

GM 130 Series

Max. vacuum level	: - 75 kPa (-563 mmHg)
Max. flow rate	: 2,896 NI/min (101.4 scfm)
Supply air pressure	: 4 ~ 6bar, max 7bar (58~87psi, Max.101.5 psi)
Air consumption	: 832 NI/min (29.1 scfm)
Supply air type	: Dry compressed air
Working temperature	: - 20°C ~ 80°C (-4°F ~ 176°F)
Noise level	: 55 ~ 65 dBA



Features

- ✓ Handles various products with different shapes, sizes and porous material
- ✓ Flexible sealing foam(EPDM) sponge pad to excellent grip.
- ✓ Adjustable check valve holes and perfect closure of the idle suction ports
- ✓ Durable and light weight aluminum body frame
- ✓ Easy Installation and low maintenance

Ordering Information

GM 130 X 300 - L4 - ES1 - A3 R3 - DN - G

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① GM Series (width)

- **GM 130** - VGRIP Width 130mm

② Length

• 220	- VGRIP Length 220mm
• 300	- VGRIP Length 300mm
400	- VGRIP Length 400mm
600	- VGRIP Length 600mm
800	- VGRIP Length 800mm
1000	- VGRIP Length 1000mm
1200	- VGRIP Length 1200mm

③ Vacuum Cartridge Type

	Feed Pressure MPa (psi)	Max Vacuum -kPa (-mmHg)	Max Vacuum flow NI/min (scfm)
LC2	0.6 (87)	75 (563)	400 (14.13)
LC3	0.6 (87)	75 (563)	600 (21.2)
• LC4	0.6 (87)	75 (563)	800 (28.25)
L2	0.6 (87)	75 (563)	724 (25.5)
L3	0.6 (87)	75 (563)	1,086 (38.36)
L4	0.6 (87)	75 (563)	1,448 (51.14)
L5	0.6 (87)	75 (563)	1,810 (63.9)
L6	0.6 (87)	75 (563)	2,172 (76.7)
L7	0.6 (87)	75 (563)	2,534 (89.5)
L8	0.6 (87)	75 (563)	2,896 (102.3)

Cartridge's selection according to the length (No.②) :
 220 mm: LC2 ~ LC4
 300 ~ 1200mm: L2 ~ L4
 600 ~ 1200mm: L5 ~ L8

④ Check Valve & Sponge Type

• ES1	- Round suction hole, For leakage / Non-porous objects
ES2	- Round suction hole, For non leakage / Porous objects
ES1-P1	- Round suction hole (Ø5), For leakage / Non-porous objects
ES2-P1	- Round suction hole (Ø5), For non leakage / Porous objects
AW	- Adjustable Check Valve (Wide round shape)
AO	- Smart efficiency valve, A Type, No Leakage Object, Round shape suction hole
BO	- Smart efficiency valve, B Type, 10~39% Leakage Object, Round shape suction hole
CO	- Smart efficiency valve, C Type, 40~50% Leakage Object, Round shape suction hole
AL	- Smart efficiency valve, A Type, No Leakage Object, Oval shape suction hole
BL	- Smart efficiency valve, B Type, 10~39% Leakage Object, Oval shape suction hole
CL	- Smart efficiency valve, C Type, 40~50% Leakage Object, Oval shape suction hole

⑤ Air Control Valve

A1	- G1/4", N/C, AC110V
A2	- G1/4", N/C, AC220V
• A3	- G1/4", N/C, DC24V
D1	- Double Solenoid AC110V
D2	- Double Solenoid AC220V
D3	- Double Solenoid DC24V

⑥ Release Valve

R1	- G1/4", N/C, AC110V
R2	- G1/4", N/C, AC220V
• R3	- G1/4", N/C, DC24V

A.. : No ③ Restrict according to the vacuum cartridge

L2 ~ L5: G1/4" : VMS14 Valve

L6 ~ L8: G3/8" : VMS38 Valve

D.. : G3/8" Double Solenoid Valve

Double Solenoid Valve is only possible DN, DL type in the No.8

⑦ Solenoid Terminal

• DN	- DIN type without lead wire
DL	- DIN type with lamp, without lead wire
CL	- Connector Type with lamp & 0.3 m lead wire

⑧ Vacuum Switch

• G	- Digital Gauge Attached (VTG-18)
-	- Not attached
S2(P)	- Digital output 2 points, No analog supply M8-4Pin male connector (0.3m lead wire)
SG2(P)	- Digital output 2 points, No analog supply (Grommet type 4 core, 2m lead wire)
SG3(P)	- Digital output 2 points, Analog Supply (Grommet type 5 core, 2m lead wire)
SG3X(P)	- Digital output 2 points, No analog Supply (Grommet type 4 core, 2m lead wire)

※Mark : ① S..(P)

L Output type : PNP open collector

②VC M8-4-2 : M8-4 pin female connector

GM130 Series Characteristics

Model	Air inlet Pressure Mpa (psi)	Air consumption N/m (scfm)	Max. Vacuum Flows N/m (scfm)	Max. Vacuum level -kPa (-mmHg)
GM 130 X 220-L4...	0.6 (87)	416 (14.6)	800 (28)	75 (563)
GM 130 X 300-L4...	0.6 (87)	416 (14.6)	1,448 (51.1)	75 (563)
GM 130 X 400-L4...	0.6 (87)	416 (14.6)	1,448 (51.1)	75 (563)
GM 130 X 600-L8...	0.6 (87)	832 (29.1)	2,896 (102.3)	75 (563)
GM 130 X 800-L8...	0.6 (87)	832 (29.1)	2,896 (102.3)	75 (563)
GM 130 X 1000-L8...	0.6 (87)	832 (29.1)	2,896 (102.3)	75 (563)
GM 130 X 1200-L8...	0.6 (87)	832 (29.1)	2,896 (102.3)	75 (563)

GM130 Series Holding Force (N) % according to the length (mm)

■ ES TYPE

Model	Holding force at 40% Sealing (N)**	Holding force at 60% Sealing (N)**	Holding force at 80% Sealing (N)**	Holding force at 100% Sealing (N)**	Weight (Kg)*
GM 130 X 220-L4-ES	273	490	704	1,072	1.3
GM 130 X 300—L4-ES	565	883	1,401	1,548	1.7
GM 130 X 400-L4-ES	896	1,270	1,710	2,318	2.2
GM 130 X 600-L8-ES	1,130	1,876	2,296	2,692	3.4
GM 130 X 800-L8-ES	1,408	2,244	3,259	3,410	4.3
GM 130 X 1000-L8-ES	1,611	2,693	3,779	4,467	5.3
GM 130 X 1200-L8-ES	1,928	2,977	4,463	4,979	6.2

■ EL TYPE

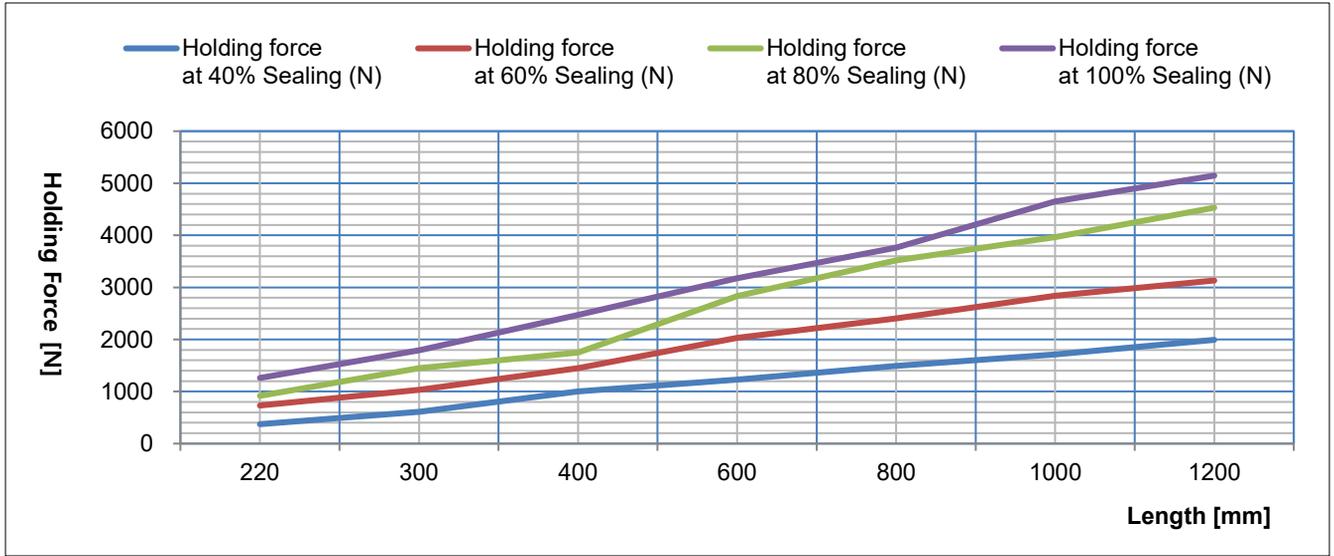
Model	Holding force at 40% Sealing (N)**	Holding force at 60% Sealing (N)**	Holding force at 80% Sealing (N)**	Holding force at 100% Sealing (N)**	Weight (Kg)*
GM 130 X 220-L4-EL	373	732	917	1,261	1.3
GM 130 X 300—L4-EL	610	1,033	1,448	1,792	1.7
GM 130 X 400-L4-EL	1,005	1,450	1,751	2,472	2.2
GM 130 X 600-L8-EL	1,228	2,029	2,834	3,178	3.4
GM 130 X 800-L8-EL	1,495	2,404	3,517	3,764	4.3
GM 130 X 1000-L8-EL	1,713	2,842	3,963	4,653	5.3
GM 130 X 1200-L8-EL	1,993	3,133	4,531	5,147	6.2

** Values may vary by workpiece surface and permeability. For reference only.

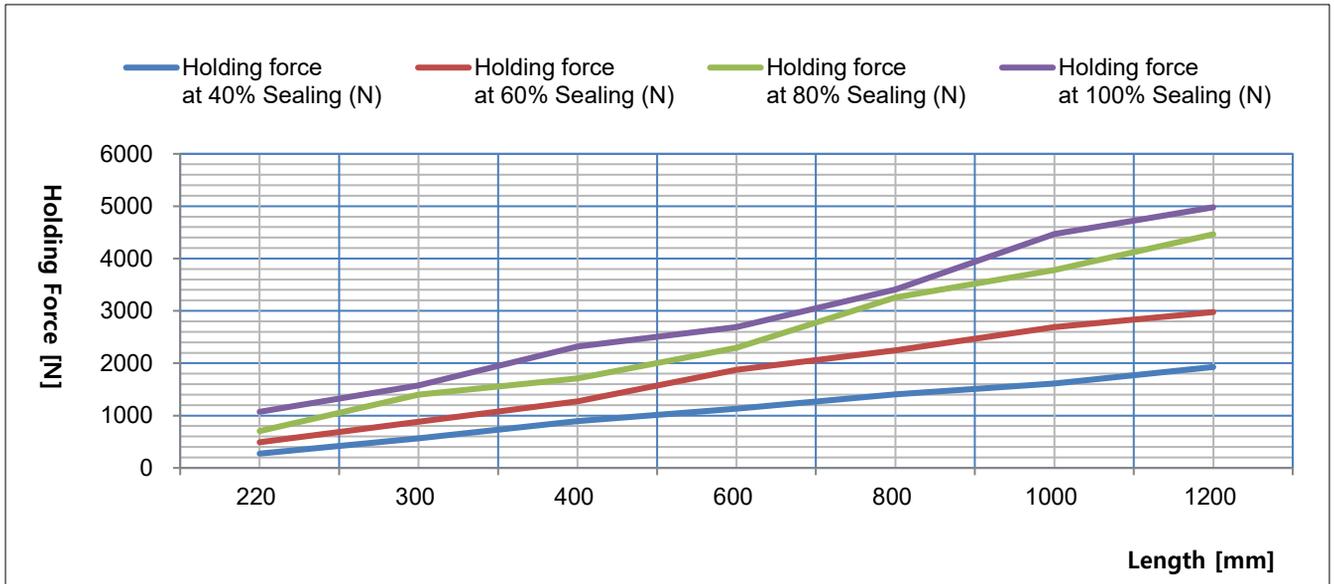
** Data set does not include safety factors. Apply appropriate safety factors for actual applications.

GM130 Series Holding Force(N) according to the length(mm)

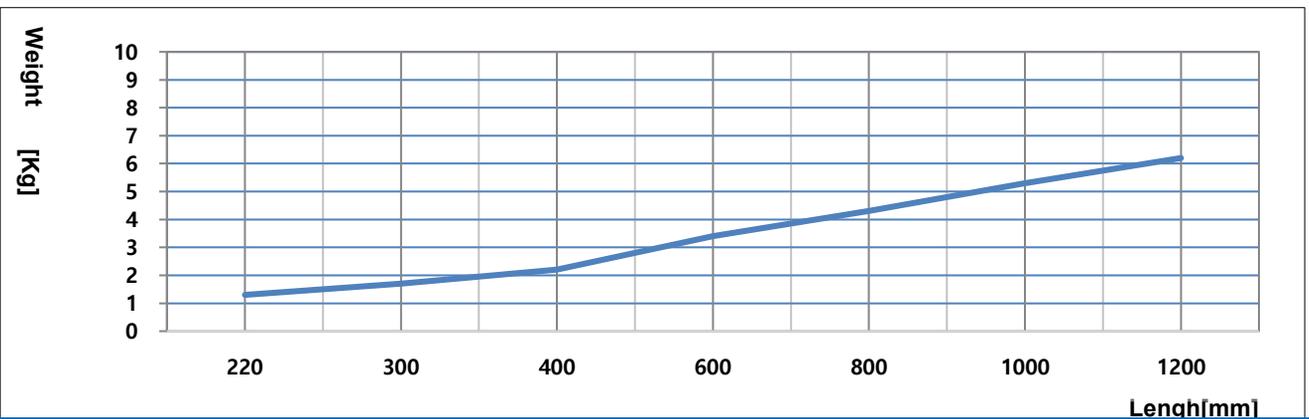
► EL Type



► ES Type



GM130 Series Weight (kg) according to the length (mm)

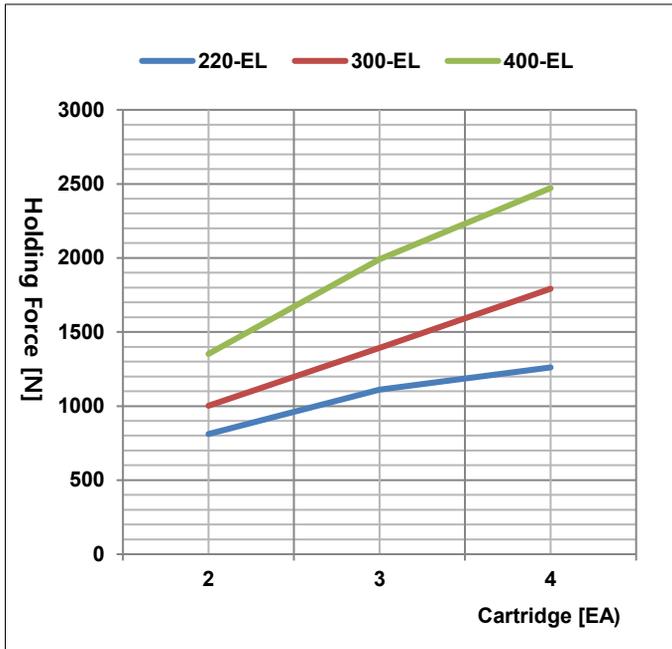


GM 130 Series – Holding Force (N) by Length and Number of Cartridges

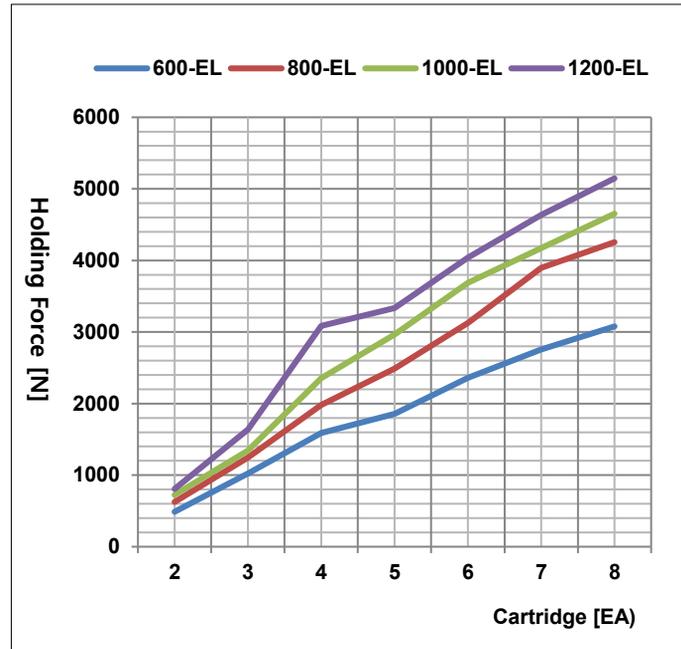
※ GM130×400 and below: 2–4 cartridges
GM130×600 and above: 2–8 cartridges

► EL Type

220 / 300 / 400

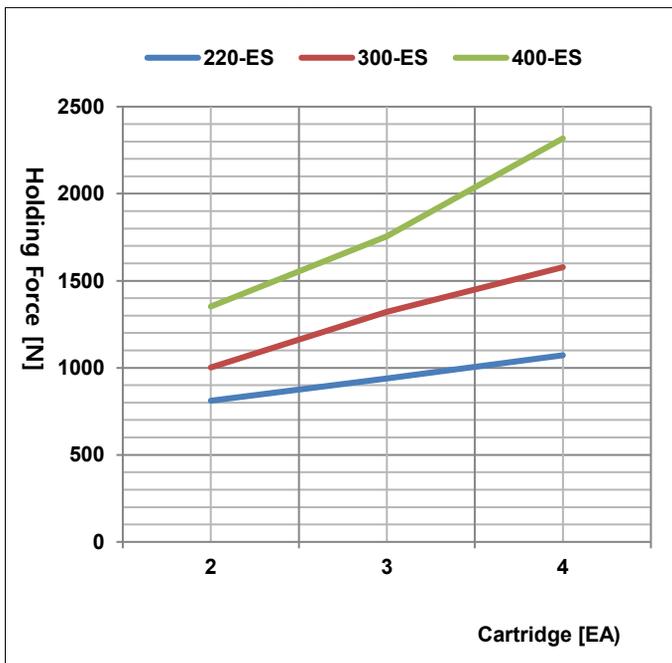


600 / 800 / 1000 / 1200

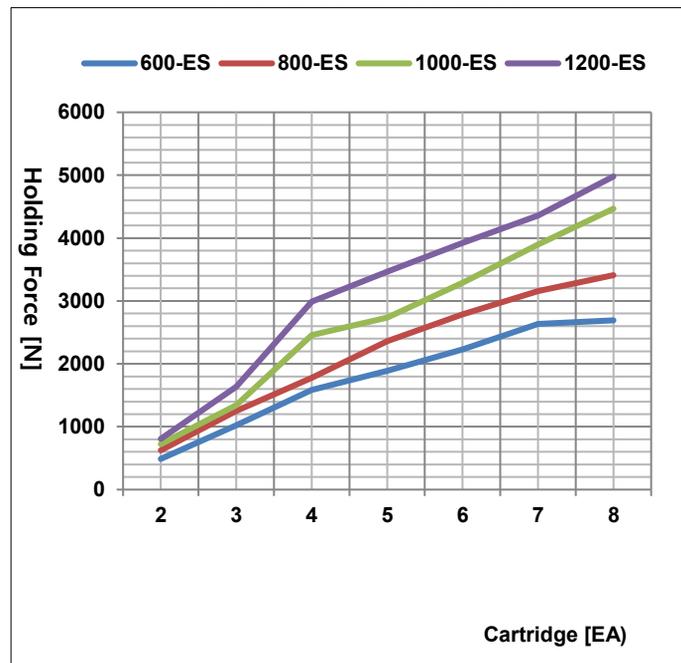


► ES Type

220 / 300 / 400

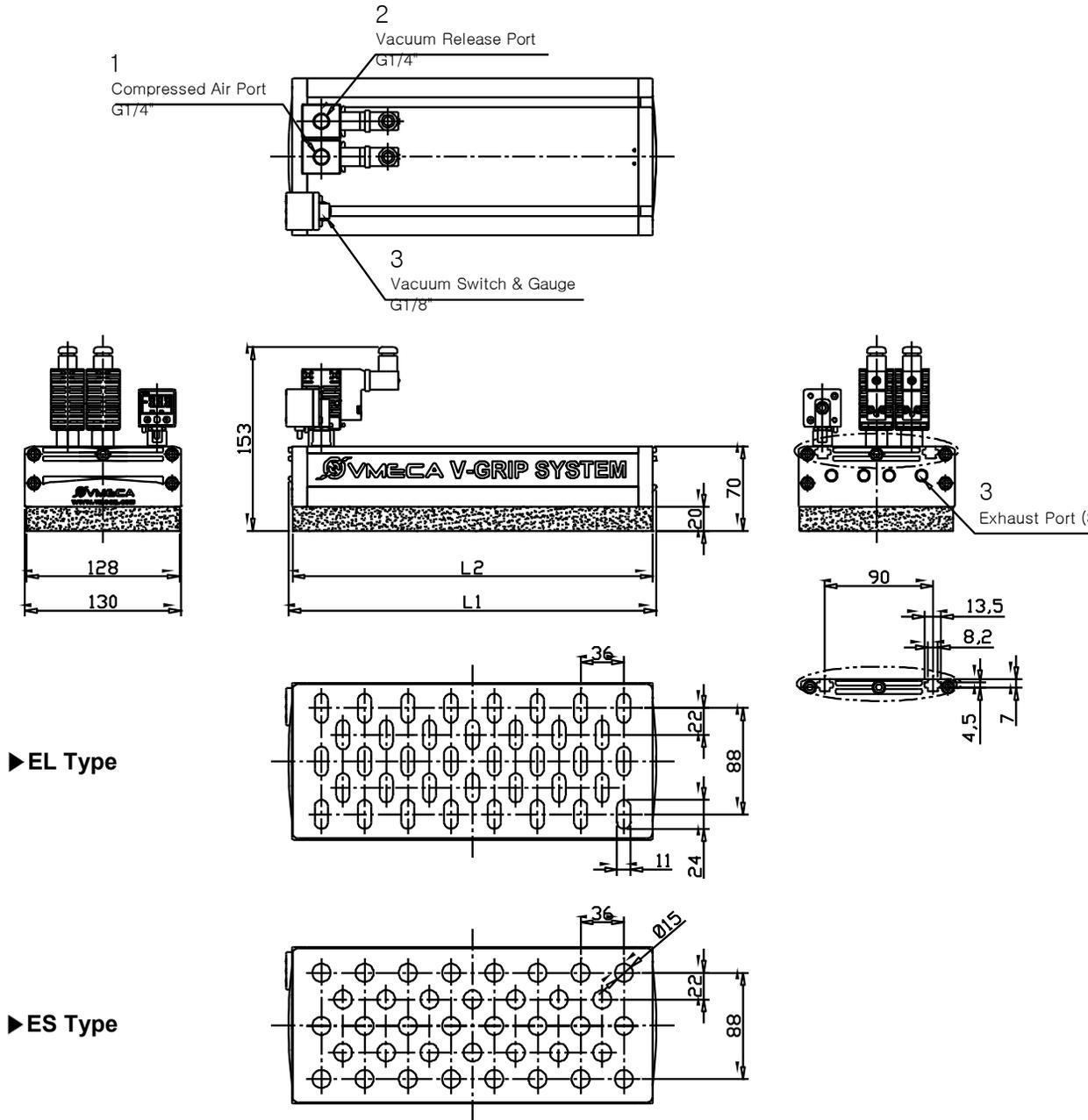


600 / 800 / 1000 / 1200



Dimension

▼ GM 130 ... Series(220~400)



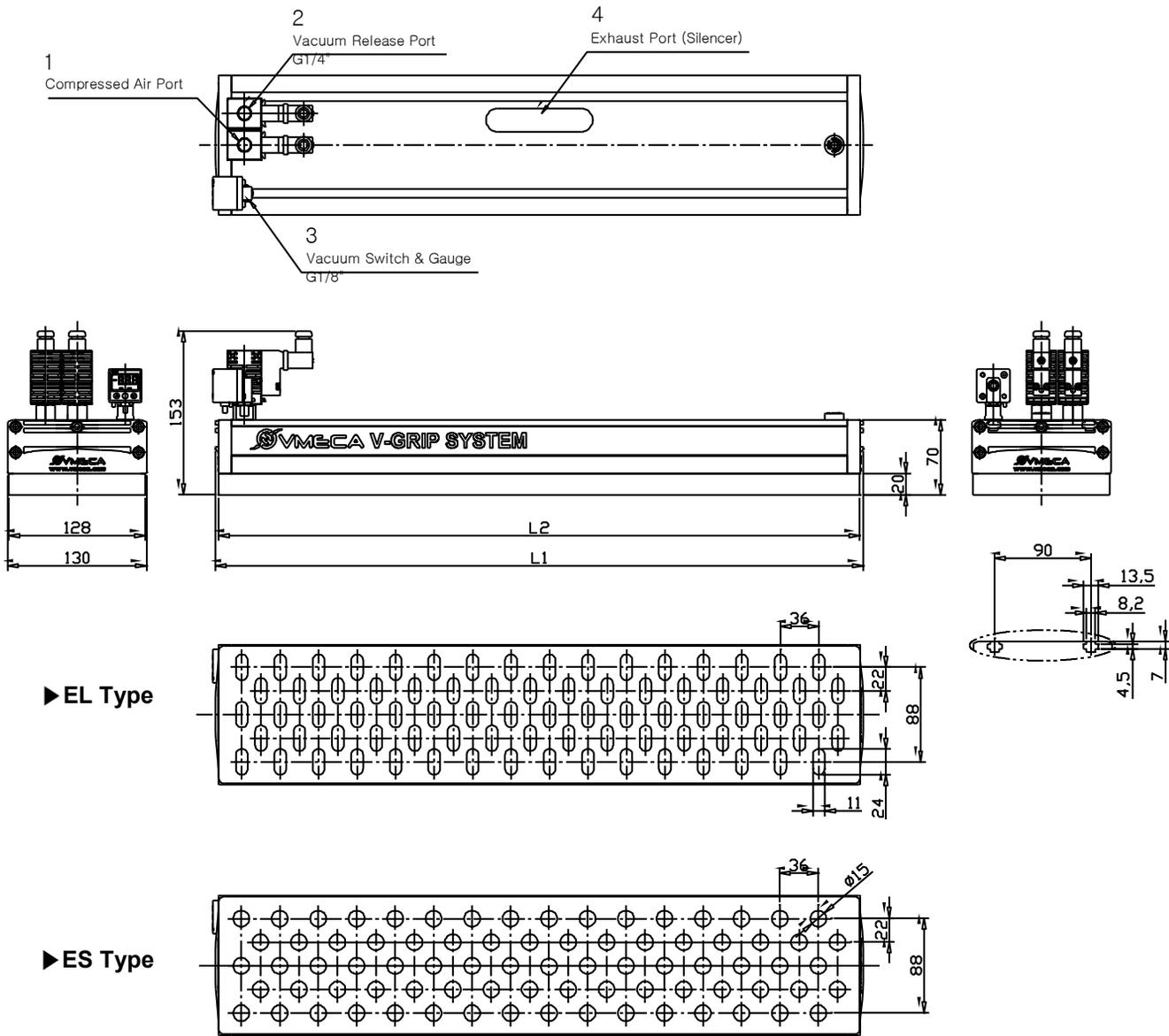
► EL Type

► ES Type

Measure unit : mm

Model	Length	Sponge Pad Length	Vacuum Port	Air Control Valve	Release Valve
	L1	L2	Qty	Type	Type
GM 130 X 220...	226.3	220	28	VMS14	VMS14
GM 130 X 300...	306.3	300	38	VMS14	VMS14
GM 130 X 400...	406.3	400	53	VMS14	VMS14

▼ GM 130 ... Series(600~1200)



Measure unit : mm

Model	Length	Sponge Pad Length	Vacuum Port	Air Control Valve	Release Valve
	L1	L2	Qty	Type**	Type
GM 130 X 600...	606.6	600	80	VMS14 VMS38	VMS14
GM 130 X 800...	806.6	800	108	VMS14 VMS38	VMS14
GM 130 X 1000...	1006.6	1000	135	VMS14 VMS38	VMS14
GM 130 X 1200...	1206.6	1200	163	VMS14 VMS38	VMS14

* Cartridge 2~6 Model : Use VMS14 Valve

Cartridge 7~8 Model : Use VMS38 Valve