

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min



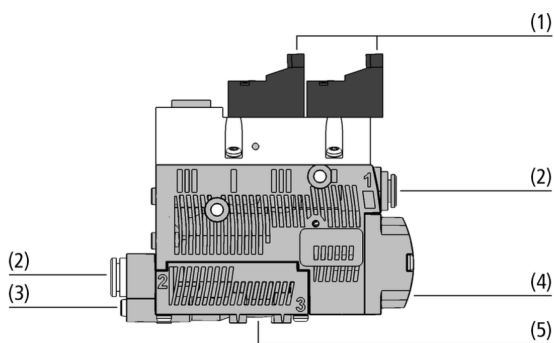
Suitability for industry specific applications

Application

- Handling of airtight and slightly porous workpieces
- Generation of vacuum in automated systems
- Use in robot handling and on linear axes
- For systems that require highly dynamic gripping of workpieces and where space is limited



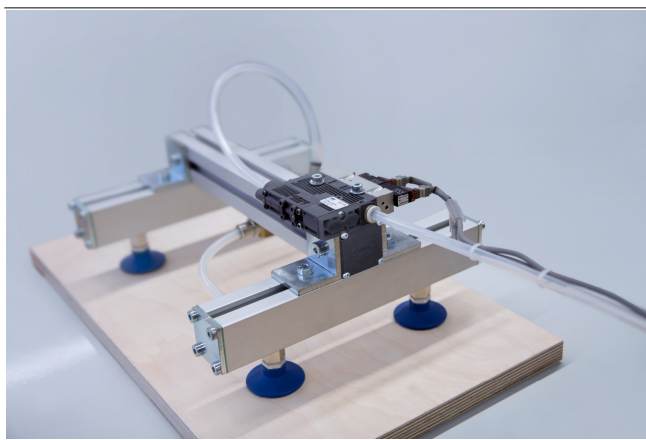
Compact Ejectors SCPSb



Design

- Basic module made of high strength plastic
- Pneumatic valves (1) for suction function NO / NC and blow off
- Pneumatic connections (2) via push-in quick connect couplings
- Screw (3) to adjust blow off for lightweight pieces
- Open silencer (4) reduces the service effort
- Can optionally be mounted using DIN rails (5)

System design Compact Ejectors SCPSb



Central vacuum generation by compact ejectors SCPSb

Product highlights

- Eco nozzle technology allows high suction rate with minimized compressed air consumption
- Compact, extremely robust unit for mounting directly on the handling system
- Push-in connections save additional screw connections
- Also suitable for control cabinet installation thanks to DIN rail mounting option

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Designation code Compact Ejectors SCPSb

SCPSb	–	2-07	–	S04	–	NO
1		2		3		4

1 – Abbreviated designation

Code	Version
SCPSb	SCPSb

2 – Nozzle size

Code	Diameter in mm
07...15	ø 0.7 to 1.5 (single stage)
2-07...2-14	ø 0.7 to 1.4 (double stage)

3 – Connection

Code	Connection
S02	Quick connect push-in coupling 2
S04	Quick connect push-in coupling 4

4 – Idle position suction valve

Code	Type
NC	Normally closed
NO	Normally open

Compact ejector SCPSb is delivered as a ready-to-connect product (without connection cable).

Available accessories: connection cable, top-hat rail clamp, vacuum filter, compressed air connection plate, mounting set, exhaust air set

Ordering data Compact Ejectors SCPSb

Type	Part no.
SCPSb 07 S04 NC	10.02.02.04130
SCPSb 07 S04 NC VD	10.02.02.04823
SCPSb 07 S04 NO	10.02.02.04129
SCPSb 07 S04 NO VD	10.02.02.04824
SCPSb 10 S04 NC	10.02.02.04132
SCPSb 10 S04 NC VD	10.02.02.04827
SCPSb 10 S04 NO	10.02.02.04131
SCPSb 10 S04 NO VD	10.02.02.04828
SCPSb 15 S02 NC	10.02.02.04134
SCPSb 15 S02 NC VD	10.02.02.04831
SCPSb 15 S02 NO	10.02.02.04133
SCPSb 15 S02 NO VD	10.02.02.04832
SCPSb 2-07 S04 NC	10.02.02.04372
SCPSb 2-07 S04 NC VD	10.02.02.04601
SCPSb 2-07 S04 NO	10.02.02.04371
SCPSb 2-07 S04 NO VD	10.02.02.04597
SCPSb 2-09 S04 NC	10.02.02.04374
SCPSb 2-09 S04 NC VD	10.02.02.04605
SCPSb 2-09 S04 NO	10.02.02.04373
SCPSb 2-09 S04 NO VD	10.02.02.04603
SCPSb 2-14 S02 NC	10.02.02.04376
SCPSb 2-14 S02 NC VD	10.02.02.04609
SCPSb 2-14 S02 NO	10.02.02.04375
SCPSb 2-14 S02 NO VD	10.02.02.04607
SCPSb BY 2-14 G02 NC	10.02.02.07393
SCPSb BY 2-14 G02 NO	10.02.02.07392

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Ordering data Accessories Compact Ejectors SCPSb

Type		Part no.
Connection cable for solenoid valves, 3 m, PUR	ASK B-MIC10 3000 K-2P	21.04.06.00086
Top-hat rail clamp	HUT-SN-KL 75x18x9 SCPS	10.02.02.04149
Vacuum filter	VFI CN6/4 50	10.07.01.00241
Vacuum filter	VFI CN8/6 50	10.07.01.00245
Compressed air connection plate	GP 4 SCPS 07..15 G2	10.02.02.04338
Mounting set	SET SCPS	10.02.02.04343

Type		Accessories	Part no.	
SCPSb	07	Exhaust air set	ABL-SET SCPS einstufig	10.02.02.04216
SCPSb	10	Exhaust air set	ABL-SET SCPS einstufig	10.02.02.04216
SCPSb	15	Exhaust air set	ABL-SET SCPS einstufig	10.02.02.04216
SCPSb	2-07	Exhaust air set	ABL-SET SCPS zweistufig	10.02.02.04667
SCPSb	2-09	Exhaust air set	ABL-SET SCPS zweistufig	10.02.02.04667
SCPSb	2-14	Exhaust air set	ABL-SET SCPS zweistufig	10.02.02.04667

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Technical data Compact Ejectors SCPSb

Type	Degree of evacuation [%]	Suction rate (max.) [m³/h]	Suction rate (max.) [l/min]	Air consumption suction [m³/h]*	Air consumption suction [l/min]**	Air consumption blow-off [m³/h]	Max. air consumption blow-off [l/min]
SCPSb 07 S04 NO	85	0.98	16.0	1.35	22.0	7.20	120
SCPSb 07 S04 NO VD	85	0.98	16.0	1.35	22.0	7.20	120
SCPSb 07 S04 NC	85	0.98	16.0	1.35	22.0	7.20	120
SCPSb 07 S04 NC VD	85	0.98	16.0	1.35	22.0	7.20	120
SCPSb 10 S04 NO	85	2.21	36.0	2.85	46.0	7.20	120
SCPSb 10 S04 NO VD	85	2.21	36.0	2.85	46.0	7.20	120
SCPSb 10 S04 NC	85	2.21	36.0	2.85	46.0	7.20	120
SCPSb 10 S04 NC VD	85	2.21	36.0	2.85	46.0	7.20	120
SCPSb 15 S02 NO	85	4.03	65.5	6.03	98.5	7.20	120
SCPSb 15 S02 NO VD	85	4.03	65.5	6.03	98.5	7.20	120
SCPSb 15 S02 NC	85	4.03	65.5	6.03	98.5	7.20	120
SCPSb 15 S02 NC VD	85	4.03	65.5	6.03	98.5	7.20	120
SCPSb 2-07 S04 NO	85	2.28	37.0	1.35	22.0	7.20	120
SCPSb 2-07 S04 NO VD	85	2.28	37.0	1.35	22.0	7.20	120
SCPSb 2-07 S04 NC	85	2.28	37.0	1.35	22.0	7.20	120
SCPSb 2-07 S04 NC VD	85	2.28	37.0	1.35	22.0	7.20	120
SCPSb 2-09 S04 NO	85	3.05	49.5	2.50	40.5	7.20	120
SCPSb 2-09 S04 NO VD	85	3.05	49.5	2.50	40.5	7.20	120
SCPSb 2-09 S04 NC	85	3.05	49.5	2.50	40.5	7.20	120
SCPSb 2-09 S04 NC VD	85	3.05	49.5	2.50	40.5	7.20	120
SCPSb 2-14 S02 NO	85	4.41	71.5	5.04	82.0	7.20	120
SCPSb 2-14 S02 NO VD	85	4.41	71.5	5.04	82.0	7.20	120
SCPSb 2-14 S02 NC	85	4.41	71.5	5.04	82.0	7.20	120
SCPSb 2-14 S02 NC VD	85	4.41	71.5	5.04	82.0	7.20	120
SCPSb BY 2-14 G02 NO	85	4.41	71.5	5.04	82.0	7.20	120
SCPSb BY 2-14 G02 NC	85	4.41	71.5	5.04	82.0	7.20	120

*At optimal operating pressure

**At optimal operating pressure

Type*	Sound pressure level suction [dB(A)]	Sound pressure level free [dB(A)]	Pressure range (operating pressure) [bar]	Recommended hose internal diameter compressed air [mm]**	Recommended hose internal diameter vacuum [mm]***	Operating temperature [°C]
SCPSb 07 S04 NO	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 07 S04 NO VD	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 07 S04 NC	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 07 S04 NC VD	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 10 S04 NO	61	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 10 S04 NO VD	61	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 10 S04 NC	61	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 10 S04 NC VD	61	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 15 S02 NO	65	77	3.0 ... 6.0 bar	4	6	0 ... 50 °C
SCPSb 15 S02 NO VD	65	77	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 15 S02 NC	65	77	3.0 ... 6.0 bar	4	6	0 ... 50 °C
SCPSb 15 S02 NC VD	65	77	3.0 ... 6.0 bar	4	4	0 ... 50 °C

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Type*	Sound pressure level suction [dB(A)]	Sound pressure level free [dB(A)]	Pressure range (operating pressure) [bar]	Recommended hose internal diameter compressed air [mm]**	Recommended hose internal diameter vacuum [mm]***	Operating temperature [°C]
SCPSb 2-07 S04 NO	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-07 S04 NO VD	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-07 S04 NC	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-07 S04 NC VD	58	63	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-09 S04 NO	62	73	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-09 S04 NO VD	62	73	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-09 S04 NC	62	73	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-09 S04 NC VD	62	73	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-14 S02 NO	70	75	3.0 ... 6.0 bar	4	6	0 ... 50 °C
SCPSb 2-14 S02 NO VD	70	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb 2-14 S02 NC	70	75	3.0 ... 6.0 bar	4	6	0 ... 50 °C
SCPSb 2-14 S02 NC VD	70	75	3.0 ... 6.0 bar	4	4	0 ... 50 °C
SCPSb BY 2-14 G02 NO	70	75	3.0 ... 6.0 bar	4	6	0 ... 50 °C
SCPSb BY 2-14 G02 NC	70	75	3.0 ... 6.0 bar	4	6	0 ... 50 °C

*The supply voltage for vacuum switches and solenoid valves is 24V DC

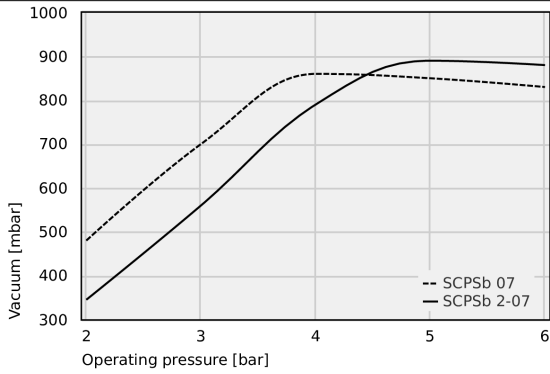
**For max. length 2 m

***For max. length 2 m

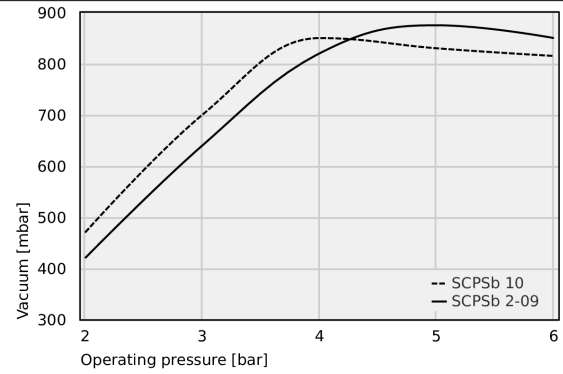
Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

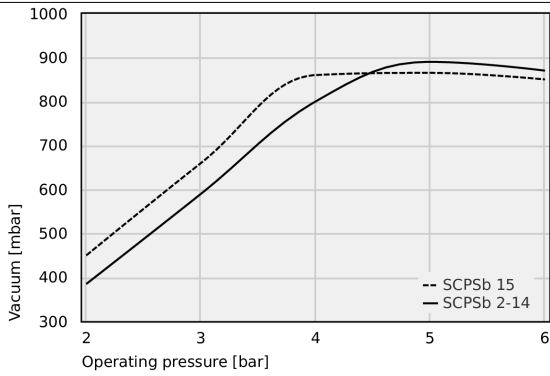
Performance data Compact Ejectors SCPSb



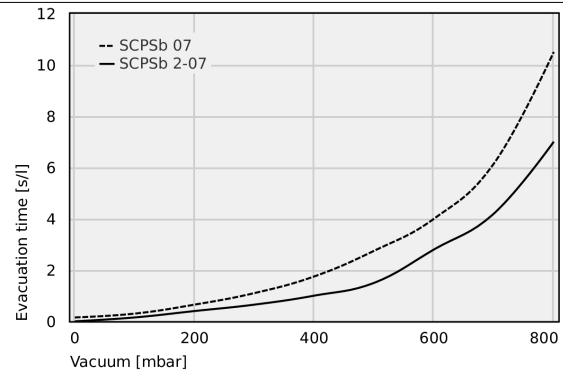
Achievable vacuum at various operating pressures



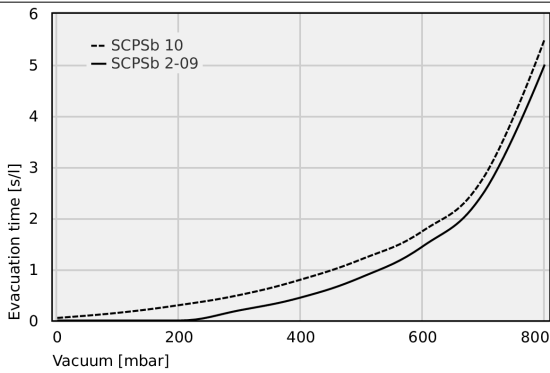
Achievable vacuum at various operating pressures



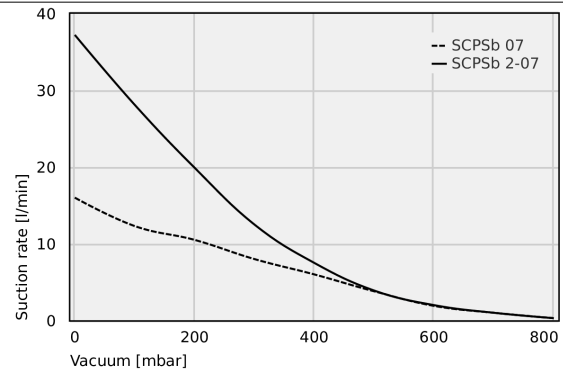
Achievable vacuum at various operating pressures



Evacuation time for various vacuum ranges [s/l]



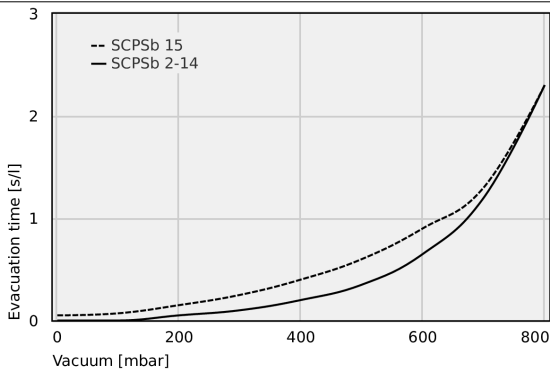
Evacuation time for various vacuum ranges [s/l]



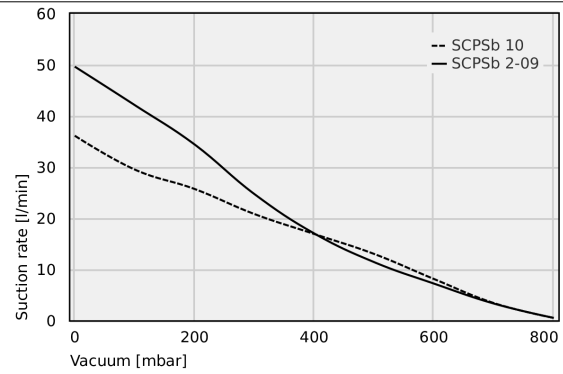
Suction rate at various degrees of evacuation [l/min]

Compact Ejectors SCPSb

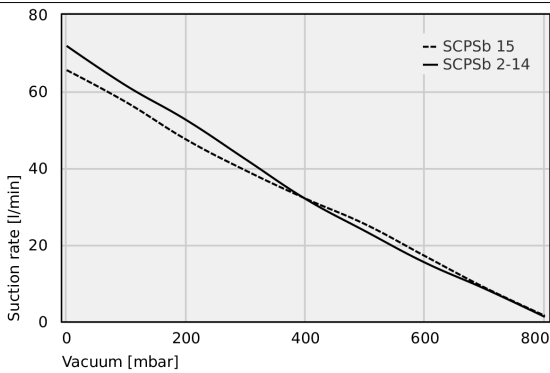
Suction rate from 16 l/min to 67 l/min



Evacuation time for various vacuum ranges [s/l]



Suction rate at various degrees of evacuation [l/min]



Suction rate at various degrees of evacuation [l/min]

Achievable vacuum at various operating pressures

	2	3	4	5	6
SCPSb 07	480.00	700.00	860.00	850.00	830.00
SCPSb 2-07	345.00	560.00	790.00	890.00	880.00

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

	2	3	4	5	6
SCPSb 10	470	700	850	830	815
SCPSb 2-09	420	640	820	875	850

	2	3	4	5	6
SCPSb 15	450	660	860	865	850
SCPSb 2-14	385	590	800	890	870

Evacuation time for various vacuum ranges [s/l]

	0	100	200	300	400	500	600	700	800
SCPSb 07	0.15	0.30	0.65	1.10	1.75	2.75	4.00	6.15	10.50
SCPSb 2-07	0.00	0.15	0.40	0.65	1.00	1.5	2.8	4.2	7

	0	100	200	300	400	500	600	700	800
SCPSb 10	0.05	0.15	0.3	0.5	0.8	1.2	1.75	2.8	5.5
SCPSb 2-09	0.0	0.0	0.00	0.2	0.45	0.85	1.45	2.5	5.0

	0	100	200	300	400	500	600	700	800
SCPSb 15	0.05	0.07	0.15	0.25	0.4	0.6	0.9	1.3	2.3
SCPSb 2-14	0.0	0.0	0.05	0.1	0.2	0.35	0.65	1.2	2.3

Suction rate at various degrees of evacuation [l/min]

	0	100	200	300	400	500	600	700	800
SCPSb 07	16.00	12.30	10.50	8.00	6.00	3.80	1.90	1.00	0.30
SCPSb 2-07	37.20	28.10	19.90	12.50	7.50	3.90	2.00	1.00	0.30

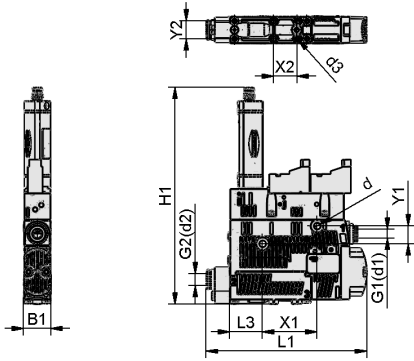
	0	100	200	300	400	500	600	700	800
SCPSb 10	36.1	29.5	25.7	20.8	16.9	13	8.1	3.4	0.5
SCPSb 2-09	49.6	42.1	34.4	24.7	17	11.4	7.2	3.3	0.5

	0	100	200	300	400	500	600	700	800
SCPSb 15	65.5	57.1	47.4	39.3	32	25.3	17	8.8	1.5
SCPSb 2-14	71.8	61.4	52.5	42.2	31.9	23.5	15.3	8.5	1.2

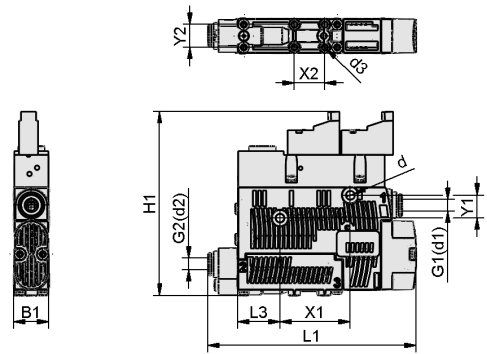
Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Design data Compact Ejectors SCPSb



SCPSb VD



SCPSb

Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Design data Compact Ejectors SCPSb

Type	B1 [mm]	d [mm]	d1 [mm]	d2 [mm]	d3 [mm]	G1	G2	H1 [mm]	L1 [mm]	L3 [mm]	X1 [mm]	X2 [mm]	Y1 [mm]	Y2 [mm]
SCPSb 07 S04 NC	18.6	4.4	6	6	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 07 S04 NC VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 07 S04 NO	18.6	4.4	6	6	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 07 S04 NO VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 10 S04 NC	18.6	4.4	6	6	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 10 S04 NC VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 10 S04 NO	18.6	4.4	6	6	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 10 S04 NO VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 15 S02 NC	18.6	4.4	6	8	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 15 S02 NC VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 15 S02 NO	18.6	4.4	6	8	2.6	-	-	97	102.5	22	36.9	16	12	12
SCPSb 15 S02 NO VD	18.6	4.4	6	6	2.6	-	-	146	102.5	22	36.9	16	12	12
SCPSb 2-07 S04 NC	18.6	4.4	6	6	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-07 S04 NC VD	18.6	4.4	6	6	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb 2-07 S04 NO	18.6	4.4	6	6	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-07 S04 NO VD	18.6	4.4	6	6	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb 2-09 S04 NC	18.6	4.4	6	6	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-09 S04 NC VD	18.6	4.4	6	6	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb 2-09 S04 NO	18.6	4.4	6	6	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-09 S04 NO VD	18.6	4.4	6	6	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb 2-14 S02 NC	18.6	4.4	6	8	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-14 S02 NC VD	18.6	4.4	6	8	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb 2-14 S02 NO	18.6	4.4	6	8	2.6	-	-	97	109.5	22	36.9	16	12	12
SCPSb 2-14 S02 NO VD	18.6	4.4	6	8	2.6	-	-	147	109.5	22	36.9	16	12	12
SCPSb BY 2-14 G02 NC	18.6	4.4	-	-	2.6	G1/8"-F	G1/8"-F	97	105.8	22	36.9	16	12	12
SCPSb BY 2-14 G02 NO	18.6	4.4	-	-	2.6	G1/8"-F	G1/8"-F	97	105.8	22	36.9	16	12	12

Compact Ejectors



Compact Ejectors SCPSb

Suction rate from 16 l/min to 67 l/min

Multimedia product presentation

Medium	Link
Product video	https://vimeo.com/147436675