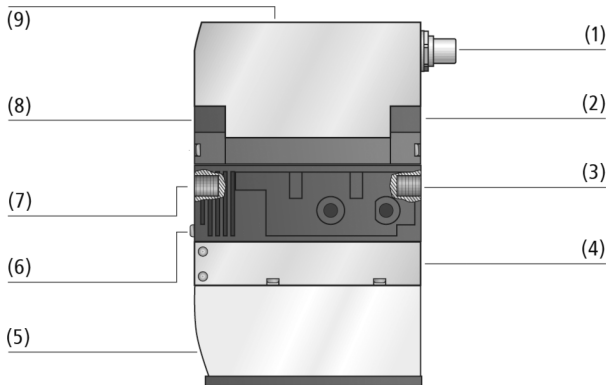


Compact Ejectors SCPI / SMPi

Suction rate from 75 l/min to 195 l/min



Compact Ejectors SCPI / SMPi



System design Compact Ejectors SCPI / SMPi



Central vacuum generation by compact ejectors SMPi

Suitability for industry specific applications

Application

- Handling of airtight as well as porous workpieces
- Generation and monitoring of the vacuum in automated systems
- For use in sheet metal processing, the automotive industry, with packaging machines, and in various robotic applications
- Pick-and-place applications with very short cycle times (fast gripping and release realized by means of the power blow off function)

Design

- Main body made of high strength plastic
- User display (9) with seven segments, operating keyboard and luminous display that indicates system status
- Electrical connection (1) via standard M12 plug, optional with potential separation of sensor and actor power supply
- Integrated pneumatic valves for NO, NC or pulse switch functions (2) and (8)
- Power blow off piston for type SMPi (4) provides extremely high blow off capacity for reduced cycle times
- Adjusting screw to adjust the blow off capacity (6); pneumatic connections (G3/8" and G1/4") with protective filters (3) and (7); integrated silencer (5)

Product highlights

- IO-Link functionality allows direct connection and parameterization via various bus systems
- Clear user display with user-friendly keys
- Integrated air saving function (RD version) reduces energy costs to a minimum
- Minimum space requirement thanks to disc design
- Weight-optimized housing ideal for high accelerations

Compact Ejectors SCPI / SMPi

Suction rate from 75 l/min to 195 l/min

Designation code Compact Ejectors SCPI / SMPi

SMPi	–	15	–	NO	–	VD	–	M12-5
1		2		3		4		5

1 – Abbreviated designation

Code	Version
SCPi	Without power blow off
SMPi	With power blow off

2 – Nozzle size

Code	Diameter in mm
15...25	ø 1.5 to 2.5

3 – Idle position suction valve

Code	Type
IMP	Bistable switched with pulse
NC	Normally closed
NO	Normally open

4 – System monitoring

Code	Type
RD	Air saving function with digital vacuum switch
VD	Digital vacuum switch




























5 – Connection electrical




























Code	Connection
M12-5	M12, 5-pole

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

Available accessories: connection cable, connection distributor, compressed air connection plate, ejector blanking plate, quick change Connection (Adapter Quick Change), ejector tester

Ordering data Compact Ejectors SCPI / SMPi

Type				Nozzle size:		
				15	20	25
SCPi	IMP	RD	M12-5	10.02.02.03347  	10.02.02.03359  	10.02.02.03371  
SCPi	IMP	VD	M12-5	10.02.02.03344 	10.02.02.03356 	10.02.02.03368 
SCPi	NO	VD	M12-5	10.02.02.03342 	10.02.02.03354 	10.02.02.03366 
SCPi	NO	RD	M12-5	10.02.02.03345  	10.02.02.03357  	10.02.02.03369  
SCPi	NC	RD	M12-5	10.02.02.03346  	10.02.02.03358  	10.02.02.03370  
SCPi	NC	VD	M12-5	10.02.02.03343 	10.02.02.03355 	10.02.02.03367 

Type				Nozzle size:		
				15	20	25
SMPi	IMP	RD	M12-5	10.02.02.03341  	10.02.02.03353  	10.02.02.03365  
SMPi	IMP	VD	M12-5	10.02.02.03338 	10.02.02.03350 	10.02.02.03362 
SMPi	NO	RD	M12-5	10.02.02.03339  	10.02.02.03351  	10.02.02.03363  
SMPi	NO	VD	M12-5	10.02.02.03336 	10.02.02.03348 	10.02.02.03360 
SMPi	NC	RD	M12-5	10.02.02.03340  	10.02.02.03352  	10.02.02.03364  
SMPi	NC	VD	M12-5	10.02.02.03337 	10.02.02.03349 	10.02.02.03361 

Ordering data Spare parts Compact Ejectors SCPI / SMPi

Spare parts	Part number
Set of parts subject to wear ejector	VST SMPi/SCPi 10.02.02.99965

Type	Spare parts	Part number
SMPi	Set of parts subject to wear ejector	VST SMPi-ERW 10.02.02.99964
SCPi	Set of wearing parts ejector	VST SCPi-ERW 10.02.02.99963

Compact Ejectors SCPi / SMPi

Suction rate from 75 l/min to 195 l/min

Ordering data Accessories Compact Ejectors SCPi / SMPi

Type	Part no.
Connection cable, M12 5-pole, 5 m, PUR, straight	ASK B-M12-5 5000 K-5P
Connection distributor 1x M12, 5 pol, 3x M12, 4 pol	ASV SM/CPi B-M12-5 3xS-M12-4
Connection distributor 1x M12, 5 pol, 2x M12, 4 pol	ASV SM/CPi B-M12-5 2xS-M12-4
Compressed air connection plate	GP 2 SMP 15..30/SCP 20..30
Compressed air connection plate	GP 3 SMP 15..25/SCP 20..25
Compressed air connection plate	GP 4 SMP 15..20/SCP 20
Compressed air connection plate	GP 5 SMP 15
Compressed air connection plate	GP 6 SMP 15
Ejector blanking plate	EJEK-PL SMP(i)15..30/SCP(i)20..30
Quick-Change-Adapter	ADP-Q 90.5x22x29.7 SMPi/SCPi
Ejector tester	EJEK-TEST SMPi/SCPi

Technical data Compact Ejectors SCPi / SMPi

Type*	Nozzle diameter [mm]	Degree of evacuation [%]	Suction rate (max.) [l/min]	Suction rate (max.) [m ³ /h]	Air consumption suction [l/min]**	Air consumption suction [m ³ /h]**	Max. air consumption blow-off [l/min]
SCPi	15	1.5	75	4.5	115	7.2	200
SCPi	20	2.0	140	8.4	180	11.7	200
SCPi	25	2.5	195	11.7	290	17.4	200
SMPi	15	1.5	75	4.5	115	7.2	200
SMPi	20	2.0	135	8.1	180	10.8	200
SMPi	25	2.5	185	11.1	290	17.4	200

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

**At optimal operating pressure (4.5 bar)

***At optimal operating pressure (4.5 bar)

Type*	Sound pressure level free [dB(A)]	Sound pressure level suction [dB(A)]	Pressure range (operating pressure) [bar]	Recommended hose internal diameter compressed air [mm]**	Recommended hose internal diameter vacuum [mm]**	Weight [kg]	Operating temperature [°C]
SCPi	15	75	4.0 ... 7.0 bar	6	6	0.6	0 ... 50 °C
SCPi	20	75	4.0 ... 7.0 bar	6	8	0.6	0 ... 50 °C
SCPi	25	78	4.0 ... 7.0 bar	8	9	0.6	0 ... 50 °C
SMPi	15	75	4.0 ... 7.0 bar	6	6	0.6	0 ... 50 °C
SMPi	20	75	4.0 ... 7.0 bar	6	8	0.6	0 ... 50 °C
SMPi	25	78	4.0 ... 7.0 bar	8	9	0.6	0 ... 50 °C

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

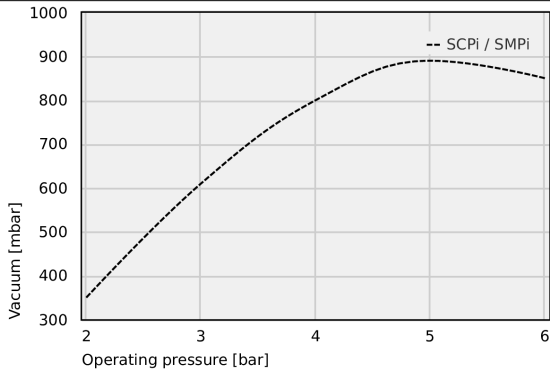
**For max. length 2 m

***For max. length 2 m

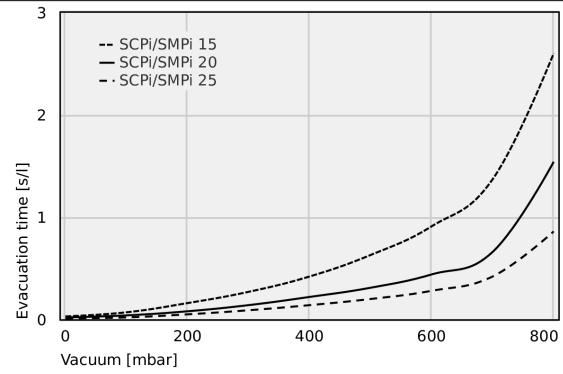
Compact Ejectors SCPi / SMPi

Suction rate from 75 l/min to 195 l/min

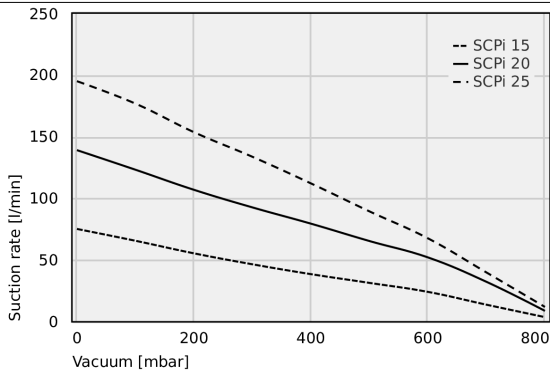
Performance data Compact Ejectors SCPi / SMPi



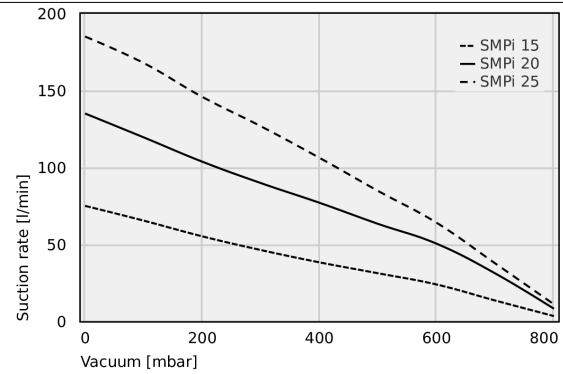
Achievable vacuum at various operating pressures



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
SCPi / SMPi	350	610	800	890	850

Compact Ejectors SCPi / SMPi

Suction rate from 75 l/min to 195 l/min

📉 Evacuation time for various vacuum ranges [s/l]

	0	100	200	300	400	500	600	700	800
SCPi/SMPi 15	0.03	0.07	0.16	0.27	0.42	0.63	0.91	1.37	2.60
SCPi/SMPi 20	0.02	0.04	0.08	0.14	0.22	0.31	0.44	0.66	1.54
SCPi/SMPi 25	0.01	0.02	0.05	0.09	0.14	0.20	0.28	0.42	0.86

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

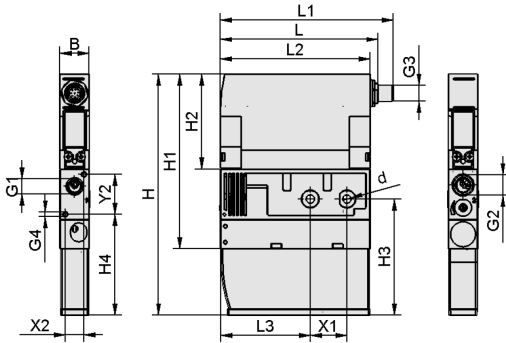
	0	100	200	300	400	500	600	700	800
SCPi 15	75.0	65.4	55.2	46.3	38.3	31.2	23.9	13.5	3.4
SCPi 20	139.0	123.1	106.8	92.5	79.3	65.2	51.9	32.1	8.5
SCPi 25	195.0	176.8	153.6	133.6	112.0	89.3	67.4	39.7	11.7

	0	100	200	300	400	500	600	700	800
SMPi 15	75.0	65.4	55.2	46.3	38.3	31.2	23.9	13.5	3.4
SMPi 20	135.0	119.5	103.7	89.8	77.0	63.3	50.4	31.1	8.2
SMPi 25	185.0	167.8	145.8	126.7	106.2	84.7	64.0	37.6	11.1

Compact Ejectors SCPi / SMPi

Suction rate from 75 l/min to 195 l/min

Design data Compact Ejectors SCPi / SMPi



SCPi / SMPi

Compact Ejectors SCPi / SMPi

Suction rate from 75 l/min to 195 l/min

Design data Compact Ejectors SCPi / SMPi

Type	B [mm]	d [mm]	G1	G2	G3	G4	H [mm]	H1 [mm]	H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	X1 [mm]	X2 [mm]	Y2 [mm]	
SCPi	15	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30
SCPi	20	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30
SCPi	25	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30
SMPi	15	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30
SMPi	20	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30
SMPi	25	22	6.6	G1/4"-F	G3/8"-F	M12x1-M	M4-F	181.5	131.5	71.5	87.5	76	118.5	129.7	112.5	67.5	27.5	14	30

Multimedia product presentation

Medium

Product video

Link

<https://vimeo.com/147436675>