

VQ pump

Features and Strengths

Highly operational reliability despite fluctuating or low compressed-air pressure
Auto quick release function – Fast response time
Filter auto cleaning with auto blow off module

Advantages

Available auto quick release without additional vacuum release control valve
Reliable and stable operation - High vacuum level and vacuum flow in efficient air consumption
Compact size and light weight

| Application





Overall of specification

Model	Max. Vacuum level (- kPa)	Max. Feed Pressure (bar)	Max. Vacuum Flow (NI/m)	Air Consumption (NI/m)	Noise level (dBA)
VQ202	90	7	44	40	59 ~ 68
VQ203	90	7	84.5	40	55 ~ 65

VACUUM PUMPS / VQ pumps

VQ pump

VMECA VQ pump is integrated with VMECA vacuum cartridge technology for reliable and stable performance in fluctuation or drop of compressed-air pressure. VQ pump is the most suitable in high speed application and features quick release function without vacuum release control valve – It can contribute the cost save for additional valve and tubing, etc. The flow rate for vacuum release can be adjusted in easy way according to applications.



Key advantages

- VMECA vacuum cartridge integrated
- Available for quick release without vacuum release valve
- Auto filter cleaning system

Vacuum release adjuster

VMECA vacuum cartridge

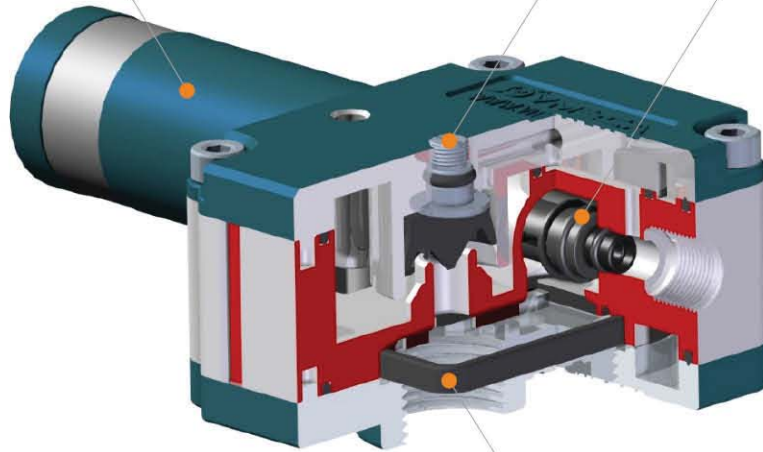


Two fold silencer

Two-fold silencer

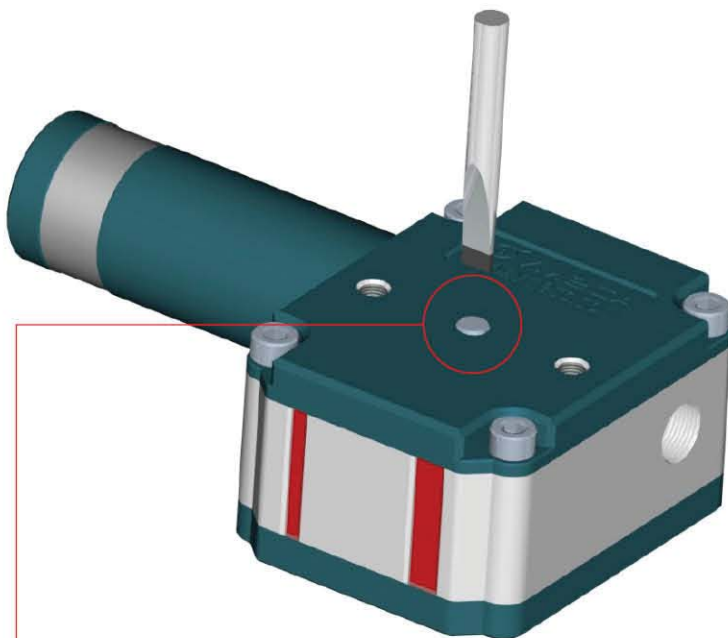
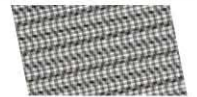
Adjustable release flow

Vacuum Cartridge

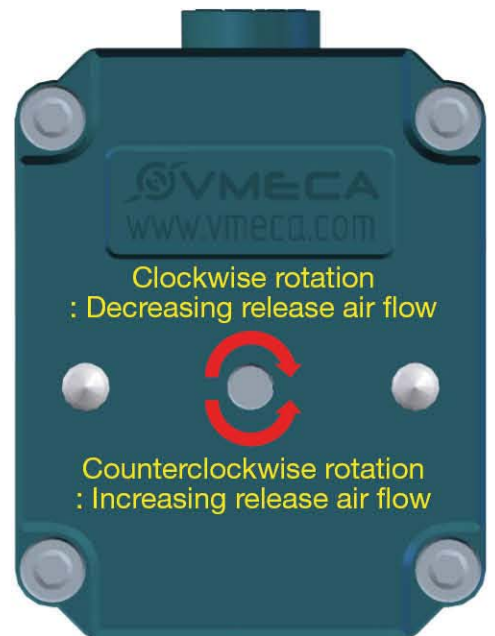


Vacuum Release

Vacuum Filter (Mesh)



Vacuum release adjuster



VACUUM PUMPS / VQ pumps

VQ202 / VQ203

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Auto quick release
- Quick response time
- Compact size and light weight
- Extremely low noise level with VMECA Twofold silencer



Specifications

Description	VQ202	VQ203
Max. Vacuum level	-90 kPa	-90 kPa
Open Vacuum flow	44 NI/min	84.5 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	59 ~ 68 dbA	55 ~ 65 dbA
Weight	146 g	160 g

Vacuum Flow

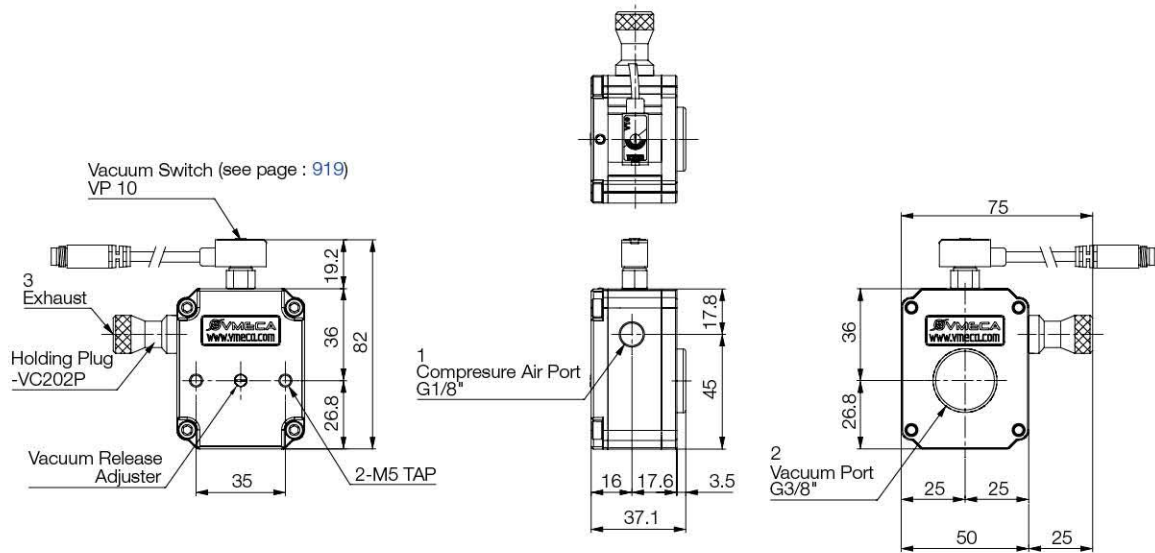
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
			0	10	20	30	40	50	60	70	80	90
VQ202	48	1.7	38.5	20	16	12	5.3	-	-	-	-	-
	65	2.2	39	26.5	17.3	15.6	13.5	8.4	2.6	-	-	-
	90	3.14	44	36	24.5	16.5	16	13.8	10	7	3.5	-
	89	4.0	42	38.8	28.5	21.2	15.8	12.2	9.5	7	2.4	-
VQ203	49	1.7	55	23.2	15.5	12.6	6.1	-	-	-	-	-
	65	2.2	68	31	16.5	15.5	13.8	9	3.5	-	-	-
	90	3.14	84	37.5	26	16	15.2	12.3	10	7.2	4	-
	89	4.0	84.5	40	33.2	22.6	15.8	12	9.2	7.3	2.9	-

Evacuation Time

Model	Feed Pressure (bar)	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)								
			10	20	30	40	50	60	70	80	90
VQ202	1.7	22	0.33	0.47	0.89	1.93	-	-	-	-	-
	2.2	25.5	0.20	0.47	0.70	0.92	1.24	1.35	-	-	-
	3.14	34	0.15	0.39	0.95	1.03	1.28	1.32	2.12	3.54	-
	4.0	40	0.15	0.42	0.56	0.80	0.99	1.21	1.46	3.74	-
VQ203	1.7	22	0.13	0.40	0.79	1.57	-	-	-	-	-
	2.2	25.5	0.08	0.39	0.59	0.85	0.96	1.10	-	-	-
	3.14	34	0.06	0.28	0.51	1.01	1.18	1.29	1.73	3.00	-
	4.0	40	0.08	0.24	0.50	0.71	0.85	1.18	1.41	3.05	-

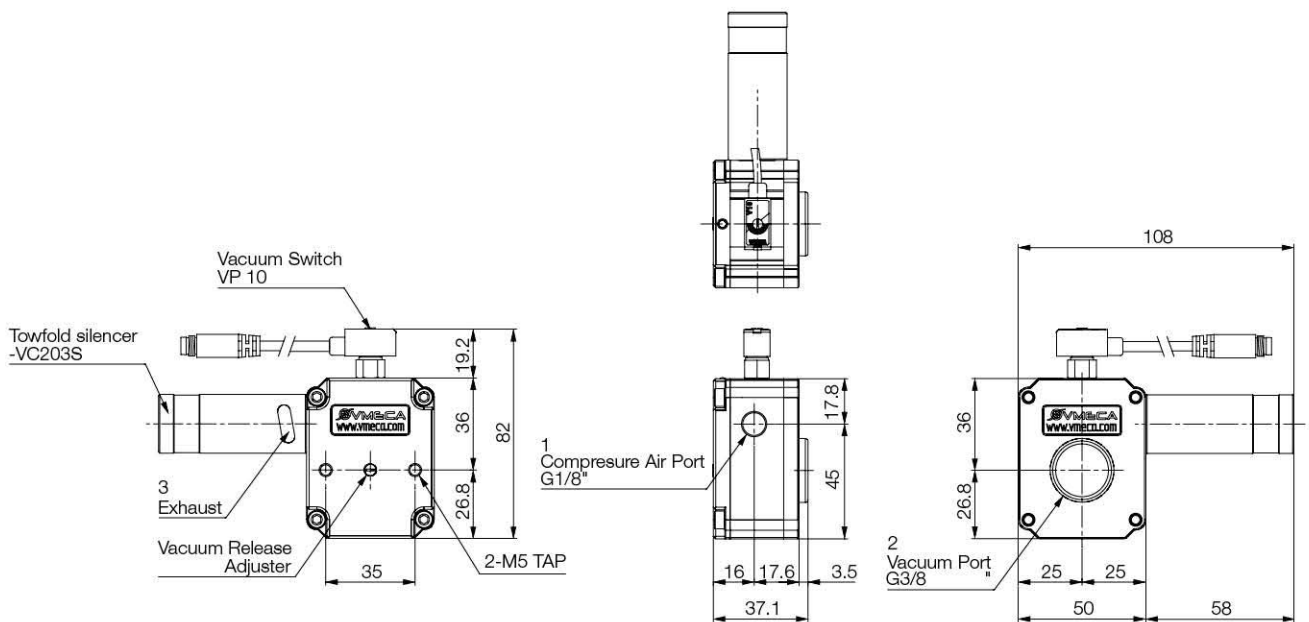
Dimensions – VQ202P with switch

[Unit : mm]



Dimensions – VQ203S with switch

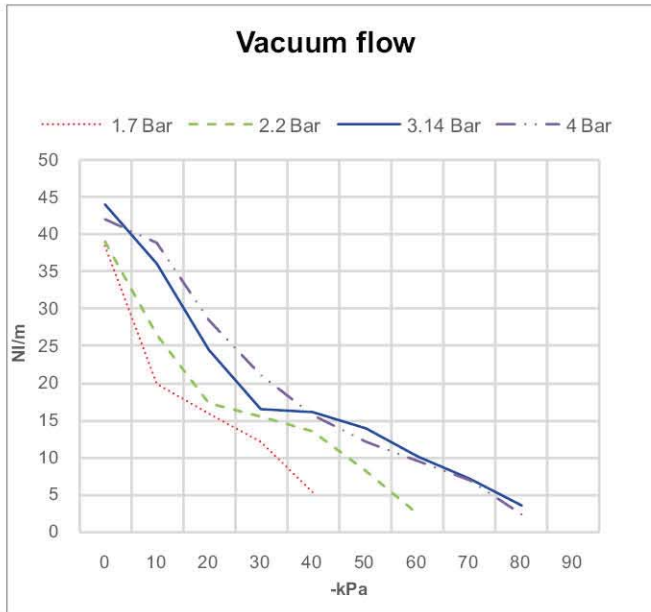
[Unit : mm]



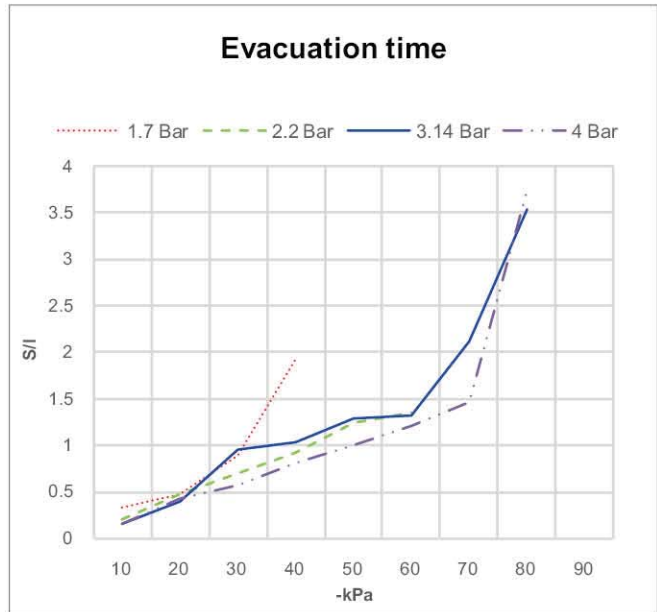
VACUUM PUMPS / VQ pumps

Performance data

VQ202

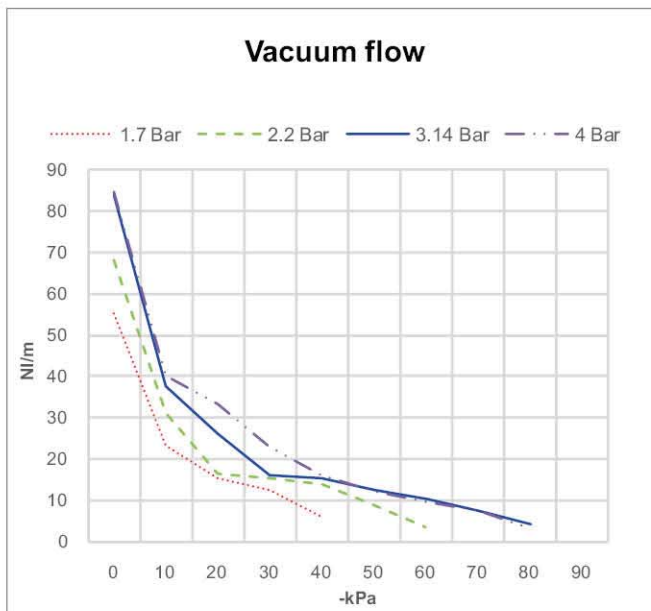


※ Vacuum flow at different vacuum level

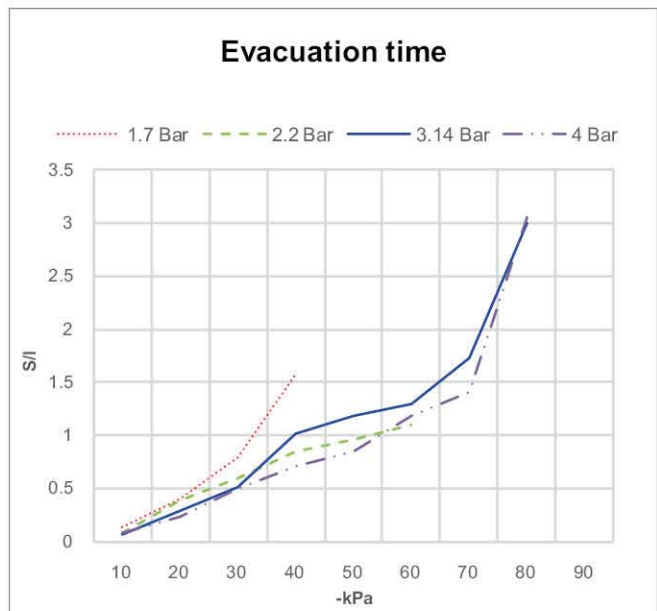


※ Time to evacuate a volume at different vacuum level

VQ203

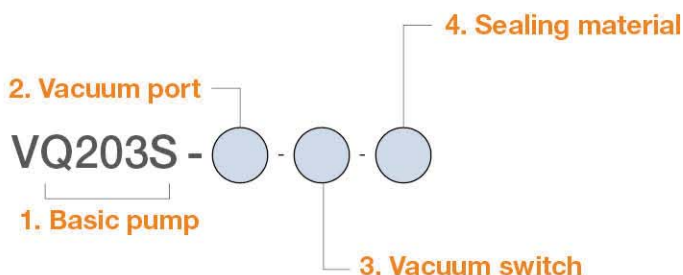


※ Vacuum flow at different vacuum level



※ Time to evacuate a volume at different vacuum level

I Build an Ordering No.



1. Basic pump	Description	Symbol
	VQ pump, 2-stage cartridge, Plug	VQ202P
	VQ pump, 3-stage cartridge, Two-fold silencer	VQ203S
2. Vacuum port	Description	Symbol
	Vacuum port, G3/8" female	38F
3. Vacuum switch	Description	Symbol
	No vacuum switch	Blank
	LED switch, No analog supply, M8-3pins, NPN	S
	LED switch, No analog supply, M8-3pins, PNP	SP
	LED switch, No analog supply, Grommet, NPN	SG
	LED switch, No analog supply, Grommet, PNP	SGP
	Digital switch, No analog supply, M8-4pins, NPN	S2
	Digital switch, No analog supply, M8-4pins, PNP	S2P
	Digital switch, No analog supply, Grommet, NPN	SG2
	Digital switch, No analog supply, Grommet, PNP	SG2P
	Digital switch, Analog supply, Grommet, NPN	SG3
	Digital switch, Analog supply, Grommet, PNP	SG3P
4. Sealing material	Description	Symbol
	NBR	Blank
	VITON	V
	EPDM	E

I Spare Parts – Basic pumps

Part No.	Description	Weight (g)
VQ202P-38F	VQ pump, 2-stage cartridge, Plug, Vacuum port G3/8" female	146
VQ203S-38F	VQ pump, 3-stage cartridge, Two-fold silencer, Vacuum port G3/8" female	160

I Spare Parts – Cartridges

Part No.	Description	Available model
VC202	Mini Vacuum Cartridge, 2-Stage	VQ202P-38F
VC203	Mini Vacuum Cartridge, 3-Stage	VQ203S-38F

I Spare Parts – Plug & Silencer

Part No.	Description
VCP-M14	Holding plug for VQ202P-38F
VTTs-M14	Two-Fold Silencer for VQ203S-38F