

SC pump

Features and Strengths

Highly operational reliability despite fluctuating or low compressed-air pressure
Integrated check valve on vacuum release port for fast evacuation time

Advantages

Fast evacuation time – More than 2times faster compared with conventional vacuum ejector
Reliable and stable operation - High vacuum level and vacuum flow in efficient air consumption
Suitable with delta robot due to 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)
SC202	90	7	44	40
SC203	90	7	84.5	40

VACUUM PUMPS / Spider vacuum speeders

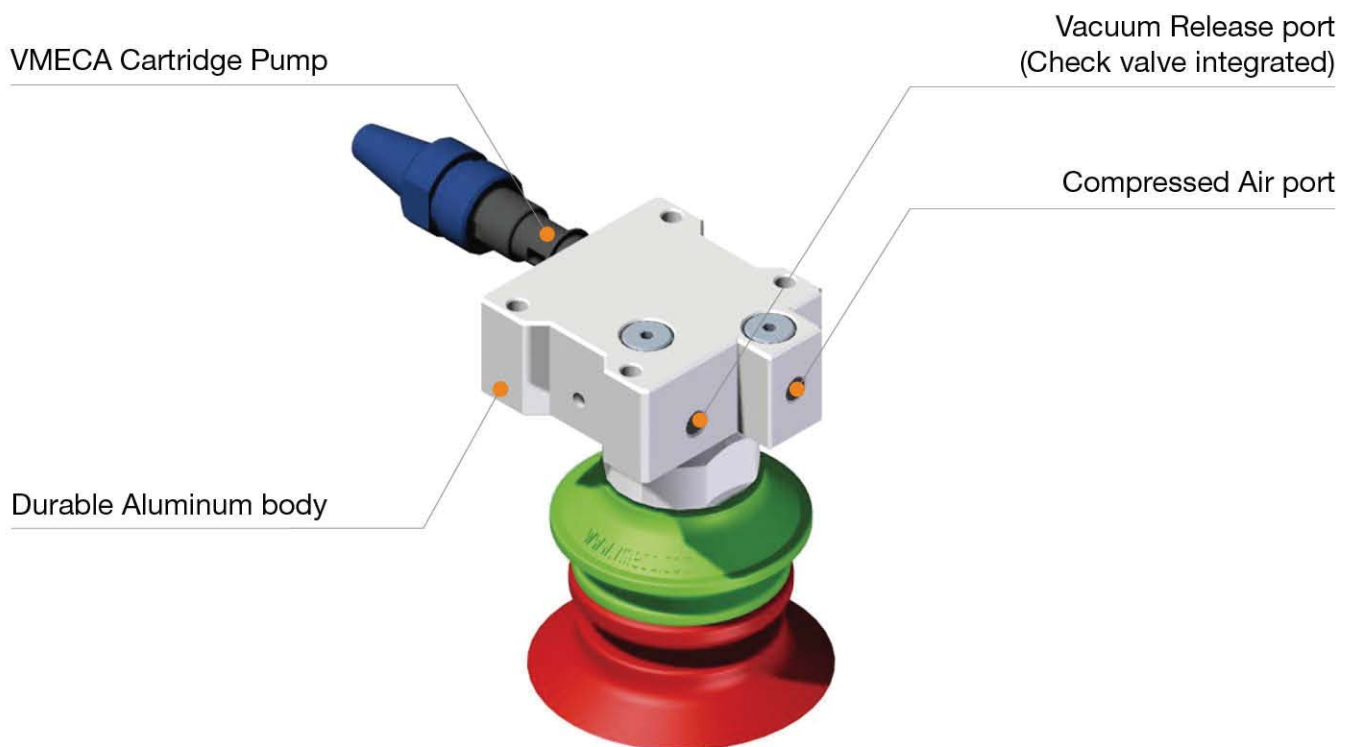
SC pump

VMECA SC pump is integrated with VMECA vacuum cartridge technology for reliable and stable performance in fluctuation or drop of compressed-air pressure. SC pump is the most suitable in high speed application such as delta robot in packaging industry because SC pump has check valve on vacuum release port so, it can operate in 2times faster evacuation time compared with conventional vacuum ejectors.



Key advantages

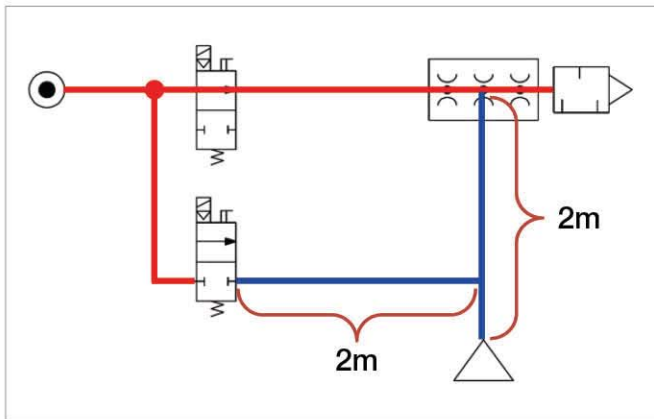
- VMECA vacuum cartridge integrated
- Compact and light weight
- Check valve on vacuum release port
 - 2times faster evacuation time than conventional ejectors



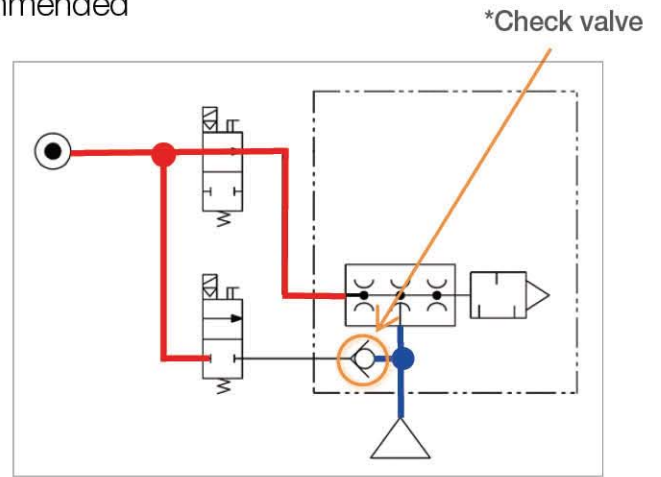
Advantage for Check valve

Check valve **“2 times Faster”** evacuation time!!

- Quicker evacuation due to lack of vacuum release line
- Installation at the nearest suction point recommended

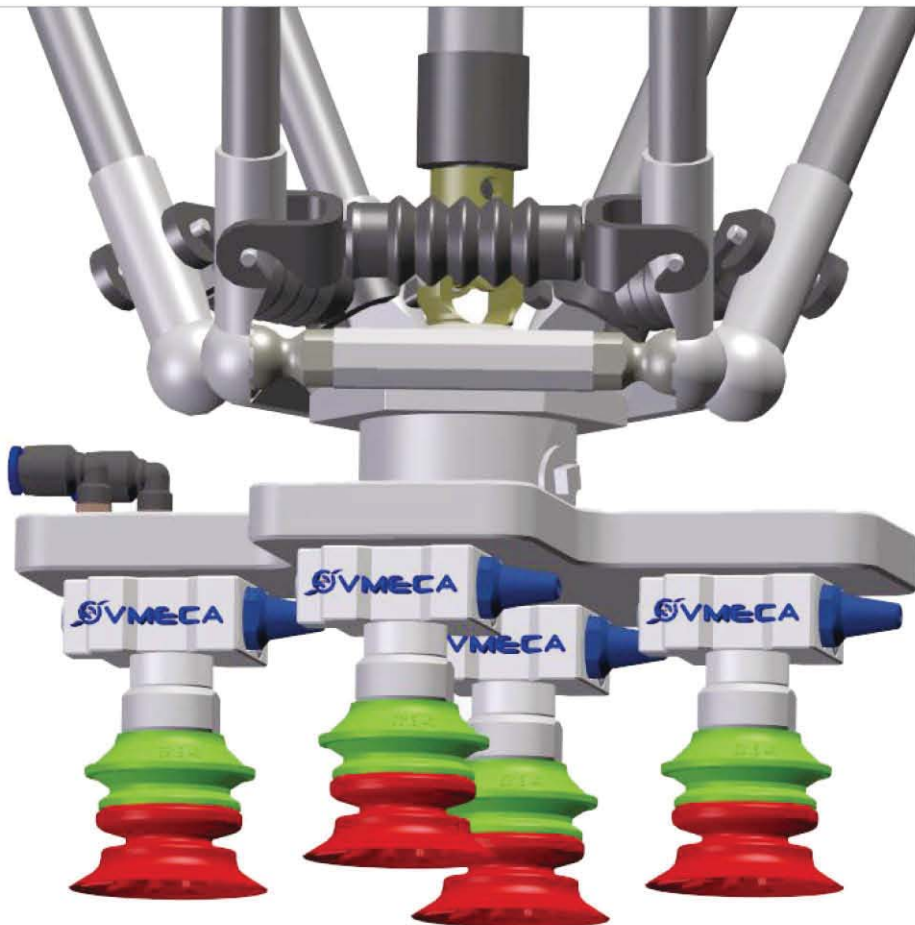


Conventional vacuum generator



SC pump

Example



VACUUM PUMPS / Spider vacuum speeders

SC202 / SC203

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated check valve on vacuum release port
 - Quick evacuation time
- Compact size and light weight



Specifications

Description	SC202	SC203
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 ~ 65 dbA	59 ~ 65 dbA
Weight	80g	85g

Vacuum Flow

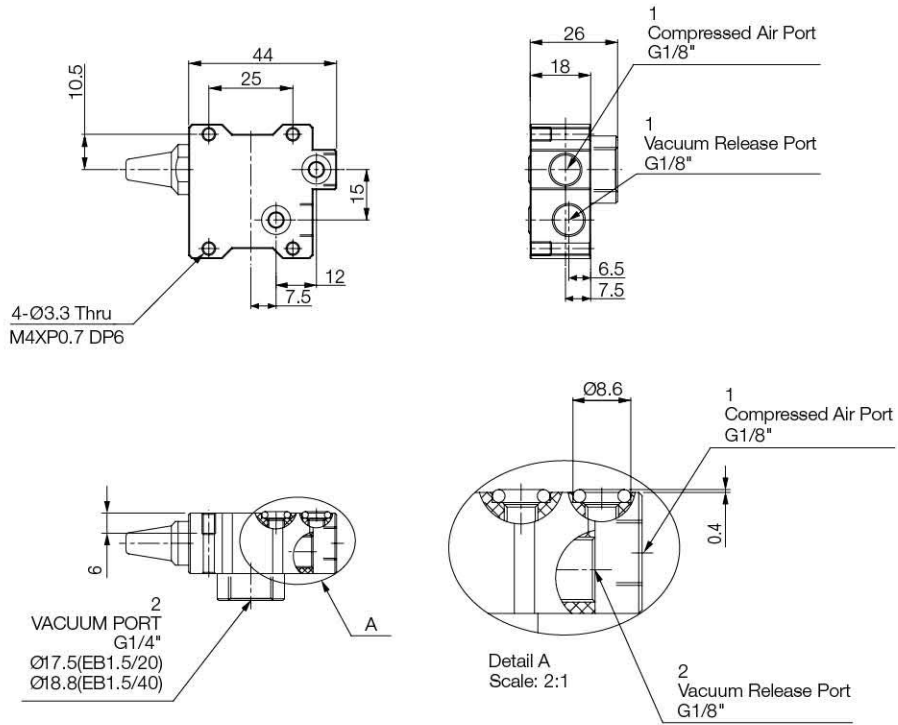
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
			0	10	20	30	40	50	60	70	80	90
SC202	48	1.7	38.5	20	16	12	5.3					
	65	2.2	39	26.5	17.3	15.6	13.5	8.4	2.6			
	90	3.14	44	36	24.5	16.5	16	13.8	10	7	3.5	
	89	4.0	42	38.8	28.5	21.2	15.8	12.2	9.5	7	2.4	
SC203	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
SC202	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	
SC203	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	

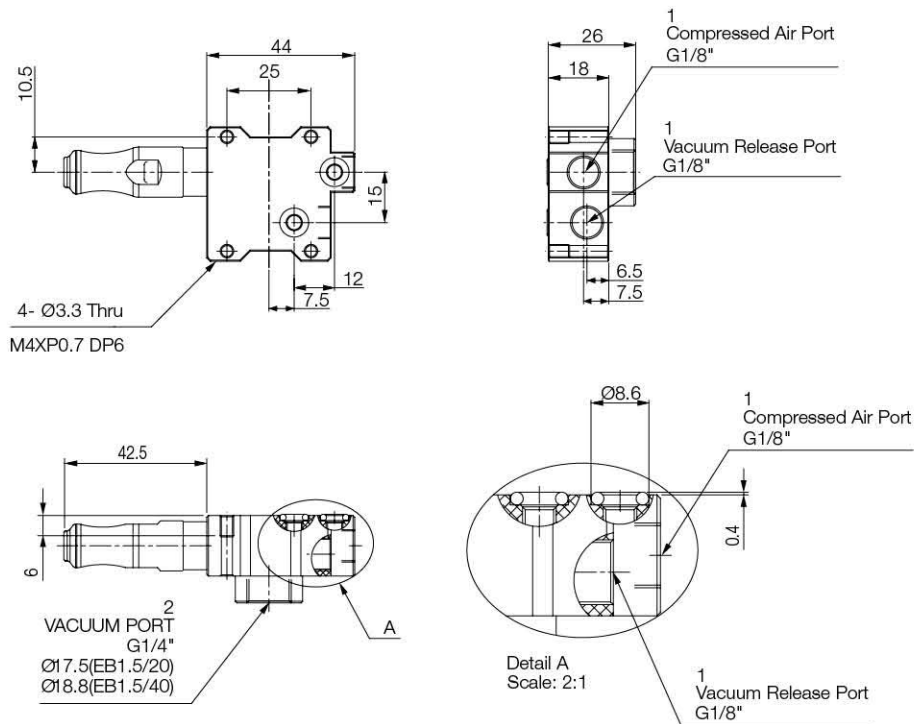
Dimensions – SC202P-C

[Unit : mm]



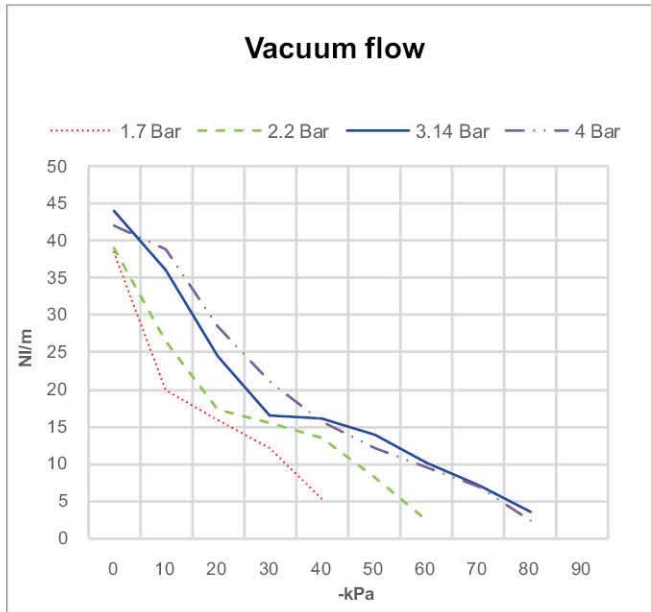
Dimensions – SC203P-C

[Unit : mm]

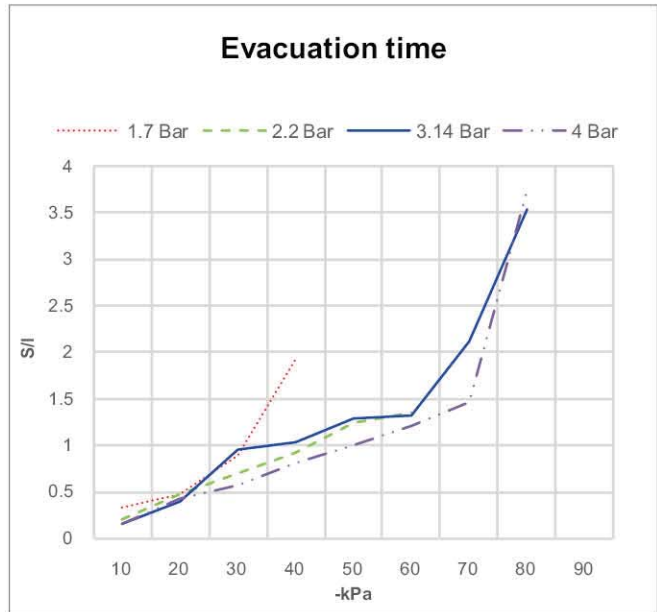


Performance data

SC202

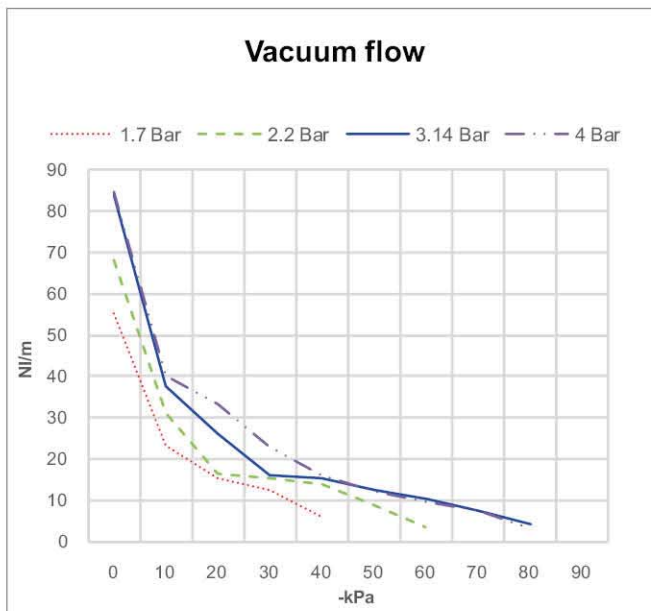


※ Vacuum flow at different vacuum level

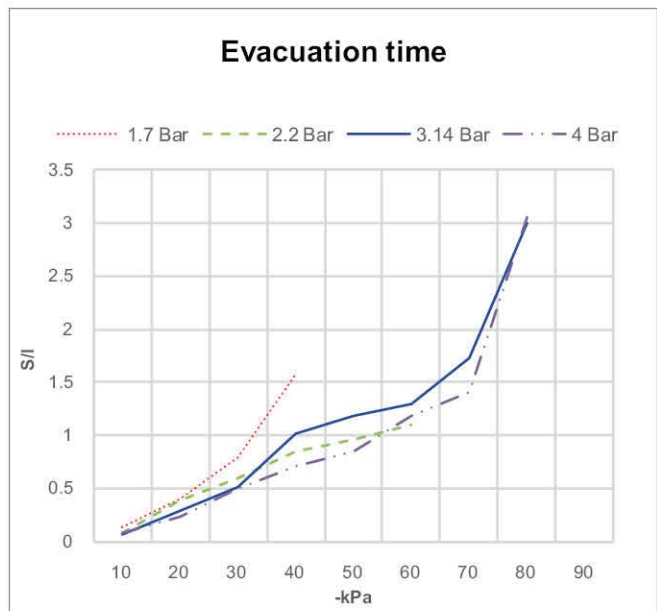


※ Time to evacuate a volume at different vacuum level

SC203

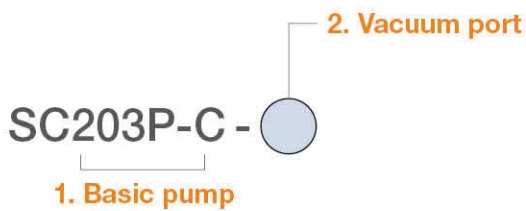


※ Vacuum flow at different vacuum level



※ Time to evacuate a volume at different vacuum level

I Build an Ordering No.



1. Basic pump	Description	Symbol
	SC pump, 2-stage cartridge, Plug	SC202P-C
	SC pump, 3-stage cartridge, Plug	SC203P-C

2. Vacuum port	Description	Symbol
	Vacuum port, G1/4" female	14F

I Spare Parts – Basic pumps

Part No.	Description	Weight (g)
SC202P-C-14F	SC pump, 2-stage cartridge, Plug, Vacuum port - G1/4" female	80
SC203P-C-14F	SC pump, 3-stage cartridge, Plug, Vacuum port - G1/4" female	85

I Spare Parts – Cartridges

Part No.	Description	Available model
VC202	Mini vacuum cartridge, 2-Stage	SC202P-C-14F
VC203	Mini vacuum cartridge, 3-Stage	SC203P-C-14F

I Spare Parts – Plugs

Part No.	Description
VCP-202PS2	Holding plug for SC202P-C-14F
VCP-203PS2	Holding plug for SC203P-C-14F