

Flow Grippers SCGS

Suction rate from 270 l/min to 650 l/min



Suitability for industry specific applications

Application

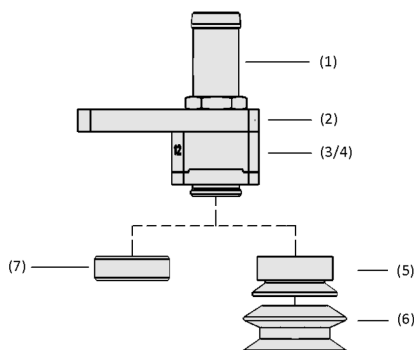
- Narrow design enables use in confined installation space and saves space when handling several products side by side at the same time
- Flow gripper for handling of assembled and blank printed circuit boards
- Minimal surface pressure and possibility of handling products with a low degree of occupancy enable reliable handling of workpieces with openings
- Contact element made of FDA compliant material allows direct, repeated contact with dry foods such as biscuits and cakes



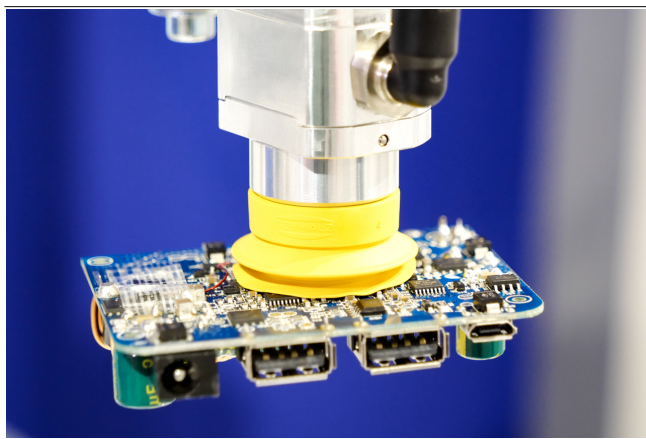
Flow Grippers SCGS

Design

- Main body (2) made out of unanodized aluminum with integrated compressed air-operated vacuum generation, for sideways mounting
- Two compressed air connections for suction and blow off (3/4)
- Exhaust pipe (1)
- Suction cup connection nipple (5) made of aluminum (FDA compliant)
- Suction cups (6) made of FDA-compliant SI-MD, SI-HD and electrostatic NBR-ESD; large shaft diameter for high flow rates
- Gripping surface made out of POM (7)



System design Flow Grippers SCGS



Flow grippers SCGS in the handling of electronic components

Product highlights

- Narrow and compact design ideal for confined spaces
- Suction area with soft, flexible sealing lip dampens and seals structured surfaces very well
- Very high volume flow enables safe gripping, even with porous materials
- Minimized air consumption reduces operating costs
- Controlled discharge of sucked air (optional) prevents contamination of the process area

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Designation code Flow Grippers SCGS

SCGS	–	1xE100	–	A	–	MS	–	AR	–	M20x1-AG
1		2		3		4		5		6

1 – Abbreviated designation

Code	Version
SCGS	SCGS

2 – Performance class of ejector

Code	Performance class of ejector
1xE100	1xE100

3 – Blow off function

Code	Type
A	Blow off function

4 – Possibility for mounting

Code	Possibility for mounting
MS	Mounting sideways

5 – Design

Code	Type
AR	Exhaust air duct axial

6 – Suction cup connection

Code	Connection
M20x1-AG	M20x1-AG (AG = male (M))

Flow gripper SCGS is supplied as an individual part (without suction area). In order to receive a complete gripper the following ordering steps are required:

- Flow gripper SCGS – available for sideways mounting
- Suction area of type SAUG-FL/SAUG-SCGS – available in various dimensions

Ordering data Flow Grippers SCGS

Type	Part no.
SCGS 1xE100 A MP AR M20x1-AG	10.01.30.00796

Ordering data Accessories Flow Grippers SCGS

Accessories	Part no.
Suction cup (round)	SAUG-SCGS 20 SI-MD-55 602 B
Suction cup (round)	SAUG-SCGS 30 SI-MD-55 602 B
Suction cup (round)	SAUG-SCGS 40 SI-MD-55 602 B
Suction cup (round)	SAUG-SCGS 50 SI-MD-55 602 B
Suction cup (round)	SAUG-SCGS 20 NBR-ESD-55 B
Suction cup (round)	SAUG-SCGS 30 NBR-ESD-55 B
Suction cup (round)	SAUG-SCGS 40 NBR-ESD-55 B
Suction cup (round)	SAUG-SCGS 50 NBR-ESD-55 B
Suction cup (round)	SAUG-SCGS 20 SI-HD-65 602 B
Suction cup (round)	SAUG-SCGS 30 SI-HD-65 602 B
Suction cup (round)	SAUG-SCGS 40 SI-HD-65 602 B
Suction cup (round)	SAUG-SCGS 50 SI-HD-65 602 B
Suction area	SAUG-FL SCGS 30 POM

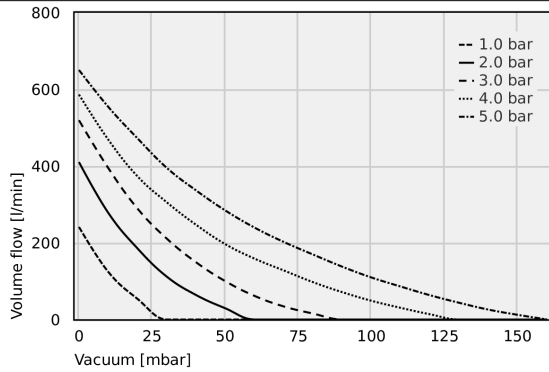
Technical data Flow Grippers SCGS

Type	Operating pressure	Operating temperature	Weight [g]
SCGS 1xE100 A MP AR M20x1-AG	1.0 ... 5.0 bar	5 ... 75 °C	95

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Performance data Flow Grippers SCGS



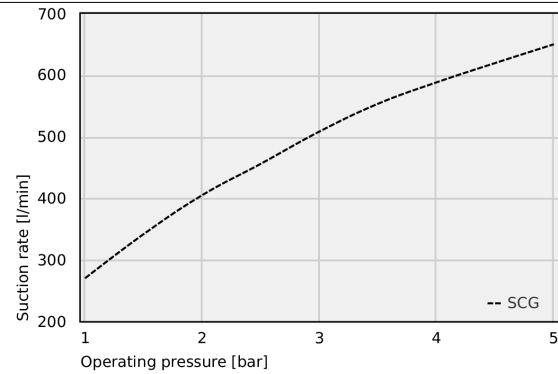
Flow rate at various degrees of evacuation



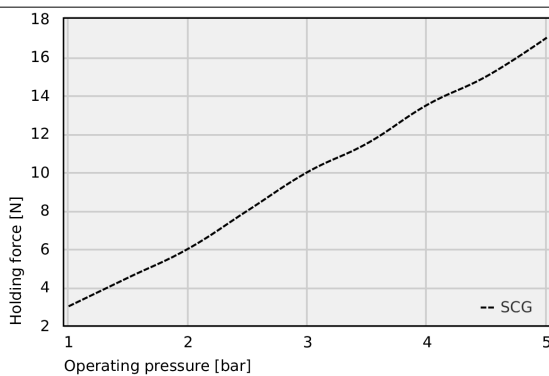
Achievable vacuum at various operating pressures



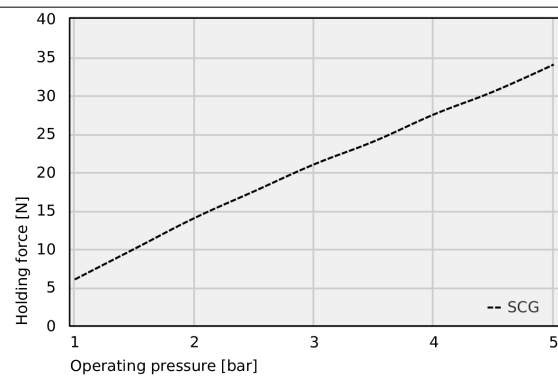
Air consumption



Suction rate at various degrees of evacuation



Holding force with suction area 40 at various operating pressures (measured on a suction-tight workpiece)



Holding force with suction area 60 at various operating pressures (measured on a suction-tight workpiece)

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Flow rate at various degrees of evacuation

Typ	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
1.0 bar	241.0	124.1	53.6	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-
2.0 bar	410.0	277.9	185.1	111.7	63.8	29.2	0.0	-	-	-	-	-	-	-	-	-	-
3.0 bar	519.0	394.6	289.0	210.8	149.2	99.9	61.5	34.0	15.4	0.0	-	-	-	-	-	-	-
4.0 bar	586.0	468.7	373.0	305.5	246.9	196.4	158.6	127.8	97.3	71.2	48.7	30.3	13.6	0.0	-	-	-
5.0 bar	650.0	554.1	472.0	395.2	336.5	284.2	239.5	202.1	169.3	137.6	109.4	85.8	63.2	43.5	25.7	12.1	0.0

Achievable vacuum at various operating pressures

Typ	1	2	3	4	5
SCG	30.0	61.0	92.0	128.0	160.0

Air consumption

Typ	1	1.5	2	2.5	3	3.5	4	4.5	5
SCG	60.00	77.00	90.00	107.00	120.00	137.00	158.00	178.00	198.00

Suction rate at various degrees of evacuation

Typ	1	1.5	2	2.5	3	3.5	4	4.5	5
SCG	270.00	341.73	405.00	455.98	508.32	553.42	588.20	619.58	650.00

Holding force with suction area 40 at various operating pressures (measured on a suction-tight workpiece)

Typ	1	1.5	2	2.5	3	3.5	4	4.5	5
SCG	3.00	4.50	6.00	8.00	10.00	11.50	13.50	15.00	17.00

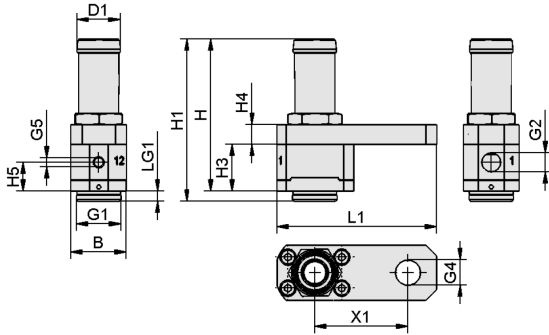
Holding force with suction area 60 at various operating pressures (measured on a suction-tight workpiece)

Typ	1	1.5	2	2.5	3	3.5	4	4.5	5
SCG	6.00	10.00	14.00	17.50	21.00	24.00	27.50	30.50	34.00

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Design data Flow Grippers SCGS

Type	B [mm]	D1 [mm]	G1	G2			H [mm]	H1 [mm]	H3 [mm]	H4 [mm]	H5 [mm]	L1 [mm]	LG1	X1 [mm]
SCGS 1xE100 A MP AR M20x1-AG	25	19.5	M20x1-M	G1/8"-F	G1/4"-F	M5-F	68.6	73.1	21.1	9	13.1	72	4.5	42

Multimedia product presentation

Medium

Product video

Link

<https://vimeo.com/691405259>