

# SPECIAL GRIPPERS / G16&G20 Series

## G16&G20 Series

### Features and Strengths

Integrated with VMECA vacuum cartridge pump  
 Excellent grip for both even & uneven surface products with flexible sealing form  
 Available for customized size according to applications



### Examples of use

PCB boards, Solar cell, Porous material products

### Performance data

Model	Max. Vacuum Level (-kPa)	Feed pressure (Bar)	Air Consumption	Working Temperature	Noise Level (dBA)
G16x60-C202-B	-90	3~6	32 NI/min at 4bar	-20°C ~ 80°C	55 ~ 65
G16x108-C203-B	-90	3~6	32 NI/min at 4bar	-20°C ~ 80°C	55 ~ 65
G20x60-C202-B	-90	3~6	32 NI/min at 4bar	-20°C ~ 80°C	55 ~ 65
G20x108-C203-B	-90	3~6	32 NI/min at 4bar	-20°C ~ 80°C	55 ~ 65

### Performance data

Model	Holding force at 60% Sealing (N)	Holding force at 80% Sealing (N)	Holding force at 100% Sealing (N)	Net weight (g)
G16x60-C202-B	6.8	11	16	57.0
G16x108-C203-B	8.0	22	32	85.0
G20x60-C202-B	6.8	11	16	64.0
G20x108-C203-B	8.0	22	32	95.0

※ Actual holding force might be different according to surface and porousness of product  
 ※ In above test result, the safety factor is not considered.

## I Build an Ordering No.

# G20x108-C203-B

### 1. Mini V-GRIP

1. Mini V-GRIP	Description	Symbol
	Mini V-GRIP, Width 16mm x Length 60mm, 2stage cartridge	<a href="#">G16X60-C202-B</a>
	Mini V-GRIP, Width 16mm x Length 108mm, 3stage cartridge	<a href="#">G16X108-C203-B</a>
	Mini V-GRIP, Width 20mm x Length 60mm, 2stage cartridge	<a href="#">G20x60-C202-B</a>
	Mini V-GRIP, Width 20mm x Length 108mm, 3stage cartridge	<a href="#">G20x108-C203-B</a>

## I Spare Parts – Flexible sealing foam

Part No.	Description
16X60-S08	Flexible sealing foam for G16x60-C202-B
16X108-S08	Flexible sealing foam for G16x108-C203-B
20X60-S08	Flexible sealing foam for G20x60-C202-B
20X108-S08	Flexible sealing foam for G20x108-C203-B

# SPECIAL GRIPPERS / Mini V-GRIP system-G30 Series

## G 30 series

### Features and Strengths

- Integrated VMECA cartridge technology inside
- Handles various products with different shapes, sizes and porous material
- Flexible sealing foam(EPDM) for excellent gripping
- Check valve and filter integrated
- Durable and light weight aluminum body frame
- Easy Installation and low maintenance



### Specifications

Spec.	G30
Max. Vacuum level	-90 kPa
Max. Open Vacuum flow	146 NI/min
Max. Feed pressure	7 bar
Temperature	-20 ~ 80 °C
Noise level	55 ~ 65 dbA

### Characteristics

Model	Air inlet Pressure psi (bar)	Air consumption NI/m (scfm)	Max. Vacuum flow NI/m (scfm)	Max. Vacuum level -kPa (-mmHg)
G30X100-LC1	87 (6)	83.5 (2.95)	111 (3.92)	90 (675)
G30X150-LC1				
G30X200-L1	87 (6)	83.5 (2.95)	146 (5.16)	90 (675)
G30X250-L1				
G30X300-L1				
G30X400-L1				
G30X500-L1				
G30X600-L1				

### Holding Force Ratio according to Length

#### ■ EL type (Oval shape suction hole)

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)	Product weight (Kg)
G30X100-L1-EL	Please contact VMECA	51	Please contact VMECA	77	0.159
G30X150-L1-EL	43	78	108	168	0.243
G30X200-L1-EL	49	106	151	173	0.344
G30X250-L1-EL	69	120	170	206	0.418
G30X300-L1-EL	72	132	182	244	0.503
G30X400-L1-EL	80	158	295	443	0.671
G30X500-L1-EL	97	190	377	526	0.823
G30X600-L1-EL	111	231	487	604	0.979

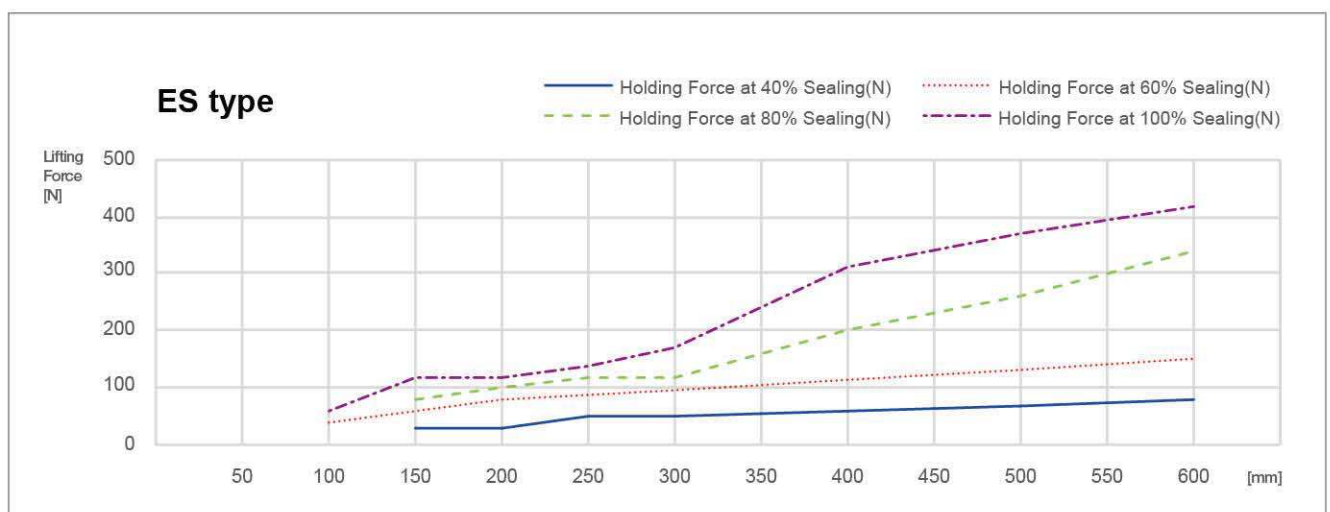
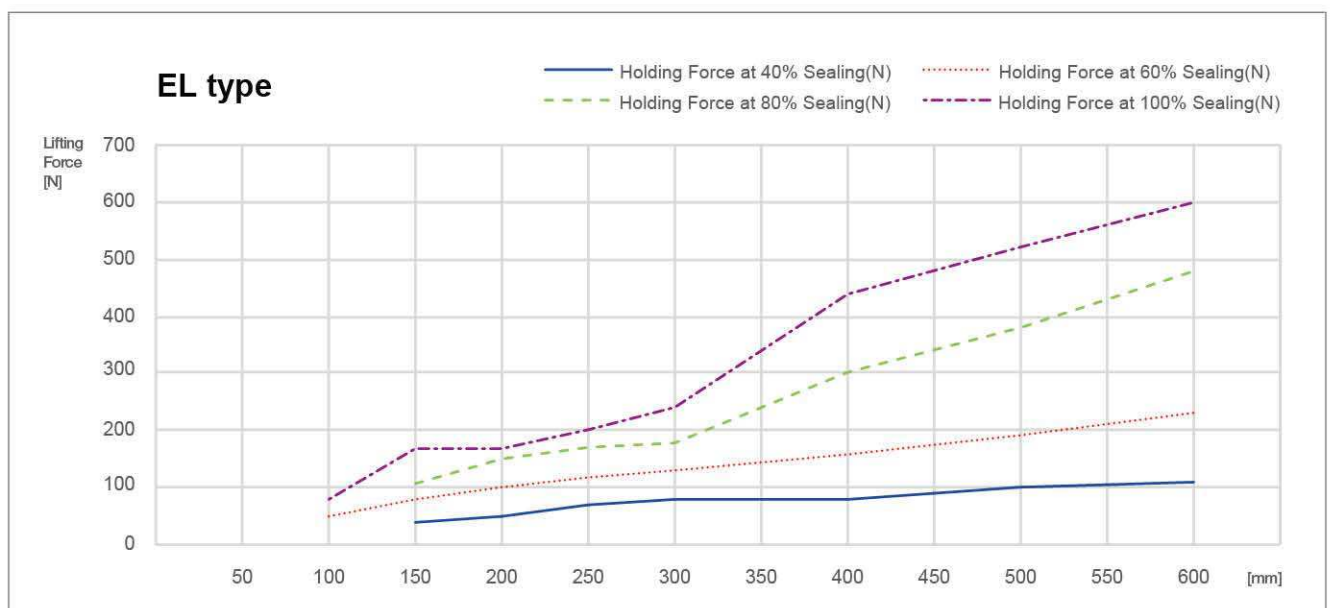
※ The holding force above is actual test result, not considered with a safety factor.

## I Holding Force Ratio according to Length

### ■ ES type (Round shape suction hole)

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)	Product weight (Kg)
G30X100-LC1-ES	Please contact VMECA	36	Please contact VMECA	55	0.159
G30X150-LC1-ES	31	55	76	120	0.243
G30X200-L1-ES	33	75	106	123	0.343
G30X250-L1-ES	48	84	120	145	0.418
G30X300-L1-ES	51	92	126	168	0.503
G30X400-L1-ES	57	110	205	308	0.669
G30X500-L1-ES	69	132	263	371	0.822
G30X60-L1-ES	78	149	343	420	0.978

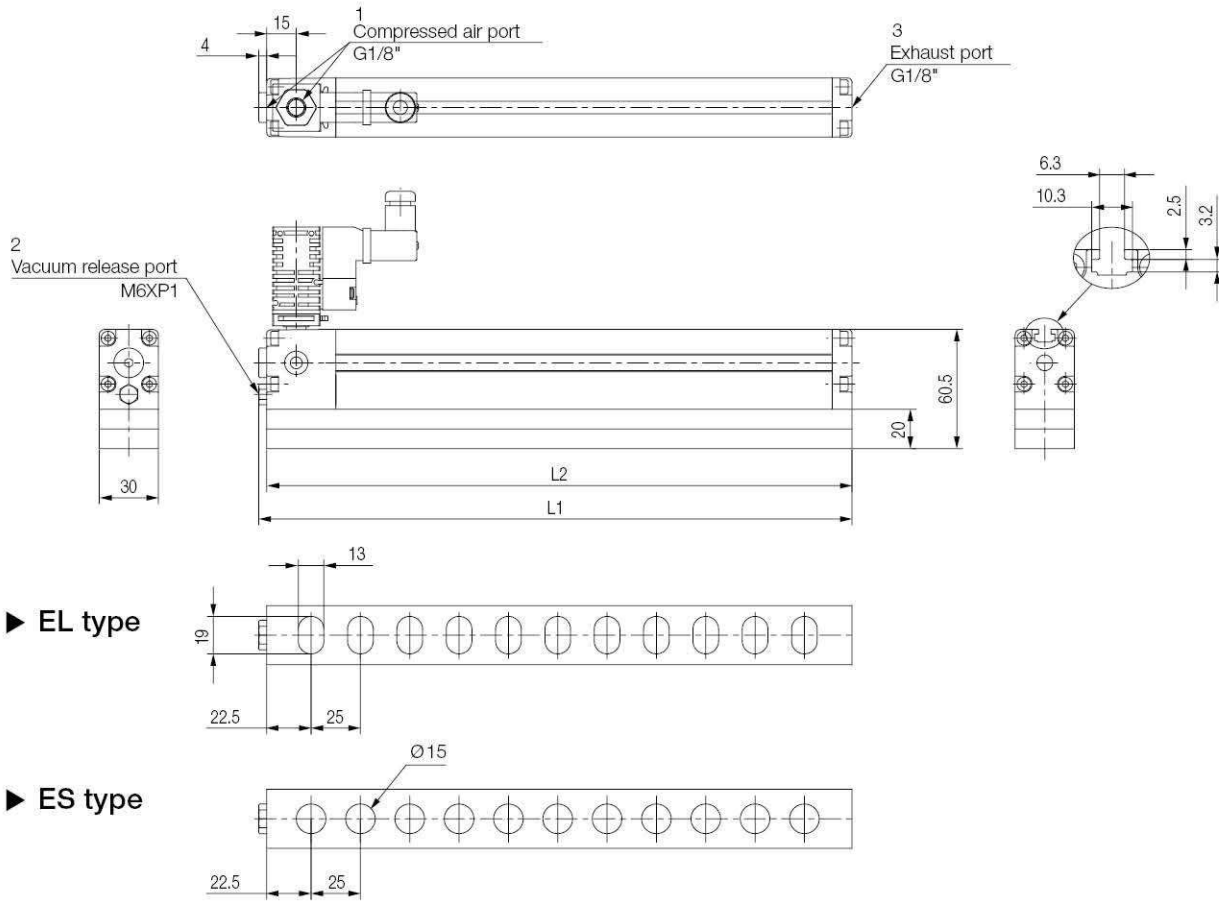
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# SPECIAL GRIPPERS / Mini V-GRIP system-G30 Series

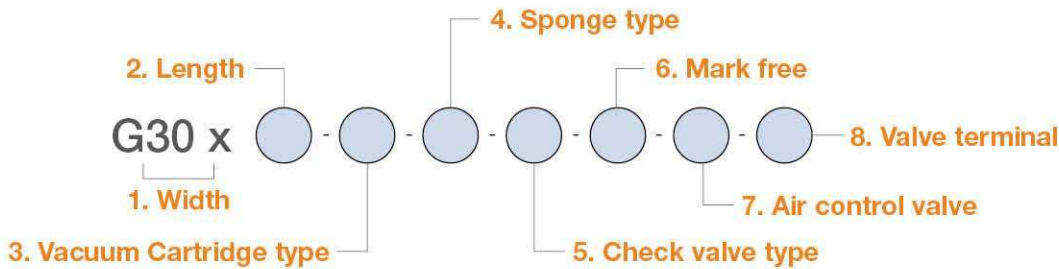
## I Dimensions – G30 series (100~600mm)

[ Unit : mm ]



Model	Length	Sponge pad length	Vacuum port	Compressed air valve
	L1	L2	The number of port	Type
G30X100-LC1-ES	102.1	96.6	3	VMS18
G30X150-LC1-ES	150.6	146.6	5	
G30X200-L1-ES	200.6	196.6	7	
G30X250-L1-ES	250.6	246.6	9	
G30X300-L1-ES	300.6	296.6	11	
G30X400-L1-ES	400.6	396.6	15	
G30X500-L1-ES	500.6	496.6	19	
G30X600-L1-ES	600.6	596.6	23	

## I Build an Ordering No.



1. Width	Description	Symbol
	G series, Width 30mm	G30
2. Length	Description	Symbol
	Length 100mm	100
	Length 150mm	150
	Length 200mm	200
	Length 250mm	250
	Length 300mm	300
	Length 400mm	400
	Length 500mm	500
	Length 600mm	600
3. Vacuum Cartridge type	Description	Symbol
	VC252 -cartridges for length 100mm ~ 150mm	LC1
	VC253 -cartridges for length 200mm ~ 600mm	L1
4. Sponge type	Description	Symbol
	Oval shape suction hole	EL
	Round shape suction hole	ES
5. Check valve type	Description	Symbol
	For non-leakage application	1
	For leakage rate 1~10% application	2
	* The result above is with VSM203 and VU50 suction cup and it is for your reference, not for absolute standard	
6. Mark free	Description	Symbol
	Standard (No mark free)	Blank
	Mark free	A
7. Air control valve	Description	Symbol
	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
8. Valve terminal	Description	Symbol
	Solenoid Terminal, DIN, Lamp, No LW	DL

# SPECIAL GRIPPERS / Mini V-GRIP system-G60 Series

## G 60 series

### Features and Strengths

- Integrated VMECA cartridge technology inside
- Handles various products with different shapes, sizes and porous material
- Flexible sealing foam(EPDM) for excellent gripping
- Check valve and filter integrated
- Durable and light weight aluminum body frame
- Easy Installation and low maintenance



### Specifications

Spec.	G60
Max. Vacuum level	-90 kPa
Max. Open Vacuum flow	292 NI/min
Max. Feed pressure	7 bar
Temperature	-20 ~ 80°C
Noise level	55 ~ 65 dbA

### Characteristics

Model	Air inlet Pressure psi (bar)	Air consumption NI/m (scfm)	Max. Vacuum flow NI/m (scfm)	Max. Vacuum level -kPa (-mmHg)
G60X100-LC2	87 (6)	167 (5.897)	222 (7.84)	90 (675)
G60X150-LC2				
G60X200-L2	87 (6)	167 (5.897)	292 (10.31)	90 (675)
G60X250-L2				
G60X300-L2				
G60X400-L2				
G60X500-L2				
G60X600-L2				

### Holding Force Ratio according to Length

#### ■ EL type (Oval shape suction hole)

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)	Product weight (Kg)
G60X100-LC2-EL	Please contact VMECA	102	Please contact VMECA	154	0.319
G60X150-LC2-EL	86	156	216	336	0.486
G60X200-L2-EL	98	212	302	346	0.689
G60X250-L2-EL	138	240	340	412	0.836
G60X300-L2-EL	144	264	364	488	1.007
G60X400-L2-EL	160	316	590	886	1.343
G60X500-L2-EL	194	380	754	1052	1.646
G60X600-L2-EL	222	462	974	1208	1.947

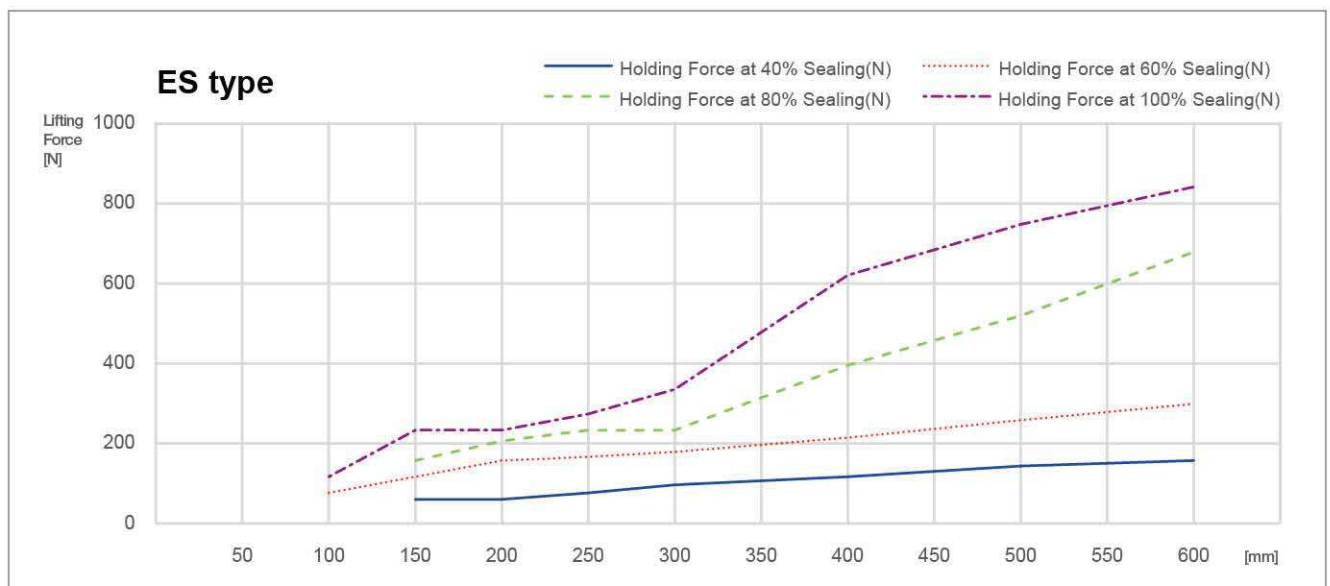
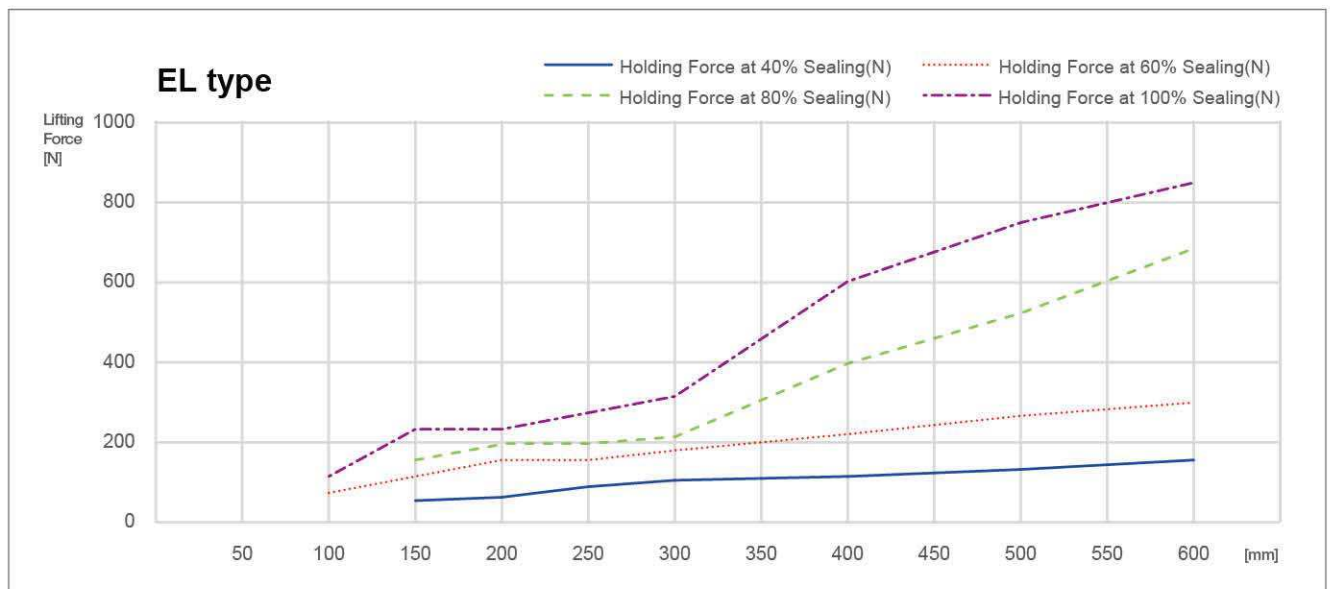
※ The holding force above is actual test result, not considered with a safety factor.

## Holding Force Ratio according to Length

### ■ ES type (Round shape suction hole)

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)	Product weight (Kg)
G60X100-LC2-ES	Please contact VMECA	72	Please contact VMECA	110	0.319
G60X150-LC2-ES	62	110	152	240	0.486
G60X200-L2-ES	66	150	212	246	0.686
G60X250-L2-ES	96	168	240	290	0.836
G60X300-L2-ES	102	184	252	336	1.006
G60X400-L2-ES	114	220	410	616	1.369
G60X500-L2-ES	138	264	526	742	1.644
G60X600-L2-ES	156	298	686	840	1.947

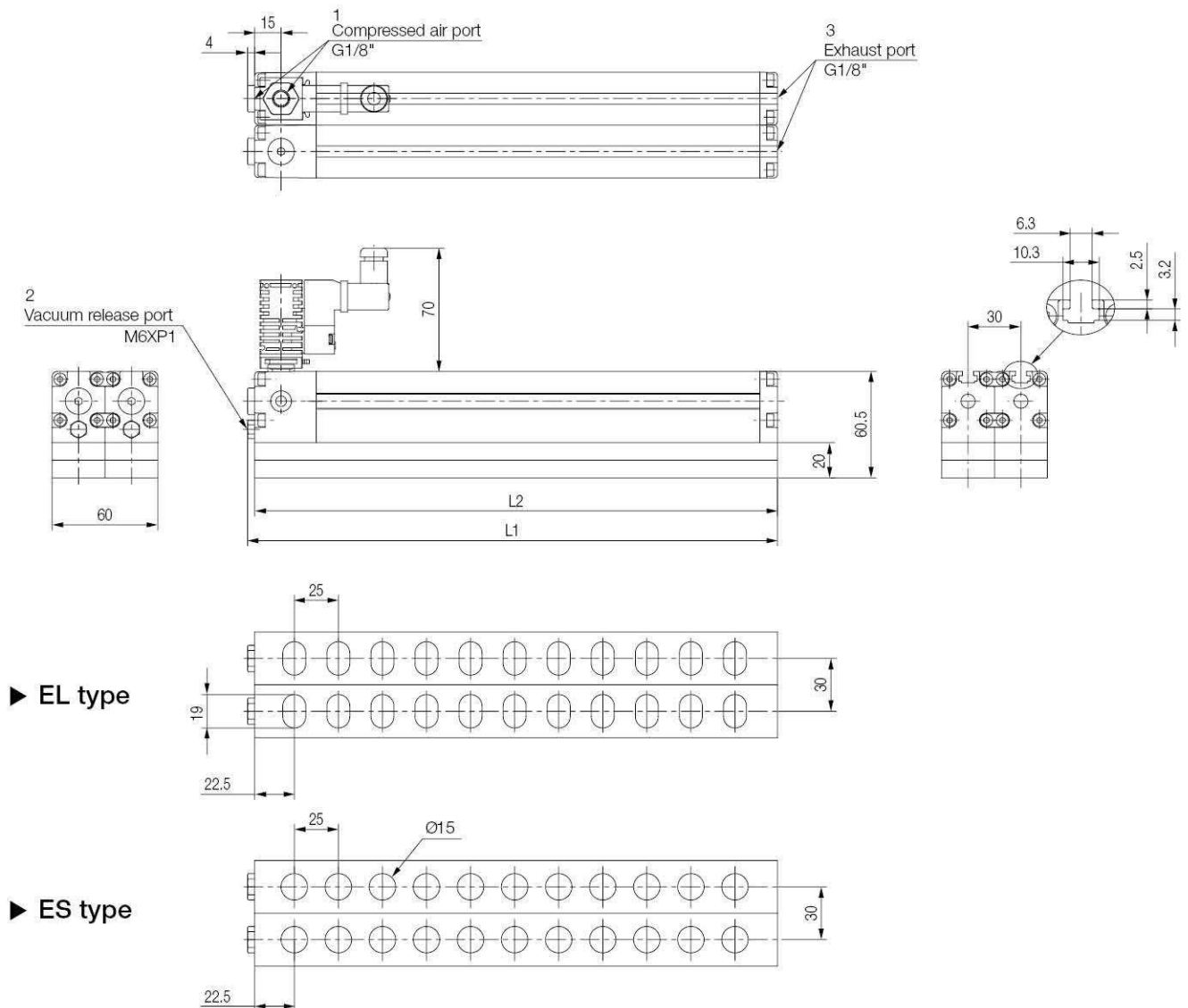
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# SPECIAL GRIPPERS / Mini V-GRIP system-G60 Series

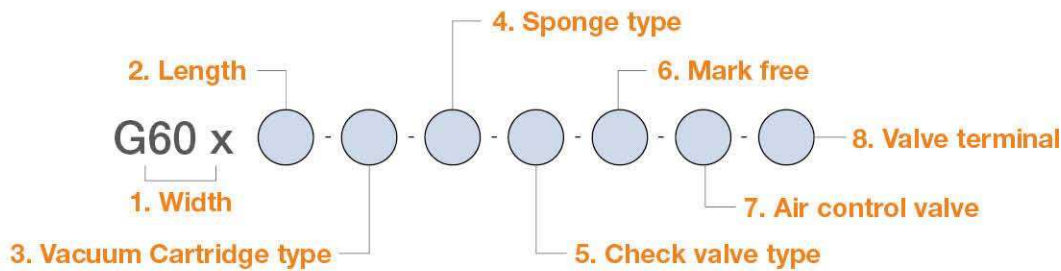
## I Dimensions – G60 series (100~600mm)

[ Unit : mm ]



Model	Length	Sponge pad length	Vacuum port	Compressed air valve
	L2	L2	The number of port	Type
G60X100-LC2-ES	102.1	96.6	6	MS18
G60X150-LC2-ES	150.6	146.6	10	
G60X200-L2-ES	200.6	196.6	7	
G60X250-L2-ES	250.6	246.6	18	
G60X300-L2-ES	300.6	296.6	22	
G60X400-L2-ES	400.6	396.6	30	
G60X500-L2-ES	500.6	496.6	38	
G60X600-L2-ES	600.6	596.6	46	

## I Build an Ordering No.



1. Width	Description	Symbol
	G series, Width 60mm	G60
2. Length	Description	Symbol
	Length 100mm	100
	Length 150mm	150
	Length 200mm	200
	Length 250mm	250
	Length 300mm	300
	Length 400mm	400
	Length 500mm	500
	Length 600mm	600
3. Vacuum Cartridge type	Description	Symbol
	VC252 -cartridges for length 100mm ~ 150mm	LC2
	VC253 -cartridges for length 200mm ~ 600mm	L2
4. Sponge type	Description	Symbol
	Oval shape suction hole	EL
	Round shape suction hole	ES
5. Check valve type	Description	Symbol
	For non-leakage application	1
	For leakage rate 1~10% application	2
	* The result above is with VSM203 and VU50 suction cup and it is for your reference, not for absolute standard.	
6. Mark free	Description	Symbol
	Standard (No mark free)	Blank
	Mark free	A
7. Air control valve	Description	Symbol
	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
8. Valve terminal	Description	Symbol
	Solenoid Terminal, DIN, Lamp, No LW	DL