

# VACUUM

## PRODUCTS OVERVIEW

2024



Increased flexibility, efficiency  
and productivity





# Suction cups

## SHEET METAL / GLASS / PLASTIC HANDLING APPLICATIONS



NEW

### VG.MB | VG.MF | VG.MBO

- Handling metal sheet with or without oil
- Glass panel handling
- High wear resistance
- Permanent fittings with hexagon
- Excellent grip stability, cleats increase the friction and avoid deformation

NBR · PU · HNBR · Red Silicone



### VG.U | VG.B | VG.B.SFO | VG.LB | VG.LB.SFO | VG.CF

- Universal and plastic applications
- Suitable for standard application, flat and slightly curved surface

NBR · HNBR · FDA red and transparent silicone

## APPLICATIONS FOR PACKAGED AND UNPACKAGED PRODUCTS - SNACKS AND BAGS



### VG.FP | VG.BC | VG.SBC

- Ideal for handling packaged flow pack products, packets of cookies and bars
- Robust bellows, soft flexible lip and specific high flow fittings

Red and transparent FDA silicone



NEW

### VG.BPG | VG.LPG | VG.XG

- Ideal for handling difficult to handle bags, medical bags and flowpacks
- The versions without internal insert are ideal for handling unwrapped products such as pralines or biscuits with porous and uneven surfaces

Transparent FDA Silicone · Polyurethane



### VG.BR | VG.LBR | VG.LBO

- Suitable for handling snacks and food bars packed in flowpack
- Ideal for gripping and depositing on the side of the handled object
- Handling of stand-up pouches (Doypack®) containing liquids
- Ideal for handling bottles

Polyurethane



### VG.FO

- Ideal for opening bags, vertical and horizontal packaging machines
- Handle thin and sensitive sheets, such as paper and plastic films


Transparent FDA Silicone

## APPLICATIONS FOR HANDLING CARDBOARD, WOOD AND POROUS SURFACES



### VG.BP | VG.GX | VG.IS

- Excellent gripping performance on corrugated and porous surface
- Available with 2.5 and 1.5 bellows (overturn applications)
- Large and flexible lip in the version PU 30/60 Shore grey/red
- Deal for handling boxes and cartons

 PU 50 Shore green, PU 30/60 Shore yellow/green, PU 30/70 Shore yellow/green, PU 30/60 Shore grey/red

## HOT SURFACE AND POLYMER APPLICATIONS



### VG.PAAT

- Ideal for objects (made of hot polymers and fibres) with flat or slightly curved surface
- Stainless steel nipple
- Suitable for high working temperatures up to 300 °C


 PTFE

## APPLICATIONS FOR UNPACKAGED FOOD PRODUCTS



### VG.U | VG.B | VG.FP | VG.LB | VG.BDT | VG.BPG | VG.LPG

- Suitable for high working temperatures
- Silicone compliant with FDA 21 CFR 177.2600 and regulation (EC) No. 1935/2004
- Detectable suction cups (blue colour): a small amount of metal additive (Fe) is added to the rubber
- Ideal for handling bakery products with seeds

 FDA Silicone · Detectable FDA-compliant silicone

VG.U	6, 9, 11, 16, 22, 33, 42, 53
VG.B	6, 9, 11, 16, 22, 33, 42, 53, 77
VG.B.SFO	16, 22, 33, 42, 53
VG.CF	16, 22, 27, 33, 42, 53, 77, 112, 152
VG.LB	6, 9, 11, 16, 22, 33, 42, 53
VG.LB.SFO	16, 22, 33, 42, 53
VG.FP	15, 20, 30, 40
VG.BC	40, 50
VG.SBC	40, 50, 63
VG.MB	32, 42, 52, 63, 83, 103
VG.PAAT	16, 20, 30, 40
VG.GX	10, 15, 20, 25, 35, 52, 75
VG.GX	10, 15, 20, 25, 35, 52, 75
VG.BP	10, 15, 20, 25, 35, 52, 75, 110, 150, 200
VG.IS	20, 25, 35, 45, 55, 70
VG.BR	20x45, 30x55
VG.LBR	20x45, 30x55
VG.LBO	40x90
VG.MF	20, 30, 45, 60, 80, 100, 120
VG.MBO	30x60, 40x80
VG.BPG	30, 41, 48, 55
VG.LPG	30, 41, 48
VG.XG	40, 50, 60
VG.FO	26, 33
VG.BDT	40

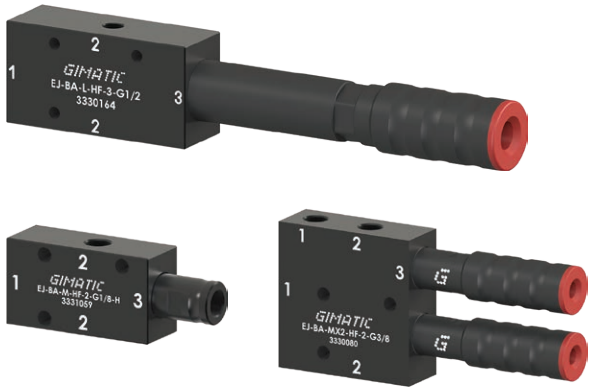


# Vacuum pumps

## VACUUM PUMPS FOR DECENTRALIZED AND CENTRALIZED APPLICATIONS



SMALL	MEDIUM	LARGE
0.18 ÷ 0.29 NI/s	0.57 ÷ 2.7 NI/s	2.6 ÷ 6 NI/s



### EJ-BASIC

- Ideal for decentralized applications
- Possibility of integration close to the gripping point, low weight
- Available with two and three stages; EJ-MEDIUM and EJ-LARGE cartridges (EJ-LP, EJ-HF, EJ-HV)

**Small applications**  
EJ-MEDIUM · EJ-MEDIUMx2 · EJ-LARGE  
with and without integrated silencer



### EJ-LINE

- Ideal for pick & place applications
- Vacuum pump in-line
- Clampable in-line design, to optimize overall dimensions
- Low weight

**Small applications**  
EJ-SMALL · EJ-MEDIUM · (EJ-LP, EJ-HF, EJ-HV)



### EJ-SYS

- Manifold in aluminum, sensing and blow-off port
- High versatility and small footprint
- Available with two and three stage cartridges (EJ-LP, EJ-HF, EJ-HV)
- Available with two and three stages; EJ-MEDIUM and EJ-LARGE cartridges (EJ-LP, EJ-HF, EJ-HV)

**Small applications**  
EJ-MEDIUM with and without integrated silencer  
EJ-LARGE with and without integrated silencer



### EJ-SLG

- High suction flow rate/low weight
- Manifold in POM material
- Available with vacuum switch integrated
- Available with two and three stages; EJ-MEDIUM and EJ-LARGE cartridges (EJ-LP, EJ-HF, EJ-HV)

**Small applications**  
EJ-MEDIUM - EJ-LARGE with and without integrated silencer

## VACUUM PUMPS WITH INTEGRATED BLOWOFF AND QUICK RELEASE DEVICE

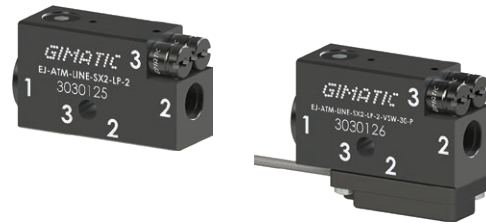


SMALL	MEDIUM	LARGE
0.58 NI/s	0.57 ÷ 1.56 NI/s	2.6 ÷ 6 NI/s



### EJ-BLOWOFF

- Integrated intensity-adjustable counterweight
- Keeps the ejector clean and releases the handled product quickly
- Available with or without integrated vacuum switch
- A single 3/2 valve controls the vacuum pump and the ATM release



### EJ-ATM-LINE

- Restores atmospheric pressure inside the gripper for quick product release
- A single 3/2 valve controls the vacuum pump and the ATM release

EJ-MEDIUM · EJ-MEDIUMx2 · EJ-LARGE

EJ-SMALLx2 (EJ-HV, EJ-LP)  
with integrated atmospheric quick release valve



NEW

### EJ-BSV-MEDIUM

- Integrated solenoid valve
- Ideal for applications in dusty environments
- Adjustable integrated blow-off tank
- Available with vacuum switch integrated
- Integrated silencer
- Anodised aluminium manifold

EJ-MEDIUM 2 stage (EJ-HF, EJ-HV) high suction flow rate and low energy consumption



# Vacuum pumps

## VACUUM PUMPS FOR w APPLICATIONS



**LARGE**  
2.6 ÷ 51.2 NI/s

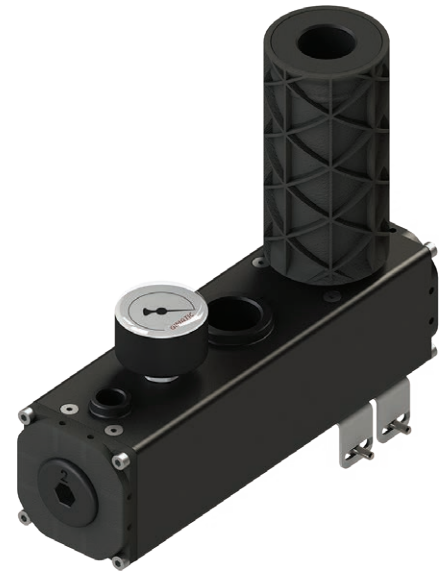


**NEW**

### EJ-MLG

- Modular and configurable
- Manifold in POM
- Designed for centralized vacuum system
- Available with 2 EJ-LARGE cartridges with two or three stages
- Sensing and blow-off connections
- Fixing bracket and vacuum gauge included

EJ-LARGE 2 or 3 stage



**NEW**

### EJ-CLS

- Ideal for centralized applications
- High performance and high flow rates for high speed Pick and Place
- Low weight (POM body)
- Analogue vacuum gauge, fixing brackets and silencer included

EJ-LARGE 3 stage



### EJ-CEN-LARGE

- Ideal for centralized applications
- Modular and configurable from 5 to 16 two-stage EJ-LARGE cartridges (EJ-HF, EJ-HV)
- Compact size and high suction flow rate
- Robust design and low weight (aluminium body and PA12 silencer)
- Can work during suction or blowing (remove silencer)

EJ-LARGE 2 stage

## BOOSTER - HIGH FLOW FOR POROUS SURFACE APPLICATIONS



### EJ-BBT BOOSTER

- Ideal for applications where a high suction flow rate is required at low vacuum degrees
- Transport of waste scraps and residual dust
- Direct suction cup mounting on EJ-BBT10 possible

Ø 10, 20, 30 and 40 mm

## VACUUM PUMP WITH ISO SOLENOID VALVES



**MEDIUM**  
0.57 ÷ 1.56 NI/s



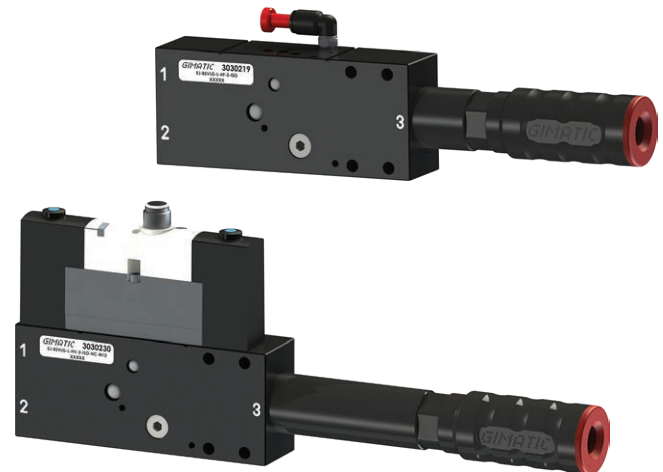
### EJ-SVLG-MEDIUM-ISO | EJ-BSVLG-MEDIUM-ISO

- Ideal for decentralized applications
- Excellent ratio between suction flow rate and compressed air consumption
- Available with ON/OFF vacuum valve and integrated manual override control
- POM manifold prepared for mounting ISO 15218 (15 mm) valve of type 3/2, NO or NC, with 1.6 mm diameter opening
- Available with two- and three-stage EJ-MEDIUM cartridges (EJ-LP, EJ-HF, EJ-HV)
- Additional vacuum port for mounting a vacuum switch
- Size: EJ-MEDIUM 2 or 3 stage

EJ-MEDIUM 2 or 3 stage



**LARGE**  
2.6 ÷ 6 NI/s



### EJ-BSVLG-LARGE-ISO

- Ideal for centralized and decentralized applications
- Excellent ratio between suction flow rate and compressed air consumption
- Available with ON/OFF vacuum valve, blow-off, and integrated manual override control
- POM manifold ready for mounting ISO 01 15407-1 3/2 x2 valve
- Available with two- and three-stage EJ-LARGE cartridges (EJ-HF, EJ-HV)
- In-line design for greater dirt tolerance
- Installable in series

EJ-LARGE 2 or 3 stage

## VACUUM PUMPS WITH ENERGY SAVING AND INTEGRATED ELECTRONICS



**LARGE**  
2.6 ÷ 3.2 NI/s



### EJ-XPRO

- Easy to install
- Powerful and reliable
- Compact dimensions
- Configurations complete with solenoid valves for vacuum generation (NC/NO) and blow-off
- Maximum vacuum level up to -95 kPa
- Suction flow rate up to 192 NI/min
- Integrated blow-off with manual adjustment
- Energy-saving system (ES) with manual and automatic mode that saves up to 95% compressed air in sealed applications, integrated non-return valve



**MEDIUM**  
0.67 ÷ 0.78 NI/s



**NEW**

### EJ-XONE

- High performance in a compact design
- Robust, durable and lightweight aluminium housing
- PNP and NPN versions, with NC and NO configuration
- 8-pin M8x1 connector
- Option for battery mounting
- Energy-saving system (ES) with manual and automatic mode that saves up to 95% compressed air in sealed applications, integrated non-return valve
- Electrically controllable backflow mechanism from pin or automatic at each cycle
- Simplified maintenance



# Vacuum gripping systems

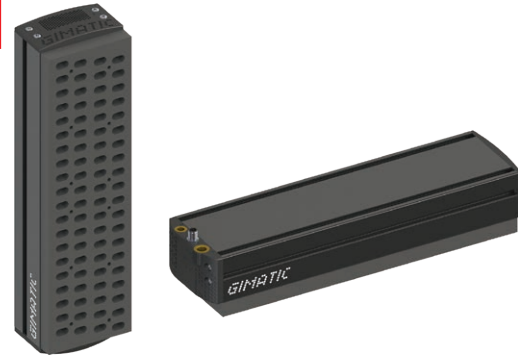
## VACUUM GRIPPING SYSTEMS WITH 20 mm THICK FOAM



### FGS-060-F20 | FGS-120-F20


- Available in different sizes to meet the requirements of many applications
- Modular and versatile solution, available with calibrated holes and self-closing valves
- Typical applications: palletization and handling in the packaging, sheet metal, glass and wood industries


## VACUUM GRIPPING SYSTEMS WITH 20 mm THICK FOAM, WITH VACUUM AND BLOWOFF SOLENOID VALVE



### FGS-120-F20-BSV

- Available in different sizes to meet the requirements of many applications
- Modular and versatile solution, available with calibrated holes and self-closing valves
- Typical applications: palletization and handling in the packaging, sheet metal, glass and wood industries

 Fine and medium pitch sponge; available sponge widths: 200, 300, 400, 600, 800, 1000, 1200 mm

 Fine and medium pitch sponge; available sponge widths: 200, 300, 400, 600, 800, 1000, 1200 mm

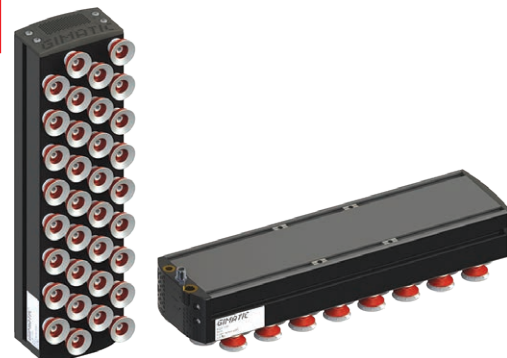
## VACUUM GRIPPING SYSTEMS WITH SUCTION CUPS



### FGS-120-SC


- Available in different sizes to meet the requirements of many applications
- The VG.IS polyurethane suction cups ensure high wear resistance and adaptability to uneven surfaces
- Typical applications: palletization and handling in the packaging, sheet metal, glass and wood industries


## VACUUM GRIPPING SYSTEMS WITH SUCTION CUPS, WITH VACUUM AND BLOWOFF SOLENOID VALVE



### FGS-120-SC-BSV

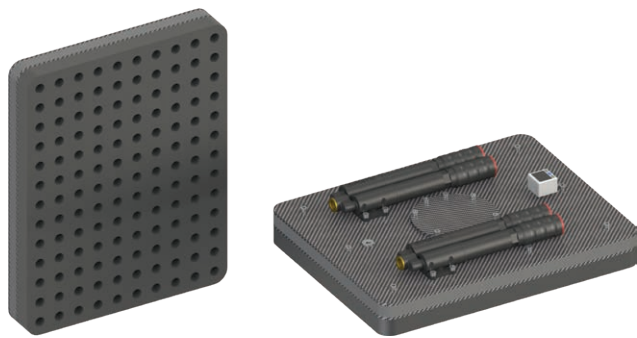
- Available in different sizes to meet the requirements of many applications
- The VG.IS polyurethane suction cups ensure high wear resistance and adaptability to uneven surfaces
- Typical applications: palletization and handling in the packaging, sheet metal, glass and wood industries

 Available strokes: 200, 400, 600, 800 mm

 Available strokes: 200, 400 mm



## CARBON FIBER VACUUM GRIPPING SYSTEM WITH 25MM THICK FOAM



### FCG

- Ideal mainly for palletising cardboard boxes, interlayers and pallets
- Power&light version with light carbon body and high suction flow rate

Dimensions: 400x300mm

## VACUUM GRIPPING SYSTEMS WITH THREADED HOLES



### NEW

### FGS-060-PSC | FGS-120-PSC

- FGS-060-PSC with G1/4" holes
- FGS-120-PSC with G3/8" holes
- Modular and configurable solution
- Various Gimatic suction pads can be integrated with special fittings with self-excluding valve and calibrated hole
- Also ideal for tilting

Available strokes: 200, 300, 400, 600, 800, 1000, 1200 mm

## VACUUM SYSTEMS FOR BAGS, WITH 30 mm THICK FOAM



### FBG

- Ideal for handling heavy bags of both liquid and solid materials with different shapes and weights
- The orange-coloured sponge is made of natural rubber and allows perfect adaptation to the bag to be handled (bags with irregular shapes)
- The black-coloured sponge is made of EPDM and has excellent wear resistance and ensures high grip stability (regular-shaped sacks)

Available in three sizes 245x125mm, 250x180mm, 350x250mm and two heights 70mm and 90mm

## VACUUM CONTAINMENT SYSTEMS FOR BAGS, INTEGRATED VACUUM GENERATORS, WITH 30 mm THICK FOAM



### NEW

### FGB-L

- Compact solution for handling heavy bags of both liquid and solid materials with different shapes and weights
- Integrates two LARGE ejectors that can be 2 or 3 stages
- The orange-coloured sponge is made of natural rubber and can be perfectly adapted to the sack to be handled
- The black sponge is made of EPDM and has excellent wear resistance
- By adding the MFI-A374-A kit, it can be attached directly to the most common cobots on the market

Available in size 245x125 mm and in two heights 70 mm and 90 mm



# Multistage cartridges

## MULTISTAGE EJECTORS FOR CUSTOM INTEGRATION



**SMALL**  
-82 kPa

**MEDIUM**  
-90 kPa

**LARGE**  
-90 kPa



### EJ-LP (LOW PRESSURE)

- EJ-LP cartridges are capable of achieving a high vacuum level with low supply pressure
- They are recommended for applications such as handling glass or sheet metal, as well as in all sealed circuits where a good flow rate at a high vacuum level is required

EJ-SMALL 2-stage  
EJ-MEDIUM 2 and 3-stage - EJ-LARGE 2 and 3-stage



**SMALL**  
-78 kPa

**MEDIUM**  
-73 kPa

**LARGE**  
-73 kPa



### EJ-HF (HIGH FLOW)

- EJ-HF cartridges evacuate a large amount of air. They are therefore suitable for handling porous objects such as cardboard, wood and materials with irregular surfaces.
- Ideal where it is necessary to evacuate large volumes of air in order to maintain the circuit at a certain vacuum level during the production cycle, compensating for any losses

EJ-SMALL 2-stage  
EJ-MEDIUM 2 and 3-stage - EJ-LARGE 2 and 3-stage



**SMALL**  
-92 kPa

**MEDIUM**  
-94 kPa

**LARGE**  
-94 kPa



### EJ-HV (HIGH VACUUM)

- EJ-HV cartridges are ideal for tight applications such as glass panel handling, sheet metal handling and thermoforming applications

EJ-SMALL 2-stage  
EJ-MEDIUM 2 and 3-stage - EJ-LARGE 2 and 3-stage



# System accessories

## VACUUM SWITCHES



### VACSD

- Digital vacuum switch with display



### VACSM

- Pre-calibrated electromechanical vacuum switch



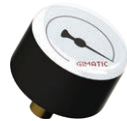
### VACSW

- Pre-calibrated vacuum switch with digital output



### VACSP

- Pneumatic Vacuum Switch NC



### AVG

- Vacuum Gauge -100 kPa / -30 inHg

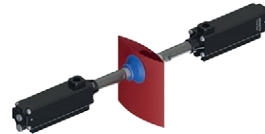
## BALL JOINTS



### VAB

- Ball joint for suction cups, with brake

## VACUUM ACTUATORS



### VAQ

- Vacuum actuator

## RELEASE SYSTEMS



### AQRV

- Valve for quick release by atmospheric pressure, G1/8"



### BNRV

- Blow-off non-return valve, G1/8"

## SUSPENSIONS



### VSRT | VSHT | VSET | VSNTG

- Rotary and non-rotary suspensions
- Threaded body suspensions
- Heavy duty suspensions (VSHT)

## VACUUM FILTERS



### FILTR

- Vacuum filter G1/8", G3/8", G1/2", G3/4" porosity 5 and 35 µm



Via Enzo Ferrari, 2/4  
25030 Roncadelle (BS) ITALY

tel. +39 030 2584655  
fax +39 030 2583886

info@gimatic.com  
www.gimatic.com



Sales Network