

## VCS pump

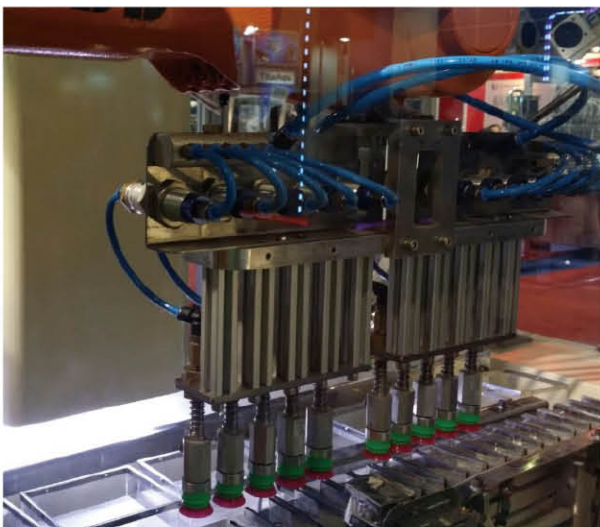
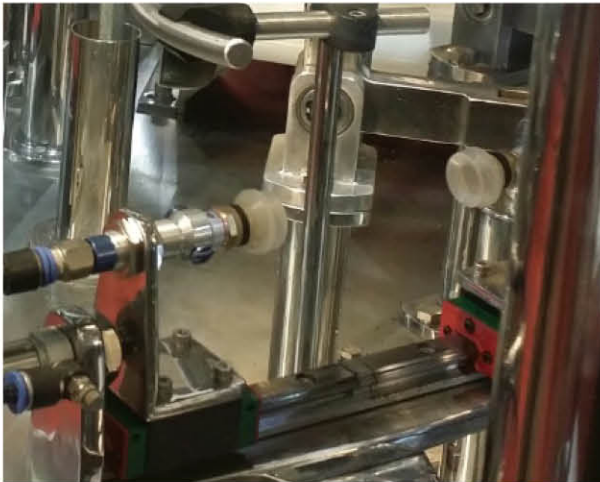
### Features and Strengths

Highly operational reliability despite fluctuating or low compressed-air pressure  
Integrated with level compensator and vacuum ejector in one body

### Advantages

No need additional level compensator  
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)
VCS102	83	2.2	16	10	50 ~ 55
VCS202	90	7	40	32	55 ~ 65

# VACUUM PUMPS / VCS pumps

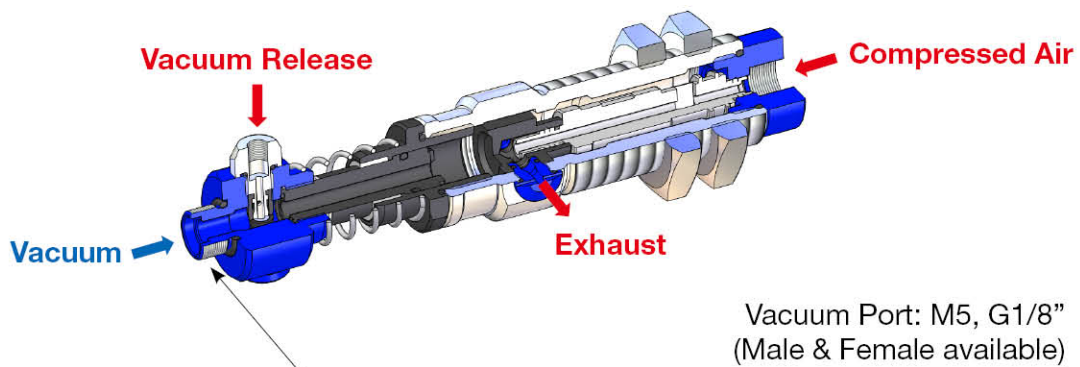
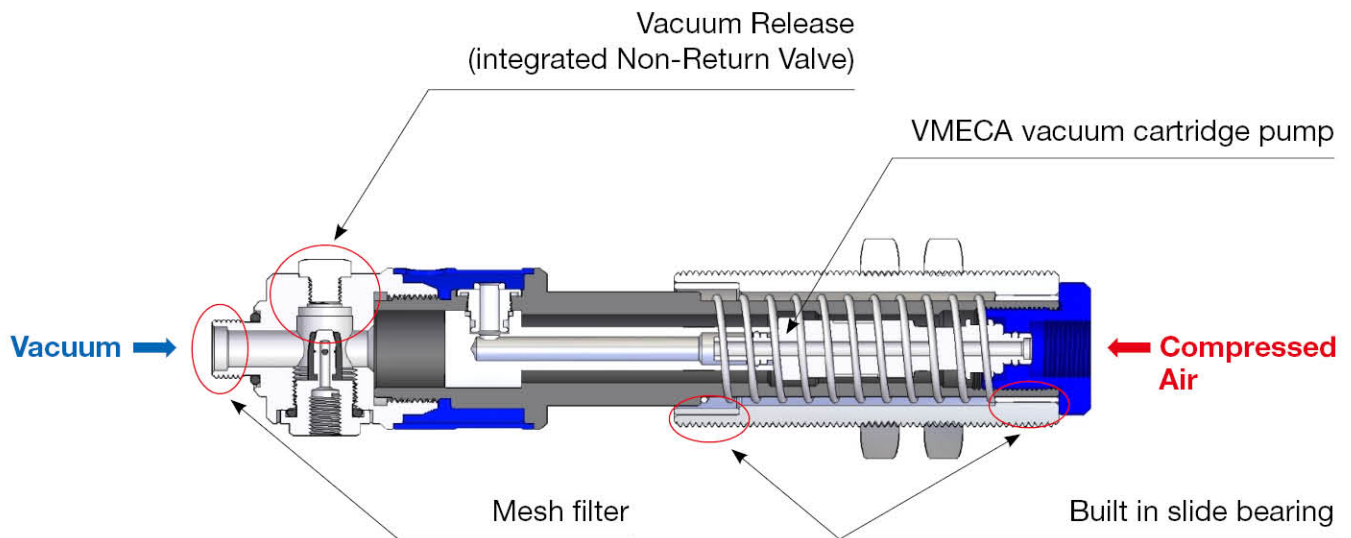
## VCS pump

**VMECA VCS pump** is integrated with VMECA vacuum cartridge technology for reliable and stable performance in fluctuation or drop of compressed-air pressure. VCS is compact size as it features vacuum ejector and level compensator in one body so that it can build vacuum system in simple structure. Also individual vacuum system can be easily made for safely handling applications.




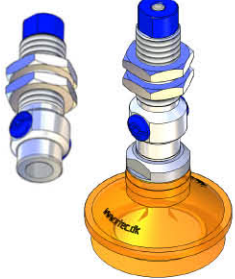


### Key advantages

- VMECA vacuum cartridge integrated
- Individual vacuum system
- Level compensator in one body

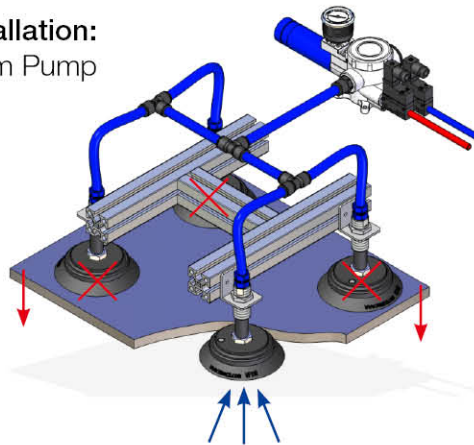


## I Body type

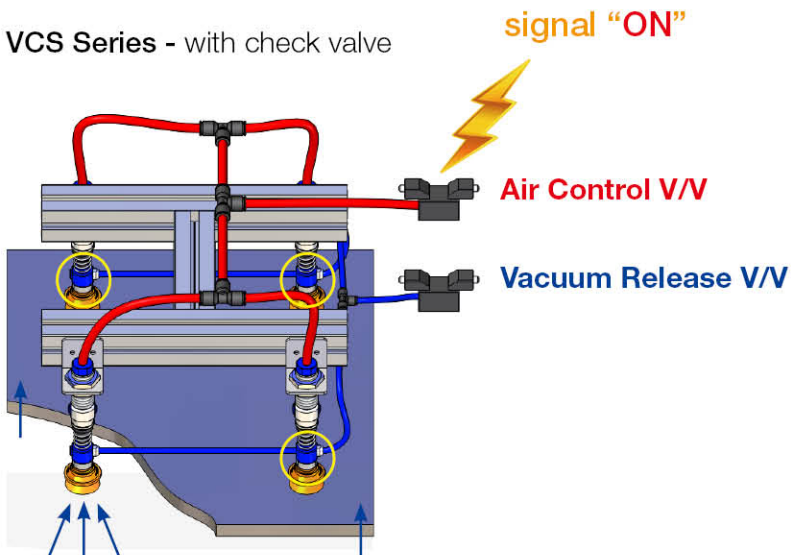
A type	B type	C type	D type
			
Vacuum Cartridge + Level compensator + Release check valve (option)	Vacuum Cartridge + Level compensator + Release check valve (option)	Vacuum Cartridge + Holder + Release check valve (option)	Vacuum Cartridge + Holder

## I Individual vacuum system

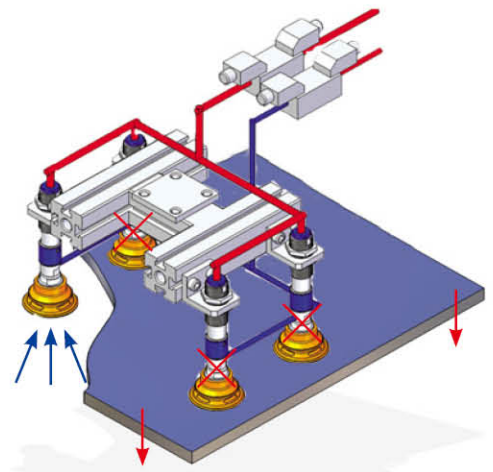
**Typical installation:**  
Suction Cup + Level Spring + Vacuum Pump



VCS Series - with check valve



VCS Series - without check valve

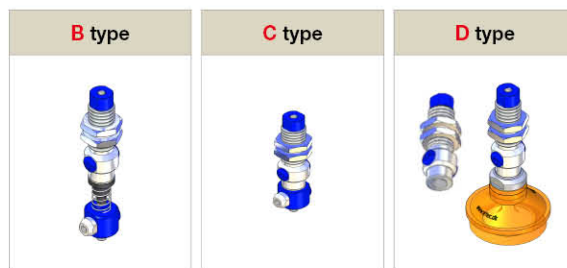


# VACUUM PUMPS / VCS pumps

## VCS102

### Features and Strengths

- Built in level compensator in one body
- Highly operational reliability despite fluctuating or low compressed-air pressure
- Quick response time
- Compact size and light weight



### Specifications

Description	VCS102
Max. Vacuum level	-83 kPa
Open Vacuum flow	16 NI/min
Max. Feed pressure	2.2 bar
Temperature	-20 ~ 80 °C
Noise level	50~55 dBA
Weight	28.72 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
VCS102	50	1.1	11.5	6.3	2.2	1.6	0.7	-	-	-	-	-
	83	1.8	14.2	9.4	3.3	2.2	2	1.4	0.8	0.4	0.18	-
	83	2.2	16	11.9	5.1	2.3	1.4	1.3	0.9	0.3	0.12	-

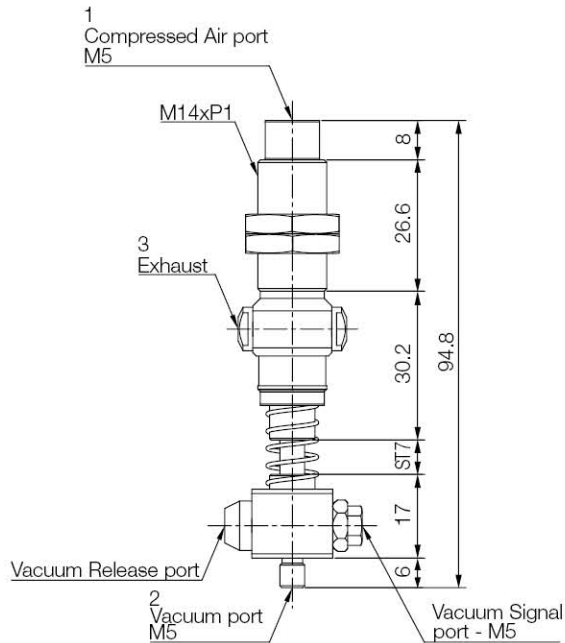
### Evacuation Time

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
VCS102	1.1	5.9	0.68	3	6.1	11.8	27.2	-	-	-	-
	1.8	8.2	0.4	1.48	4.3	6.9	9.1	15.3	27.4	50.2	-
	2.2	10	0.34	1.6	3.9	7	10.4	17.5	30.9	61.4	-

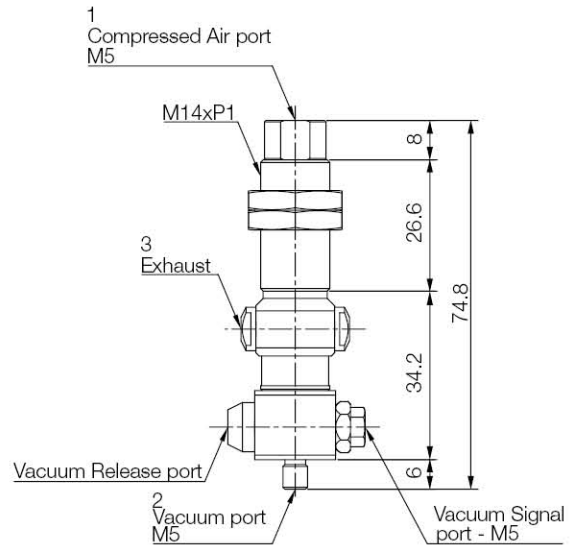
## I Dimensions – VCS102 series

[ Unit : mm ]

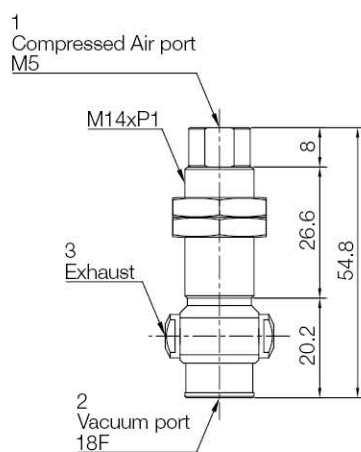
VCS102-LM5  
VCS102C-LM5 (C type)



VCS102-LM5 07  
VCS102C-LM5 07 (B type)

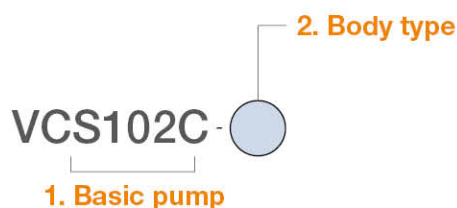


VCS102-L18F (D type)



# VACUUM PUMPS / VCS pumps

## Build an Ordering No.



1. Basic pump	Description	Symbol
	Vacuum speeder VCS102 series, 2-stage cartridge, No release check valve	VCS102
	Vacuum speeder VCS102 series, 2-stage cartridge, Release check valve	VCS102C
2. Body type	Description	Symbol
	Port size M5 male	LM5
	Port size M5 male, Level compensator 7mm	LM507
	Port size G1/8" female: Only available with VCS102	L18F

## Spare Parts – Basic pumps

Part No.	Description	Weight (g)
VCS102-LM5	Vacuum speeder VCS102 series, 2-stage cartridge, No release check valve, Port size M5 male	43
VCS102-LM507	Vacuum speeder VCS102 series, 2-stage cartridge, No release check valve, Port size M5 male, Level compensator 7mm	47
VCS102-L18F	Vacuum speeder VCS102 series, 2-stage cartridge, No release check valve, Port size G1/8" female	28.72
VCS102C-LM5	Vacuum speeder VCS102 series, 2-stage cartridge, Release check valve, Port size M5 male	45
VCS102C-LM507	Vacuum speeder VCS102 series, 2-stage cartridge, Release check valve, Port size M5 male, Level compensator 7mm	46

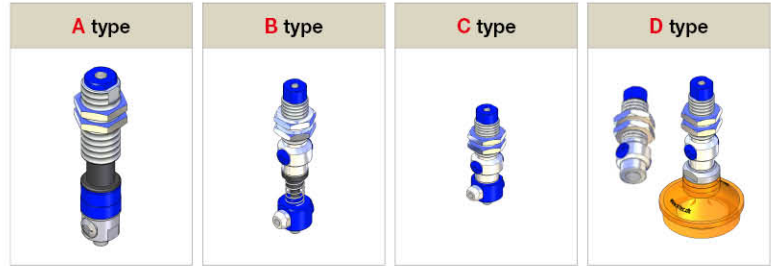
## Spare Parts – Cartridges

Part No.	Description
VC102	Micro vacuum cartridge, 2-Stage

## VCS202

### Features and Strengths

- Built in level compensator in one body
- Highly operational reliability despite fluctuating or low compressed-air pressure
- Quick response time
- Compact size and light weight



### Specifications

Description	VCS202
Max. Vacuum level	-90 kPa
Open Vacuum flow	40 NI/min
Max. Feed pressure	7 bar
Temperature	-20 ~ 80 °C
Noise level	55 ~ 65 dBA
Weight	232.82 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
VCS202	50	1.7	35	25.4	12.8	8.3	4	-	-	-	-	-
	65	2.2	38.8	29.5	17	11.5	8	5.2	1.4	-	-	-
	90	3.14	40	36.9	26	15.8	11	8.9	6.6	3.9	2	-
	85	4	40	42.7	31	23	14.1	7.6	6.4	3.9	1.3	-

### 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	
VCS202	1.7	17	0.26	0.59	1.29	2.56	-	-	-	-	-	-
	2.2	20	0.18	0.48	0.95	1.55	2	2.5	-	-	-	-
	3.14	26	0.15	0.37	0.61	1.5	1.5	2	3.8	6.2	-	-
	4	32	0.14	0.39	0.59	0.9	1.2	1.8	3.2	6.9	-	-

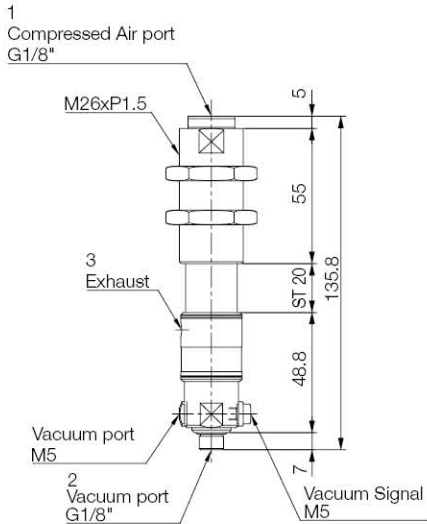


# VACUUM PUMPS / VCS pumps

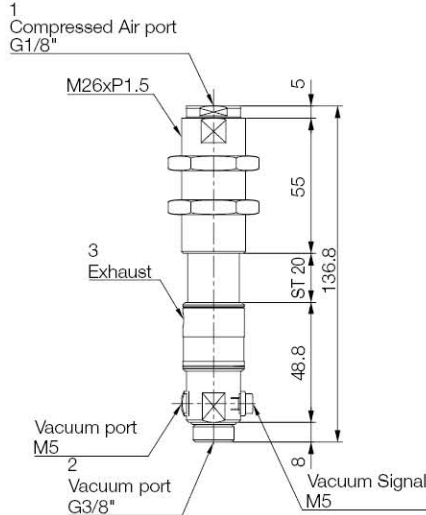
## I Dimensions – VCS202 series

[ Unit : mm ]

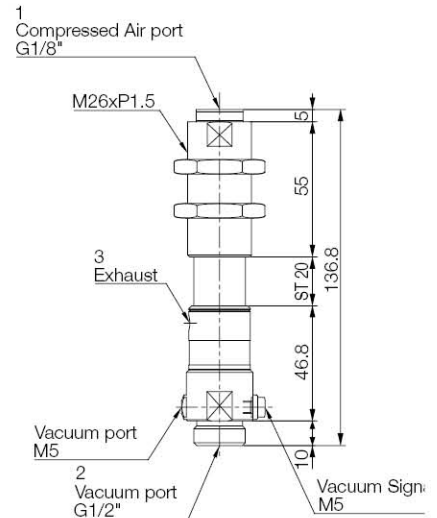
VCS202-18M20  
VCS202C-18M20 (A type)



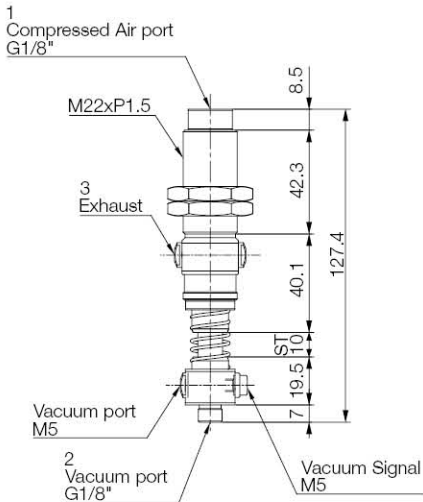
VCS202-38M20  
VCS202C-38M20 (A type)



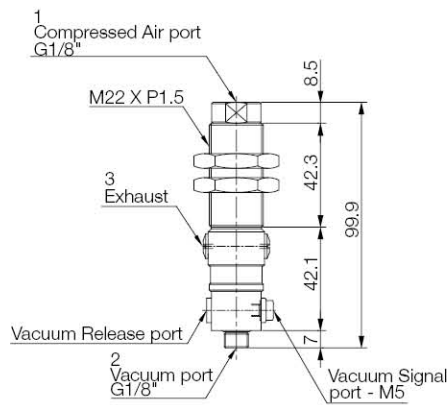
VCS202-12M20  
VCS202C-12M20 (A type)



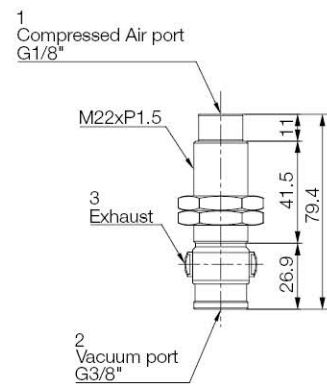
VCS202-L18M 10  
VCS202C-L18M 10 (B type)



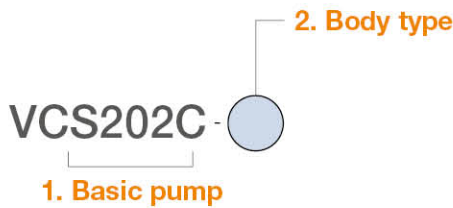
VCS202-L18M  
VCS202C-L18M (C type)



VCS202-L38F (D type)



## Build an Ordering No.



1. Basic pump	Description	Symbol
	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve	VCS202
	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve	VCS202C
2. Body type	Description	Symbol
	Port size G1/8" male, Level compensator 20mm	18M20
	Port size G3/8" male, Level compensator 20mm	38M20
	Port size G1/2" male, Level compensator 20mm	12M20
	Port size G1/8" male	L18M
	Port size G1/8" male, Level compensator 10mm	L18M10
	Port size G3/8" female: <a href="#">Only available with VCS202</a>	L38F

## Spare Parts – Basic pumps

Part No.	Description	Weight (g)
VCS202-18M20	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G1/8" male, Level compensator 20mm	228.02
VCS202-38M20	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G3/8" male, Level compensator 20mm	229.2
VCS202-12M20	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G1/2" male, Level compensator 20mm	232.82
VCS202-L18M	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G1/8" male	114.72
VCS202-L18M10	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G3/8" male, Level compensator 10mm	130.56
VCS202-L38F	Vacuum speeder VCS202 series, 2-stage cartridge, No release check valve, Port size G3/8" female	92.25
VCS202C-18M20	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve, Port size G1/8" male, Level compensator 20mm	228.83
VCS202C-38M20	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve, Port size G3/8" male, Level compensator 20mm	229.03
VCS202C-12M20	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve, Port size G1/2" male, Level compensator 20mm	232.6
VCS202C-L18M	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve, Port size G1/8" male	113.68
VCS202C-L18M10	Vacuum speeder VCS202 series, 2-stage cartridge, Release check valve, Port size G1/8" male, Level compensator 10mm	129.84

## Spare Parts – Cartridges

Part No.	Description
VC202	Mini vacuum cartridge, 2-Stage