



The pumps listed on this data sheet represent a cross-section of the large number of possibilities for each pump type. Based on our modular pump design, all pumps can be customised exactly to meet the needs of your application - within days and at standard pricing. Please contact us for details.



SP 500 EC-LC
iron core motor



SP 550 EC
coreless motor



SP 550 EC-BL
brushless motor

Product Features

- High efficiency for mobile devices
- Durable design
- Smallest size and low weight
- Low vibration and sound level
- Suitable for any mounting orientation
- Oil-free, maintenance-free, leak-tight

Typical Applications

- Exhaust and flue gas analysis
- Respiratory gas analysis
- Fuel cells
- Gas analysis
- Personal gas detectors
- Air sampling
- Pipetting



TYPE	SP 500 EC-LC		
Operating Voltage [Vdc]	4,5	9	12
Art. No.	7s51003	7s51001	7s51010
max. Nominal Current [mA]	210	140	100
PERFORMANCE			
max. Flow [l/min]	1,0	1,1	1,1
max. Pressure [bar]	0,7	0,7	0,7
max. Vacuum [mbar]	-500	-550	-500
MOTOR			
Standard Motor	iron core		
Standard Bearings	sintered bearings		
Motor Connection	soldering lugs		
Optional Motor	n/a		
Optional Bearings	n/a		
MATERIALS			
Standard Pump Head	PPS		
Optional Pump Head	PA6 / customer specific (upon request)		
Standard Diaphragm	EPDM		
Optional Diaphragm	FKM / customer specific (upon request)		
Standard Valves	EPDM		
Optional Valves	FKM / FFKM / customer specific (upon request)		
Standard Gaskets	EPDM		
Optional Gaskets	FKM / customer specific (upon request)		
PNEUMATIC CONNECTION			
Standard Connectors	barbed connectors		
Optional Connectors	n/a		
DIMENSIONS + WEIGHT			
Dimensions [mm] W x H x L	23 x 34 x 40,5		
Weight [g]	36,7		

Flow values are subject to the standard conditions specified in DIN 1343. The use of other materials may cause deviations in performance values.

The technical data shown on this data sheet represents the typical mean values achieved by the products in our standard testing procedure.

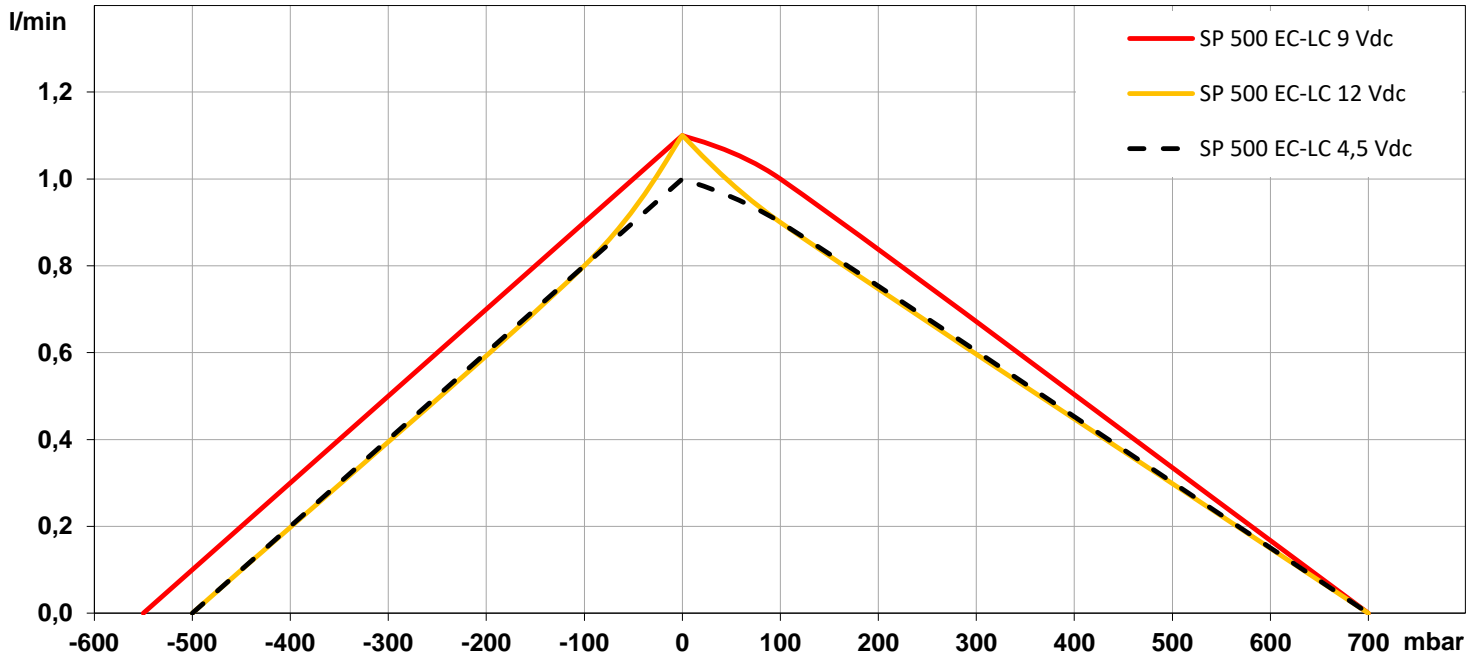
All data provided is for information only and does not represent production values.

Standard products are subject to change without notice.

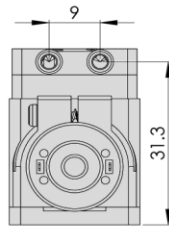
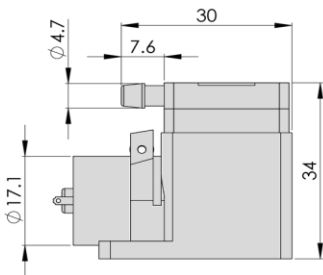
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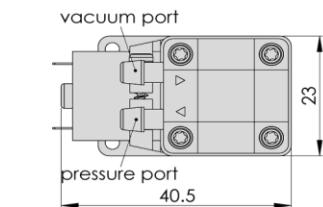
PERFORMANCE DIAGRAM | SP 500 EC-LC



DRAWING | SP 500 EC-LC



Drawing shows standard orientation of pneumatic connectors. (3 alternative orientations possible)



3D CAD Data:

- ▶ Download STEP
- ▶ Download IGES

You can also download the 3D CAD files from the SP website:
 ▶ www.schwarzer.com/download

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TYPE	SP 550 EC			SP 550 EC-BL
Operating Voltage [Vdc]	4,5	6	12	12
Art. No.	7s51048	7s51049	7s51050	7s56038
max. Nominal Current [mA]	180	120	100	200
PERFORMANCE				
max. Flow [l/min]	1,1	1,1	1,2	1,3
max. Pressure [bar]	0,5	0,5	0,55	0,55
max. Vacuum [mbar]	-400	-400	-450	-500
MOTOR				
Standard Motor	coreless			brushless for analogue or PWM control
Standard Bearings	sintered bearings			ball bearings
Motor Connection	2 wires			6 wires with plug
Optional Motor	n/a			n/a
Optional Bearings	ball bearings			n/a
MATERIALS				
Standard Pump Head	PPS			
Optional Pump Head	PA6 / customer specific (upon request)			
Standard Diaphragm	EPDM			
Optional Diaphragm	FKM / customer specific (upon request)			
Standard Valves	EPDM			
Optional Valves	FKM / FFKM / customer specific (upon request)			
Standard Gaskets	EPDM			
Optional Gaskets	FKM / customer specific (upon request)			
PNEUMATIC CONNECTION				
Standard Connectors	barbed connectors			
Optional Connectors	n/a			
DIMENSIONS + WEIGHT				
Dimensions [mm] W x H x L	23 x 34 x 41,7			23 x 34 x 40
Weight [g]	41			45

Flow values are subject to the standard conditions specified in DIN 1343. The use of other materials may cause deviations in performance values.

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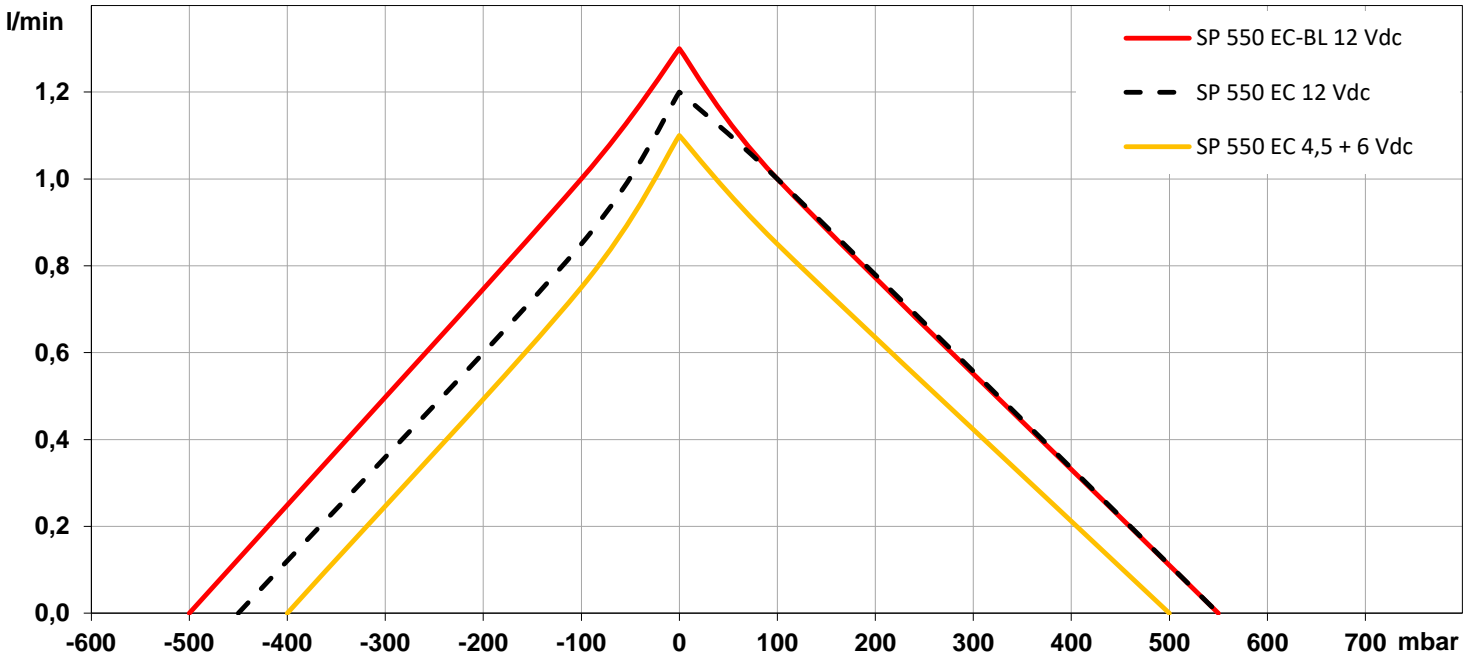
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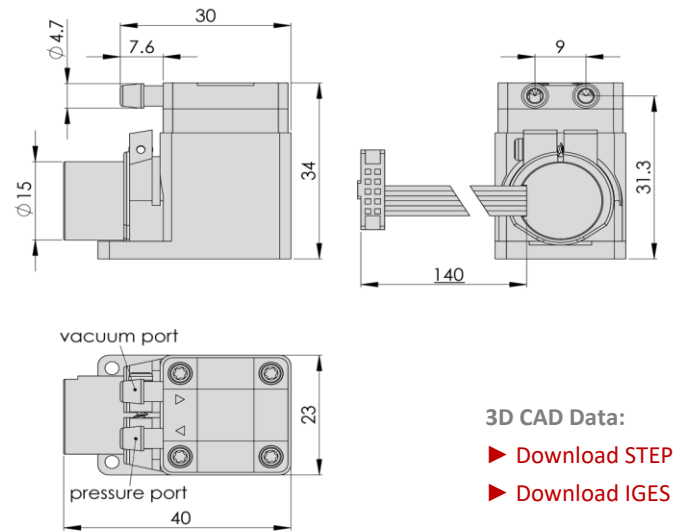
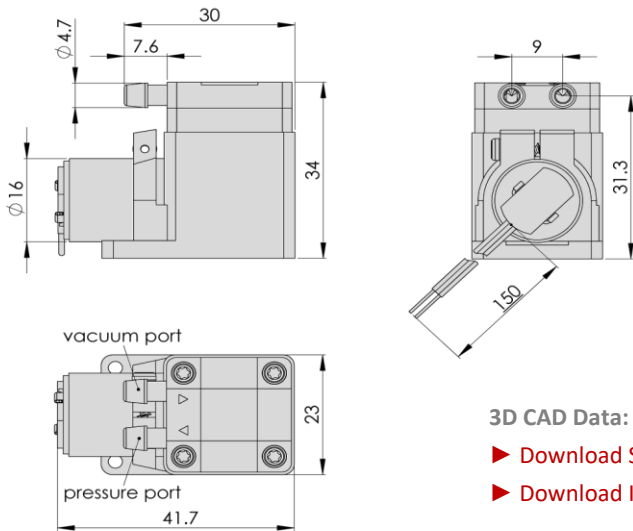


PERFORMANCE DIAGRAM | SP 550 EC ▪ SP 550 EC-BL



DRAWING | SP 550 EC

DRAWING | SP 550 EC-BL



Drawing shows standard orientation of pneumatic connectors (3 alternative orientations possible).

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