

# Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min



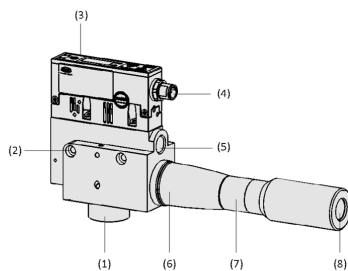
## Suitability for industry specific applications



Compact Ejectors SCPS-L / SCPSi-L

### Applications

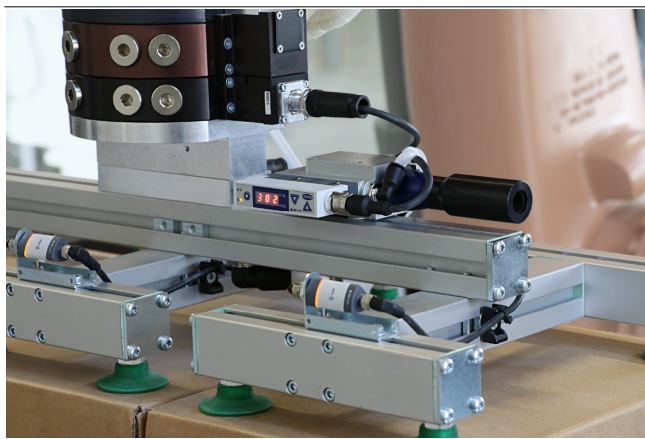
- Compact ejector for handling highly permeable as well as suction tight workpieces
- Handling of not rigid workpieces such as bags or cardboard boxes
- Use in robot handling and on linear axes
- Pick and place applications with shortest cycle times
- For systems with limited space and high dynamics when gripping parts
- Typically used for fully automated part handling



### Design

- Pneumatic connections (1) and (5)
- Mounting holes (2)
- Display and control element: SCPS-L (with bar display) and SCPSi-L (with display) (3)
- Central electrical connection via M12-5 plug (4)
- Integrated multi-stage nozzle (6) with retaining cap and inserted silencer (7)
- Exhaust air outlet (8)

System design Compact Ejectors SCPS-L / SCPSi-L



Central vacuum generation by compact ejector SCPSi-L

### Product highlights

- Efficient eco nozzle technology for high suction rate with minimized compressed air consumption
- Simple, tool-free exchange of SEP nozzles for fast cleaning due to modular design
- Transfer and output of device and process parameters, both in IO-Link and in SIO mode
- Vacuum connection G1/2" for a wide range of capacities through flexible use of the SEP 22 nozzles

### Designation code Compact Ejectors SCPS-L / SCPSi-L

## Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min



### 1 – Abbreviated designation

Code	Version
SCPS-L	with bar display
SCPSi-L	with display (IO-Link)

### 2 – Nozzle type

Code	Type
HV	High vacuum

### 3 – Nozzle size

Code	Diameter in mm
3-16	ø 1.6 (3-stage)
3-20	ø 2.0 (3-stage)

### 4 – Idle position suction valve

Code	Type
NC	Normally closed
NO	Normally open

### 5 – Connection electrical

Code	Connection
M12-5	M12, 5-pole





### 6 – Switching function

Code	Type
PNP	Switches to plus

Compact ejector SCPS-L / SCPSi-L is delivered as a ready-to-connect product (without connection cable).

Available accessories: connection cable, ejector module, silencer, filter

## Ordering data Compact Ejectors SCPS-L / SCPSi-L

Type	Part no.
SCPSc-L HV 3-16 NO M12-5 PNP	10.02.02.07517
SCPSc-L HV 3-16 NC M12-5 PNP	10.02.02.07516
SCPSc-L HV 3-20 NO M12-5 PNP	10.02.02.07519
SCPSc-L HV 3-20 NC M12-5 PNP	10.02.02.07518
SCPSi-L HV 3-16 NO M12-5	10.02.02.06052 
SCPSi-L HV 3-16 NC M12-5	10.02.02.06051 
SCPSi-L HV 3-20 NO M12-5	10.02.02.06050 
SCPSi-L HV 3-20 NC M12-5	10.02.02.05827 
SCPS-L HV 3-16 NO M12-5 PNP	10.02.02.06057
SCPS-L HV 3-16 NC M12-5 PNP	10.02.02.06058
SCPS-L HV 3-20 NO M12-5 PNP	10.02.02.06055
SCPS-L HV 3-20 NC M12-5 PNP	10.02.02.06056

## Ordering data Spare parts Compact Ejectors SCPS-L / SCPSi-L

Type	Part no.
Holder cap SHC	SHC 3 22 10.02.01.01810
Holder cap SHC	SHC 3 22 10.02.01.01514
Ejector module SEP	SEP HV 3 16 22 10.02.01.01397
Ejector module SEP	SEP HV 3 20 22 10.02.01.01631
Silencer	SD 29x70 SHC 22 10.02.01.01517
Silencer	SD 29x121.5 SHC 10.02.01.01831

## Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min

### Ordering data Accessories Compact Ejectors SCPS-L / SCPSi-L

Type	Part no.
Connection cable, M12 5-pole, 5 m, PUR, straight	ASK B-M12-5 5000 K-5P
Connection cable, M12 5-pole, M12 5-pole, 2 m, PUR, straight	ASK B-M12-5 2000 S-M12-5
Ejector module SEP	SEP HV 3 16 22
Ejector module SEP	SEP HV 3 20 22
Silencer	SD 29x70 SHC 22
Silencer	SD 29x121.5 SHC
Vacuum cup filter	VFT G1/2-IG 100

### Technical data Compact Ejectors SCPS-L / SCPSi-L

Type	Degree of evacuation [%]	Suction rate (max.) [l/min]	Suction rate (max.) [m³/h]	Air consumption suction [l/min]*	Air consumption suction [m³/h]**	Air consumption blow-off [m³/h]
SCPSc-L 3-16	90	227	13.6	102	6.1	15.4
SCPSc-L 3-20	90	323	19.4	172	10.3	15.4
SCPSi-L 3-16	90	227	13.6	102	6.1	15.4
SCPSi-L 3-20	90	323	19.4	172	10.3	15.4
SCPS-L 3-16	90	227	13.6	102	6.1	15.4
SCPS-L 3-20	90	323	19.4	172	10.3	15.4

\*At optimal operating pressure (4 bar)

\*\*At optimal operating pressure (4 bar)

Type	Sound level free [dB(A)]*	Sound level suction [dB(A)]	Pressure range (operating pressure) [bar]	Recomm. internal hose diameter compressed air [mm]**	Recomm. internal hose diameter vacuum [mm]***	Weight [g]	Operating temperature [°C]
SCPSc-L 3-16	80	72	4.0 ... 6.0 bar	6	12	460	0 ... 50 °C
SCPSc-L 3-20	81	77	4.0 ... 6.0 bar	6	14	460	0 ... 50 °C
SCPSi-L 3-16	80	72	4.0 ... 6.0 bar	6	12	460	0 ... 50 °C
SCPSi-L 3-20	81	77	4.0 ... 6.0 bar	6	16	460	0 ... 50 °C
SCPS-L 3-16	80	72	4.0 ... 6.0 bar	6	12	460	0 ... 50 °C
SCPS-L 3-20	81	77	4.0 ... 6.0 bar	6	14	460	0 ... 50 °C

\*At optimal operating pressure (4 bar)

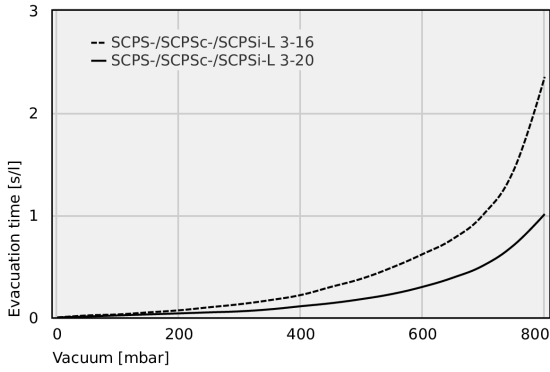
\*\*For max. length 2 m

\*\*\*For max. length 2 m

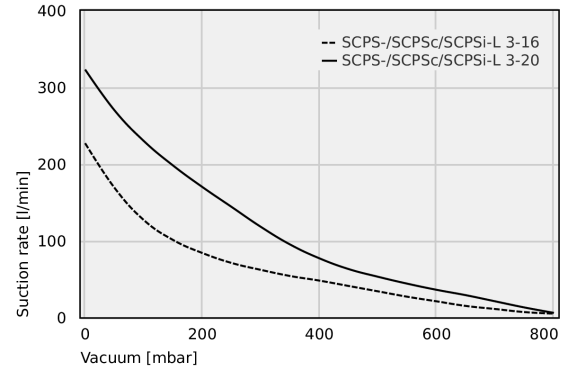
# Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min

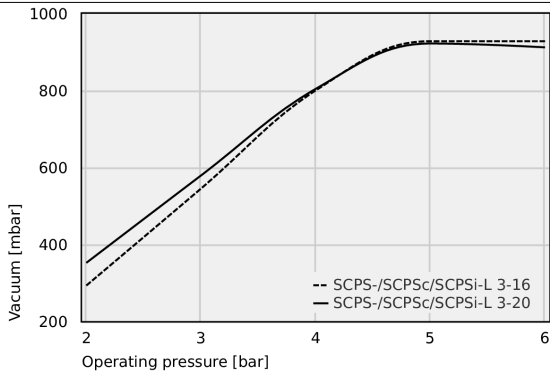
Performance data Compact Ejectors SCPS-L / SCPSi-L



Evacuation times for various vacuum ranges [s/l]



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



Achievable vacuum at various operating pressures

## Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min

### Evacuation times for various vacuum ranges [s/l]

	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
SCPS-/ SCPSc/ SCPSi-L 3-16	0.00	0.02	0.03	0.05	0.07	0.10	0.13	0.17	0.22	0.30	0.38	0.49	0.62	0.77	1.01	1.45	2.35
SCPS-/ SCPSc/ SCPSi-L 3-20	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.08	0.11	0.14	0.18	0.23	0.30	0.39	0.51	0.71	1.01

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

	0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
SCPS-/ SCPSc/ SCPSi-L 3-16	227	169	127	101	84	71	62	54	48	41	34	27	21	15	11	7	5
SCPS-/ SCPSc/ SCPSi-L 3-20	323	270	230	198	170	144	118	95	77	63	53	44	36	29	21	13	6

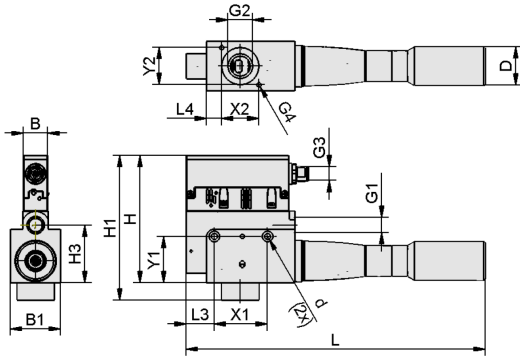
### Achievable vacuum at various operating pressures

	2	3	4	5	6
SCPS-/SCPSc/SCPSi-L 3-16	293	545	800	928	928
SCPS-/SCPSc/SCPSi-L 3-20	352	579	804	922	912

## Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min

### Design data Compact Ejectors SCPS-L / SCPSi-L



SCPS- / SCPSc- / SCPSi-L

## Compact Ejectors SCPS-L / SCPSi-L

Suction rate from 227 l/min to 323 l/min

### Design data Compact Ejectors SCPS-L / SCPSi-L

Type	B [mm]	B1 [mm]	D [mm]	d [mm]	G1	G2	G3	G4	H [mm]	H1 [mm]	H3 [mm]	L [mm]	L3 [mm]	L4 [mm]	X1 [mm]	X2 [mm]	Y1 [mm]	Y2 [mm]
SCPSc-L HV 3-16 NO M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPSc-L HV 3-16 NC M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPSc-L HV 3-20 NO M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28
SCPSc-L HV 3-20 NC M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28
SCPSi-L HV 3-16 NO M12-5	18.00	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPSi-L HV 3-16 NC M12-5	18.00	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPSi-L HV 3-20 NO M12-5	18.00	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28
SCPSi-L HV 3-20 NC M12-5	18.00	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28
SCPS-L HV 3-16 NO M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPS-L HV 3-16 NC M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	224.5	21	11.5	40	28	35	28
SCPS-L HV 3-20 NO M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28
SCPS-L HV 3-20 NC M12-5 PNP	17.61	37.5	29	4.5	G1/4"-F	G1/2"-F	M12x1-M	M4-F	95.75	109	56.5	230.0	21	11.5	40	28	35	28