



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 270 EC  
coreless motor



SP 270 EC-LC  
iron core motor



SP 270 EC-BLa / -BLp  
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 270 EC		
Operating Voltage [Vdc]	3	5	 12
Art. No.	7s20097	7s20098	7s20099
max. Nominal Current [mA]	150	120	60
<b>PERFORMANCE</b>			
max. Flow [l/min]	0,80	0,80	0,80
max. Pressure [bar]	0,75	0,75	0,75
max. Vacuum [mbar]	-600	-600	-600
<b>MOTOR</b>			
Standard Motor	coreless		
Standard Bearings	sintered bearings		
Motor Connection	2 wires		
Optional Motor	n/a		
Optional Bearings	ball bearings		
<b>MATERIALS</b>			
Standard Pump Head	PPS		
Optional Pump Head	customer specific (upon request)		
Standard Diaphragm	EPDM		
Optional Diaphragm	FKM / customer specific (upon request)		
Standard Valves	EPDM		
Optional Valves	FKM / customer specific (upon request)		
Standard Gaskets	EPDM		
Optional Gaskets	FKM / customer specific (upon request)		
<b>PNEUMATIC CONNECTION</b>			
Standard Connectors	barbed connectors		
Optional Connectors	manifold		
<b>DIMENSIONS + WEIGHT</b>			
Dimensions [mm] W x H x L	16 x 25 x 38,3		
Weight [g]	27		

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.

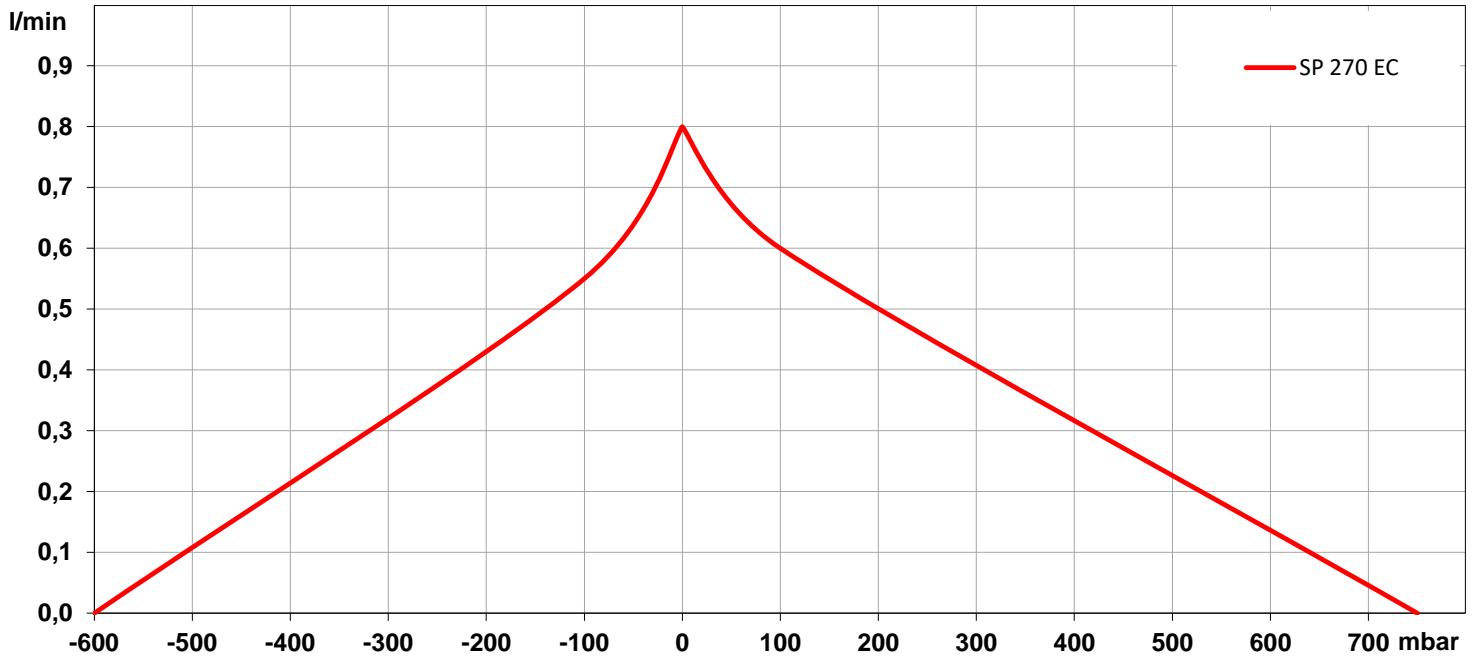
All data provided is for information only and does not represent production values.

Standard products are subject to change without notice.

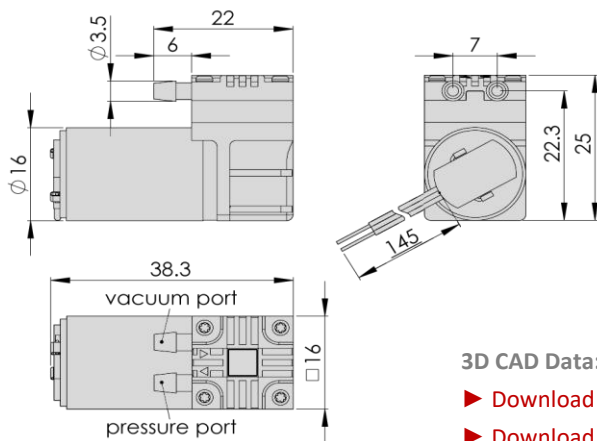
12.06.2021



PERFORMANCE DIAGRAM | SP 270 EC



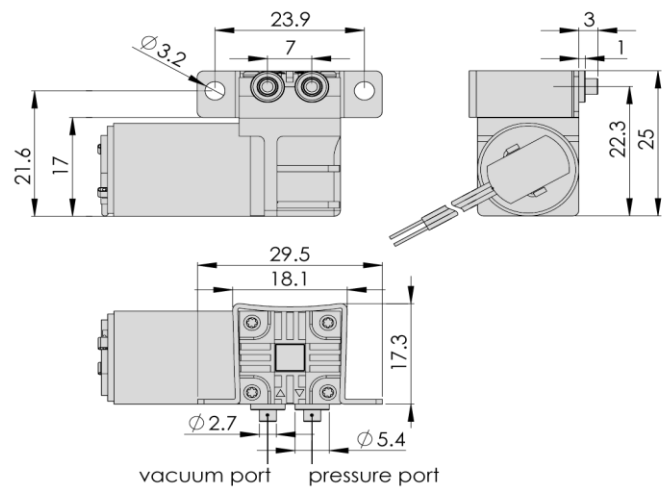
DRAWING | SP 270 EC



3D CAD Data:

- ▶ Download STEP
- ▶ Download IGES

DRAWING | SP 270 EC Manifold



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


You can also download the 3D CAD files from the SP website: ▶ [www.schwarzer.com/download](http://www.schwarzer.com/download)

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12.06.2021



TYPE	SP 270 EC-LC				SP 270 EC-BLa	SP 270 EC-BLp
Operating Voltage [Vdc]	3	 5	6	12	12	12
Art. No.	7s20093	7s20094	7s20095	7s20096	7s20100	7s20101
max. Nominal Current [mA]	150	130	90	60	120	120
<b>PERFORMANCE</b>						
max. Flow [l/min]	0,50	0,70	0,55	0,80	0,90	0,90
max. Pressure [bar]	0,65	0,70	0,65	0,70	0,80	0,80
max. Vacuum [mbar]	-550	-600	-550	-600	-600	-600
<b>MOTOR</b>						
Standard Motor	iron core				brushless for analogue control	brushless for PWM control
Standard Bearings	sintered bearings				ball bearings	
Motor Connection	soldering lugs				6 wires with plug	
Optional Motor	n/a				n/a	
Optional Bearings	n/a				n/a	
<b>MATERIALS</b>						
Standard Pump Head	PPS					
Optional Pump Head	customer specific (upon request)					
Standard Diaphragm	EPDM					
Optional Diaphragm	FKM / customer specific (upon request)					
Standard Valves	EPDM					
Optional Valves	FKM / customer specific (upon request)					
Standard Gaskets	EPDM					
Optional Gaskets	FKM / customer specific (upon request)					
<b>PNEUMATIC CONNECTION</b>						
Standard Connectors	barbed connectors					
Optional Connectors	manifold					
<b>DIMENSIONS + WEIGHT</b>						
Dimensions [mm] W x H x L	16 x 26 x 36,8				16 x 25 x 37,4	
Weight [g]	24				23	

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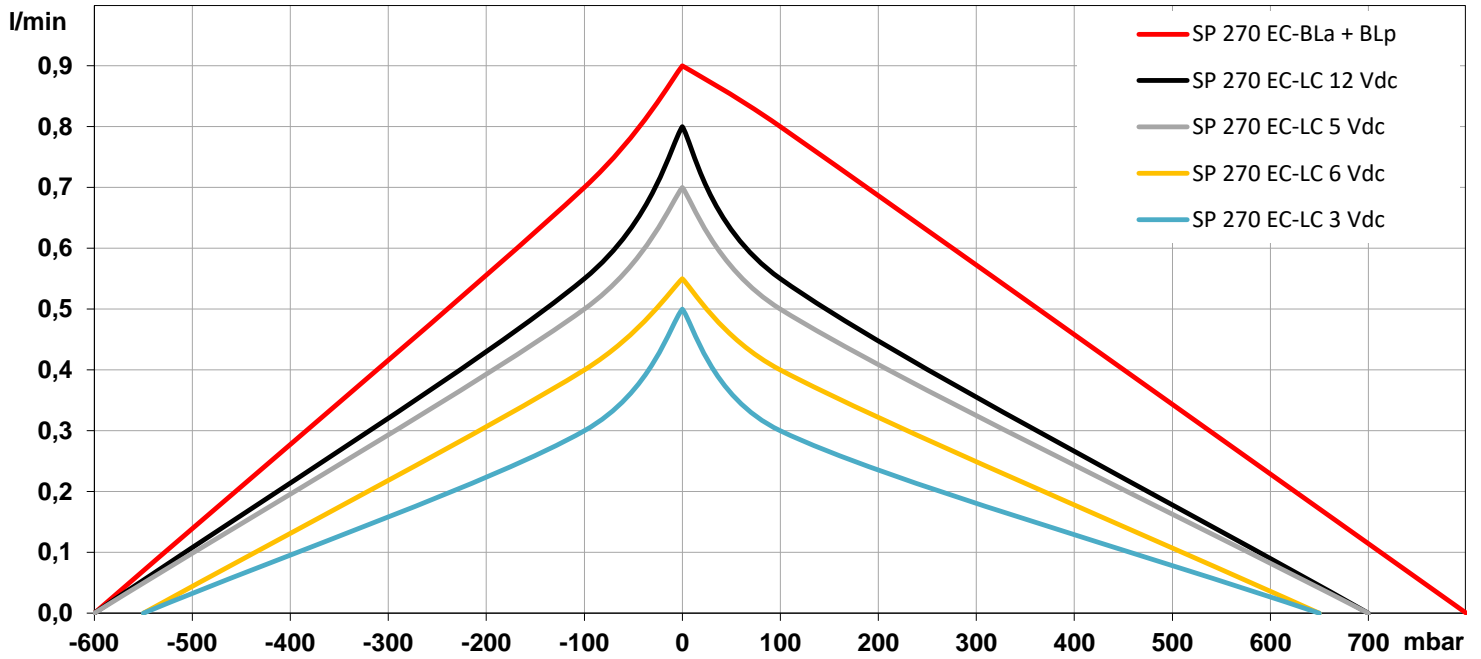
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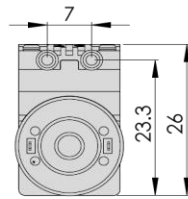
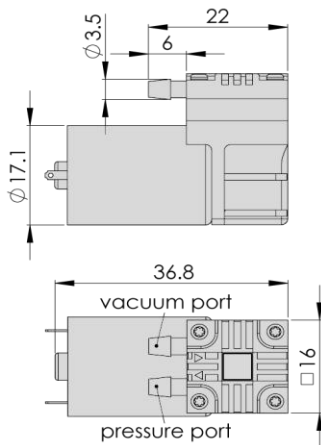


PERFORMANCE DIAGRAM | SP 270 EC-LC ▪ SP 270 EC-BLa ▪ SP 270 EC-BLp



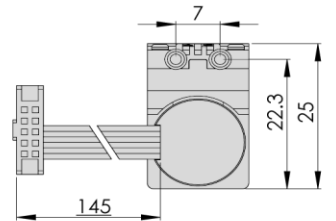
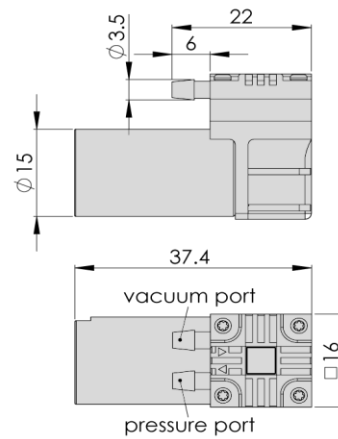
DRAWING | SP 270 EC-LC

DRAWING | SP 270 EC-BLa ▪ SP 270 EC-BLp



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