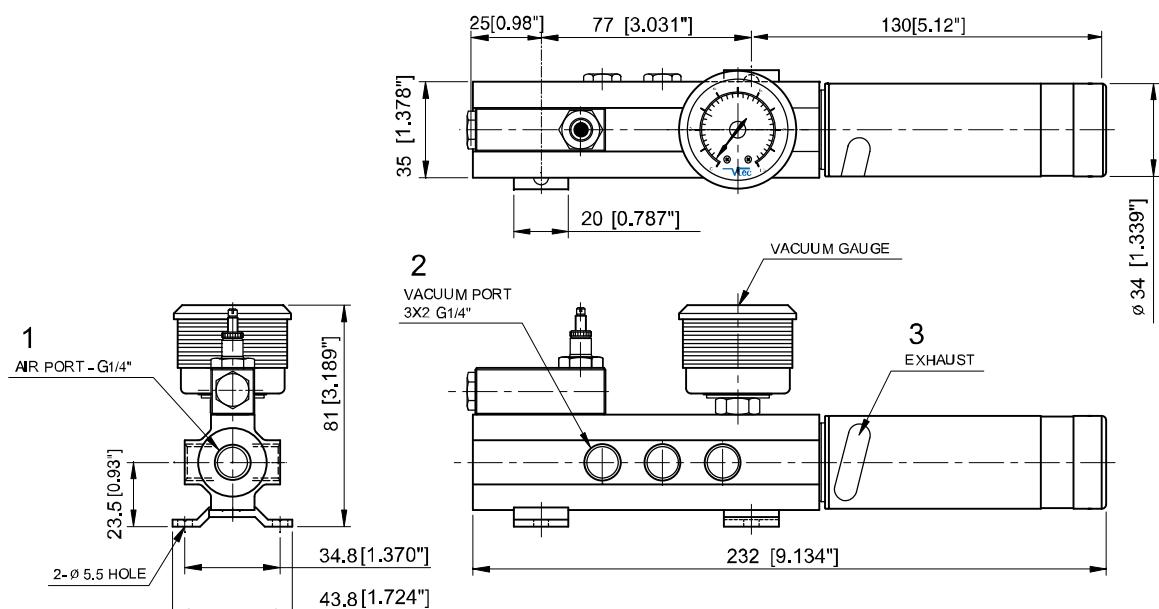


VCM8 42 : M8-4Pin female connector



## Standard

### ▼ Series VS 146.. / VLS 146..



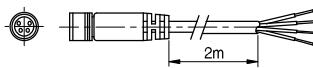
Measure unit : mm [in]

## Dimensional Information

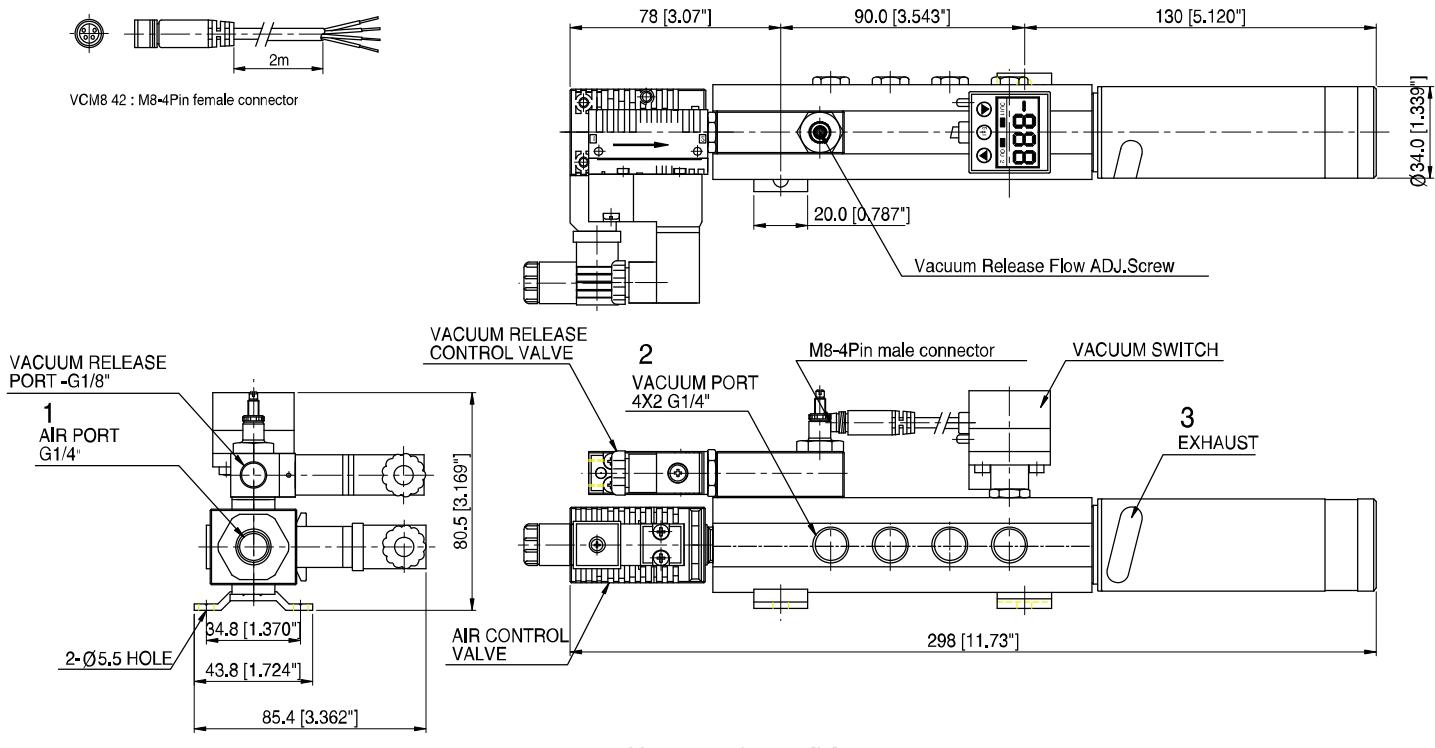
With Vacuum control valve, Vacuum release control valve and Digital Vacuum Switch

### ▼ Series VS 148.. / VLS 148..

#### OPTION



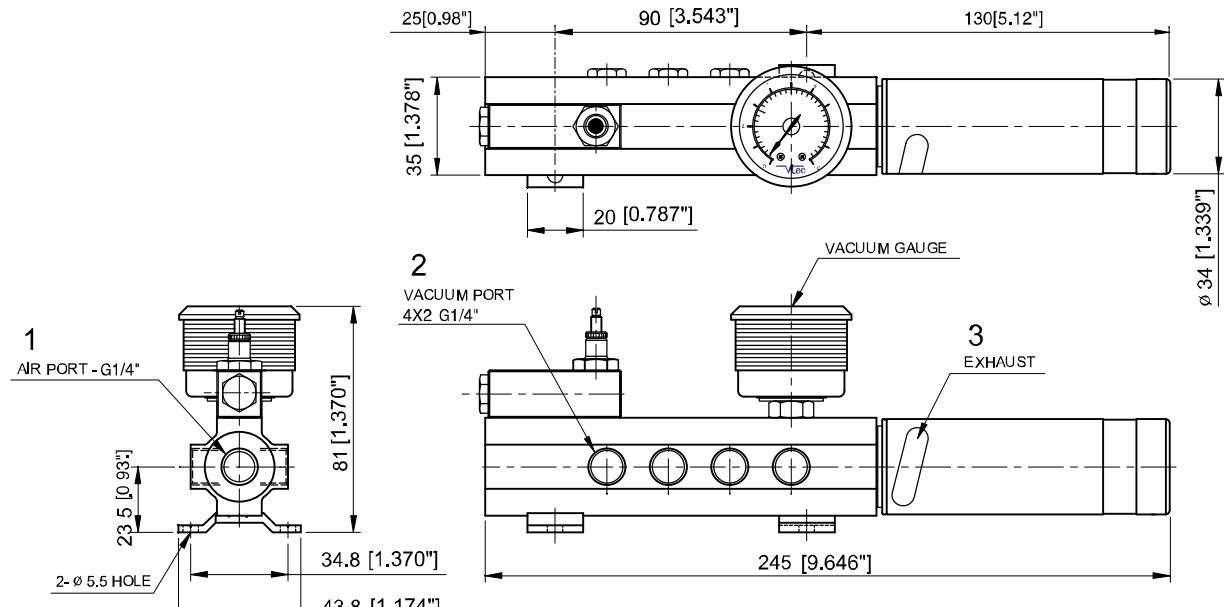
VCM8 42 : M8-4Pin female connector



Measure unit : mm [in]

#### Standard

### ▼ Series VS 148.. / VLS 148..



Measure unit : mm [in]