

Vertical Type

Magic Gripper

MV - Series



MV15 Series

Feature

- ▶ High vacuum flow rate - with up to 4 cartridges, Micro Premium Cartridge (previous Magic Gripper can have max. 2 cartridges)
- ▶ Non-return check valve (integrated) function.
- ▶ Both Magic cup and Suction cup are available.
- ▶ Manifold type (with bracket) and Robot mounted flange available.
- ▶ Vertical design for securing space
- ▶ 45% reduced volume - against MC10 Magic Gripper



Specification

Description	MV15-1	MV15-2	MV15-3	MV15-4
Max. Vacuum level	- 87 kPa	- 87 kPa	- 87 kPa	- 87 kPa
Open Vacuum flow	17 NI/min	34 NI/min	51 NI/min	68 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	65 ~ 68 dBA	65 ~ 68 dBA	65 ~ 68 dBA	65 ~ 68 dBA
Weight	39.6 g	39.9 g	40.2 g	40.5 g

Vacuum Flow

Model	Max. Vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (NI/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
MV15-1	66.5	3	13.0	14.6	10.6	7.5	6.2	4.9	2.9	1.0	-	-	-
	87.3	4	16.1	16.3	13.1	8.5	7.4	6.3	5.2	4.1	2.5	0.6	-
	85.8	5	18.6	16.9	14.0	10.6	6.8	5.8	4.9	3.8	2.4	0.4	-
	83.3	6	21.7	17.2	14.4	11.4	8.9	6.4	4.5	3.8	2.0	0.2	-

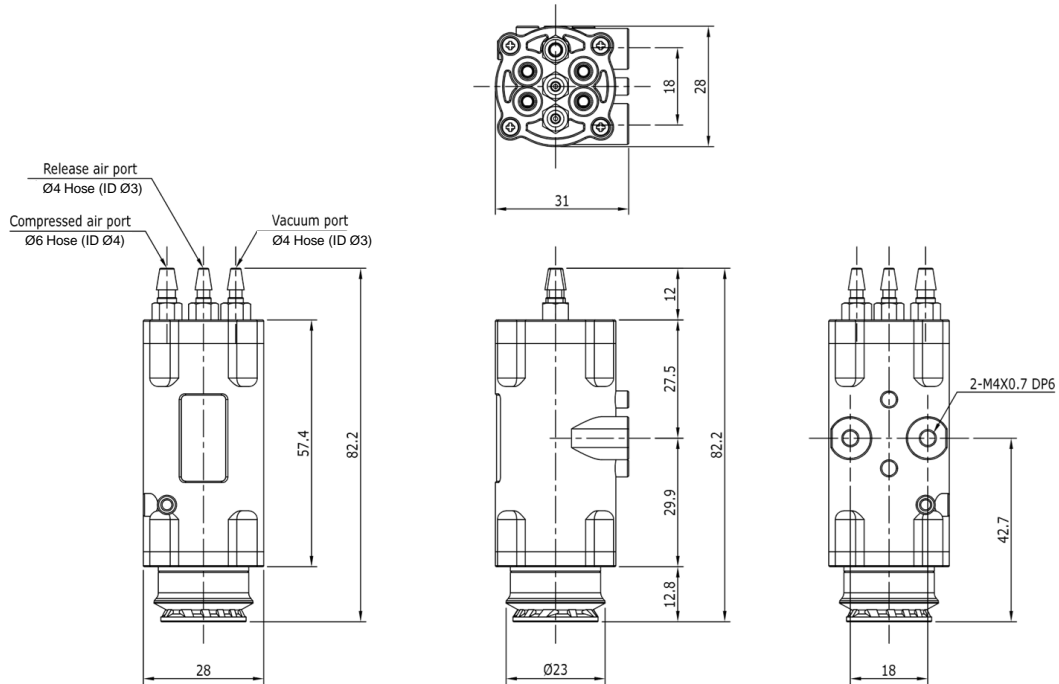
Vacuum Flow

Model	Max. Vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (NI/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
MV15-2	66.5	3	26	29.2	21.2	15	12.4	9.8	5.8	2	-	-	-
	87.3	4	32.2	32.6	26.2	17	14.8	12.6	10.4	8.2	5	1.2	-
	85.8	5	37.2	33.8	28	21.2	13.6	11.6	9.8	7.6	4.8	0.8	-
	83.3	6	43.4	34.4	28.8	22.8	17.8	12.8	9	7.6	4	0.4	-

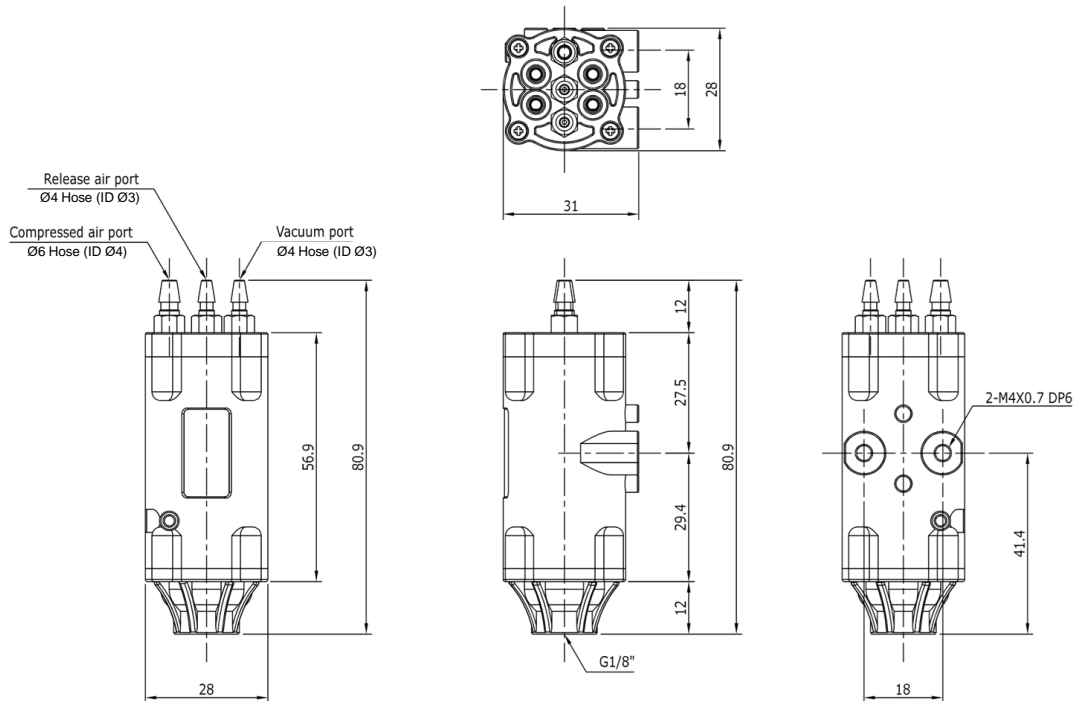
Model	Max. Vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (NI/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
MV15-3	66.5	3	39	43.8	31.8	22.5	18.6	14.7	8.7	3	-	-	-
	87.3	4	48.3	48.9	39.3	25.5	22.2	18.9	15.6	12.3	7.5	1.8	-
	85.8	5	55.8	50.7	42	31.8	20.4	17.4	14.7	11.4	7.2	1.2	-
	83.3	6	65.1	51.6	43.2	34.2	26.7	19.2	13.5	11.4	6	0.6	-

Model	Max. Vacuum (-kPa)	Feed Pressure (bar)	Air Consumption (NI/min)	Vacuum flow (NI/min) at different vacuum levels (-kPa)									
				0	10	20	30	40	50	60	70	80	90
MV15-4	66.5	3	39	58.4	42.4	30	24.8	19.6	11.6	4	-	-	-
	87.3	4	48.3	65.2	52.4	34	29.6	25.2	20.8	16.4	10	2.4	-
	85.8	5	55.8	67.6	56	42.4	27.2	23.2	19.6	15.2	9.6	1.6	-
	83.3	6	65.1	68.8	57.6	45.6	35.6	25.6	18	15.2	8	0.8	-

Dimensions – Basic Pump

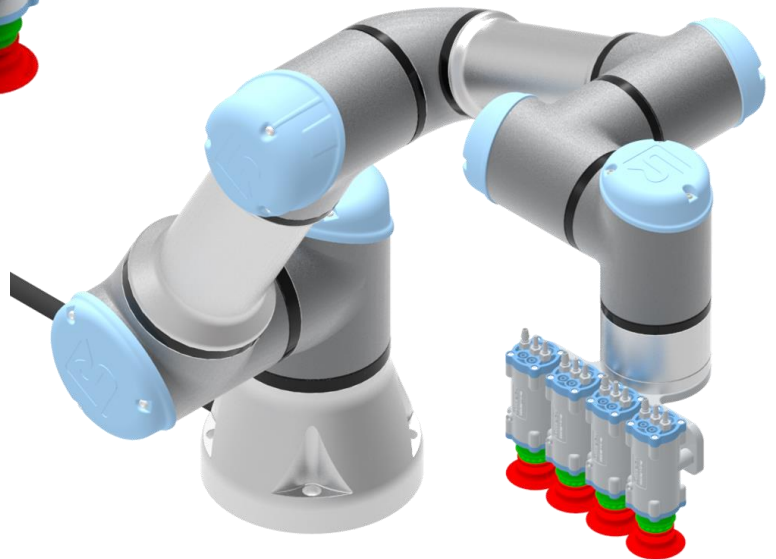
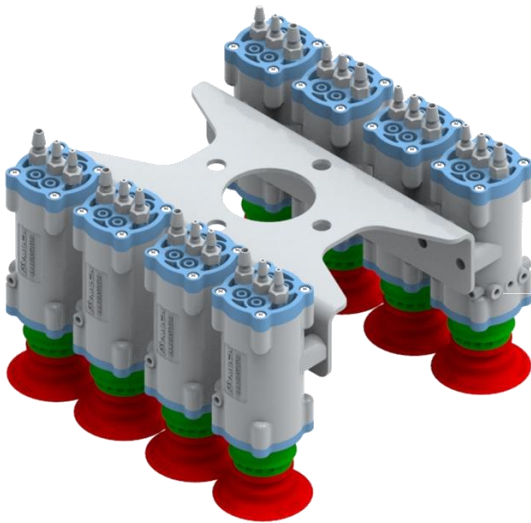
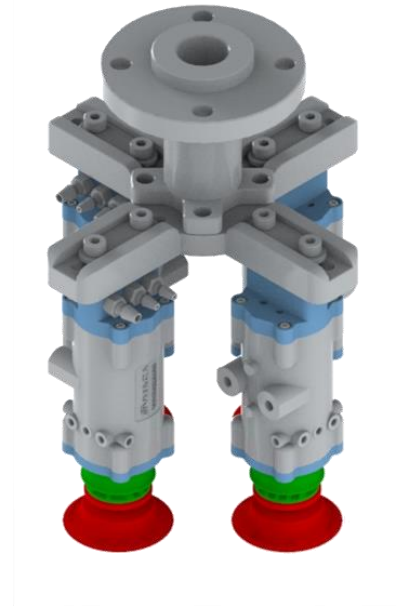
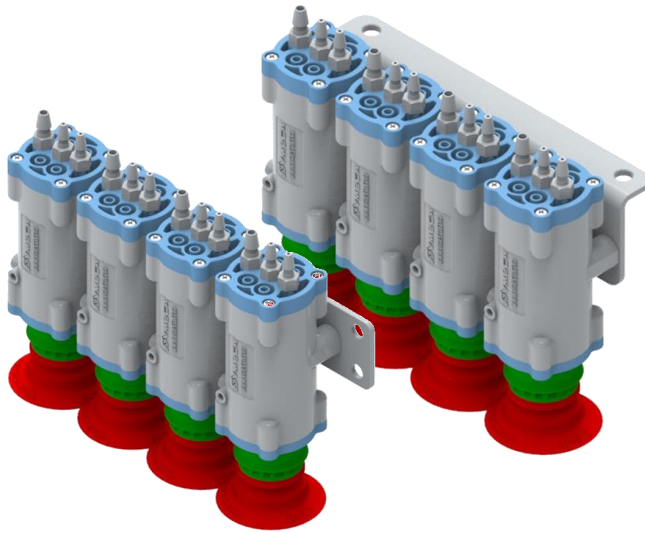


MV15 (magic cup type)

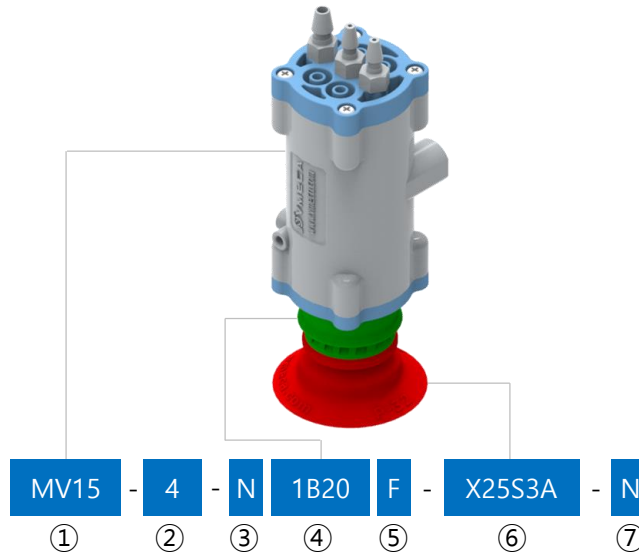


MV15 (thread 14F type)

Applications



Build an Ordering No. (Magic cup type)



① Base pump	
Symbol	Description
MV15	Micro premium cartridge 2-Stage

② Body type	
Symbol	Description
1	Vacuum cartridge, 1EA
2	Vacuum cartridge, 2EA
3	Vacuum cartridge, 3EA
4	Vacuum cartridge, 4EA

③ Sealing	
Symbol	Description
N	NBR
E	EPDM
V	Viton

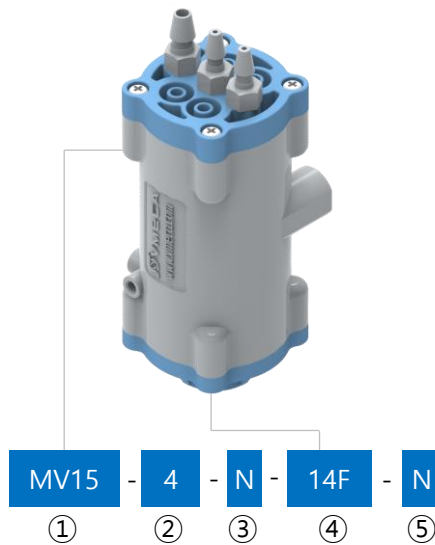
④ Top bellows	
Symbol	Description
1B20	Top bellows 1 fold, 20mm
2B20	Top bellows 2 folds, 20mm
1B40	Top bellows 1 fold, 40mm
2B40	Top bellows 2 folds, 40mm

⑤ Vacuum filter	
Symbol	Description
F	Filter (200 mesh)

⑥ Suction lip	
Symbol	Description
	Refer to Magic cup catalog

⑦ Non-return valve	
Symbol	Description
Blank	No non-return valve
N	Non-return valve

Build an Ordering No. (Fitting type)



① Base pump

Symbol	Description
MV15	Micro premium cartridge 2-Stage

② Body type

Symbol	Description
1	Vacuum cartridge, 1EA
2	Vacuum cartridge, 2EA
3	Vacuum cartridge, 3EA
4	Vacuum cartridge, 4EA

③ Sealing

Symbol	Description
N	NBR
E	EPDM
V	Viton

④ Vacuum port

Symbol	Description
14F	Vacuum port G1/4"

⑤ Non-return valve

Symbol	Description
Blank	No non-return valve
N	Non-return valve