

Turtle pump

Features and Strengths

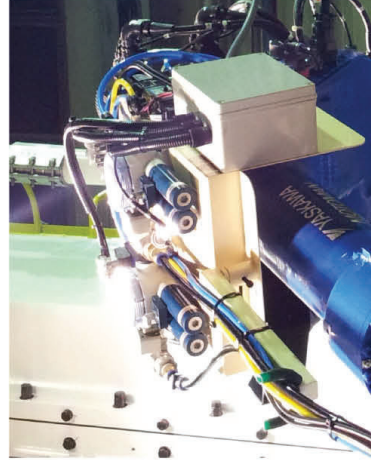
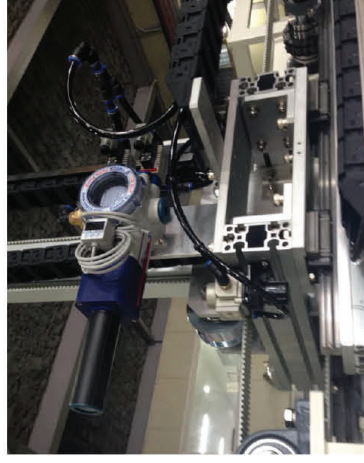
Highly operational reliability despite fluctuating or low compressed-air pressure
 Integrated pleated filter with high dirt capacity & Auto-cleaning system

Advantages

Excellent performance in most of every automation application – Especially, dust environment application
 Reliable and stable operation - High vacuum level and vacuum flow in efficient air consumption
 Optional Air-saving kit (AS-KIT) to minimize energy consumption



Application



Overall of specification

Model	Max. Vacuum level (- kPa)	Max. Feed Pressure (bar)	Max. Vacuum Flow (NI/m)	Air Consumption (NI/m)
VTC3021	92	7	171	152
VTC3031	92	7	341	152
VTCL3021	75	7	200	104
VTCL3031	75	7	362	104
VTC3022	92	7	342	304
VTC3032	92	7	682	304
VTCL3022	75	7	400	208
VTCL3082	75	7	724	208
VTC3122	92	7	342	304
VTC3123	92	7	513	456
VTC3124	92	7	684	608
VTC3132	92	7	682	304
VTC3133	92	7	1023	456
VTC3134	92	7	1364	608
VTCL3122	75	7	400	208
VTCL3123	75	7	600	312
VTCL3124	75	7	800	416
VTCL3132	75	7	724	208
VTCL3133	75	7	1086	312
VTCL3134	75	7	1448	416

Turtle pump

Air Saving

VMECA Turtle pump with integral vacuum filter and silencer can be combined with the optional vacuum On/Off control valve, vacuum release valve and vacuum switch to create an optimal vacuum solution for many applications. VMECA Turtle pump and optional components, due to the compact design and size, can be mounted close to the point of use reducing system volume and maintenance while improving cycle time.



Key advantages

- VMECA vacuum cartridge integrated
- Vacuum filter self cleaning system
- All-in-one in compact design

VMECA air control valve

- Single or Double solenoid valve

VMECA vacuum filter

- Prevents dust coming into the pump
- Pleated media for high dirt holding capacity
- Moisture, oil resistant
- Washable

VMECA vacuum gauge or sensor

- Indicates vacuum level
- Digital output signal when set vacuum level is achieved

VMECA free-flow silencer

- Assures low noise level
- Free air flow design to minimize vacuum loss due to back flow
- No dust collection

VMECA Auto cleaning control valve

- Quick vacuum release
- Automatic filter cleaning system

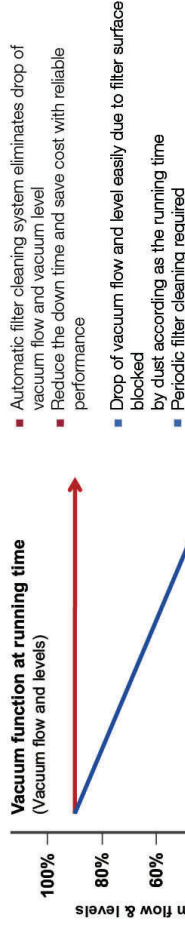
Body

- Durable engineering plastic material
- Corrosion resistant
- Light weight
- Two vacuum ports: G3/4" and G1"

VMECA® patented Vacuum Cartridge System

- Multiple Vacuum cartridge available up to 4pcs
- High operational reliability despite fluctuating or low compressed air pressure
- Air-Saving(AS) kit available to minimize energy consumption (about 20times less)
- Easily mountable and interchangeable vacuum cartridge

Comparison of vacuum flow & level at running time



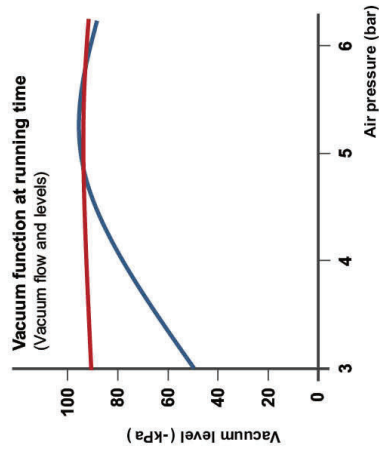
- Automatic filter cleaning system eliminates drop of vacuum flow and vacuum level
- Reduce the down time and save cost with reliable performance
- Drop of vacuum flow and level easily due to filter surface blocked by dust according as the running time
- Periodic filter cleaning required

Running time (month)

— VMECA Improved system — Typical installation (Old system)



Comparison of vacuum level at different feed pressure



- High operational reliability despite fluctuating or low compressed air pressure (vacuum level $\pm 2\%$)

— VMECA Improved system — Typical installation (Old system)



VTC3031 / VTCL3031

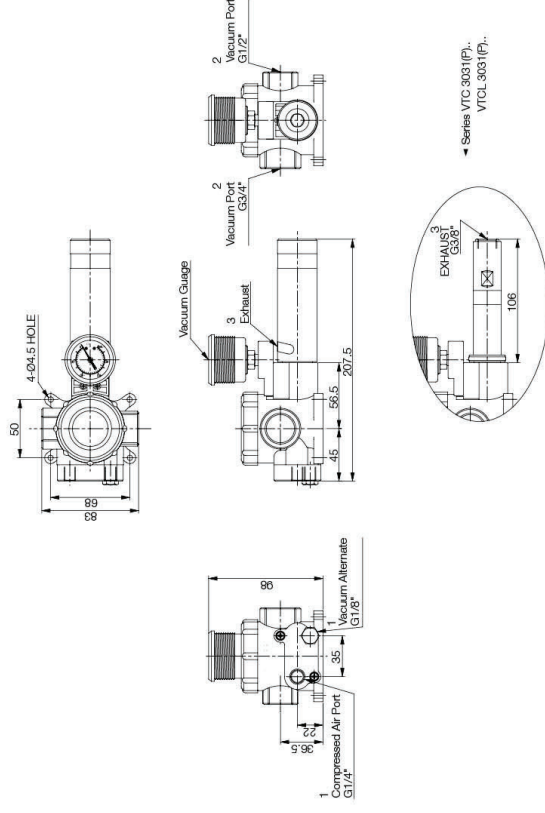
Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



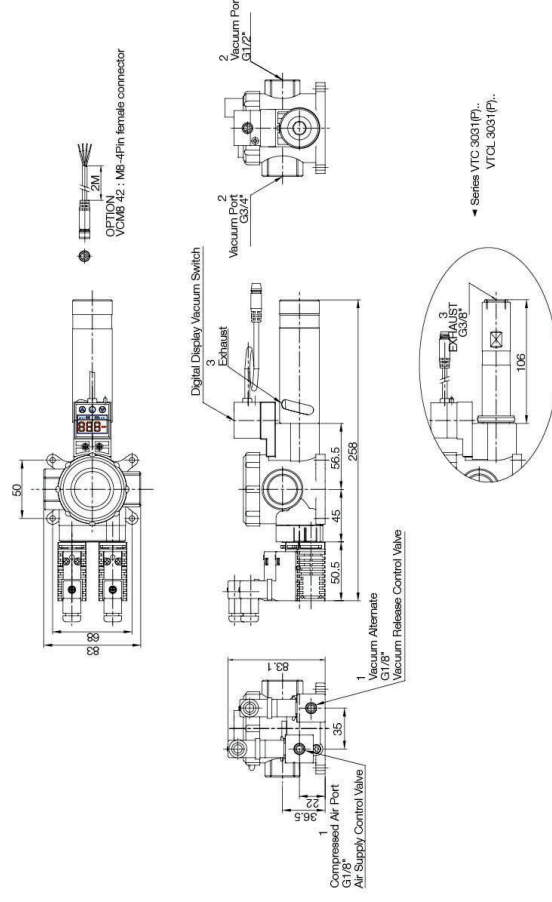
Dimensions – Basic Pump

[Unit : mm]



Dimensions – with Accessories

[Unit : mm]



Specifications

Description	VTC3031	VTCL3031
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	341 NI/min	362 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	412 g	411 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		
VTC3031	75	2.2	302	123	88	53	31	29	17	5	-	-	-	-
	92	3.0	338	152	106	64	33	32	22	17	6	2	-	-
	92	4.0	341	154	128	94	69	43	23	17	7	2	-	-
VTCL3031	60	4.0	302	176	110	70	46	28	7	-	-	-	-	-
	70	5.0	344	200	130	82	50	38	23	11	-	-	-	-
	75	6.0	362	194	154	100	52	38	32	22	-	-	-	-

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			
VTC3031	2.2	97	0.02	0.09	0.1	0.32	0.42	0.73	1.62	-	-	-	-	-
	3	118	0.02	0.07	0.18	0.28	0.38	0.64	0.8	1.2	3.8	-	-	
	4	152	0.01	0.05	0.07	0.09	0.2	0.42	0.6	1	3.4	-	-	
VTCL3031	4	70	0.03	0.09	0.17	0.29	0.38	0.8	-	-	-	-	-	
	5	85	0.01	0.08	0.15	0.25	0.3	0.4	0.8	-	-	-	-	
	6	104	0.01	0.07	0.12	0.2	0.28	0.36	0.6	-	-	-	-	

VTC3021 / VTCL3021

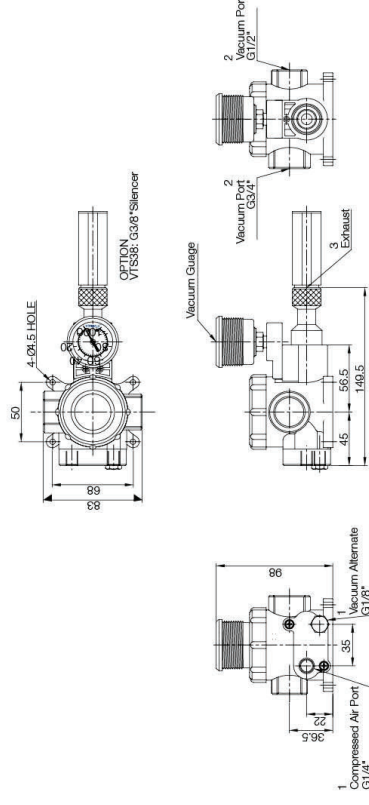
Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Dimensions – Basic Pump

[Unit : mm]



Specifications

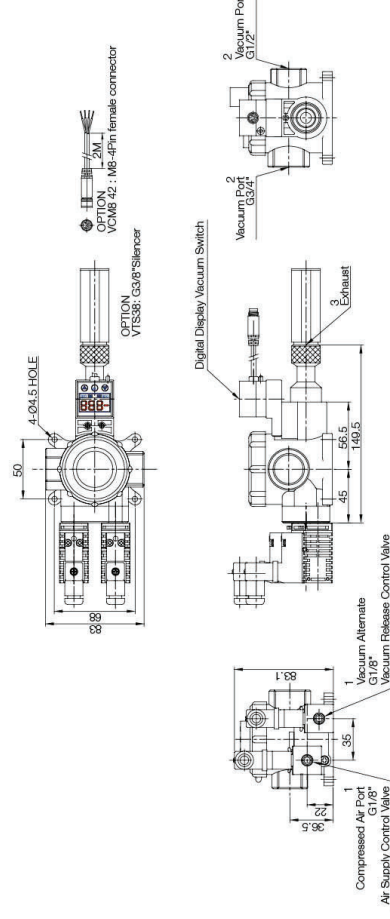
Description	VTC3021	VTCL3021
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	171 NI/min	200 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	317 g	316 g

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		
VTC3021	75	2.2	164	122.5	88	53	31.4	28.5	16.5	4.6	-	-	-	-
	92	3.0	170	152	106	64	33	32	22	16.5	6.4	1.9	-	-
VTCL3021	60	4.0	188	158	110	70	46	28	6.8	-	-	-	-	-
	70	5.0	195	176	130	82	50	37.5	23	11.3	-	-	-	-
	75	6.0	200	183	154	100	52	38	32	22	-	-	-	-

Dimensions – with Accessories

[Unit : mm]

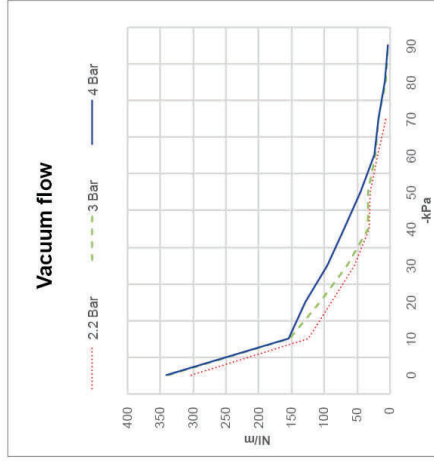


Evacuation Time

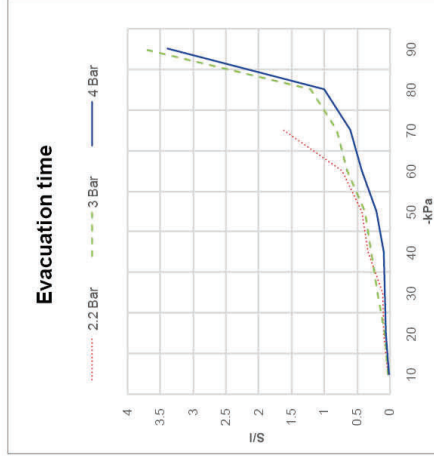
Model	Feed Pressure (bar)	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)										
			10	20	30	40	50	60	70	80	90		
VTC3021	2.2	97	0.03	0.12	0.21	0.38	0.47	0.73	1.62	-	-	-	-
	3.0	118	0.027	0.1	0.19	0.3	0.4	0.64	0.8	1.2	3.8	-	-
	4.0	152	0.026	0.058	0.09	0.1	0.25	0.5	0.69	1.05	3.5	-	-
VTCL3021	4.0	70	0.035	0.009	0.17	0.29	0.38	0.85	-	-	-	-	-
	5.0	85	0.027	0.088	0.15	0.25	0.3	0.4	0.82	-	-	-	-
	6.0	104	0.028	0.08	0.12	0.2	0.28	0.36	0.63	-	-	-	-

Performance data

VTC3031

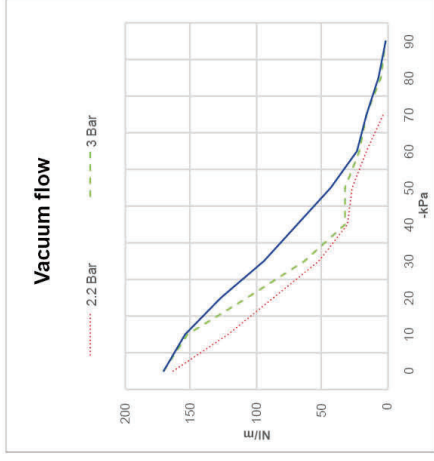


* Vacuum flow at different vacuum level

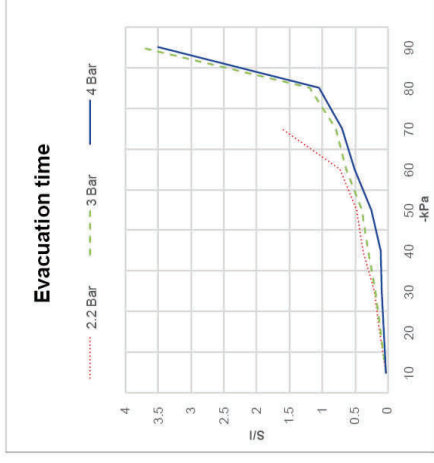


* Time to evacuate a volume at different vacuum level

VTC3021

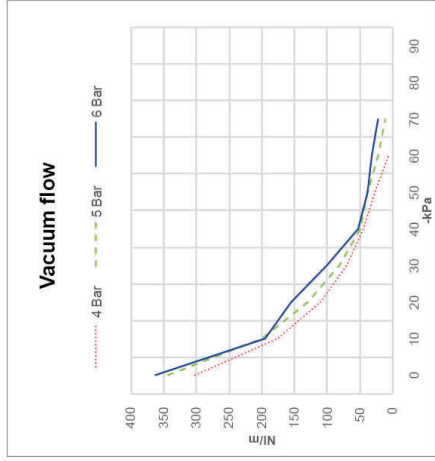


* Vacuum flow at different vacuum level

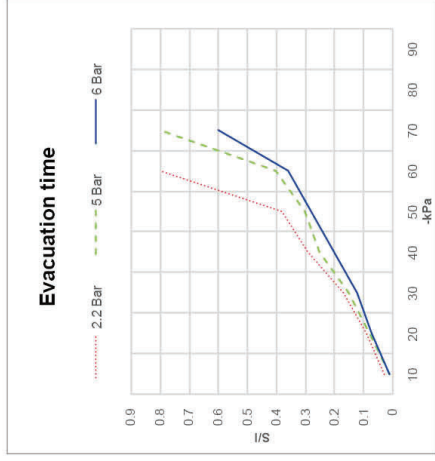


* Time to evacuate a volume at different vacuum level

VTCL3031

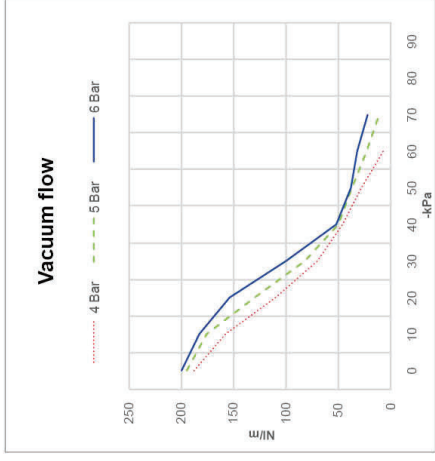


* Vacuum flow at different vacuum level

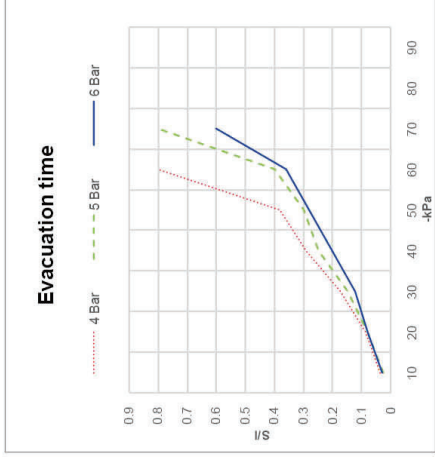


* Time to evacuate a volume at different vacuum level

VTCL3021



* Vacuum flow at different vacuum level



* Time to evacuate a volume at different vacuum level

VTC3032 / VTCL3032

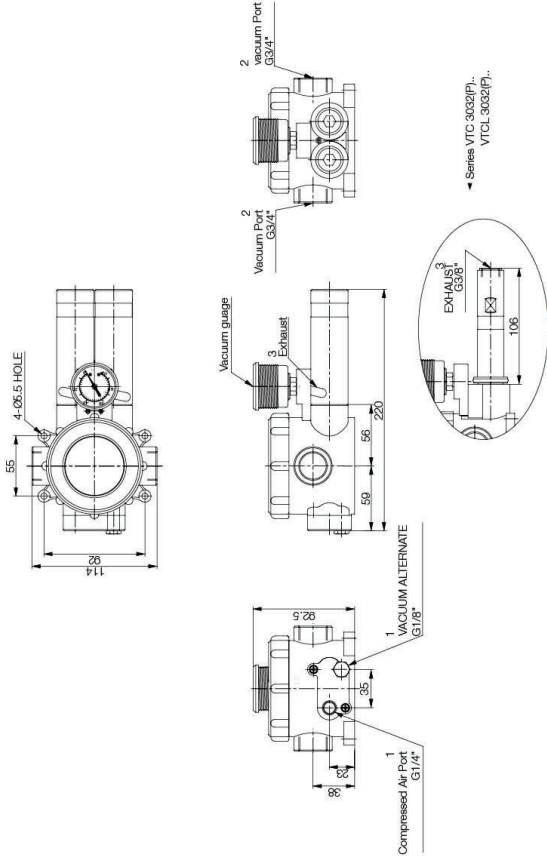
Features and Strengths

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- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



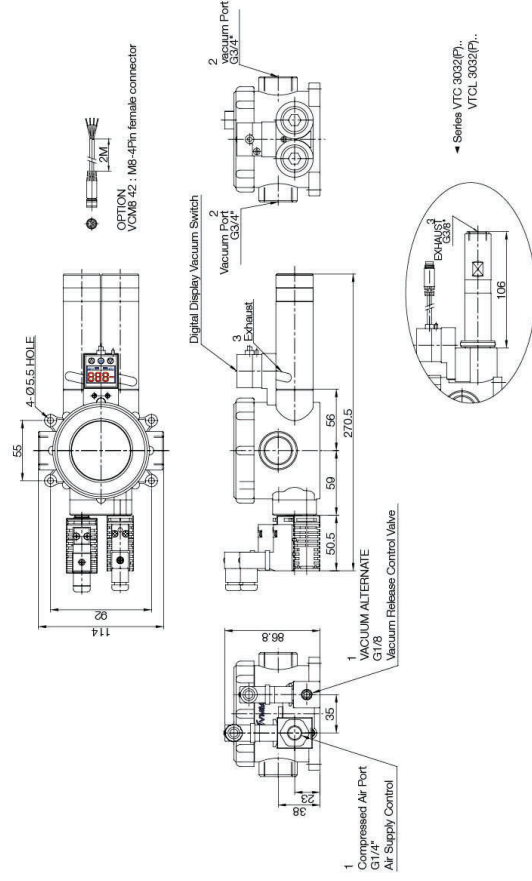
Dimensions – Basic Pump

[Unit : mm]



Dimensions – with Accessories

[Unit : mm]



Specifications

Description	VTC3032	VTCL3032
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	682 NI/min	724 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	671 g	670 g

Vacuum Flow

Model	Max. vacuum pressure (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)												
			0	10	20	30	40	50	60	70	80	90			
VTC3032	75	2.2	604	245	176	106	62.8	57	33	92	-	-	-	-	-
	92	3.0	676	304	212	128	66	64	44	33	12.8	3.8	-	-	-
	92	4.0	682	308	255	188	138	86	46.6	34.6	13.8	4.2	-	-	-
VTCL3032	60	4.0	604	352	220	140	92	56	13.6	-	-	-	-	-	-
	70	5.0	688	392	260	164	100	75	46	23.8	-	-	-	-	-
	75	6.0	724	415	308	200	104	76	64	44	-	-	-	-	-

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				
VTC3032	2.2	97	0.02	0.09	0.10	0.32	0.42	0.73	1.62	-	-	-	-	-	-
	3.0	118	0.02	0.07	0.18	0.28	0.38	0.64	0.80	1.20	3.80	-	-	-	-
	4.0	152	0.01	0.05	0.07	0.09	0.20	0.42	0.60	1.00	3.40	-	-	-	-
VTCL3032	4.0	70	0.03	0.084	0.167	0.24	0.35	0.43	-	-	-	-	-	-	-
	5.0	85	0.01	0.08	0.14	0.20	0.27	0.43	0.80	-	-	-	-	-	-
	6.0	104	0.01	0.07	0.10	0.198	0.21	0.32	0.60	-	-	-	-	-	-

VTC3022 / VTCL3022

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Specifications

Description	VTC3022	VTCL3022
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	342 NI/min	400 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	555 g	555 g

Vacuum Flow

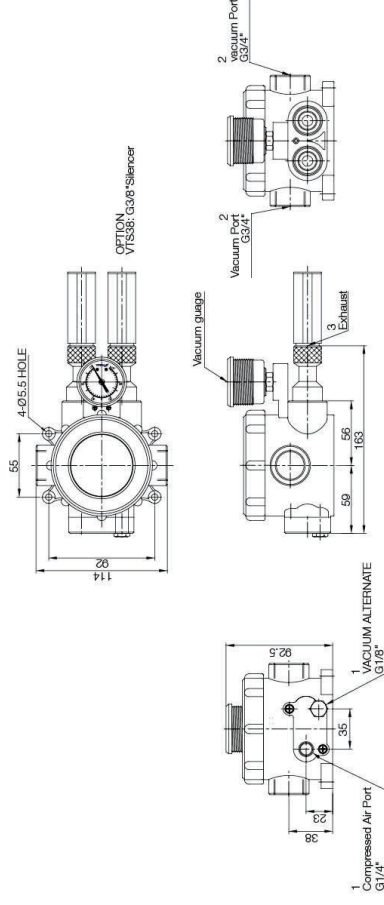
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)											
			0	10	20	30	40	50	60	70	80	90		
VTC3022	75	2.2	328	245	176	106	62.8	57	33	9.2	-	-	-	-
	92	3.0	340	304	212	128	66	64	44	33	12.8	3.8	-	-
	92	4.0	342	308	255	188	138	86	46.6	34.6	13.8	4.2	-	-
VTCL3022	60	4.0	376	316	220	140	92	56	13.6	-	-	-	-	-
	70	5.0	390	352	260	164	100	75	46	23.8	-	-	-	-
	75	6.0	400	366	308	200	104	76	64	44	-	-	-	-

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			
VTC3022	2.2	194	0.011	0.043	0.050	0.170	0.230	0.380	0.810	-	-	-	-	-
	3	236	0.010	0.032	0.055	0.150	0.220	0.330	0.480	0.780	1.980	-	-	
	4	304	0.010	0.026	0.037	0.047	0.120	0.230	0.350	0.700	1.720	-	-	
VTCL3022	4	140	0.013	0.037	0.073	0.140	0.190	0.450	-	-	-	-	-	
	5	170	0.009	0.032	0.060	0.128	0.160	0.250	0.430	-	-	-	-	
	6	208	0.006	0.030	0.047	0.098	0.150	0.200	0.320	-	-	-	-	

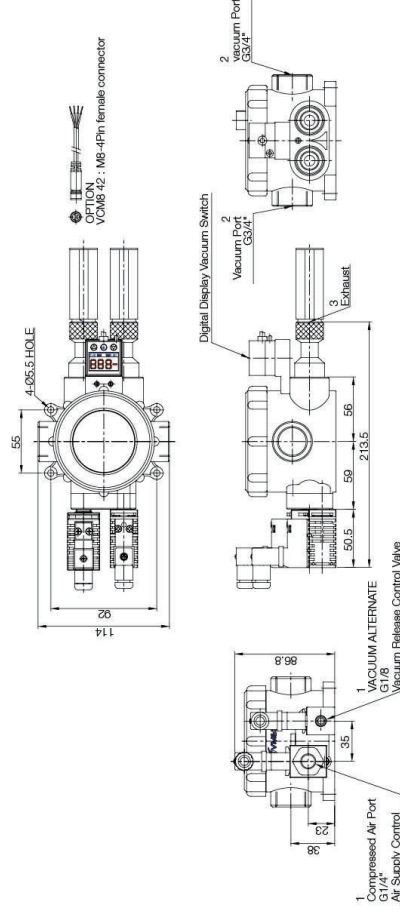
Dimensions – Basic Pump

[Unit : mm]



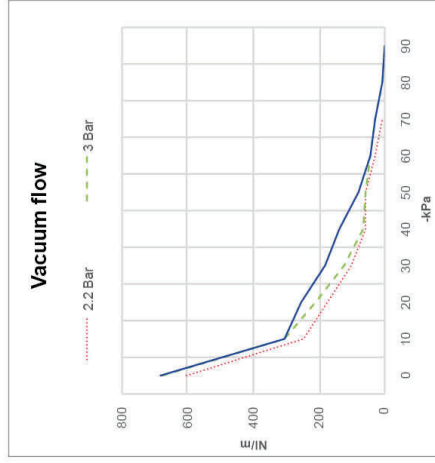
Dimensions – with Accessories

[Unit : mm]

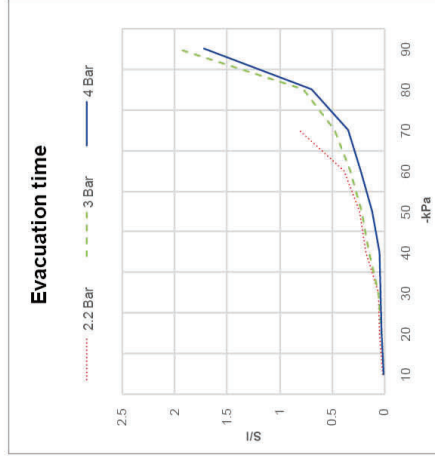


Performance data

VTC3032



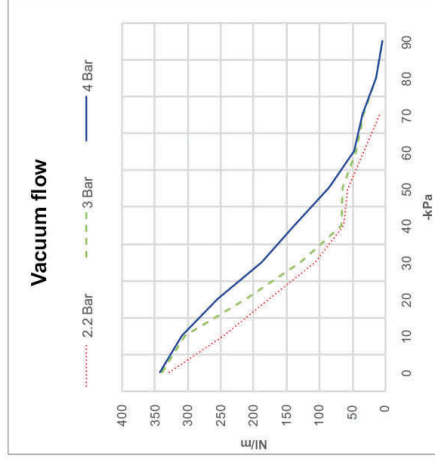
* Vacuum flow at different vacuum level



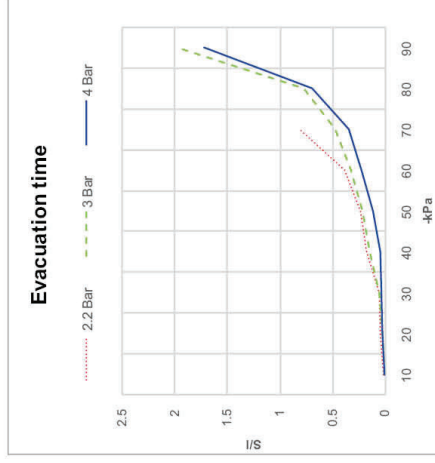
* Time to evacuate a volume at different vacuum level

Performance data

VTC3022

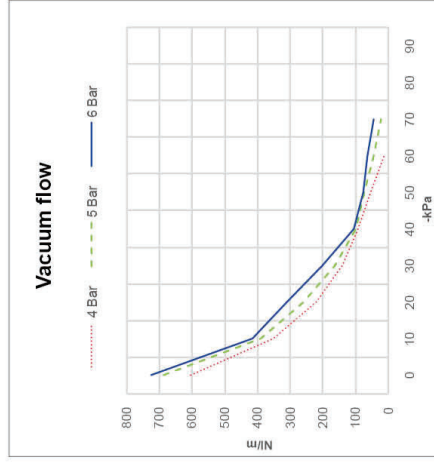


* Vacuum flow at different vacuum level

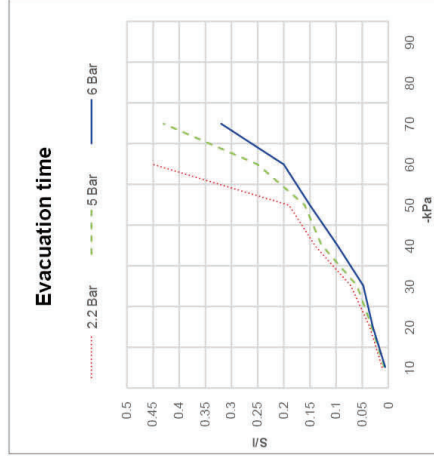


* Time to evacuate a volume at different vacuum level

VTCL3032

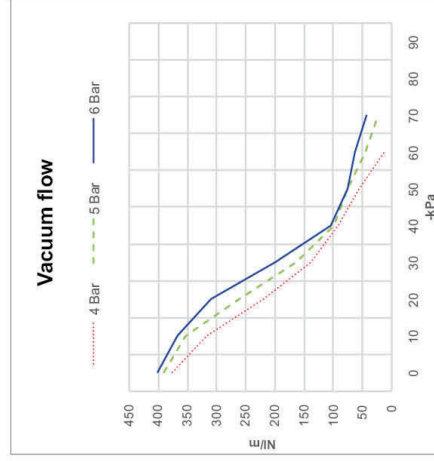


* Vacuum flow at different vacuum level

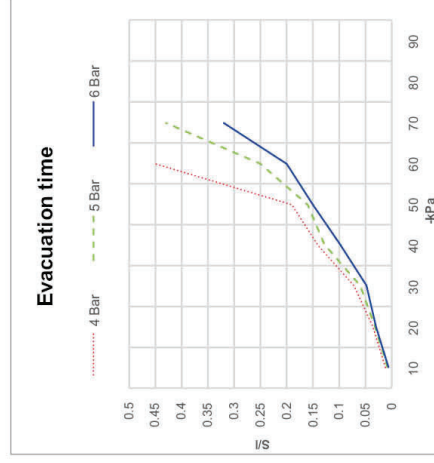


* Time to evacuate a volume at different vacuum level

VTCL3022



* Vacuum flow at different vacuum level



* Time to evacuate a volume at different vacuum level

VTC3134 / VTCL3134

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Specifications

Description	VTC3134	VTCL3134
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	1364 NI/min	1448 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	1,113 g	1,111 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			
VTC3134	75	2.2	1208	490	352	212	126	114	66	18	-	-	-	-	-
	92	3.0	1352	608	424	256	132	128	88	66	26	7.6	-	-	-
	92	4.0	1364	616	510	376	276	172	93	69	28	8.4	-	-	-
VTCL3134	60	4.0	1208	688	440	280	184	112	27	-	-	-	-	-	-
	70	5.0	1376	784	520	328	200	150	92	45	-	-	-	-	-
	75	6.0	1448	828	616	400	208	152	128	88	-	-	-	-	-

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				
VTC3134	2.2	388	0.005	0.02	0.027	0.08	0.1	0.18	0.4	-	-	-	-	-	-
	3.0	472	0.004	0.018	0.02	0.07	0.09	0.16	0.2	0.3	0.95	-	-	-	-
	4.0	608	0.003	0.01	0.01	0.02	0.05	0.1	0.15	0.25	0.85	-	-	-	-
VTCL3134	4.0	280	0.0089	0.023	0.04	0.07	0.09	0.2	-	-	-	-	-	-	-
	5.0	340	0.0057	0.018	0.03	0.063	0.075	0.1	0.2	-	-	-	-	-	-
	6.0	416	0.0053	0.015	0.029	0.052	0.071	0.09	0.15	-	-	-	-	-	-

VTC3133 / VTCL3133

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Specifications

Description	VTC3133	VTCL3133
Max. Vacuum level	-93 kPa	-75 kPa
Open Vacuum flow	1023 NI/min	1086 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	1,117 g	1,115 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		
VTC3133	75	2.2	902	368	264	159	94	86	50	14	-	-	-	-
	92	3.0	1014	456	318	192	99	96	66	50	19	6	-	-
	92	4.0	1023	462	383	282	207	129	70	52	21	6.3	-	-
VTCL3133	60	4.0	906	516	330	210	138	84	20.4	-	-	-	-	-
	70	5.0	1032	588	390	246	150	112.5	69	34	-	-	-	-
	75	6.0	1086	621	462	300	156	114	96	66	-	-	-	-

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			
VTC3133	2.2	291	0.006	0.03	0.038	0.1	0.14	0.24	0.54	-	-	-	-	-
	3.0	354	0.005	0.02	0.03	0.09	0.12	0.21	0.24	0.4	1.27	-	-	-
	4.0	456	0.004	0.01	0.02	0.03	0.06	0.14	0.2	0.33	1.13	-	-	-
VTCL3133	4.0	210	0.016	0.03	0.05	0.09	0.12	0.26	-	-	-	-	-	-
	5.0	255	0.0085	0.028	0.05	0.08	0.1	0.13	0.26	-	-	-	-	-
	6.0	312	0.0079	0.02	0.04	0.06	0.09	0.12	0.2	-	-	-	-	-

VTC3132 / VTCL3132

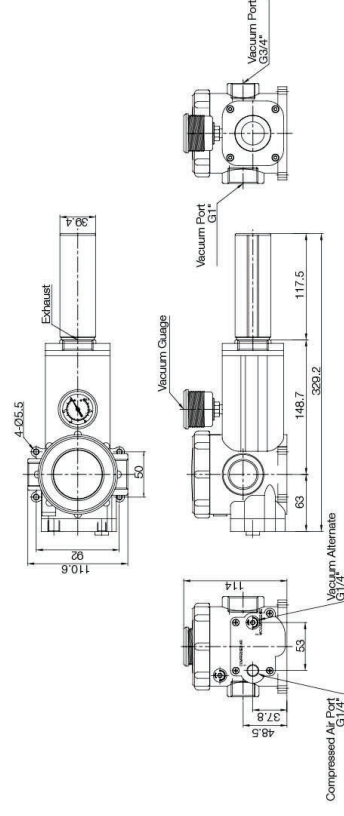
Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Dimensions – Basic Pump

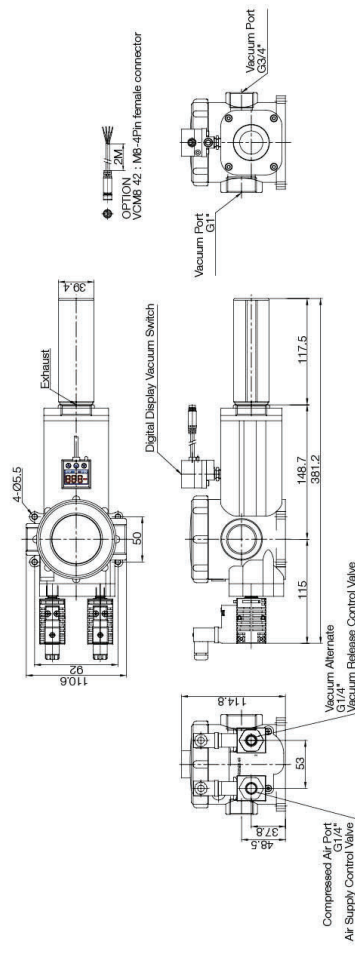
[Unit : mm]



Series VTC 3134... / VTCL 3134...

Dimensions – with Accessories

[Unit : mm]



Specifications

Description	VTC3132	VTCL3132
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	682 NI/min	724 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	1,121 g	1,120 g

Vacuum Flow

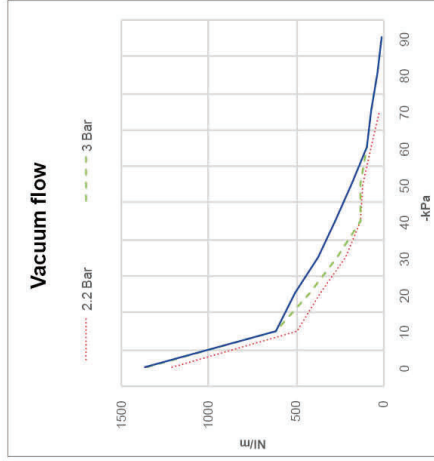
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)																
			0	10	20	30	40	50	60	70	80	90							
VTC3132	75	2.2	604	245	176	106	62.8	57	33	9.2	-	-	-	-	-	-	-	-	-
	92	3.0	676	304	212	128	66	64	44	33	12.8	3.8	-	-	-	-	-	-	-
	92	4.0	682	308	255	188	138	86	46.6	34.6	13.8	4.2	-	-	-	-	-	-	-
VTCL3132	60	4.0	604	344	220	140	92	56	13.6	-	-	-	-	-	-	-	-	-	-
	70	5.0	688	392	260	164	100	75	46	23.8	-	-	-	-	-	-	-	-	-
	75	6.0	724	415	308	200	104	76	64	44	-	-	-	-	-	-	-	-	-

Evacuation Time

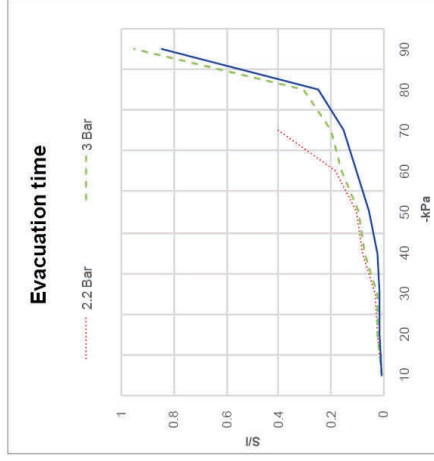
Model	Feed Pressure (bar)	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)																
			10	20	30	40	50	60	70	80	90								
VTC3132	2.2	194	0.011	0.043	0.050	0.170	0.230	0.380	0.810	-	-	-	-	-	-	-	-	-	-
	3.0	236	0.010	0.032	0.055	0.150	0.220	0.330	0.480	0.780	1.980	-	-	-	-	-	-	-	-
	4.0	304	0.010	0.026	0.037	0.047	0.120	0.230	0.350	0.700	1.720	-	-	-	-	-	-	-	-
VTCL3132	4.0	140	0.017	0.037	0.073	0.14	0.19	0.45	-	-	-	-	-	-	-	-	-	-	-
	5.0	170	0.014	0.032	0.06	0.128	0.16	0.25	0.43	-	-	-	-	-	-	-	-	-	-
	6.0	208	0.012	0.03	0.047	0.098	0.15	0.2	0.32	-	-	-	-	-	-	-	-	-	-

Performance data

VTC3134



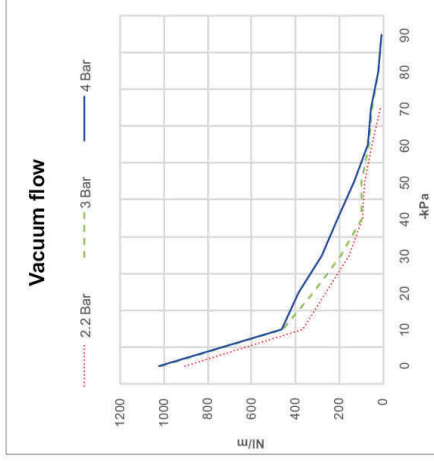
* Vacuum flow at different vacuum level



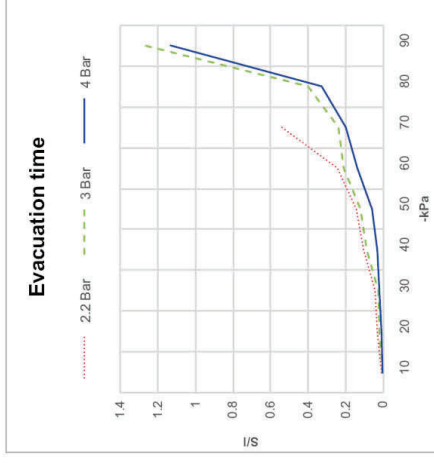
* Time to evacuate a volume at different vacuum level

Performance data

VTC3133

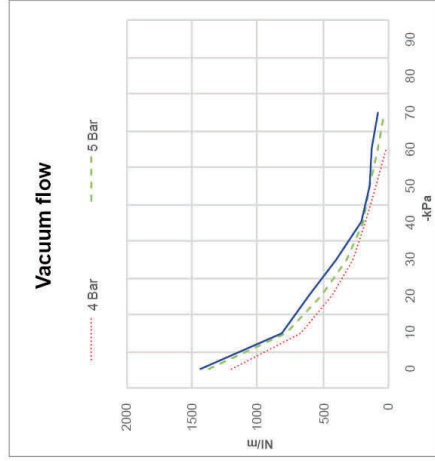


* Vacuum flow at different vacuum level

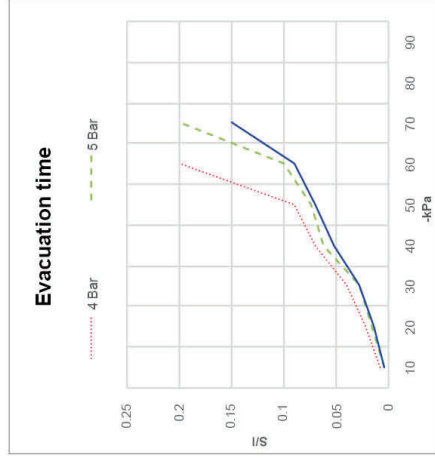


* Time to evacuate a volume at different vacuum level

VTCL3134

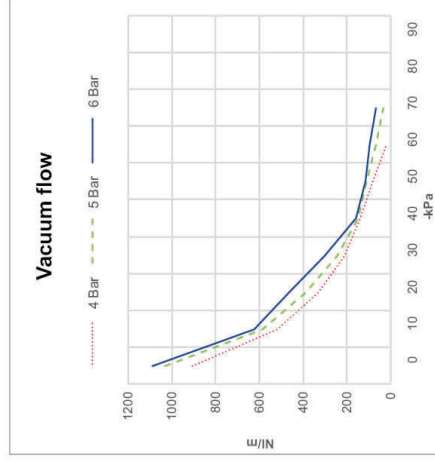


* Vacuum flow at different vacuum level

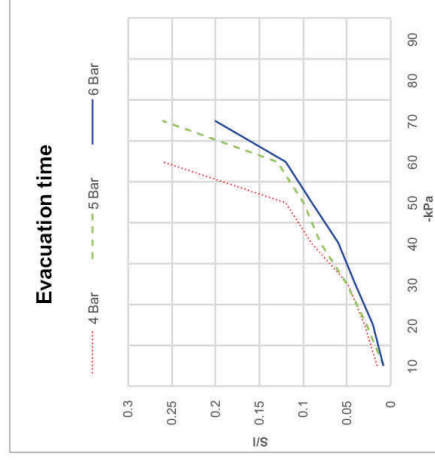


* Time to evacuate a volume at different vacuum level

VTCL3133



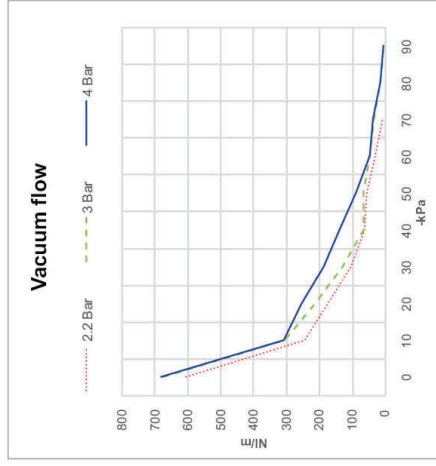
* Vacuum flow at different vacuum level



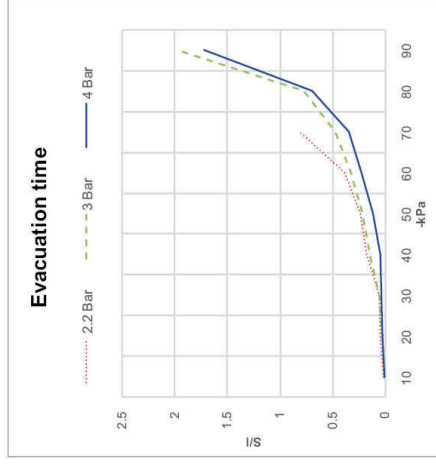
* Time to evacuate a volume at different vacuum level

Performance data

VTC3132

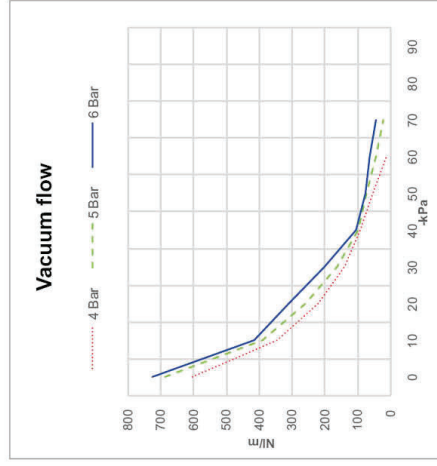


※ Vacuum flow at different vacuum level

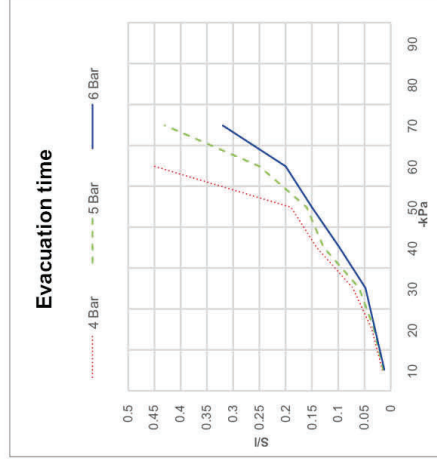


※ Time to evacuate a volume at different vacuum level

VTCL3132



※ Vacuum flow at different vacuum level



※ Time to evacuate a volume at different vacuum level

VTC3124 / VTCL3124

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Specifications

Description	VTC3124	VTCL3124
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	684 NI/min	800 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	957 g	956 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			
VTC3124	75	2.2	656	490	352	212	126	114	66	18	-	-	-	-	-
	92	3.0	680	608	424	256	132	128	88	66	26	7.6	-	-	-
	92	4.0	684	616	510	376	276	172	93	69	28	8.4	-	-	-
VTCL3124	70	5.0	780	704	520	328	200	150	92	45.2	-	-	-	-	-
	75	6.0	800	732	616	400	208	152	128	88	-	-	-	-	-

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				
VTC3124	2.2	388	0.008	0.03	0.05	0.095	0.12	0.018	0.4	-	-	-	-	-	-
	3.0	472	0.007	0.025	0.048	0.08	0.1	0.016	0.2	0.3	0.95	-	-	-	
	4.0	608	0.006	0.015	0.02	0.025	0.06	0.012	0.17	0.26	0.87	-	-	-	
VTCL3124	4.0	280	0.01	0.025	0.04	0.07	0.09	0.2	-	-	-	-	-	-	
	5.0	340	0.0067	0.02	0.037	0.065	0.075	0.1	0.2	-	-	-	-	-	
	6.0	416	0.006	0.02	0.03	0.055	0.073	0.09	0.15	-	-	-	-	-	

VTC3123 / VTCL3123

Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



Specifications

Description	VTC3123	VTCL3123
Max. Vacuum level	-92 kPa	-75 kPa
Open Vacuum flow	513 NI/min	600 NI/min
Max. Feed pressure	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA
Weight	946 g	945 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		
VTC3123	75	2.2	492	367	264	159	94	86	50	14	-	-	-	-
	92	3.0	510	456	318	192	99	96	66	50	19	6	-	-
	92	4.0	513	462	383	282	207	129	70	52	21	6.3	-	-
VTCL3123	70	5.0	585	528	390	246	150	112.5	69	33.9	-	-	-	-
	75	6.0	600	549	462	300	156	114	96	66	-	-	-	-

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			
VTC3123	2.2	291	0.01	0.04	0.07	0.13	0.16	0.24	0.54	-	-	-	-	-
	3.0	364	0.009	0.03	0.06	0.1	0.13	0.21	0.26	0.4	1.27	-	-	
	4.0	456	0.008	0.019	0.03	0.033	0.08	0.16	0.23	0.35	1.17	-	-	
VTCL3123	4.0	210	0.012	0.029	0.057	0.097	0.127	0.27	-	-	-	-	-	
	5.0	255	0.009	0.028	0.05	0.083	0.1	0.13	0.26	-	-	-	-	
	6.0	312	0.009	0.027	0.04	0.06	0.09	0.12	0.2	-	-	-	-	

VTC3122 / VTCL3122

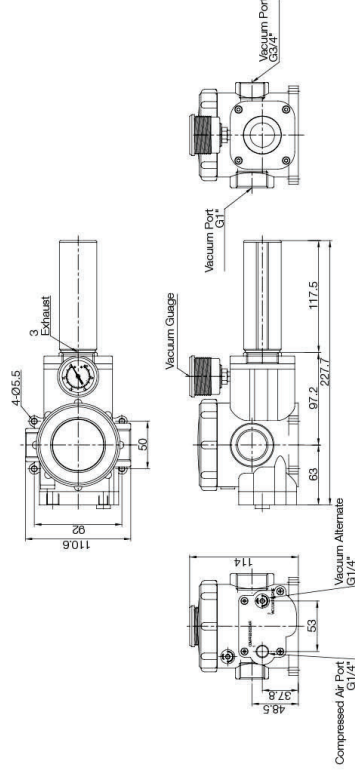
Features and Strengths

- Highly operational reliability despite fluctuating or low compressed-air pressure
- Integrated pleated filter with high dirt capacity & Auto-cleaning system
- Optional Air-Saving Kit available to minimize energy consumption
- Quick response time
- Patented design



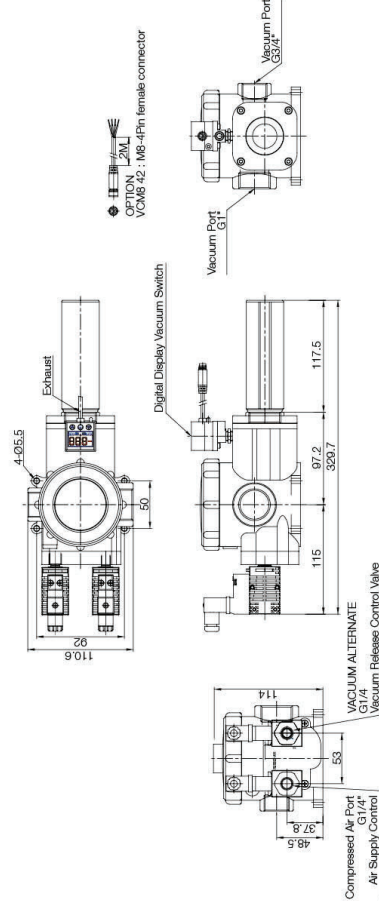
Dimensions – Basic Pump

[Unit : mm]



Dimensions – with Accessories

[Unit : mm]



Specifications

Description	VTC3122		VTCL3122	
	Max. Vacuum level	-92 kPa	-75 kPa	-75 kPa
Open Vacuum flow	342 NI/min	342 NI/min	400 NI/min	400 NI/min
Max. Feed pressure	7 bar	7 bar	7 bar	7 bar
Temperature	-20 ~ 80 °C	-20 ~ 80 °C	-20 ~ 80 °C	-20 ~ 80 °C
Noise level	50 ~ 60 dbA	50 ~ 60 dbA	50 ~ 60 dbA	50 ~ 60 dbA
Weight	933 g	933 g	933 g	933 g

Vacuum Flow

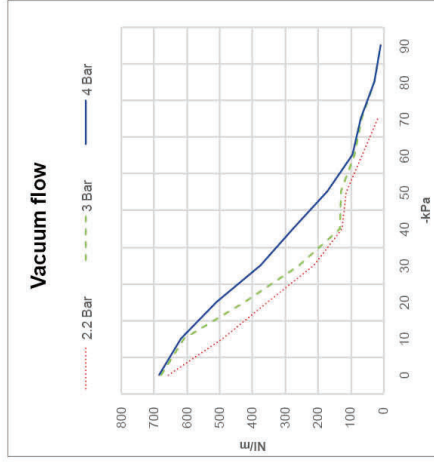
Model	Max. vacuum (-kPa)	Feed Pressure (bar)	Vacuum flow (NI/min) at different vacuum levels (-kPa)												
			0	10	20	30	40	50	60	70	80	90			
VTC3122	75	2.2	328	245	176	106	62.8	57	33	9.2	-	-	-	-	-
	92	3.0	340	304	212	128	66	64	44	33	12.8	3.8	-	-	-
	92	4.0	342	308	255	188	138	86	46.6	34.6	13.8	4.2	-	-	-
VTCL3122	60	4.0	376	316	220	140	92	56	13.6	-	-	-	-	-	-
	70	5.0	390	352	260	164	100	75	46	23.8	-	-	-	-	-
	75	6.0	400	366	308	200	104	76	64	44	-	-	-	-	-

Evacuation Time

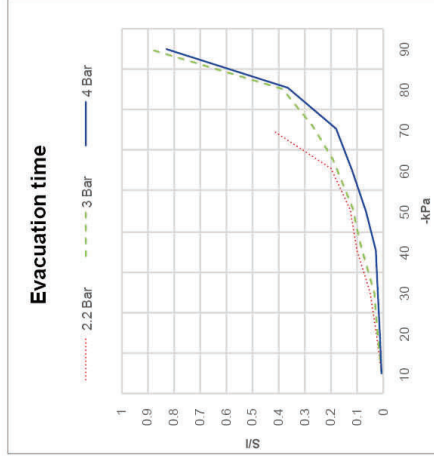
Model	Feed Pressure (bar)	Air Consumption (NI/min)	Evacuation time in sec / liter to reach different vacuum levels (-kPa)											
			10	20	30	40	50	60	70	80	90			
VTC3122	2.2	194	0.018	0.065	0.108	0.2	0.25	0.395	0.81	-	-	-	-	-
	3.0	236	0.016	0.05	0.07	0.16	0.23	0.34	0.5	0.795	2.01	-	-	
	4.0	304	0.014	0.029	0.043	0.05	0.13	0.25	0.355	0.71	1.75	-	-	
VTCL3122	4.0	140	0.018	0.04	0.08	0.145	0.195	0.5	-	-	-	-	-	
	5.0	170	0.014	0.036	0.075	0.125	0.15	0.2	0.4	-	-	-	-	
	6.0	208	0.013	0.032	0.06	0.1	0.155	0.18	0.35	-	-	-	-	

Performance data

VTC3124

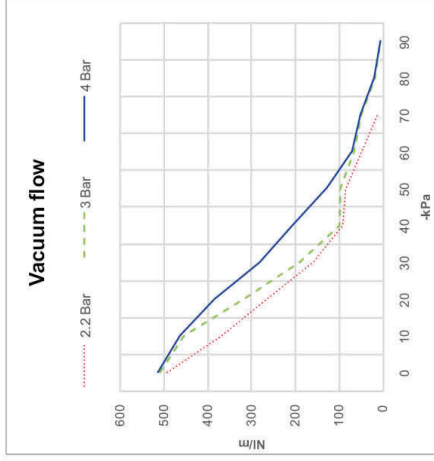


* Vacuum flow at different vacuum level

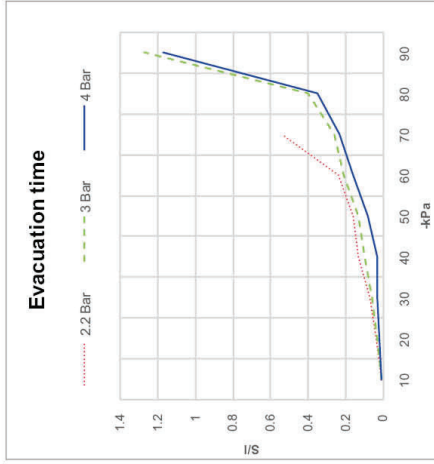


* Time to evacuate a volume at different vacuum level

VTC3123

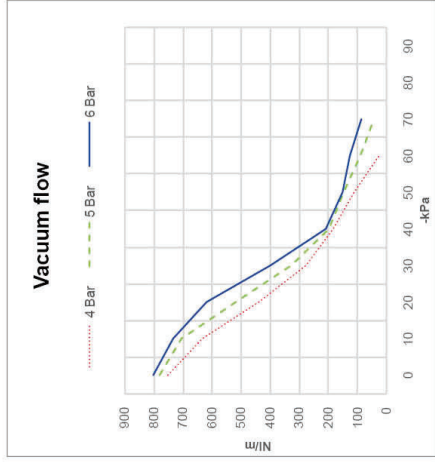


* Vacuum flow at different vacuum level

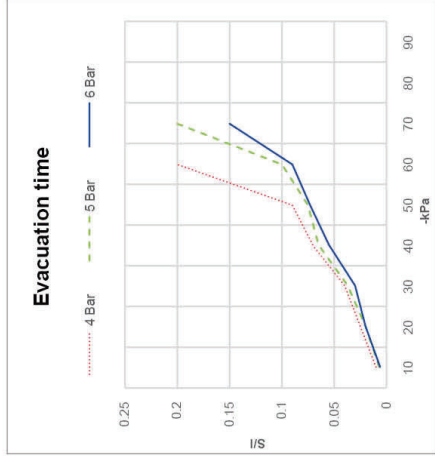


* Time to evacuate a volume at different vacuum level

VTCL3124

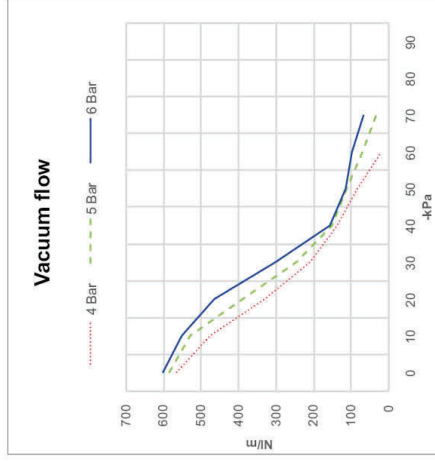


* Vacuum flow at different vacuum level

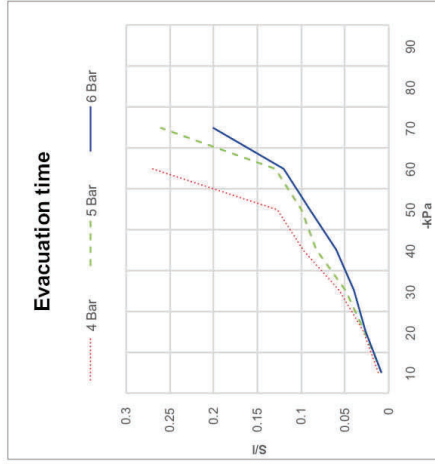


* Time to evacuate a volume at different vacuum level

VTCL3123



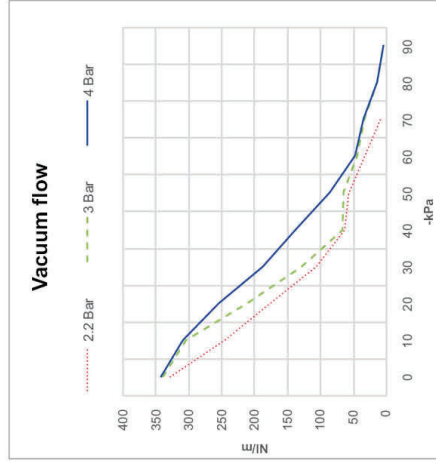
* Vacuum flow at different vacuum level



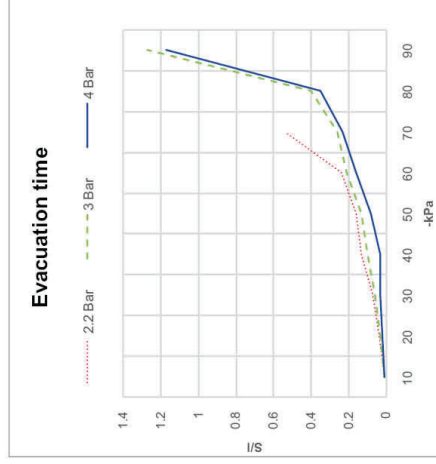
* Time to evacuate a volume at different vacuum level

Performance data

VTC3122

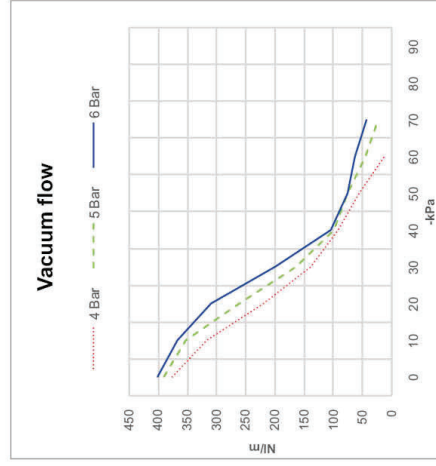


※ Vacuum flow at different vacuum level

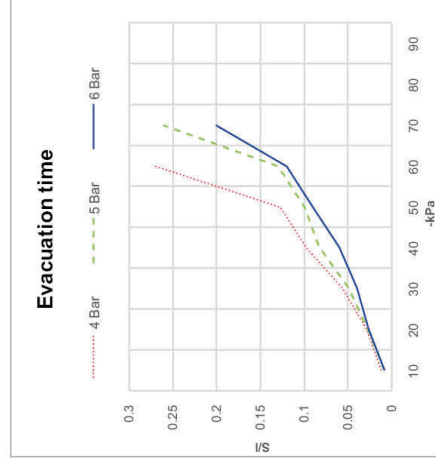


※ Time to evacuate a volume at different vacuum level

VTCL3122

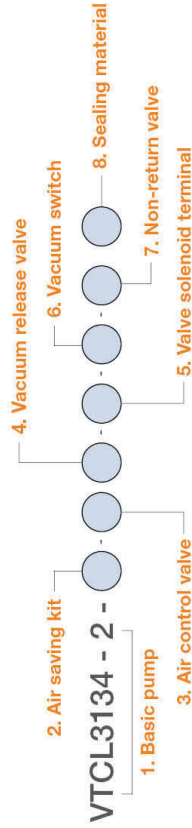


※ Vacuum flow at different vacuum level



※ Time to evacuate a volume at different vacuum level

Build an Ordering No.



1. Basic pump	Description	Ordering No.
VTC Midi pump, 3-stage, 1-cartridge, Vacuum filter, Two-fold silencer		VTCL3031-2
VTC Midi pump, 2-stage, 1-cartridge, Vacuum filter		VTC3021-2
VTC Midi Pump, 2-stage, 2-cartridge, Vacuum filter, Two-fold silencer		VTC3032-2
VTC Midi pump, 2-stage, 2-cartridge, Vacuum filter		VTC3022-2
VTCL Midi pump, 3-stage "L" cartridge, 1-cartridge, Vacuum filter, Two-fold silencer		VTCL3031-2
VTCL Midi pump, 2-stage "L" cartridge, 1-cartridge, Vacuum filter		VTCL3021-2
VTCL Midi Pump, 3-stage "L" cartridge, 2-cartridge, Vacuum filter, Two-fold silencer		VTCL3032-2
VTCL Midi pump, 2-stage "L" cartridge, 2-cartridge, Vacuum filter		VTCL3022-2
VTC Midi pump, 3-stage, 1-cartridge, Vacuum filter, Plug		VTC3031P-2
VTC Midi pump, 3-stage, 2-cartridge, Vacuum filter, Plug		VTC3032P-2
VTCL Midi pump, 3-stage "L" cartridge, 1-cartridge, Vacuum filter, Plug		VTCL3031P-2
VTCL Midi Pump, 3-stage "L" cartridge, 2-cartridge, Vacuum filter, Plug		VTCL3032P-2
VTC Mega pump, 3-stage, 4-cartridge, Vacuum filter, Silencer		VTC3134-2
VTC Mega pump, 3-stage, 3-cartridge, Vacuum filter, Silencer		VTC3133-2
VTC Mega pump, 2-stage, 2-cartridge, Vacuum filter, Silencer		VTC3132-2
VTC Mega pump, 2-stage, 4-cartridge, Vacuum filter, Silencer		VTC3124-2
VTC Mega pump, 2-stage, 3-cartridge, Vacuum filter, Silencer		VTC3123-2
VTC Mega pump, 2-stage, 2-cartridge, Vacuum filter, Silencer		VTC3122-2
VTCL Mega pump, 3-stage "L" cartridge, 4-cartridge, Vacuum filter, Silencer		VTCL3134-2
VTCL Mega pump, 3-stage "L" cartridge, 3-cartridge, Vacuum filter, Silencer		VTCL3133-2
VTCL Mega pump, 2-stage "L" cartridge, 4-cartridge, Vacuum filter, Silencer		VTCL3124-2
VTCL Mega pump, 2-stage "L" cartridge, 3-cartridge, Vacuum filter, Silencer		VTCL3123-2
VTCL Mega pump, 2-stage "L" cartridge, 2-cartridge, Vacuum filter, Silencer		VTCL3122-2
2. Air saving kit	Description	Symbol
No air saving kit		Blank
Air saving kit without air control valve		AS
Air saving kit integrated with air control valve		ASV
3. Air control valve	Description	Ordering No.
No air control valve		Blank
Air control valve, AC110V		A1
Air control valve, AC220V		A2
Air control valve, DC24V		A3
Double solenoid valve, AC110V		D1
Double solenoid valve, AC220V		D2
Double solenoid valve, DC24V		D3
4. Vacuum release valve	Description	Ordering No.
No vacuum release valve		Blank
Vacuum release valve, AC110V		R1
Vacuum release valve, AC220V		R2
Vacuum release valve, DC24V		R3
5. Valve solenoid terminal	Description	Symbol
Solenoid Terminal, DIN, No LW		DN
Solenoid Terminal, DIN, Lamp, No LW		DL
Solenoid Terminal, Conn. Lamp & 0.3m LW: Only available with DC24V		CL
Solenoid Terminal, DIN, 2 in 1 BUS cable: Not available with Double Solenoid Valve		2B
Solenoid Terminal, DIN, 3 in 1 BUS cable: Not available with Double Solenoid Valve		3B
Solenoid Terminal, DIN, 4 in 1 BUS cable: available with Double Solenoid Valve		4B
- 3B and 4B are available only with DC24V and S2 or S2P vacuum switch		

Build an Ordering No.

6. Vacuum switch	Description	Ordering No.
No vacuum switch		Blank
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

7. Non-return valve	Description	Ordering No.
No non-return valve		Blank
Non-return valve: No need with Air saving kit		N

8. Sealing material	Description	Ordering No.
NBR		Blank
VITON		V
EPDM		E

Spare Parts – Basic pumps

Model	Description	Weight (g)
VTC3031-2	VTC Midi pump, 3-stage, 1-cartridge, Vacuum filter, Two-fold silencer	412
VTC3021-2	VTC Midi pump, 2-stage, 1-cartridge, Vacuum filter	917
VTC3032-2	VTC Midi Pump, 2-stage, 2-cartridge, Vacuum filter, Two-fold silencer	671
VTC3022-2	VTC Midi pump, 2-stage, 2-cartridge, Vacuum filter	655
VTCL3031-2	VTCL Midi pump, 3-stage, 1- "L" cartridge, Vacuum filter, Two-fold silencer	411
VTCL3021-2	VTCL Midi pump, 2-stage, 1- "L" cartridge, Vacuum filter	316
VTCL3032-2	VTCL Midi Pump, 3-stage, 2- "L" cartridge, Vacuum filter, Two-fold silencer	670
VTCL3022-2	VTCL Midi pump, 2-stage, 2- "L" cartridge, Vacuum filter	655
VTC3031P-2	VTC Midi pump, 3-stage, 1-cartridge, Vacuum filter, Plug	392
VTC3032P-2	VTC Midi pump, 3-stage, 2-cartridge, Vacuum filter, Plug	631
VTCL3031P-2	VTCL Midi pump, 3-stage, 1- "L" cartridge, Vacuum filter, Plug	392
VTCL3021P-2	VTCL Midi pump, 3-stage, 2- "L" cartridge, Vacuum filter, Plug	630
VTC3134-2	VTC Mega pump, 3-stage, 4-cartridge, Vacuum filter, Silencer	1,113
VTC3133-2	VTC Mega pump, 3-stage, 3-cartridge, Vacuum filter, Silencer	1,117
VTC3132-2	VTC Mega pump, 2-stage, 2-cartridge, Vacuum filter, Silencer	1,121
VTC3124-2	VTC Mega pump, 2-stage, 4-cartridge, Vacuum filter, Silencer	957
VTC3123-2	VTC Mega pump, 2-stage, 3-cartridge, Vacuum filter, Silencer	946
VTC3122-2	VTC Mega pump, 2-stage, 2-cartridge, Vacuum filter, Silencer	933
VTCL3134-2	VTCL Mega pump, 3-stage, 4- "L" cartridge, Vacuum filter, Silencer	1,111
VTCL3133-2	VTCL Mega pump, 3-stage, 3- "L" cartridge, Vacuum filter, Silencer	1,115
VTCL3132-2	VTCL Mega pump, 2-stage, 2- "L" cartridge, Vacuum filter, Silencer	1,120
VTCL3124-2	VTCL Mega pump, 2-stage, 4- "L" cartridge, Vacuum filter, Silencer	956
VTCL3123-2	VTCL Mega pump, 2-stage, 3- "L" cartridge, Vacuum filter, Silencer	945
VTCL3122-2	VTCL Mega pump, 2-stage, 2- "L" cartridge, Vacuum filter, Silencer	933

Spare Parts – Cartridges

Model	Description	Available model
VC302	Midi Vacuum Cartridge, 2-Stage	VTC3021, VTC3022, VTC3122, VTC3123, VTC3124
VC303	Midi Vacuum Cartridge, 3-Stage	VTC3031, VTC3032, VTC3132, VTC3133, VTC3134
VCL302	Midi Vacuum Cartridge, "L" Series, 2-Stage	VTCL3021, VTCL3022, VTCL3122, VTCL3123, VTCL3124
VCL303	Midi Vacuum Cartridge, "L" Series, 3-Stage	VTCL3031, VTCL3032, VTCL3132, VTCL3133, VTCL3134

Spare Parts – Filter elements

Model	Description
VTFE342	Filter element, Polyester, 5 Micron for 1 cartridge Turtle pump
VTFE502	Filter element, Polyester, 5 Micron for 2-4 cartridges Turtle pump

Spare Parts – Plugs & Silencers

Model	Description	Weight (g)
VCP-M25-302	Holding plug for 2 stage Midi VTC / VTCL vacuum pumps	31.04
VCP-M25-303	Holding plug for 2 stage Midi VTC / VTCL vacuum pumps	59.32
VTS-M25	Two-Fold Silencer for Midi VTC / VTCL vacuum pumps	78.34
VTS-10	Free flow silencer, G1" for Mega VTC / VTCL vacuum pumps	48.33
VTS-10-A	Free flow silencer, Low noise, G1" for Mega VTC / VTCL vacuum pumps	116.24