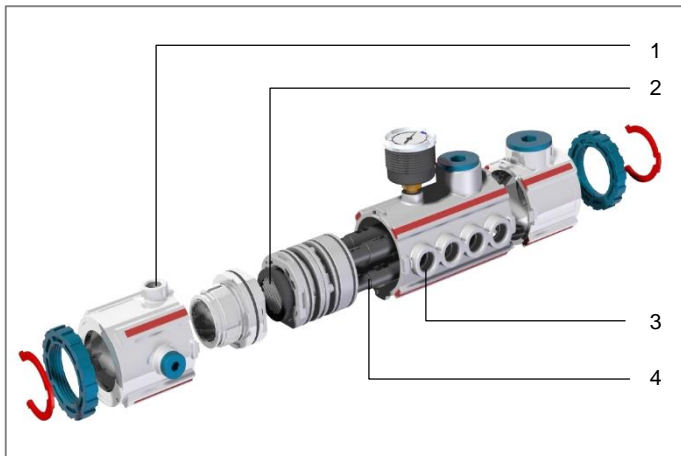


Magic pump



Magic pump – Rotatable body : Various selection for air & vacuum ports



Products Structure of Magic pump



Rotatable Magic pump being used with distributor type vacuum port

Suitable for handling

Features & Strengths

- ▶ Patented design
- ▶ Widely selective air & vacuum port
- ▶ Rotatable each body for preferred ports & direction
- ▶ Integrated pleated filter with high dirt capacity & Auto-cleaning system
- ▶ High operational reliability despite fluctuating or low compressed-air pressure
- ▶ Light weight & Very low noise level

Products Structure

- ▶ Various [air port^{1\)}](#) & [vacuum port^{3\)}](#) options
- ▶ [Vacuum filter^{2\)}](#) integrated with auto-cleaning system
- ▶ [VMECA Cartridge pump^{4\)}](#) integrated

Applications

- ▶ Metal sheet transfer
- ▶ Carton box
- ▶ Semiconductor industry
- ▶ Wood panel
- ▶ Electronic components

Magic pump

Designation Ordering No.

Model Ordering Designation	Vacuum Port	Filter Element	Bracket*	Air Saving kit*	Air control valve - Voltage*	Release control valve - Voltage*	Solenoid Terminal*	Vacuum Switch*	Non-return Valve	Sealing
M3122	34 – ¾"	(No mark)*	(No mark)*	(No mark)	A1	R1	DN	(No mark)	(No mark)	(No mark)
M3123	01 – 1"	2 - PE	B – Bracket	AS	A2	R2	DL	S2	N	V - Viton
M3124				ASV	A3	R3	CL	S2P		E – EPDM
M3132								SG2		
M3133								SG2P		
M3134								SG3		
								SG3P		

Example) M3134-01-2-B-ASV-A3 R3-CL-S2-V

* No mark means Standard.

* In Air Saving kit section, AS option is not available with Air control valve and ASV option is not available without Air control valve.

* In AS (ASV) kit option, Non-return valve automatically added – Not necessary to mark "N" on Model Ordering Designation.

* For additional valve & switch information, section "Valve and Switch" on request.

Rotatable Ejector - Magic pump

Model	Code	Model	Code
M3122-34-2	1C60 4010 0000	M3132-34-2	1C60 1010 0000
M3122-34-2-B	1C60 4030 0000	M3132-34-2-B	1C60 1030 0000
M3122-34-2-A3-R3-CL-S2	1C60 4010 1410	M3132-34-2-A3-R3-CL-S2	1C60 1010 1410
M3122-34-2-A3-R3-CL-S2-N	1C60 4010 1413	M3132-34-2-A3-R3-CL-S2-N	1C60 1010 1413
M3122-34-2-AS-R3-CL-S2	1C60 4011 1510	M3132-34-2-AS-R3-CL-S2	1C60 1011 1510
M3122-34-2-ASV-A3-R3-CL-S2	1C60 4012 1410	M3132-34-2-ASV-A3-R3-CL-S2	1C60 1012 1410
M3123-34-2	1C60 5010 0000	M3133-34-2	1C60 2010 0000
M3123-34-2-B	1C60 5030 0000	M3133-34-2-B	1C60 2030 0000
M3123-34-2-A3-R3-CL-S2	1C60 5010 1410	M3133-34-2-A3-R3-CL-S2	1C60 2010 1410
M3123-34-2-A3-R3-CL-S2-N	1C60 5030 1413	M3133-34-2-A3-R3-CL-S2-N	1C60 2010 1413
M3123-34-2-AS-R3-CL-S2	1C60 5011 1510	M3133-34-2-AS-R3-CL-S2	1C60 2011 1510
M3123-34-2-ASV-A3-R3-CL-S2	1C60 5012 1410	M3133-34-2-ASV-A3-R3-CL-S2	1C60 2012 1410
M3124-34-2	1C60 6010 0000	M3134-34-2	1C60 3010 0000
M3124-34-2-B	1C60 6030 0000	M3134-34-2-B	1C60 3030 0000
M3124-34-2-A3-R3-CL-S2	1C60 6010 1410	M3134-34-2-A3-R3-CL-S2	1C60 3010 1410
M3124-34-2-A3-R3-CL-S2-N	1C60 6030 1413	M3134-34-2-A3-R3-CL-S2-N	1C60 3010 1413
M3124-34-2-AS-R3-CL-S2	1C60 6011 1510	M3134-34-2-AS-R3-CL-S2	1C60 3011 1510
M3124-34-2-ASV-A3-R3-CL-S2	1C60 6012 1410	M3134-34-2-ASV-A3-R3-CL-S2	1C60 3012 1410

Spare Part – Silencer

Model	Description	Code
VTS10-A	Direct silencer with 1" port	130 1D0

Magic pump

Technical Data

Description	Unit	Data	Description	Unit	Data
Supply air type	-	Dry Compressed Air	Supply air pressure	bar	3~4, Max 7
Max. vacuum level	kPa	-92	Working temperature	°C	-20 ~ 80
Max. flow rate	NI/min	1364	Sound level	dBA	55~62
Air consumption	NI/min	194 ~ 608	Net weight*	g	1002

* Net weight is calculated with M3134-34-2-B.

Performance Data (Vacuum flow at different vacuum level)

Model	Max. Vacuum (-kPa)	Feed pressure (MPa)	Vacuum flow (NI/min) at different vacuum level -kPa(-mmHg)									
			0 (0)	10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
M3122	93	0.3	340	304	212	128	66	64	44	33	12.8	3.8
	93	0.4	342	308	255	188	138	86	46.6	34.6	13.8	4.2
M3123	93	0.3	510	456	318	192	99	96	66	50	19	6
	93	0.4	513	462	383	282	207	129	70	52	21	6.3
M3124	93	0.3	680	608	424	256	132	128	88	66	26	7.6
	93	0.4	684	616	510	376	276	172	93	69	28	8.4
M3132	92	0.3	676	304	212	128	66	64	44	33	12.5	3.5
	91	0.4	682	308	255	188	138	86	46	34	13.5	4
M3133	92	0.3	1014	456	318	192	99	96	66	50	19	6
	91	0.4	1023	462	383	282	207	129	70	52	21	6.1
M3134	92	0.3	1352	608	424	256	132	128	88	66	26	7.5
	91	0.4	1364	616	510	376	276	172	93	69	28	8.5

Magic pump

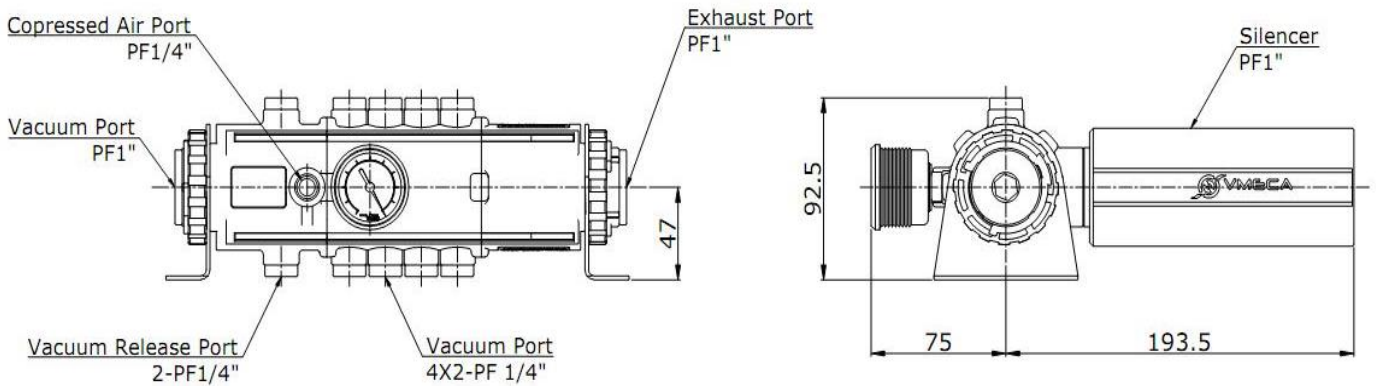
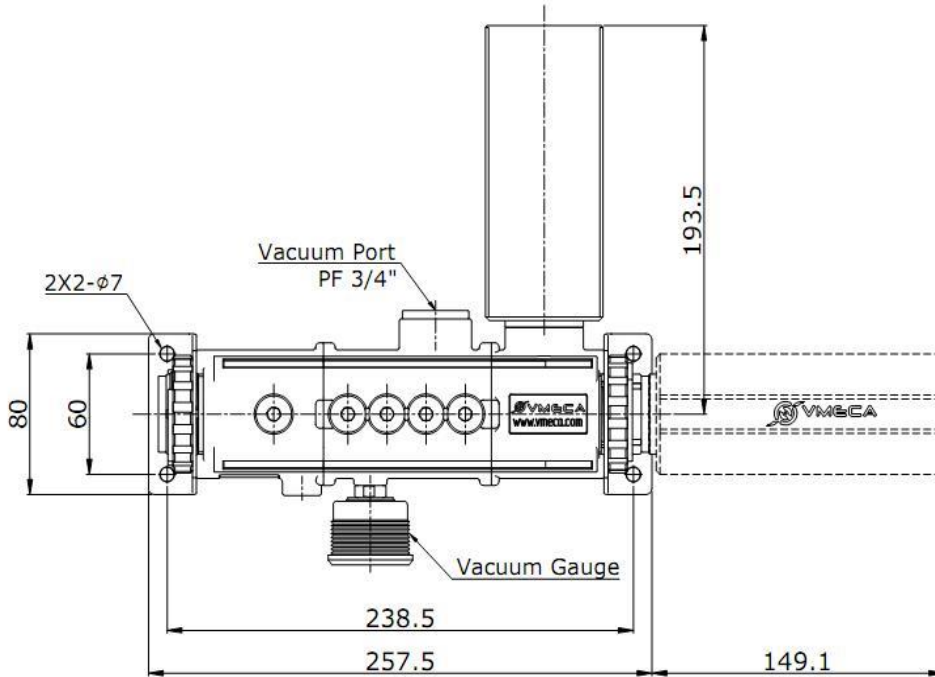
Performance Data (Evacuation time at different vacuum level)

Model	Feed pressure (MPa)	Air Consumption (NI/min)	Time, s/l, to evacuate a volume to different vacuum level -kPa (-mmHg)								
			10 (75)	20 (150)	30 (225)	40 (300)	50 (375)	60 (450)	70 (525)	80 (600)	90 (675)
M3122	0.3	236	0.016	0.05	0.07	0.16	0.23	0.34	0.5	0.795	2.01
	0.4	304	0.014	0.029	0.043	0.05	0.13	0.25	0.355	0.71	1.75
M3123	0.3	354	0.009	0.03	0.06	0.1	0.13	0.21	0.26	0.4	1.27
	0.4	456	0.008	0.019	0.03	0.033	0.08	0.16	0.23	0.35	1.17
M3124	0.3	472	0.007	0.025	0.048	0.08	0.1	0.016	0.2	0.3	0.95
	0.4	608	0.006	0.015	0.02	0.025	0.06	0.012	0.17	0.26	0.87
M3132	0.3	236	0.01	0.032	0.045	0.15	0.22	0.33	0.48	0.78	1.98
	0.4	304	0.01	0.026	0.037	0.047	0.12	0.23	0.35	0.7	1.72
M3133	0.3	354	0.005	0.02	0.03	0.09	0.12	0.21	0.24	0.4	1.27
	0.4	456	0.004	0.01	0.02	0.03	0.06	0.14	0.2	0.33	1.13
M3134	0.3	472	0.004	0.018	0.02	0.07	0.09	0.16	0.2	0.3	0.95
	0.4	608	0.003	0.01	0.01	0.02	0.05	0.1	0.15	0.25	0.85

Magic pump

Dimensional Data

M312 series (2stage cartridge)

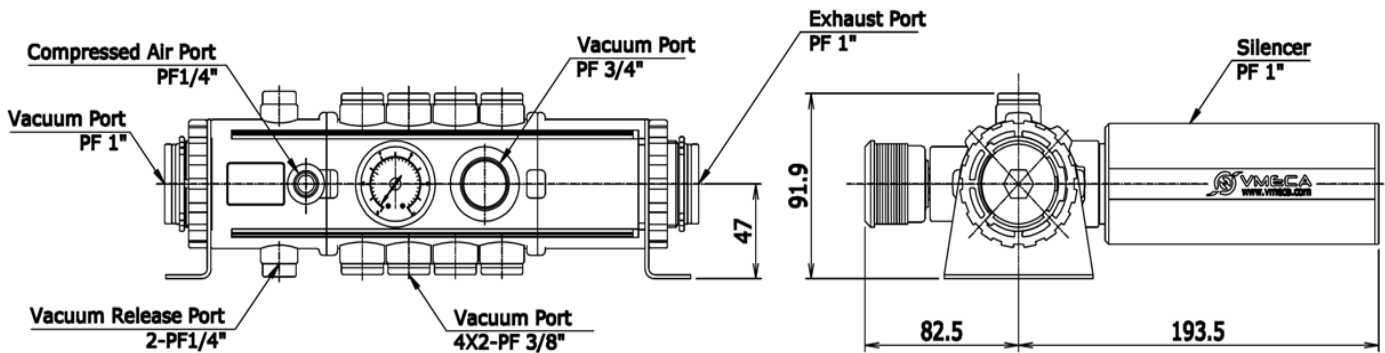
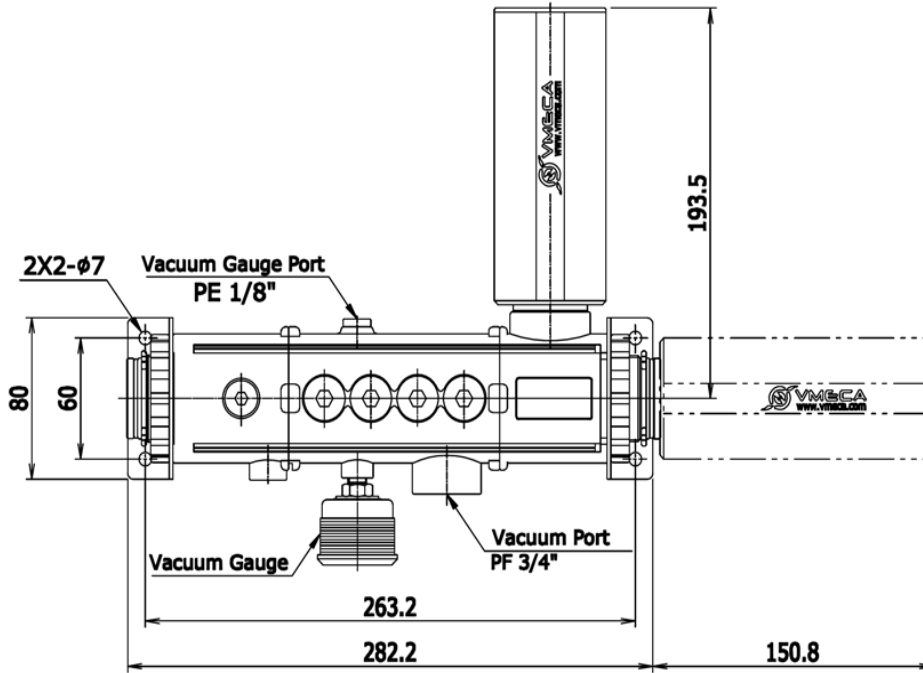


[Measure unit : mm[in]]

Magic pump

Dimensional Data

M313 series (3stage cartridge)



[Measure unit : mm[in]]

Valve & Switch

Ordering No. for overall Valve & Switch

Model	Ordering Designation	Description	Remark
Air control valve - Voltage	A1	AC110V	
	A2	AC220V	
	A3	DC24V	
	D1	Double solenoid – AC110V	* Double solenoid valve is available only for 'DN' or 'DL' on Solenoid Terminal option
	D2	Double solenoid – AC220V	
	D3	Double solenoid – DC24V	
Release control valve - Voltage	R1	AC110V	
	R2	AC220V	
	R3	DC24V	
Solenoid Terminal	DN	Din type without lead wire	
	DL	Din type with lamp without lead wire	
	CL	Connector type with lamp & 0.3m lead wire	* 'CL' and '3B' are available only for DC24V * '3B' is available only for 'S2' or 'S2P' on Vacuum Switch option
	2B	Din type with '2 in 1' BUS cable (Air control valve + release control valve)	
	3B	Din type with '3 in 1' BUS cable (Air control valve + release control valve + Digital switch)	
Vacuum Switch	No Mark – Standard	Vacuum Gauge	
	S2	Digital Display output 2points, No analog supply M8-4Pin connector type 0.3m lead wire	* VCM8 42 (M8-4Pin connector wire) is available only for 'S2' or 'S2(P)'
	S2P	PNP open collector of S2	
	SG2	Digital Display output 2points, No analog supply Grommet type 4-Core 2m lead wire	
	SG2P	PNP open collector of SG2	
	SG3	Digital Display output 2points, Analog supply Grommet type 5-Core 2m lead wire	
	SG3P	PNP open collector of SG3	