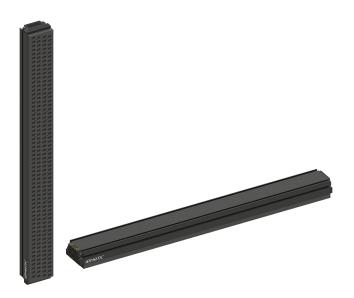# Vacuum gripping systems with foam / FGS-120 with fine pitch and self-closing valves

FGS-120-1200-F20-0T-VA

- The FGS-120 series of vacuum gripping systems, in the version with foam, is a modular and versatile solution for handling different products with different sizes, shapes and porosity
- Integrated EJ-LARGE-HF-3 multistage cartridges for high suction flow rate and low energy consumption
- The version with self-closing valves is ideal in applications where objects with different sizes/ shapes need to be handled. It allows the user to work with smaller vacuum pumps, reducing consumption while maintaining a high level of vacuum, even when most of the gripper surface area is not engaged

Technical features

Max feed pressure	0.6 MPa
Temperature range	0 ÷ +50 °C
Weight	5.65 ÷ 5.77 kg
Material	Al, 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]
FGS-120-1200-F20-0T-VA-EJL4XX	0.6	6.8	23.6	14	10	6.8	3.56	2.48	2.04	1.24	-73
FGS-120-1200-F20-0T-VA-EJL6XX	0.6	10.2	34	21	15.6	10.2	5.4	3.6	2.9	2	-73

Gripping force

Model	Gripping force [N] at different vacuum levels				
	-30 kPa	-40 kPa	-50 kPa	-60 kPa	-70 kPa
FGS-120-0600-F20	1115	1479	1851	2220	2590

Theoretical gripping force on flat surface, with fully covered gripping surface, safety factor excluded
Standard foam thickness: 20 mm

Identification codes

Drawing	Alphanumeric code	Description	Order code
A	FGS-120-1200-F20-OT-VA-EJL4XX	Vacuum gripping systems with foam, 120x1200 mm, fine pitch, with integrated self-closing valves	353011204
B	FGS-120-1200-F20-OT-VA-EJL6XX	Vacuum gripping systems with foam, 120x1200 mm, fine pitch, with integrated self-closing valves	353011206

A

G1/4" Air supply

G1/4" Vacuum

1250

120

97

27

85

20

Exhaust ejector, do not cover

10

M8

20

G1/8" Air supply

G1/8" Vacuum

B

G1/4" Air supply

G1/4" Vacuum

1260

120

97

27

85

20

G1/4" Air supply

G1/4" Vacuum

20 20 20 150 20 20 495 20

G1/8" Vacuum

G1/8" Air supply

G1/8" Air supply

G1/8" Vacuum

Exhaust ejector, do not cover

M8

60

Exhaust ejector, do not cover

Identification codes

Alphanumeric code	Spare parts	Order code
FGS-120-0600-F20-OT	Spare EPDM foam, 120x1200 mm, thickness 20 mm, fine pitch	353012006

1220

118

18

10

20