

Vacuum Gripper

Introduction

DEG vacuum gripper is specially produced for handling large items with different shapes, dimensions and compactness. Perfect application to handle the entire layer for palletizing or de-palletizing in packaging industrial segment.

Gripper designed with built-in check valves or flow reductions can handle single product or a layer of products just by one gripper. With this technology, DEG vacuum gripper can fulfil the needs of many industrial sector applications.

DEG vacuum gripper can be designed and built available in different sizes (maximum 1000 x 1000 mm), can be equipped with integrated built in Multi-stage vacuum pump or separated vacuum generation unit. (Vacuum pump or Side channel vacuum blower).



Characteristics

- DEG vacuum gripper with built-in Multi-stage ejectors offer a wide range of selection for suction capacity suitable for handling products with leakage
- DEG vacuum gripper with external vacuum generation units perfect for large area application and handling of carton boxes with different dimension.(maximum 1000 x 1000 mm)
- Selection of 20, 30 and 40 mm EPDM foam or Silicon foam for food industry used
- Different pattern and foam diameter: 6, 10, 15 and 20 mm. Also available with suction pads.
- Vacuum detection
- Easy maintenance
- Low energy consumption

Applications

- Industries Application: Wood, metal sheet, plastics, Glass, packaging, food, Electronics, Electrical appliance,
- Specially in Automation lines for handling of products with many holes, high leakage carton box, rough and uneven surface, loose packing,
- Carton boxes palletization systems
- Carton boxes de-palletization systems
- Layer boxes handling

Applications Pictures



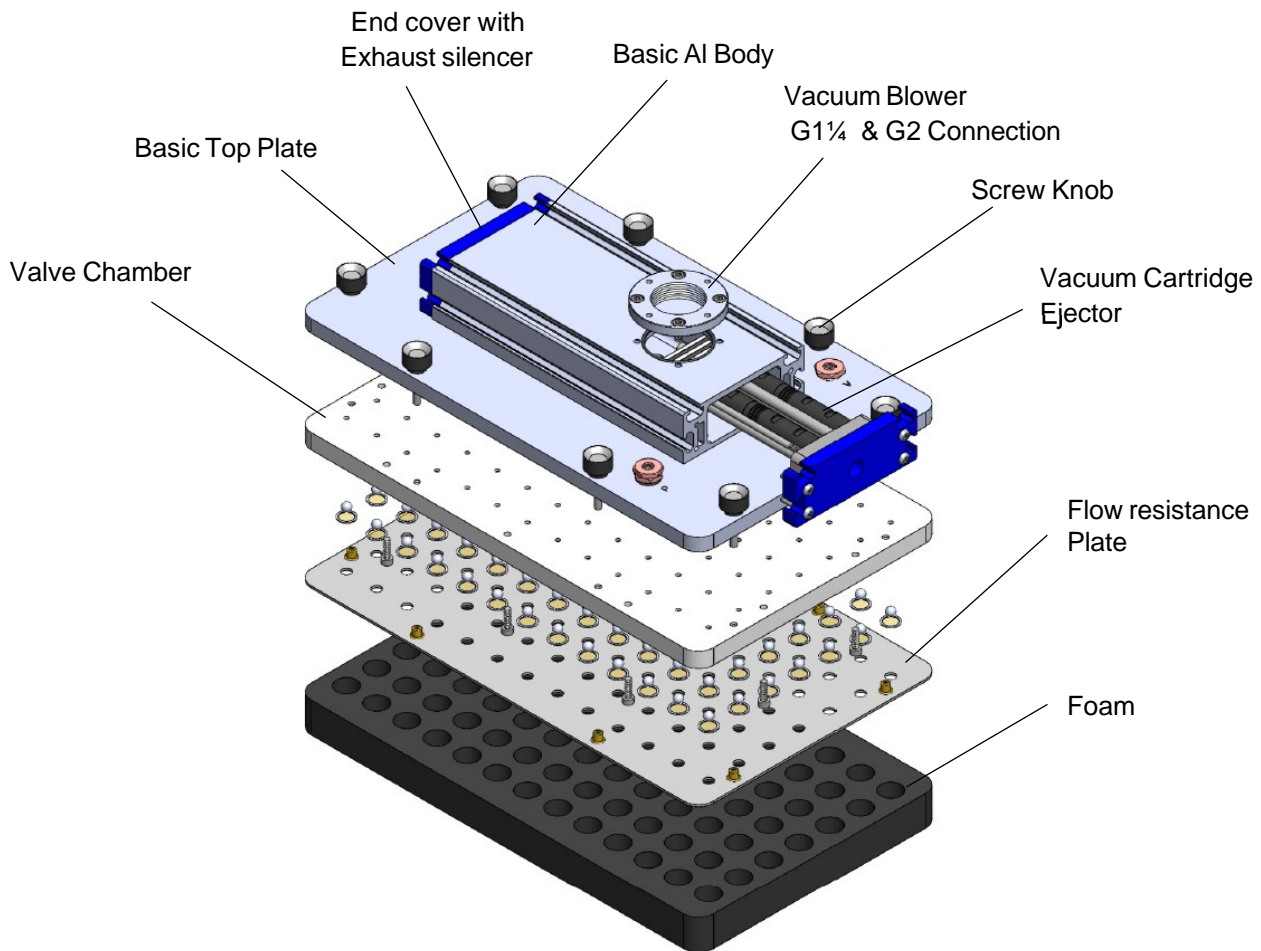
Vacuum Gripper

Ordering Information

Part No : **DEG400240F20R05VVC2**

Series	Length (mm)	Width (mm)	Foam Thickness	Shape	Technology	Pump Size Suction Capacity
DEG	400	240	F 20: Foam 20mm	R05: Diameter 20mm	V: Check valve N: Flow resistance (**)	VC1: 360 L/min
	600	300	F 30: Foam 30mm			VC2: 720 L/min
	800	400	F 40: Foam 40mm (**)			VC3: 1080 L/min
	1000					VC4: 1440 L/min
						VC5: 1800 L/min
						VC6: 2160 L/min
						VC7: 2520 L/min
						VC8: 2880 L/min
						G1¼ : 1¼ Vacuum Blower
						G2: 2" Vacuum Blower

(**) Special Request



Vacuum Gripper

Air Consumption / Suction Capacity data related to numbers of Cartridge ejectors (5 bar)

Type	Air consumption at 5 bar (NI/min)	Suction Capacity (NI/min)
VC1	90	360
VC2	180	720
VC3	270	1080
VC4	360	1440
VC5	450	1800
VC6	540	2160
VC7	630	2520
VC8	720	2880

Theoretical gripping force on flat surface with completely covered module, without safety factor (N)

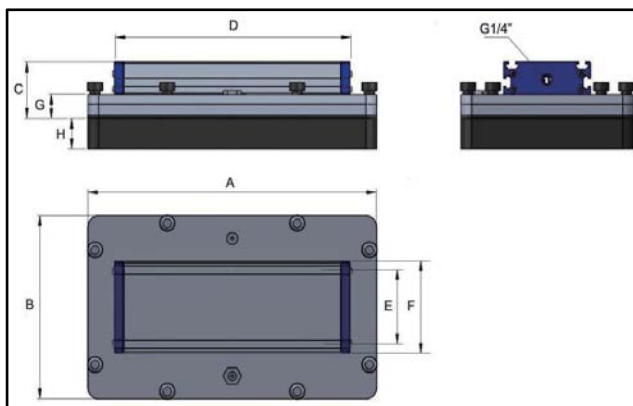
Gripper with Foam 20/30/40 mm thickness, Standard 20 mm holes R05

Type	Force at 30% Vacuum (N)	Force at 40% Vacuum (N)	Force at 50% Vacuum (N)	Force at 60% Vacuum (N)	Force at 70% Vacuum (N)
DEG 400-240-F40	858	1144	1430	1716	2002
DEG 600-240-F40	1254	1672	2090	2508	2926
DEG 800-240-F40	1716	2288	2860	3432	4004
DEG 400-300-F40	1018	1358	1697	2037	2376
DEG 600-300-F40	1612	2150	2687	3225	3762
DEG 800-300-F40	2206	2942	3677	4413	5148
DEG 400-400-F40	1358	1810	2263	2715	3168
DEG 600-400-F40	2150	2866	3583	4299	5016
DEG 800-400-F40	2942	3922	4903	5883	6864

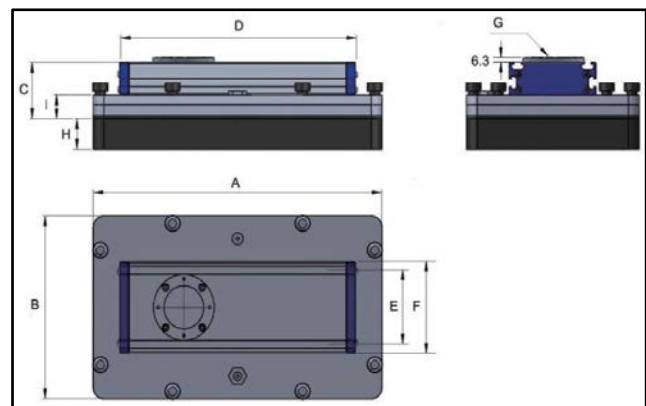
Design Data

Type	A	B	C	D	E	F	G	H	Weight (kg)
DEG 400-240	400	240	74.2	266	97	120	G1/4"	20/30/40	8
DEG 600-240	600	240	74.2	474	97	120	G2"	20/30/40	
DEG 800-240	800	240	74.2	674	97	120	G2"	20/30/40	
DEG 400-300	400	300	74.2	266	97	120	G1/4"	20/30/40	9.65
DEG 600-300	600	300	74.2	474	97	120	G2"	20/30/40	
DEG 800-300	800	300	74.2	674	97	120	G2"	20/30/40	
DEG 400-400	400	400	74.2	266	97	120	G2"	20/30/40	
DEG 600-400	600	400	74.2	474	97	120	G2"	20/30/40	
DEG 800-400	800	400	74.2	674	97	120	G2"	20/30/40	

Unit dimension in mm



DEG with built-in Vacuum Cartridge Ejector



DEG with Vacuum blower connection

Vacuum Gripper

Spare Part

Foam

DEGFOAM40024030R05

Model	Length (mm)	Width (mm)	Thickness	Shape
DEGFOAM	400	240	20:20mm	R05: Diameter 20 mm
	600	300	30:30mm	
	800	400	40:40mm	

Flow Resistance Plate

DEGPLATE4002402R05

Model	Length (mm)	Width (mm)	Thickness	Shape
DEGPLATE	400	240	2:2mm	R05: Diameter 20 mm
	600	300		
	800	400		

Screw knob

SCREWKNOBM530

Model	Thread	Length
SCREWKNOB	M5	30mm