



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	 quick availability	
Art. No.	7s20097	7s20098		12
max. Nominal Current [mA]	150	120		7s20099
			60	
PERFORMANCE				
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	
MOTOR				
Standard Motor	coreless			
Standard Bearings	sintered bearings			
Motor Connection	2 wires			
Optional Motor	n/a			
Optional Bearings	ball bearings			
MATERIALS				
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)			
PNEUMATIC CONNECTION				
Standard Connectors	barbed connectors			
Optional Connectors	manifold			
DIMENSIONS + WEIGHT				
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.

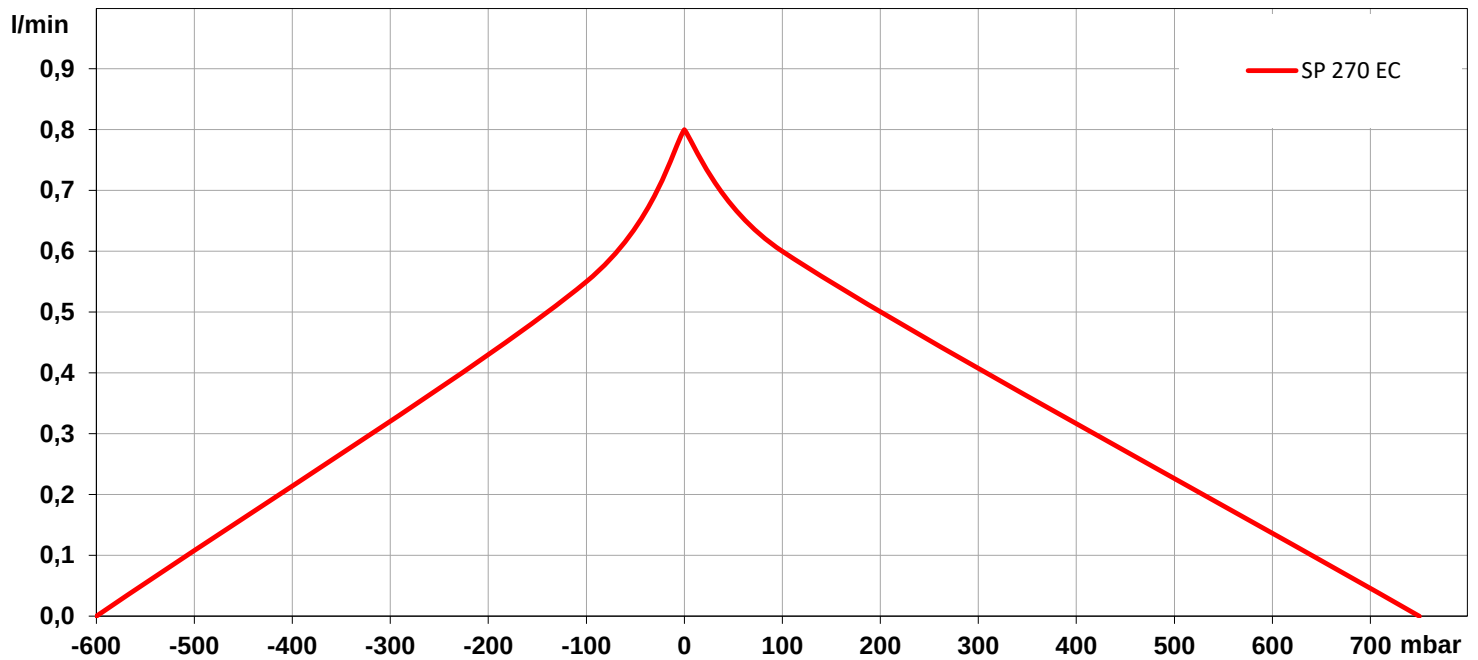
All data provided is for information only and does not represent production values.

Standard products are subject to change without notice.

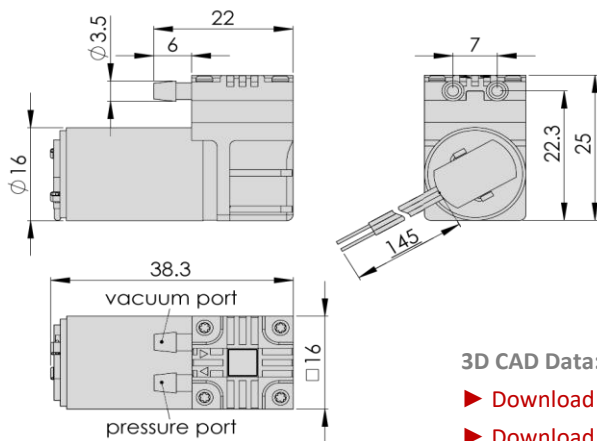
11.11.2021



PERFORMANCE DIAGRAM | SP 270 EC



DRAWING | SP 270 EC



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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11.11.2021



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
PERFORMANCE						
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
MOTOR						
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	
MATERIALS						
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)					
PNEUMATIC CONNECTION						
Standard Connectors	barbed connectors					
Optional Connectors	manifold					
DIMENSIONS + WEIGHT						
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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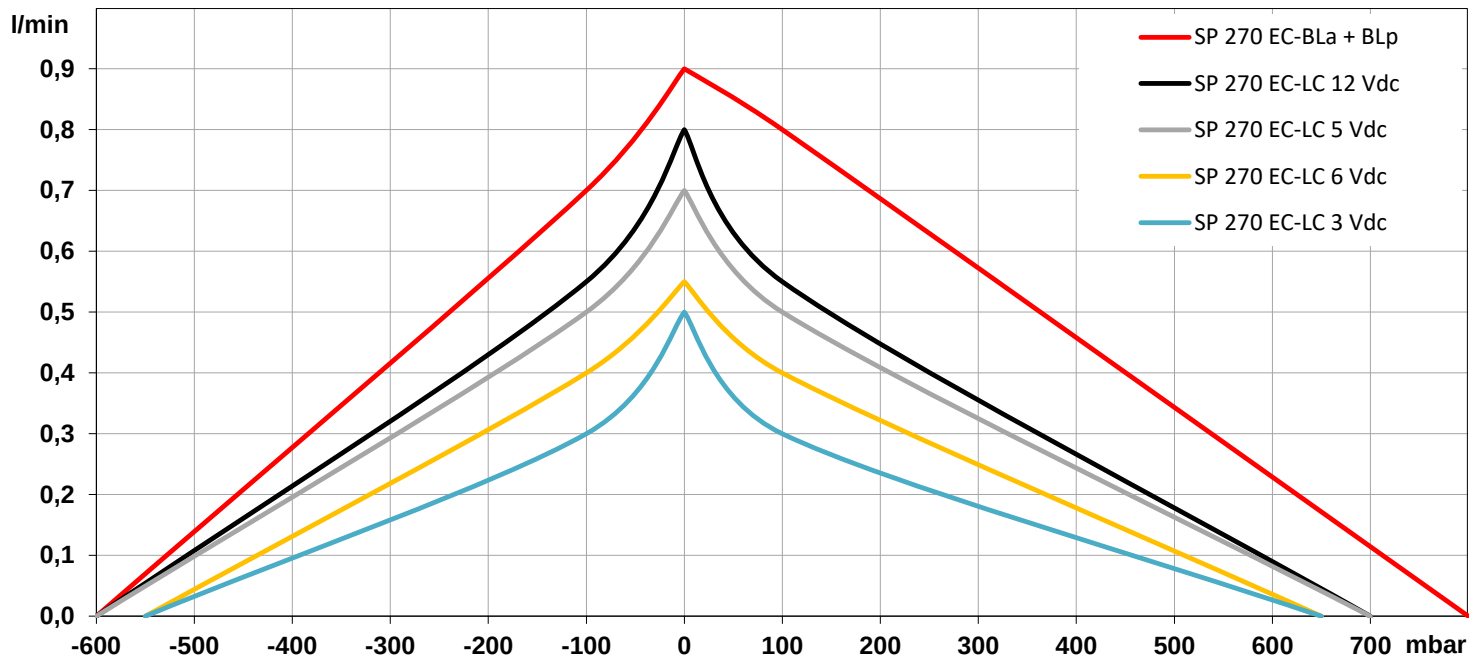
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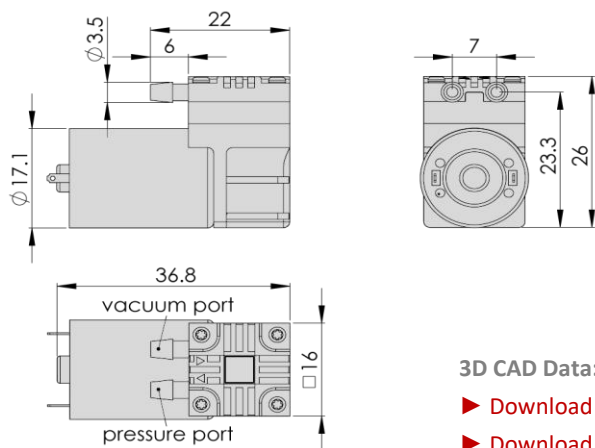
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PERFORMANCE DIAGRAM | SP 270 EC-LC ▪ SP 270 EC-BLa ▪ SP 270 EC-BLp



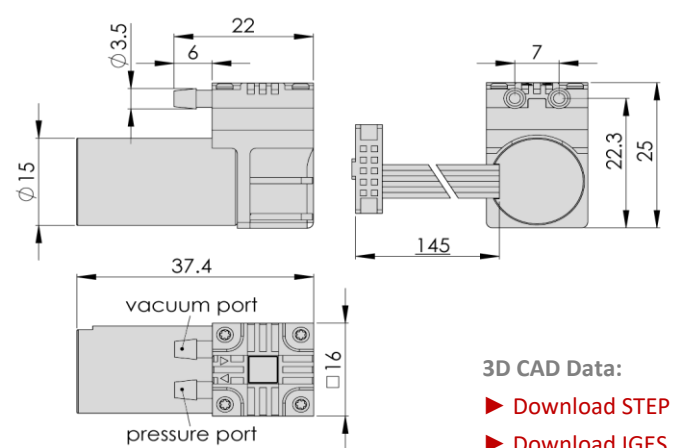
DRAWING | SP 270 EC-LC



3D CAD Data:

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



3D CAD Data:

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- Download IGES

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

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