Vacuum gripping systems with foam / FCG Power&Light 400x300 medium pitch with self-closing valves

GIMATIC from **EMI**

FCG-400-0300-F25-R10-P30-VA

- The FCG-400 series of vacuum gripping systems, in the version with suction cups, is a modular and versatile solution for handling a variety of products of different sizes, shapes and porosity
- Ideal mainly for palletising cardboard boxes, interlayers and pallets
- Power&light version with light carbon body and high suction flow rate
- Integrated energy-efficient multi-stage EJ-LARGE-HF-3 cartridges
- Central vacuum port for connection to external vacuum source (blower, electric pump)
- Self-closing valves permit use with a smaller vacuum pump, ensuring a high vacuum level even if most of the surface of the gripper is not covered
- Additional vacuum sensing ports to monitor the vacuum level during gripping
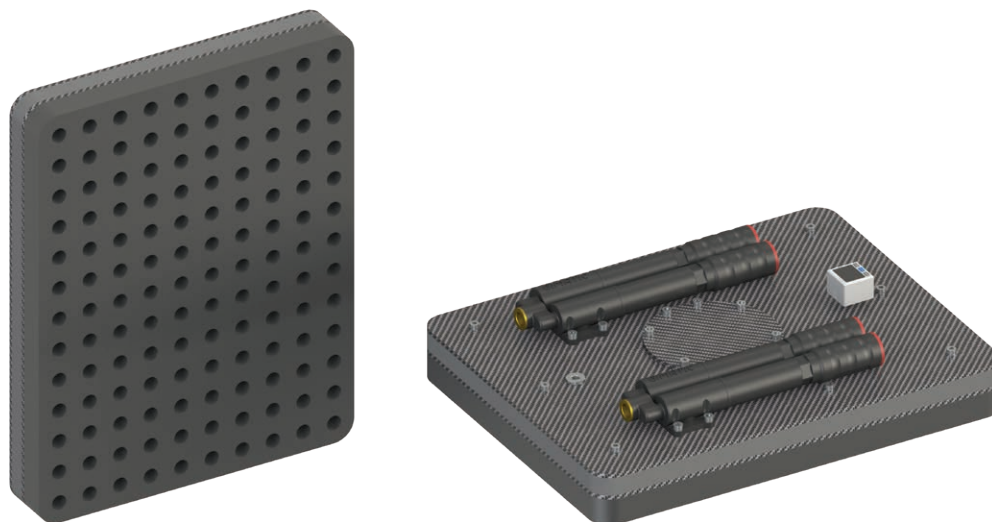
Technical features

Max feed pressure	0.6 MPa
Temperature range	0 ÷ +50 °C
Weight	4.5 kg
Material	CF, EPDM, NBR, PA12
Noise level	70 dB

Suction flow rate

Model	Feed pressure	Air consumption	Suction flow rate [Nl/s] at different vacuum levels [kPa]								Max vacuum
	[MPa]	[Nl/s]	0	-10	-20	-30	-40	-50	-60	-70	[kPa]
FCG-400-0300-F25-R10-P30-VA-EJL4	0.6	6.8	23.6	14	10	6.8	3.56	2.48	2.04	1.24	-73

Gripping force

| Model	Gripping force [N] at different vacuum levels				
	-30 kPa	-40 kPa	-50 kPa	-60 kPa	-70 kPa
FCG-400-0300-F25	1015	1300	1650	2000	2300

Theoretical gripping force on flat surface, with fully covered gripping surface, safety factor excluded
Standard foam thickness: 25 mm

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Identification codes

Alphanumeric code	Description	Order code
FCG-400-0300-F25-R10-P30-VA-EJL4	Vacuum gripping system with foam, 400x300 mm, medium pitch, with integrated self-closing valves	373400001

62   237.5

Exhaust ejector (4x),
do not cover

28 max

24   25

0÷2

--B--

Foam

25

-B-

400

Cover

24   16

G1/4"
Air supply

149

300

31

60
105

180

A   A

Screw M5 (8x)

Cover

NO

(80)

G1/8"
Vacuum

30

90

G1/8"
Vacuum

G1/4"
Air supply
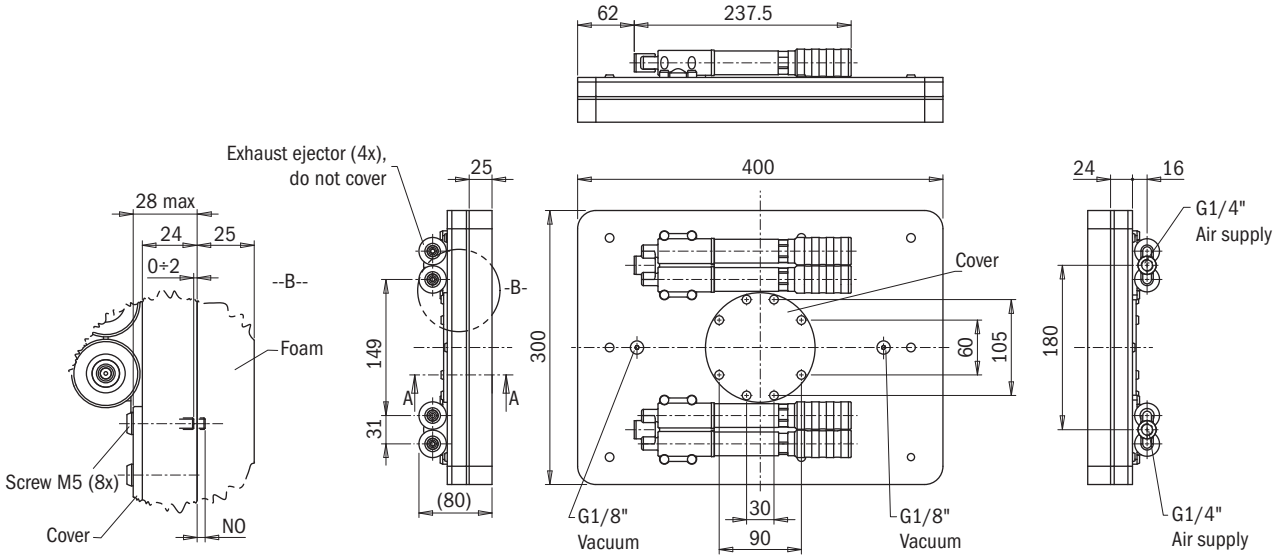
Reference dimensions for interface assembly.
Do not exceed the recommended measures

Assembly example for interface
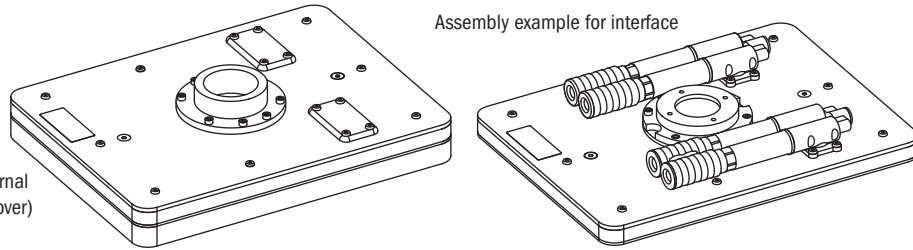
Assembly example for external
vacuum source, (remove cover)

Identification codes

Alphanumeric code	Spare parts	Order code
FCG-400-0300-F25-R10	Spare EPDM foam, 400x300 mm, thickness 25 mm, medium pitch	373400300

400

30 (9x)

300

Ø12

30 (12x)

Introduction
Vacuum theory
Suction cups
Vacuum pumps
Vacuum gripping systems
Customised solutions
Suspensions
System accessories